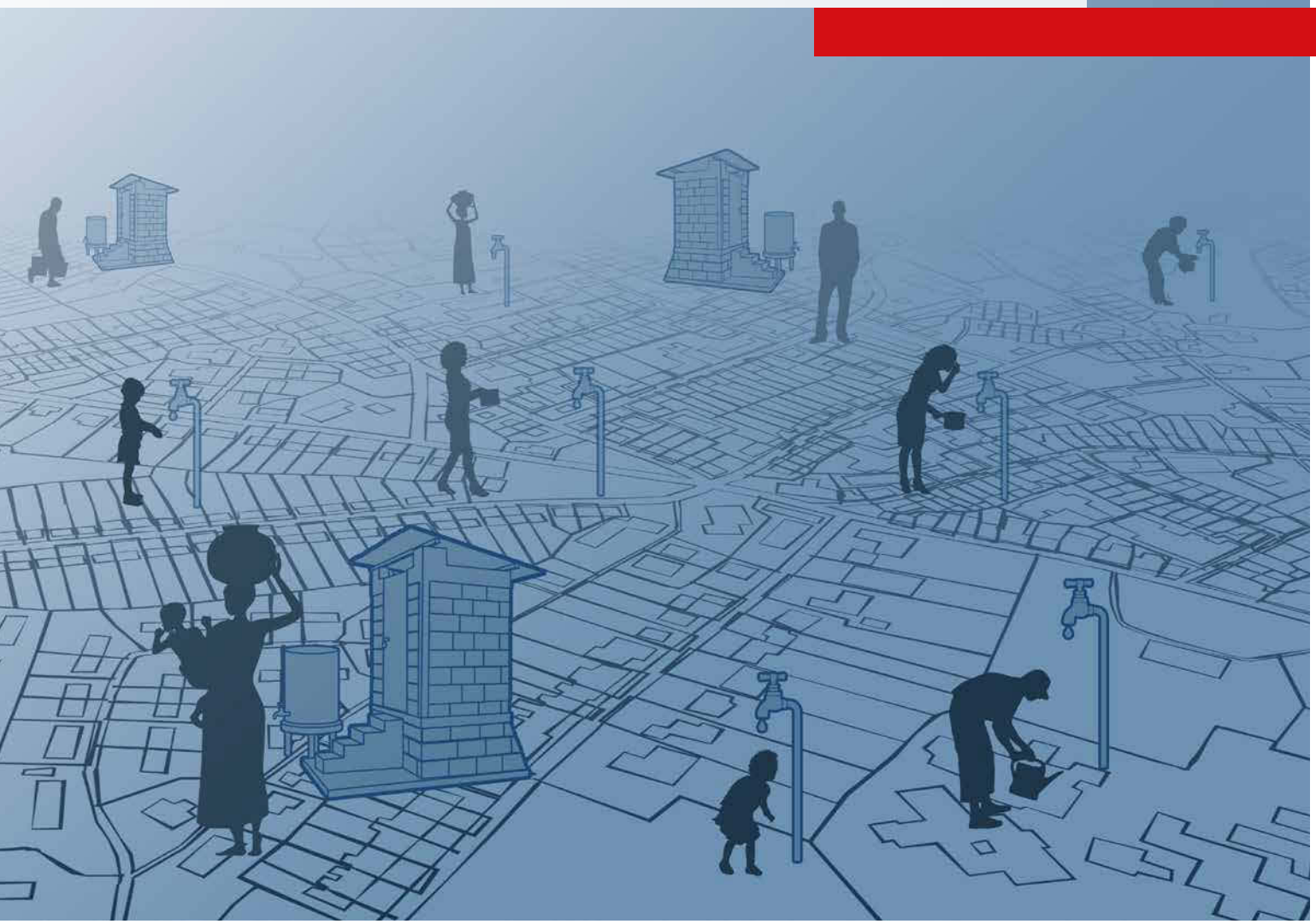
Toilets on discount!



Sharing GIZ's experience with accelerating access to sanitation through household toilet subsidies

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Picture 1:
Household toilet in a low-income area in Kenya

Picture 2:
Urban low-income area in Burundi

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ACRONYMS

AMCOW	African Ministers‘ Council on Water
BMZ	*Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung* (Federal Ministry of Economic Cooperation and Development)
CFA	Communauté Financière d‘Afrique; synonym to the currency CFA franc
CLTS	Community-Led Total Sanitation
GDP	Gross Domestic Product
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH* (German Corporation for International Cooperation GmbH)
KfW	*Kreditanstalt für Wiederaufbau* (KfW Development Bank)
NGO	Non-governmental Organisation
NWASCO	National Water Supply and Sanitation Council (Zambia)
ODF	Open Defecation Free
OECD	Organisation for Economic Co-operation and Development
ONEA	L‘Office national de l‘eau et de l‘assainissement (Burkina Faso)
PN-AEUE	*Programme National d’Assainissement des Eaux Usées et Excreta* (National Programme for sanitation, waste water and excreta)
PSAO	Ouagadougou Strategic Sanitation plan
SDG	Sustainable Development Goal
UBSUP	Up-scaling Basic Sanitation for the Urban Poor (Kenya)
UDDT	Urine Diverting Dry Toilet
WASH	Water, sanitation and hygiene
WASREB	Water Services Regulatory Board (Kenya)
WHO	World Health Organization
WSSCC	Water Supply and Sanitation Collaborative Council
WSTF	Water Sector Trust Fund (Kenya)
WSUP	Water and Sanitation for the Urban Poor

