

Reflection of Reality and Unreality in the Sanitation Sector in Nepal

Lila Prasad Limbu *

Abstract

This study, explores the development trend of sanitation coverage and compares and contrasts government reports and the reality of the sanitation sector. The researcher has used a descriptive research design and a quantitative research method. The data collection technique was field observation because the researcher observed 228 houses to find the reality of having and not having toilet households. The researcher found that the Nepal Government's record of sanitation coverage is not real because the Nepal Government claimed cent percent of households have toilets in the study area. But it was found that 60% of households do not have toilets. However, this study does not cover factors of sanitation. The other factors need further study.

Keywords: coverage, plan and policies, toilet, target

Introduction

The Nepal Government has been putting drinking water and sanitation at a high level of priority. For example, the total Sanitation approach was implemented in 2003, and the first open-defecation-free VDC was declared in 2005. The school-led total sanitation (SLTS) was applied at the same time. But the open defecation free (ODF) concept was highly initiated after 2008 because the Nepal Government held the International Year of Sanitation in 2008. After that, the sanitation declarations of school catchments and clusters were started formally. The community-led and hygiene master plan (SHMP) was formulated in 2011 (Slagle, 2015).

Nepal's government also started to involve international donors in the sanitation sector. So, international donor agencies are ready to support poor and vulnerable households. For example, 8,000 toilets were constructed through output-based aid for poor and vulnerable households; 20 public toilets suitable for both genders and the disabled were constructed with septic tanks. (World Bank, 2018). The gender and disabled-friendly toilet policy is continuously implemented in Nepal since 2011.

* Lecturer, Department of Rural Development, Ratna Rajyalaxmi Campus, Tribhuvan University, Nepal.

E-mail: lila.limbu@rrlc.tu.edu.np

All countries drinking water and sanitation sector have been prioritized after 2015, for example, the SDG goals include several targets that aim to reduce WASH inequalities (Table 1). Goal 1 aims to 'end poverty in all its forms everywhere and includes a target for universal access to basic services' (1. 4). 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 & UNICEF, 2019). All countries in the world have started to make a plan for water and sanitation towards sustainable goal number 6.1. Nepal's government also takes an ambitious target to achieve the goal in the sanitation sector.

The sustainable goals completion phase is divided into three phases. These phases are as follows. The SDG will cover the period 2016-2030 in three phases, aligned with the Sustainable Development Goals. Phase I: Short Term (2016-2020) universal access to basic WASH services; improved service levels (medium 25%, high 15% population, reconstruction). Phase II: Medium Term (2021-2025), improved service levels (medium 40%, high 30% population), functionality and sustainability improvement Phase III: Long Term (2026-2030), improved service levels (medium 50%, high 50% population), impact assessment it, (MWSS, 2016). The sustainable goal implantation time duration was already started from seven years. Nevertheless, the Nepal government cannot achieve significant results until now. Nevertheless, SDG goals helps to achieve high access of basic service in sanitation sector. But there is a great challenge to achieving the quality in the sanitation sector.

Now, the countries experiencing sanitation sector have serious problems in the future. So, they want to stop, and they are working together. Many international organizations like the World Health Organization and United Nations Children's Fund (WHO/UNICEF), Joint Monitoring Programmed for Water Supply, Sanitation and Hygiene (JMP) produce internationally comparable estimates of national, regional and global progress on drinking water, sanitation and hygiene (WASH) and is responsible for global monitoring of the Sustainable Development Goal (SDG) targets related to WASH, (WHO & UNICEF, 2019). Nevertheless, meeting the goal is not an easy task. Because many rural people do not have toilets in their homes, and some people have toilets in their homes but do not use them at night.

The government's actions on water and sanitation are primarily based on the National Water Plan (2002–2027), which aim to provide universal coverage of basic water supplies and sanitation by 2017, (UNICEF, 2018). Nevertheless, the Nepal government could not meet the target because the government of Nepal has ambitious

targets to tackle the country's poor WASH and nutrition status and has taken important steps toward reaching these targets. The Nepal government again adopts an ambitious target to SDG goal in the sanitation sector.