EXECUTIVE SUMMARY

The debate on subsidies has recently resurfaced in the context of the ambitious Sustainable Development Goal to achieve universal access to safely managed sanitation and the very significant funding gap to achieve this. The water and sanitation sector has always been highly subsidized, yet those subsidies mostly flow into support for existing customers rather than extension of services to the underserved.[1] The World Bank's recent report "Doing more with less" concluded that smart, targeted and well-implemented subsidies can be powerful tools to ensure all people benefit from water and sanitation services and calls for a better use of scarce subsidies.[2] This paper complements this call for action by sharing GIZ's experience with implementing pro-poor subsidies in sanitation specifically for the construction of household toilets. The guiding question is how to design smart subsidies that are scalable so that it is possible to significantly increase access to sanitation in the context of scarce financial resources. After dispelling three prevalent myths about subsidies for household sanitation, the paper makes the case for good subsidy design, proposes a set of design variables and examines the inevitable trade-offs when making design choices. The paper draws heavily on GIZ's own experience in providing technical assistance for the design and implementation of household sanitation subsidies in Kenya and Burkina Faso.

The paper concludes that sanitation subsidies can contribute towards realizing the 2030 Agenda principle of Leaving No One Behind, but only if they are designed appropriately. Appropriate design requires the evaluation of trade-offs, taking into account the overarching policy goal and the intended beneficiaries. Besides designing new sanitation subsidy schemes, reforming existing sanitation subsidies to be more pro-poor could yield significant benefits. In this context, the success of sanitation subsidies needs to be evaluated first and foremost against the criteria of leaving no one behind. At GIZ, we believe that household sanitation subsidies can be an effective tool to reach this policy goal. By sharing GIZ's experience, we hope to contribute to the debate on how to design and implement sustainable and scalable household sanitation subsidies that leave no one behind.

Picture 3: Toilets constructed under the UBSUP programme, Kenya

1) GIZ (2018: 69).
2) World Bank (2019: ix).

1 INTRODUCTION

© SuSanA Secretariat, Hanns-André Pitot, 2015

Picture 4: Sewage and waste is dumped r egularly into this river in the Kibera neighborhood of Nairobi, Kenya.

Access to sanitation is a human right.[3] Every human being needs to use a toilet several times a day, yet approximately two billion people still lack access to basic unshared improved sanitary facilities.[4] The international community has raised the profile of sanitation by setting a specific and ambitious goal to achieve universal access as one of the Sustainable Development Goals, recognizing that the dignity of the individual is fundamental. According to the principle **Leave No One Behind**, the targets should be met for all nations and people and for all segments of society.[5] Goal 6.2 calls on all countries to achieve access to adequate and equitable sanitation and hygiene for all and to end open defecation by 2030, paying special attention to the needs of women and girls and those in vulnerable situations.[6] In this context, the German Federal Ministry for Economic Cooperation and Development (BMZ) pledged to assign greater importance to sanitation for households as part of its new water strategy.[7]

Rapid population growth, particularly in urban areas, makes efforts to improve access to sanitation challenging. For example, Nairobi's population of about four million people is expected to almost double in the next 15 years. More than half of Nairobi's current inhabitants lack access to adequate sanitation services, and a large share of the population live in informal settlements. Poor sanitary conditions affects women and children and particular, increasing vulnerability to water-transmitted diseases and exacerbating poverty.[8]

In many contexts, sewer networks are unable to offer a universal solution. In African cities, for example, sewer networks typically serve a small share of the population and this share has been declining over time. Dependence

3) The United Nations recognized access to sanitation as a human right in 2010.
4) UNICEF and WHO (2019: 8).
5) United Nations (2016).
6) Safely managed sanitation refers use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite (UNICEF and WHO, 2019: 62).
7) Federal Ministry for Economic Cooperation and Development (BMZ) (2017: 7).
8) GIZ (2012).

on on-site sanitation facilities is therefore both high and growing in many cities in low income countries.[9] Table 1 exemplifies the current situation for five African countries. In Burkina Faso, for example, there was one sewer connection for 248 water connections in 2015.

Table 1: Access to sewer connections in selected African countries

Source: GIZ Access Study, 2018. Sector reporting and Country case studies.

	Burkina Faso	Uganda	Kenya	Zambia	Tanzania
Sewer connections[1]	1 600	21 000	344 000	211 000	41 479
Water connections	401 000	529 000	1 035 000	423 000	430 000
Ratio (water / sewer conn)	1 in 248	1 in 25	1 in 3	1 in 2	1 in 10
Ratio (urban population / sewer connection)	3 378	300	34	31	407
% access to sewer connections[2]	0.2%	3%	23%	25%	2%
Date	2016	2017	2015	2015	2014

Notes: 1 Data has been rounded. Data does not include septic and conservancy tanks.
2 Assuming 8 people per sewer connection.