The SDG aims to develop partnerships with key WASH actors in regions of interest. (Swiss Government, 2020). So, the Nepal government have been working with partners in Nepal to meet the SDG goal. International nongovernmental organizations like DFID, UNICEF, UNDP, and UN have been partners in drinking water and sanitation. On the other hand, some nongovernment organizations and private sectors also work in the drinking water and sanitation sector. The government of Nepal also has been investing a huge amount of money in the sanitation sector. Due to this, sanitation coverage is gradually increasing.

Government investments in water supply and sanitation are primarily guided by its Water Plan (2002 – 27), which seeks universal coverage of the basic water supply and sanitation level by 2017. The SDG Plan has also sought to improve the basic level of the water supply. The Nepal had set targets for the improved level of sanitation was to upgrade 27 % of the population to a medium to a high level of sanitation service by 2017 and 50 % by 2027. (Ministry of Urban Development, 2014). Again sustainable development goals put the same target on drinking water and sanitation sector.

Nepal had a unitary government before 2015. The power of formulating plans, policies and strategies was under the central government. Decisions were made by the central government and gave the order to the local government. The Nepal government improved some drinking water and sanitation sector. The country Nepal adopted the federal system after 2015. After that, the WASH sector governance was especially implemented in operational level, it broadly depends on the federal, provincial and local government because the subsidiary legislatures envisaged in the federal constitution. (Government of Nepal, 2016). All three levels of government are equally responsible as they have been working together.

The local Water Boards were rearranged into a decentralized structure in the federal system in Nepal to improve water and sanitation services efficiency and responsiveness in municipalities. NWSC with enhanced capacity and responsibilities for towns; and WUSC with institutional strengthening, regulatory mechanisms with defined responsibilities for asset creation (WUSC are now the operators while the state is the asset owner), maintenance, financing, cost recovery and expansions in small towns and villages. (Government of Nepal, 2016). Moreover, local WASH

governing committees and actors were effectively engaged in planning, implementing and monitoring the project activities. The capacity and performances of local WASH committees and actors were improved as expected through support and facilitation mechanism and coaching through participating in decision-making, planning and monitoring activities (Nepal Red Cross, 2018). They also made policies and strategies for drinking water and sanitation. However, rural municipalities' representatives do not have sound knowledge about project sustainability policies and planning process. Due to this, they do not make plans and policies through the participatory approach. They distributed the budget without estimation. Mainly, local leaders demand some budget to the rural municipality chair for the drinking water and sanitation projects in their own areas and then, the rural village assembly distribute the budget for drinking water and sanitation without plan and estimation. It is a big challenge in project sustainability in Nepal. Next, local governments do not prioritize the sanitation sector more than drinking water. Only a little effort had been put into the sanitation sector. It is not enough in the sanitation sector.

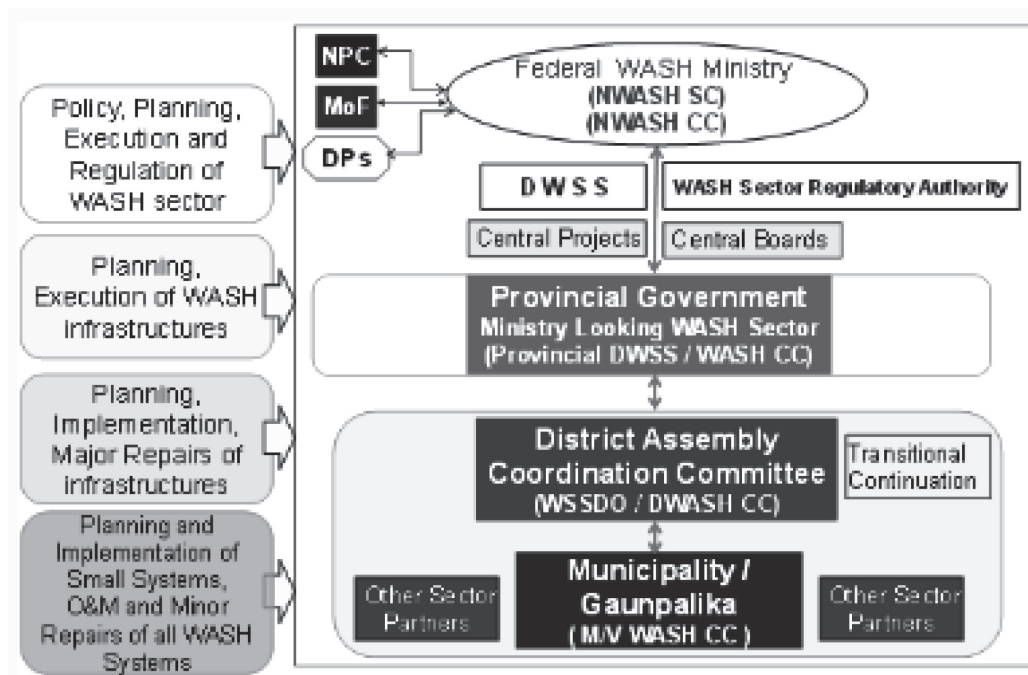
The local governments conducted many awareness programs for sanitation, as well as they also provided some materials for building toilets like toilet pans and cement. Nevertheless, some local people still do not have toilet access. They have been using the open place for defecation. It is a great challenge for the sanitation sector in Nepal. So, the researcher's claimed that Nepal government records in sanitation sector are not real in rural areas.