A large and growing financing gap limits progress towards universal access. The cost to achieve universal access to basic sanitation facilities with safe fecal waste management is estimated to be $70 billion per year.[10] Some 58 percent of the capital costs of becoming open defecation–free (ODF) need to be spent on extending coverage to the poorest two wealth quintiles.[11] Public investment in sanitation is wholly insufficient to meet the Sustainable Development Goal targets. Investments by African countries, for example, are a small fraction of the recommended 1.2% of GDP.[12] Most households have also not prioritized sanitation in the allocation of their available household budgets in relation to competing items including food, electricity and mobile phones.[13]

Existing subsidies are pervasive but not well targeted. The World Bank's recent report on subsidies in the water and sanitation sector, "Doing more with less", concluded that the sector is heavily subsidized and that these subsidies were pervasive, expensive, poorly targeted, nontransparent and distortionary.[14] The cost of water and sanitation subsidies in 194 countries (excluding China and India) was estimated at $320 billion per year, or 0.51 percent of GDP. The majority of existing subsidies benefit existing customers and are not used to extend services to the underserved.[15] This paper complements the World Bank's call for action by sharing GIZ's experience with implementing pro-poor subsidies in sanitation.

9) The Joint Monitoring Programme managed by UNICEF and WHO has only recently started reporting on safely managed sanitation. Although the reporting on sanitation is patchy, the trends reported here are robust.
10) Hutton et al (2016: 7).
11) Hutton et al (2016: 7).
12) Coombes et al (2015).
13) Jenkins et al (2007), Yishay et al (2017).
14) World Bank (2019: ix).
15) GIZ (2018: 69).

Investments in sanitation yield significant health, social and economic benefits. Poor sanitation is costly. A World Bank study calculated a loss between 0.9% of national GDP annually due to poor sanitation in Kenya. 1.5 % of GDP in Benin, and up to 2% of GDP in Burkina Faso.[16] Investments in sanitation improve public health, increase attendance and attainment at school, improve economic productivity, and increase security, particularly for women.[17] Improving sanitation also helps improve access to safe drinking water, because less feaces ends up polluting it. In addition, the benefits to be derived from sanitation are generally more diffused, more delayed, and less obviously attributable to the uptake of services than are the benefits derived from safe drinking water. Nevertheless, well-being may be immediately improved through gains in convenience and dignity, particularly for women. In light of these compelling arguments, the case for investing in sanitation is undisputed.

Sanitation is a public good and there is a sound economic argument for subsidizing sanitation. Society as a whole benefits from the community health benefits of safely managed sanitation. This health benefit is only achieved when a certain threshold of sanitation coverage (60% or higher) is achieved.[18] Coverage below this threshold may not result in any significant health gains and individual households may not get all of the health benefit from their own investment in sanitation improvement unless the threshold has been reached for the whole community. In the language of economics, there is a positive externality associated with investments in sanitation, strengthening the case for subsidies.

The full capital and operating costs of sewer networks and wastewater treatment works are often heavily subsidized, but the associated health benefits may not be achieved. In a context where this infrastructure serves a better-off minority within a city, and where resources are scarce, these subsidies do not benefit the majority of poor people in the community who are not connected to the sewer network. The community health benefits from these subsidies are also not realized.

There is a strong case to be made for household sanitation subsidies. These subsidies are more equitable and more pro-poor compared to subsidizing sewer networks and wastewater treatment plants where the latter only service a minority of the population. Moreover, household subsidies can stimulate demand for sanitation improvements and can result in positive community health benefits. Another rationale is simply that without adequate household facilities, sewer and wastewater treatment infrastructure will continue to operate below full capacity, as the feces never reach them. These arguments are elaborated in Section 3.

At the same time there are negative perceptions associated with these subsidies. Subsidies for household sanitary facilities have in the past and are still considered by many as a 'no-go'. They have been met with negative criticism from development partners and national mandated institutions. Public bodies may be reluctant to subsidize, or be prevented from subsidizing, privately-owned facilities. Development financiers have, in the past, preferred financing large infrastructure projects rather than oversee programmes involving many small transactions. Where subsidy programmes have been implemented, some have fully subsidized hardware without a focus on behavior change, sanitation marketing, demand creation and the full sanitation service chain. When infrastructural investment has taken place, the toilets constructed have not met national standards in terms of materials, emptying and transportation thus rendering them unsustainable. Other programmes have focused only on behavioral change (and shaming techniques) with disappointing results in terms of household-level investments in improved sanitation facilities.[19] Such fragmented approaches are detrimental to the development of the sector and threaten much-needed progress towards increased sanitation coverage.

16) World Bank (2018).
17) Evans et al (2009).
18) Cronin et al (2017: 211).
19) World Bank (2020) forthcoming.

Against this backdrop, sanitation practitioners have recently restarted the debate on subsidies targeting toilet construction on a household level, recognizing that household facilities are an important element of the full sanitation chain.[20] For example, the SDG 6 Synthesis report 2018 on Water and Sanitation addresses policy and implementation gaps within partner countries on sanitation subsidies. There is a growing call for a paradigm shift in how sanitation is financed in order to achieve the ambitious Sustainable Development Goals.[21] The paradigm shift recognizes the need for an integrated combined approach that includes toilet construction, fecal sludge management, behavior change, capacity development, public awareness raising and the creation of an enabling environment.

Picture 5: Toilet in Embu, constructed as part of the UBSUP programme, Kenya

20) See, for example, World Bank (2019) and Evans et al (2009).
21) For example, this topic has become more prominent at the Stockholm World Water Week.