The SDGs also setting in sanitation sector is also ambitious, because SDG goal which is emphasizing 100% equitable and accessible of clean drinking water and sanitation sector to address inequalities (UNICEF, 2016). It is difficult to meet target in developing countries like Nepal. The developing countries governments have been struggling to fulfil the basic level of drinking water and sanitation.

The federal government of Nepal has tried to meet the sustainable goal. So, the federal constitution of Nepal put the provision of Federal wash ministry, under the federal WASH ministry lies DWSS department and WASH sector regulatory Central Authority Board in National level. Similarly, the provincial government Ministry is looking WASH sector and the provincial DWSS/ WASH Coordination Committee. Under the District Assembly Coordination Committee in the district, there is DWSH Coordination Committee. It coordinates all rural municipalities and municipalities for drinking water and sanitation management. There are municipality and rural municipality WASH Coordination Committees at the local level to provide the local

people with clean water and sanitation access. Above all, water and sanitation office levels are equally responsible for meeting the sustainable goal in the drinking water and sanitation sector. Figure 1 shows the Federal Government's drinking water and sanitation situation.

Figure 1



(Source: Government of Nepal, 2016)

Above all, the Nepal government authorities are equally responsible for maintaining the sanitation sector in Nepal. However, they were not functioning equally because of a centralized mindset, weak coordination, and lack of knowledge, political instability, political bases and political conflict. Therefore, it needs compulsion. The compulsion makes all these authorities more active and more responsible. However, there are two types of compulsion, they are self-directed compulsion and outer force directed compulsion. Self-directed compulsion is more appropriate than outer force directed compulsion because it comes from strong sense of knowledge. It needs high class of education and training.

Similarly, the next problem is of lack of proper networking knowledge. Local representatives do not have sound knowledge of the federal political system as well as

rights and responsibility of governments. Not only this, they also do not have sound knowledge about the formulation of new plans and policies as well as monitoring and evaluating the projects. Due to the lack of knowledge of local government representatives, drinking water and sanitation coverage only increased on white paper but not in reality.

Nepal government have been measuring all projects' sustainability after completing the program. The sustainability evaluation and interventions authority used indicators to measure the continued effectiveness and functionality of drinking water and sanitation programs from 2006, (Control et al., 2008). All program reports show a high level of achievement in drinking water and sanitation sector. However, in reality, we cannot find that developing situation. For example, Nepal Government report 2018 shows that Dhankuta, Terhathum, Illam and Pachthar districts are open defecation-free districts. These all districts households had toilets. But in reality, all households did not have toilets. Some people go to jungle for defecation and some households have toilets but do not use them at nighttime.

A global vision of universal access to 'safely managed' water supply, sanitation and hygiene (WASH) services, as set under the Sustainable Development Goals (SDGs), calls for attention to vulnerable groups and equitable provision of WASH services. In many countries, the water and sanitation coverage of lower-wealth quintiles has increased at a slower rate than that of the better-off quintiles (WHO/UNICEF, 2015b). Furthermore, vulnerable groups, including indigenous and tribal peoples, suffer disproportionately from inadequate access to safe drinking water and sanitation services (ILO, 2016) and are not being explicitly considered in countries' national WASH policies. (United Nations, 2019). So, the Nepal government also implemented very good drinking water and sanitation policies and strategies in Nepal. There is some weakness in implementation. However, it brings some changes in the sanitation sector.