2 PURPOSE AND SCOPE

This paper addresses the question of **how to design smart subsidies that are scalable so that it is possible to significantly increase access to sanitation, sustainably, in the context of scarce financial resources**. In this paper, we define a household sanitation subsidy as direct or indirect financial support to households, for the construction of a household toilet.[22] The paper is based on GIZ's own experience in supporting the design and implementation of household sanitation subsidies in two countries, Kenya and Burkina Faso, and offers guidance on how to design smart subsidies that deliver on both sustainability and access at scale.[23]

Three common myths related to household sanitation subsidies are discussed and debunked. A case is made for the importance of careful subsidy design. A set of subsidy design variables are proposed. Trade-offs within and between these design variables are evaluated in the context of the overall policy objective Leave No One Behind, offering the reader practical guidance for subsidy design in different contexts. The paper draws conclusions on the efficacy of household sanitation subsidy in making a contribution to the Sustainable Development Goal of universal access to safely managed sanitation.

At this stage and looking at the GIZ internal discourse, the debate is not whether household sanitation subsidies are an effective financial incentive tool for development cooperation. **Rather the point of discussion is how to design subsidies in a smart way that ensures sustainability and scale of access in the context of scarce financial resources**. This thinking is not only embraced by GIZ water and sanitation programmes; more and more key national and international partners and organizations have emphasized the need to focus on how to implement smart subsidies within their respective contexts.

© Water Sector Trust Fund, Kenya, 2014

Picture 6: Dry toilet constructed as part of the UBSUP programme in Kenya

22) See Evans et al (2009: 6) for a general overview of sanitation subsidies.

23) This paper limits its scope to GDCs experience on purpose. Others have outlined in more general terms the why's and how's of sanitation subsidies. See references for more literature.

3 UNPACKING THE THREE MYTHS OF HOUSEHOLD SANITATION SUBSIDIES

This section responds to the frequently quoted arguments against household sanitation subsidies. Debunking these myths enables an increased understanding of the need to prioritise smart subsidies.

MYTH 1

HOUSEHOLD SANITATION SUBSIDIES DISTORT THE MARKET AND SUPPRESS INNOVATION IN TOILET DESIGN.

Critics argue that subsidies contribute to higher prices for toilets (or parts thereof) and suppress the design of new toilets as the subsidy is often bound to a certain design and/or materials.

In fact, the subsidy is designed to correct an already existing market failure. By removing pathogens from the environment, sanitation yields huge benefits to the entire community. Hence, sanitation is a public and a merit good,[24] however demand for household toilets is too low and needs stimulation. This is because the social benefit (positive externality) of the toilet once in place is much larger than the benefit accruing to the individual toilet owner. Thus, the subsidy is intended to correct this market failure. Certainly, the subsidy should be designed in a way that avoids creation of monopolies for certain hardware sellers, masons and other contractors involved in the design and construction. Regarding innovation, this is also a matter of design of the sanitation subsidy. Smart design takes into account the importance of innovation in toilet design. Conversely, a subsidy can even help enforce a desired technical standard, if it is only paid for toilets that meet minimum criteria set by the utility or regulator.

MYTH 2

HOUSEHOLD SANITATION SUBSIDIES ARE NOT FINANCIALLY SUSTAINABLE.

Critics argue that household sanitation subsidies cannot be sustained over the long term.

A household sanitation subsidy is a **once-off capital subsidy**, contributing to the purchase for construction of a household sanitation facility. The cost per household is much less than subsidies commonly provided for sewer networks and wastewater treatment works, which typically also require ongoing subsidies to be sustained.

Household sanitation subsidies typically results in **a crowding-in effect**. Neighbors of the new toilet owners often decide to purchase a toilet even without receiving financial incentives. This effect is well documented, for example in Cambodia, and lowers the overall cost of the subsidy.[25]

24) A merit good is a good that society thinks everyone ought to have regardless of whether it is wanted by each individual. Evans et al (2009).
25) Rosenboom et al (2011).

The sustainability of the subsidy itself depends on its source. The subsidy can be **sustainably funded from taxes and/or from a levy on the water tariff** (see Section 5.2).[26] There are also secondary effects that reinforces the financial sustainability of these subsidies, namely the positive social and economic returns from improved sanitation when this is achieved at scale. Certainly, financial sustainability can only be acquired if there is a solid understanding of the potential scale of needs and the costs of the programme (capital costs and long-term O&M costs). In low income areas, the accompanying fecal sludge management may require subsidies as well.

MYTH 3

HOUSEHOLD TOILET CONSTRUCTION IS A PRIVATE AFFAIR AND NOT THE RESPONSIBILITY OF THE GOVERNMENT.

Critics argue that the government should use scarce public funds to improve sewer pipes and wastewater treatment plants rather than subsidizing household toilets, and require the household to pay for the toilet himself.

It is well established that infrastructural development is not enough to ensure sustainable sanitation. While investments in sewer pipes and treatment are certainly necessary, **the sanitation chain cannot work if the household facilities are inappropriate or non-existent**. For example, for a toilet emptying business to flourish and protection of the surrounding environment inclusive of groundwater, household sanitary facilities need to be designed so that they can be easily emptied. Similarly, a wastewater treatment plant will not be able to work at full capacity if a large portion of the sludge never reaches the plant but ends up in the environment instead, or, if the minimum flow rate to prevent clogging is not achieved. Even more importantly, subsidies can ensure that facilities are designed according to the government's desired technical standards (e.g. Kenya, Burkina Faso) and inclusive of human rights criteria like acceptability, affordability and sustainability. Moreover, given that sanitation is a merit good and that households tend to under-invest in sanitation, the public sector has an interest in changing behavior and individual choices. Households certainly have a responsibility to purchase sanitation facilities and pay the running costs (just like they purchase water tap and pay their monthly water or electricity bills). Subsidies can help increase the willingness of households to pay for sanitation.

26) See Evans et al (2009) for a discussion on subsidy funding.

4 DESIGN MATTERS: MITIGATING UNINTENDED NEGATIVE CONSEQUENCES

In addition to the three myths, critics of subsidies point to a range of unintended negative consequences. Three frequently cited consequences are discussed below, showing how subsidy design can mitigate these effects.

1

1. SUBSIDIES BENEFIT THE BETTER-OFF RATHER THAN THE POOR.

Household sanitation subsidies are often ill-targeted and exclude the poorest of the poor, for example because they often require the individual to make a contribution towards the construction costs.

w**The risk of ill-targeted subsidies can be reduced by smart subsidy design.** The most important principle is that subsides should be targeted to the population groups that most need support. In comparison to subsidizing suppliers of household toilets or utilities/municipalities for the expansion of sewer networks, subsidies to households offer an opportunity to target recipients directly. Yet, the designers of the subsidy need to carefully assess people's ability and willingness to pay for sanitation. As will be elaborated further on in this paper, the subsidy amount is one of the most important design criteria. To stimulate demand, it may make sense to start with the low-hanging fruits rather than with the poorest of the poor. This way, the subsidy can leverage private money that would not be spent on sanitation otherwise. This ripple effect has been observed in implementation, e.g. in Kenya through the UBSUP programme. Additionally, public awareness raising and setting clear and transparent criteria about the conditions under which the subsidy can be obtained is an important instrument to ensure the target group actually takes advantage of the subsidy.

2

2. SUBSIDIES UNDERMINE OWNERSHIP OF THE SANITATION FACILITIES

As the individual owner will not pay the full price of the toilet, he may attach a lower value to the toilet.

The amount of the subsidy has to be carefully determined, as it can influence the level of ownership[27]. There is a risk that facilities are used for non-sanitation purposes, such as storage or dumping sites. For example, in India, some villagers converted newly built toilets into firewood storage areas, chicken coops, or storerooms.[28] Lower ownership is a very acceptable trade-off given the goal to accelerate the uptake of household toilets, in light of the Leave No One Behind principle. Furthermore, other measures such as clear social marketing campaigns with strong national mandated institutional back up, capacity development on household level (such as O&M of toilets, handwashing) can enhance ownership. Successful campaigns in Bangladesh, for example, have transformed a household toilet into a status symbol, signifying dignity.[29] Again, **smart design** matters!

27) A number of studies have looked at the effect of subsidies on take-up of health products such as toilets, soap, and mosquito nets. Pattanayak et al (2009) found that subsidies increase the up-take of toilets. However, Cohen and Dupas (2008) conducted a randomized control trial that compared mosquito net provision given for free or sold at different price points. They found that there was no evidence that those who received free nets were less likely to use them.

28) Sharma (2017).

29) www.thethirdpole.net/en/2016/03/03/open-defecation-ends-in-bangladesh-almost.

3

3. SUBSIDIES CREATE DEPENDENCIES AS THEY LOWER THE WILLINGNESS OF INDIVIDUALS TO CONTRIBUTE THEIR PRIVATE CAPITAL.

As people get used to subsidies, they cease to make independent investment decisions, preferring to wait for subsidized services instead.[30] This is especially the case when several development partners/agencies implement different approaches and undermine each other as evident in several countries in sub-Saharan Africa.

To counter this consequence, clear communication with the target group and coordination among donors is key. Managing expectations of the subsidy recipients must be an integral part of the programme. The target group needs to be informed of the choice they take and understand the character and limitation of the subsidy (e.g. one-off and not inclusive of O&M). The donor agencies should align with the national subsidy frameworks of the mandated institutions and these institutions should clearly communicate the subsidy strategy and implementation plan.

The fragmentation of interventions in the sanitation sector is a relevant and serious concern. Development partners need to align their approaches with the national subsidy policy frameworks of the mandated institutions. Close coordination of development actors can help prevent situations where one organization constructs household toilets for free or with very minimal investment from the household while a second one tries to persuade households to contribute to the investment.

In summary, subsidy designers need to choose between targeting different population groups (landlords or tenants, the poorest, or those with highest demand for sanitation, etc.). They also need to consider trade-offs between reaching different policy objectives (quick scale-up, long-term sustainability, market creation). This is not unusual in policy design and these trade-offs should not keep policy-makers from using subsidies as a financial incentive to accelerate access to sanitation. The most important thing therefore is to identify the target groups, policy objectives and strategies at the very beginning.

30) Evans et al (2009).

5 SMART SUBSIDY DESIGN: DESIGN VARIABLES AND TRADE-OFFS

The literature that tackles the question of "How to design sound subsidy schemes in practice" is very scarce. An extensive discussion on sanitation subsidies is given in the report "Public Funding for Sanitation".[31] Moreover, the new World Bank Report[32] contains a toolkit for policymakers to design smarter subsidies. Some of the suggestions contained therein are also tackled below, such as a communications strategy build advance backing and for successful implementation; designing an appropriate exit strategy, and complementary policy measures. With the elaboration that follows, we aim to complement the World Bank's toolkit with concrete examples from GIZ experience in Burkina Faso and Kenya on smart subsidy design. The section draws on the methodology for subsidy design developed by GIZ. We introduce the most important design variables and examine trade-offs that are inevitable when making design choices.