The Nepal Government report 2018 again shows that sanitation coverage in 2010 was 43%, 54.60% in 2012, 72.22% in 2014, 86.07 in 2016, and 98.88% in 2018. When the researcher visited rural municipalities, he found that every house did not have toilet. So, the researcher selected this study to explore the sanitation coverage development trend and real coverage of sanitation in Nepal because the Government of Nepal's sanitation coverage record is doubtful. Because there are no public toilets when visiting rural and urban areas. While people go to collect water and grass in the

jungle or travelling on vehicles, they do pee and defecate in the open places. It is a big challenge for open defecation in Nepal. But, government do not think seriously on it. Hence, the researcher defined objectives: (i) to find the coverage of open defecation development trend from 2010 to 2018. (ii) to examine the toilet access situation in seven provinces and (iii) to examine the situation of sanitation where the government claimed 100% coverage of sanitation.

Methods

The researcher used a descriptive research design because enumerators visited one time in the field to collect data, and those data were analyzed using an excel program and presented in the tables. The research method was quantitative because the researcher had collected numbers of houses which have toilets and no toilets. The data collection method was a census and technique was field observation technique. The sampling method of area selection was purposive because there are seven provinces in Nepal. From that seven provinces, the researcher had purposively selected the province one. There are 14 districts under province number one. Out of 14 districts, again researcher purposively selected Taplejung district because the Nepal government report 2018 shows that 100% of houses have toilets in Taplejung district. And then researcher again selected one rural municipality. Because of ethical concerns, the researcher does not mention Municipality and Wards. From that rural municipality, the researcher randomly selected four wards. Under the four wards, the researcher selected four villages. In these villages, there is total 228 houses. After that, enumerators visited every household in four villages to observe whether they had toilet or no toilets and recorded them in the diary and used that record for data analysis.

Discussion and Findings

The researcher collected secondary data from the Nepal Government Reports. Nepal Government Reports, 2010 shows that there was no record of the sanitation situation before 1980 in Nepal. After 1980, the Nepal government has been started to keep sanitation records continuously in Nepal. Those records are presented in this article to show the sanitation coverage development trend in Nepal. Table 1 shows the area-wise records of sanitation coverage in Nepal.

Table 1

Area-wise records of sanitation coverage in Nepal

Area	Year								Remarks
	1980	1990	2000	2005	2010	2011	2015	2017	
Urban	-	34%	80%	81%	78%	91%	67%	100%	2017 is the national target for the declaration of ODF throughout the country
Rural	-	30%	25%	30%	37%	55%	52%	100%	
National	2%	6%	30%	39%	43%	62%	53%	100%	

(Source: GOV/ NPC, 2010)

Table 1 shows five years sanitation development trend in Nepal. In 2012, overall country Nepal had only 43 per cent toilet access. However, it reached 54.60 per cent in 2014. In two years, 11.60 per cent increased. Very rapidly increased toilet having households between 2012 and 2014 because 18.38 per cent of toilet access increased in two years.

In the past (especially before 1980), there was no record-keeping system of sanitation coverage in Nepal. However, it was found that a rough calculation of sanitation coverage was 2% at the national level. Therefore, it was assumed that the sanitation coverage was more in urban areas than in Terai, hills and mountainous regions of Nepal (Sah, 2013).