The following table lists the most important design variables for subsidies.

Table 2: Subsidy design variables

Source: Adapted from GIZ (2009) "Energy subsidies: Why, when and how? – A think piece"

1	**Objective**: increasing access, social equity, public health, dignity, environment
2	**Funding source**: tariffs, taxes, transfers
3	**Legal and institutional framework**: mandated institutions, pro-poor orientation, pro-poor fund, multi-sectoral fund, strategy and frameworks indicating subsidies
4	**Target group – Recipients and Beneficiaries**: Households, landlords/plot owners, tenants, communities, private companies.
5	**Type of subsidy and amount**: direct/indirect, cash/in-kind contribution, upfront/post-construction
6	**Selection criteria**: by social/financial/political/geographic criteria
7	**Accompanying demand creation measures**: Awareness campaigns and sanitation marketing
8	**Timing and exit**: sequencing, planned phase-out, follow-up funding
9	**Regulation and technical standards**: minimum standards, reporting, anchorage at the regulator
10	**Scalability**: relevance to beneficiaries, ownership of local actors, sustainability of impact
11	**Monitoring and adjustments**: Monitoring, Evaluation, Impacts, Baseline, Costs, …

5.1. Subsidy objective

The overall subsidy objectives guide all subsequent subsidy design decisions and the trade-offs that need to be made. Most subsidies serve multiple objectives, therefore a prioritization of objectives is necessary. This paper focuses on household sanitation subsidies in the context of the global Sustainable Development Goal agenda that aims to leave no one behind. This implies a pro-poor orientation in subsidy design and the need to identify the target group.

31) Evans et al (2009).
32) World Bank (2019).

The Up-scaling Basic Sanitation for the Urban Poor (UBSUP) programme in Kenya, for example, had the overall objective to increase the access to adequate sanitation in urban low income households. The introduction of household sanitation subsidies, as part of the UBSUP programme, had two main objectives, namely:

1. Enable poor households who could not **afford** an improved household latrine by their own means, to acquire such a facility; and

2. Create **demand** for sanitation, which will accelerate the development of the sanitation chain.

5.2. Funding sources

The monetary value of an individual household sanitation subsidy is calculated as the difference between the actual cost of the facility and/or service and the amount paid by the user. The total subsidy need is therefore the product of the average individual household subsidy multiplied by the number of households receiving the subsidy.

The funds necessary to pay for this subsidy can come from three primary sources: tariffs, taxes and/or transfers.[33] Tariffs are users payments for the service. For on-site sanitation, the equivalent to tariffs is regular user payments. Taxes are the revenue raised by local, regional and national governments through their tax systems. Transfers are revenues from foreign sources, for example, international donors and charitable entities, mostly in the form of grants.

Tariffs/user payments are the most sustainable source of funding for sanitation. The service provider directly controls the collection of tariffs and user payments.[34] By contrast, taxes and transfers originate from outside the sphere of the service providers' direct operations, such as from the local governments' income tax revenues or from foreign governments' ODA budget. Therefore, they may change due to external factors such as change in political leadership or economic slowdown. In most cases, a combination of tariffs, taxes, and transfers is the most realistic source of funding for household sanitation subsidies.[35] Innovative mechanisms to raise additional funds for subsidies are also possible (see Box 1).

However, in reality, in many developing country utilities the amount paid by users is very small compared to the amount covered through taxes and transfers. According to the World Bank, the cost of water and sanitation subsidies in 194 countries (excluding China and India) is an estimated $320 billion per year, or 0.51 percent of their GDP.[36] This shows that subsidies in water and sanitation are expensive and pervasive.

Many practitioners recognize that customers' **willingness to pay** for sanitation services is often lower than their willingness to pay for water services. Cross-subsidizing sanitation through a **surcharge on the water bill** is one way to deal with this. Such surcharges can be enforced by the government, sector financing institutions, the regulator, or the utility itself.

33) OECD (2009). Loans (whether multilateral, bilateral, concessionary or commercial) are sources of repayable finance (not funding). Repayable finance serves a useful purpose in bridging the gap between the need for development and the payment for that need. However, ultimately, as the name indicates, these are to be repaid from future tariffs, taxes or transfers.

34) Note however, that the government and, if existent, the regulator set the regulatory framework for tariffs, therefore the utility often does not have sole control over its tariff setting.

35) See, for example, Institute for Sustainable Futures (2014).

36) World Bank (2019).

In **Burkina Faso**, the water and sanitation utility, ONEA, has implemented a sanitation surcharge that is levied on the cost of drinking water. This surcharge is used to finance on-site sanitation activities and is set at US$0.02 per cubic metre of water sold, amounting to 4% of water revenues. Using the surcharge on water bills, ONEA collects about 1, 5 billion CFA every year for sanitation.

The **Kenya**, the water legislation gives the minister responsible for water the power to prescribe a **levy** on consumers of piped water to be collected by water providers and paid into a national **Water Sector Trust Fund**.[37] This Fund, which can also get funding from national and country governments as well as donations and grants from other sources, has a mandate to support improvements in water and sanitation services particularly in underserved areas and for the urban poor. According to a study by Water and Sanitation for the Urban Poor (WSUP), Kenyan water utility customers were willing to pay a pro-poor sanitation surcharge, regardless of the proposed type of sanitation investment.[38]

In **Zambia**, the regulator NWASCO introduced a sanitation surcharge in 2007. The sanitation surcharge is part of the tariff structure and can be set to be up 5% of the monthly water bill. In 2019, all approved sanitation surcharges were set at 2.5% of the water bill. Revenue collections from the sanitation surcharge are ring-fenced according to NWASCO guidelines to ensure that they are not used to cover a commercial utility's operating costs but rather used to fund approved sanitation extension projects. Proposed sanitation projects are prepared by commercial utilities and submitted to NWASCO annually for approval. Commercial utilities are awarded the sanitation surcharge on a case by case basis depending on their level of cost coverage. The surcharge can be suspended by NWASCO where a commercial utility fails to adhere to agreed terms and conditions.[39]

Box 1: Mobilizing additional funding for sanitation subsidies through levies

Levies on industries or products could contribute to household sanitation subsidies based on the following ideas or precedents.

A study by the German Association of Energy and Water Industries (BDEW) proposed to impose a levy on the pharmaceutical industry, the main source for drug residues in water, and use the funds to upgrade the wastewater treatment plants, in line with the polluter-pays principle.*

Levies on plastic-producing and plastic-using industries could contribute funding for water and sanitation service delivery. A study by Urban Institute calculated that a levy of 5 cents on every litre of bottled water Americans consume could generate over $2.5 billion per year.**

Solidarity levies could mobilize additional funds for water and sanitation from unrelated and thus far untapped sources. The most well-known example comes from the health sector. Unitaid, an international facility for drug purchases, hosted by WHO, collected $1.48 billion in 2015 through a levy on airlines. Unitaid uses those funds to accelerate access to high-quality drugs and diagnostics for HIV/AIDS, tuberculosis, and malaria in high-burden countries.**

*civity Management Consultants (2018)
**Nagpal et al (2018)

37) Water Act 2016 Sections 113 to 118. The minister responsible for water in Kenya is called the Cabinet Secretary.
38) WSUP (2018).
39) NWASCO (2018).

5.3. Legal and institutional framework

Subsidies need a clear basis in law that establishes the legitimacy and overall parameters, including key policy objectives, of the subsidy programme. The law should also establish the institution with the overall responsibility of the subsidy programme, the sources of funding and the basic principles to be observed by the institution administering the subsidy. The more detailed provisions likely to be necessary for the implementation of the subsidy can be developed in regulations accompanying the law.

In **Burkina Faso**, household sanitation subsidies were enabled through the adoption of the Ouagadougou Strategic Sanitation Plan (PSAO) in 1992, an integrated sanitation and hygiene promotion programme implemented by ONEA.[40] PSAO recognized that conventional sewerage was not an affordable option for the entire city and anticipated that 80% of the city's residents would be served through on-site sanitation solutions. The plan included hardware (construction of infrastructure and toilets) as well as educational and promotional measures. It had three main components, which focused on conventional sewerage, on-site sanitation and school sanitation facilities. Burkina Faso's National Programme for sanitation, waste water and excreta (PN-AEUE) stipulated that 2% of sanitation facilities should be constructed through a total subsidy and should target only poor households. This provided a sound institutional and legal framework for the implementation of household sanitation subsidies in Burkina Faso.

In **Kenya**, the responsibilities for sanitation were divided between different ministries.[41] The ministry responsible for health focused primarily on rural sanitation and awareness raising while the ministry responsible for water focused mainly on urban sanitation. Water utilities managed networked sanitation services comprising sewer networks and wastewater treatment facilities. This fragmentation led to gaps particularly with respect to the majority of the urban poor who did not have access to sewer connections.

The Water Sector Trust Fund was established as the primary mechanism for pro-poor funding and, in terms of its urban programme, allocated funds to water utilities. More recently, some water utilities, supported by funds from the Trust Fund, have implemented decentralized sanitation solutions, particularly the treatment of fecal waste from onsite sanitation systems.