Table 2

Region-wise sanitation coverage in Nepal

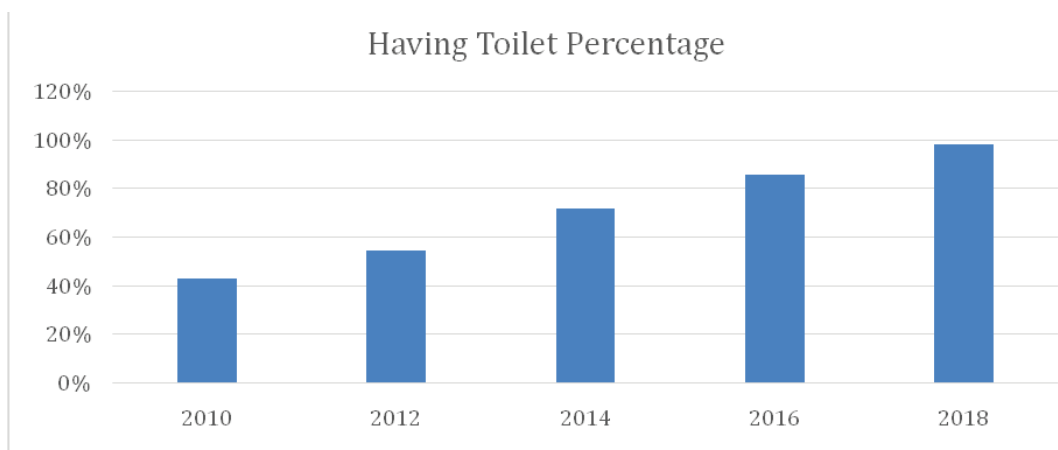
Development Region	Households Having Toilets (%)
Far Western Development Region	47.30
Mid-Western Development Region	51.40
Western Development Region	73.00
Central Development Region	63.90
Eastern Development Region	60.30

(Source: CBS, 2011)

Table 2 shows the development of region-wise toilet access in Nepal. According to CBS, 2011, 47.30 % of households have toilet access in the far western development region, 51.40% Mid- Western Development region, 73.00% of households have Toilets in Western Development Region, 63.90% in Central Development Region and 60.30% in Eastern Development Region.

Figure 2

Defecation free development scenario of Nepal



(Source: Nepal Government, 2018)

Nevertheless, the toilet access development trend comparatively decreased between 2014 to 2016 and 2012 to 2014 because only 18.38 per cent of toilet having households was increased. After, this trend was decreased. This decreasing trend was continuously increased because only 12.31 per cent of having access of toilet households were increased from 2016 to 2018. Nevertheless, in total, there were 5315491 houses in Nepal. Out of the 5226357 houses (98.32%) had toilet access in Nepal.

Nepal's government has been trying to make defecation-free Nepal meet the millennium development goals and the sustainable goals in Nepal. Under this campaign, the Nepal government announces open defecation-free districts in Nepal. Those districts are reflected in this table.

Table 3

Defecation Free Scenario of Nepal

Name of Province	Number of Districts	Total Number of Houses	Number of Districts Having 100% Toilet	The number of Districts that do not have 100% Access of Toilet	Percentage of Toilet Access
Koshi Province	14	993735	12	2 (Jhapa & Morang)	99.55
Madesh Province	8	931363	6	2	93.54
Bagmati Province	13	**	9	4	98.98
Gandaki Province	11	517959	11	0	100.00
Lumbini Province	12	**	11	1	99.42
Karnali Province	10	275358	10	0	100.00
Far-Western Province	9	**	9	0	100.00

(Source: Nepal Government, 2018)

There are 14 districts in province number one. Among of them 2 districts Jhapa and Morang are not defecation free districts. It means the people who are living in Jhapa and Morang districts do not have toilet access. Other 12 district people have 100 percent toilet access. So, Nepal Government announced 12 districts were open defecation-free districts. However, 99.55% of houses have toilet access in province number one. There are eight districts in Madhesh Province. Out of them, the people of only six districts have toilet access. Other two districts, people do not have toilet access. Nevertheless, 93.54% of people have toilet access in province number two.

Similarly, in total, there are thirteen districts in Bagmati province. Nine districts were open defecation-free districts. Four districts were not open defecation-free districts. However, 98,98% of people have toilet access. All eleven districts were open defecation-free districts in Gandaki province. It means 100% of people who live in Gandaki province have toilet access.

Similarly, there are twelve districts in Limbuni province. Among of them 11 districts were open defecation-free districts. Only one district is left to announce an

open defecation-free district, even though 99.42% of households have toilets in Lumbini province. In Karnali province, there are ten districts, and every households have toilet access because the Nepal government has already announced open defecation-free districts. It means 100% of people have toilet access in Karnali province. In the Far-western province, there are nine districts. All districts were open defecation-free districts. It shows all households (100%) toilet access in the Far-western province.

Table 4

Present Situation of Toilet Having Houses in Study Areas.

Name Village	Total Houses	No Have to Toilet	Percentage	With Toilet Houses	Percentage
A	67	48	71.64	19	28.36
B	41	18	44.00	23	56.00
C	56	33	58.90	23	41.10
D	64	42	65.63	22	34.37
Total	228	141	**	87	**

(Source: Field Survey, 2022)

Table number four reflects that the toilet having households in the study area. The researcher randomly selected four villages from single rural municipalities of province number one's district and conducted observation in every house to collect data on having and not having toilets. In total, there were 67 houses in village A. Out of the 48 houses (71.64%) have toilets at home, and 19 houses (28.36%) do have toilets. Similarly, there were 41 houses in village number B, Out of them, only 18 (44%) had toilets, and 23 households (56%) did not have toilet access.

In the same way, there were 56 houses in village "C". Out of them 33 households (58.90%), a per cent of households were with toilet, but 23 households (41.10%) houses did not have toilet access. The above scenario shows that the Nepal government report 2018 is contradictory because that shows that Nepal has above 98% coverage in the sanitation sector. Moreover, the Nepal government report claimed that this study areas households had 100% toilet access. Though, this reflection of reality and unreality in the sanitation sector article shows that only 44 to 72 per cent of households have toilet access, whereas the Nepal government claimed 100% of toilet access.

Conclusion

Especially before 1980, there was no record-keeping system of sanitation coverage in Nepal. But the Nepal government strictly implemented sanitation programs from 2003 in Nepal. For examples, the total Sanitation (CLTS) approach in 2003 and School Led Total Sanitation (SLTS) in 2005 were applied. The open defecation free concept was initiated in Nepal after the Community-Led and Hygiene Master Plan (SHMP) was formulated in 2011, providing a national guideline in 2005. The strict rules and regulations increased sanitation sector in Nepal. In 2012, overall country Nepal had only 43 per cent toilet access. However, it reached 54.60 per cent in 2014. In two years, 11.60 per cent increased. Very rapidly increased sanitation coverage between 2012 and 2014 because 18.38 per cent of toilet access households were increased in two years.

The toilet access development trend was comparatively decreased in 2014 to 2016, than in 2012 to 2014 because only 13.85 per cent of toilet access households were increased. However, this decreasing trend was continuously increased because only 12.31 per cent of toilet access households increased from 2016 to 2018. Therefore, the Nepal government report 2018 is contradictory because that shows that Nepal has above 98% coverage in the sanitation sector. On the other hand, the Nepal government report claimed that these study areas households have 100% toilet access. So, it is not real because this research article shows that only 44 to 72 per cent of households have toilet access, whereas the Nepal government claimed 100% of toilet access.

Acknowledgement

I would like to acknowledge the University Grand Commission of Nepal for providing me PhD grants.

References

- Bank, A. D. (2018). *Report and recommendation of the president to the board of directors proposed loan Nepal: Urban water supply and sanitation (Sector) Project*.
- Control, D., Control, D., Interventions, S., America, C., Mitch, H., Services, H., Control, D., Control, D., Service, P. H., & Services, H. (2008). *Evaluation of the sustainability of water and sanitation interventions in central America after hurricane mitch, CDC*.

- The Ministry of Water Supply and Sanitation. (2016). *Nepal water supply, sanitation and hygiene sector development plan (2016-2030)*. http://mowss.gov.np/assets/uploads/files/SDP_-_Final_-_Eng.pdf (accessed March 05, 2018)
- Ministry of Urban Development. (2014). *National water supply and sanitation sector policy*. https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/eng_wss_policy_2014_draft-1.pdf
- MWSS. (2016). *Sector status report 2016: Water, sanitation and hygiene*. Ministry of Water Supply and Sanitation.
- Nepal Red Cross. (2018). *End line study of sanitation, hygiene and water*. Nepal Red Cross Society.
- Slagle, R. (2015). Process report. *Current*, 603, 17–20.
- Swiss Government. (2020). *SDC / HA operational concept 2017-2020 water and sanitation (WASH)*. Swiss Government.
- UNICEF. (2016). *Strategy for water, sanitation and hygiene 2016-2030*. UNICEF. <https://doi.org/10.1089/jwh.2010.2097>
- UNICEF. (2018). Water, sanitation and hygiene (wash) and nutrition in Nepal, with a focus on children under five.
- United Nations. (2019). *The United Nations world water development report 2019*. United Nations.
- WHO & UNICEF. (2019). *Progress on household drinking water, sanitation and hygiene 2000-2017*. United Nations Children’s Fund (UNICEF) and World Health Organization.