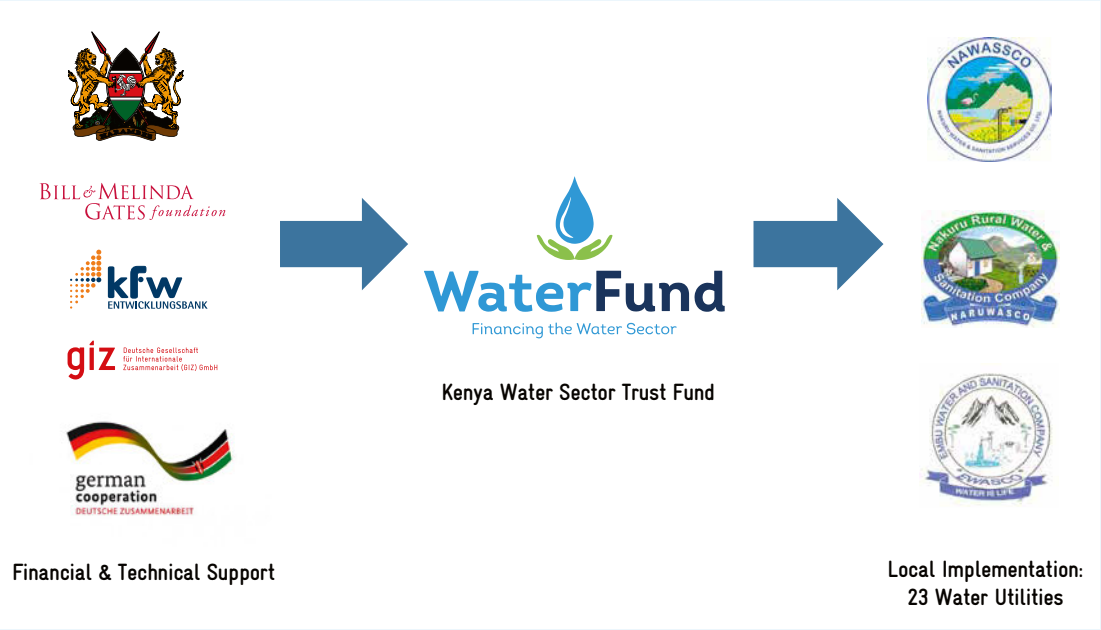
The Up-scaling Basic Sanitation for the Urban Poor (UBSUP) programme was anchored in the ministry responsible for water and managed by the Trust Fund, with funds coming primarily from development partners (Picture 1). UBSUP was piloted first. Lessons from this influenced decisions on who should be responsible for a particular stage in the service chain and how that responsibility can be addressed. Existing policies and regulations under the Water Services Regulatory Board (WASREB) were reviewed to ensure harmonization and the inclusion of all components, such as sanitation technologies, financing mechanisms, and elements of urban sanitation and sludge management (including reuse of treated sludge). The implementation of UBSUP was then scaled up. The lessons learned from the programme directly influenced national policies and UBSUP models and implementation procedures became the programme of reference for stakeholders during the review of Kenya's National Environmental Sanitation and Hygiene Policy from 2007 that led to an improved version in 2016.[42]

40) The PSAO was the first strategic sanitation plan. Currently all 56 cities which ONEA serves have their own strategic sanitation plans. 37 of them are currently being implemented.

42) The names of these ministries have changed over time.

43) Republic of Kenya/Ministry of Health (2016).

Picture 7: UBSUP implementation framework in Kenya
Source: GIZ



In some countries, legislation precludes household sanitation subsidies. For example, in Zambia, the Water Supply and Sanitation Act, No.28 of 1997, stipulates that household toilets are the responsibility of households. Some countries choose to focus their public resources on the construction of first-mile infrastructure such as water treatment plants and wastewater treatment facilities. While every law has its own story, the policy goal of leave no one behind provides grounds to reconsider pro-poor subsidies with the view to removing legal barriers to their implementation.

5.4. Target group – Recipients and Beneficiaries

The intended beneficiaries of the subsidy need to be defined in light of the overall subsidy objective. Once the intended beneficiaries have been defined, mechanisms to target these beneficiaries need to identified.

In light of the Leave No One Behind policy objective, **the intended beneficiaries of household sanitation subsidies are most likely to be households who do not have an adequate sanitation facility and who are living below the poverty line**. The poverty line is usually expressed as an annual per capita income or expenditure threshold. It is difficult to measure household income directly and, therefore, to determine whether a particular household should benefit from the subsidy or not. To get around this problem, it is necessary to develop eligibility criteria with a high correlation with the underlying poverty variable, that can be objectively measured, easily observed and that are difficult to falsify or misrepresent.[43]

43) Foster et al (2000).

The **two basic approaches to determine the eligibility** for a subsidy programme are **area-based** (zonal/geographical) eligibility and **individual-based** (by recipient) eligibility.

In **Kenya**, the poverty levels of individual households are hard to establish since there is no register or identification for people living below the poverty line. Therefore, **an area-based approach was taken** to identify eligibility for subsidies. The main criteria for mapping eligible recipients in low income areas was geographical data on low-income area provided by the MajiData platform (Box 2).

Box 2: Using geographical data to support selection - MajiData

MajiData is the online Water and Sanitation Database on Urban Low Income Areas in Kenya. It was developed by the ministry responsible for water and the Water Sector Trust Fund in cooperation with GIZ, UN-Habitat, KfW and Google.org. It contains information on 1882 urban low income areas in Kenya located in 212 cities and towns. The database supports the water utilities and the Water Sector Trust Fund to prepare tailor-made water supply and sanitation proposals for the urban low income areas located within their service areas. MajiData provides the water sector with the information required to measure impact and ensure targeting of the population within the low-income areas.

Given that MajiData was not fully updated and did not capture all the low income areas in the services areas, this approach proved to be challenging. Geographic targeting also runs the risk that the water utilities intentionally reach out for the lowest hanging fruits, that is, the low-income areas that are easiest to reach, hence leaving the more difficult area behind. To mitigate this issue, the Trust Fund developed criteria during the call for proposals for utilities to choose low-income areas within their jurisdiction. Before providing the financing, the Fund visited the areas to verify the presence of the low-income areas.

It is also important to distinguish between beneficiaries and recipients as these may be different. For example, the recipient of a household sanitation subsidy could be the property owner and the beneficiary the tenant, or vice versa (Box 3).

Box 3: Landlords and tenants

In many low income areas, the inhabitants rent the property, which is owned by a landlord. This circumstance makes it harder to ensure that the subsidy for a toilet ends up benefitting those who need it the most. For example, the landlord may raise rents upon completed construction of the toilet, forcing poor tenants – the intended beneficiaries – out.

There is also a risk that some landlords receiving the subsidy could afford to build toilets for their tenants without financial aid.

To reduce these risks, area-based targeting should be complemented with individual/recipient eligibility checks.

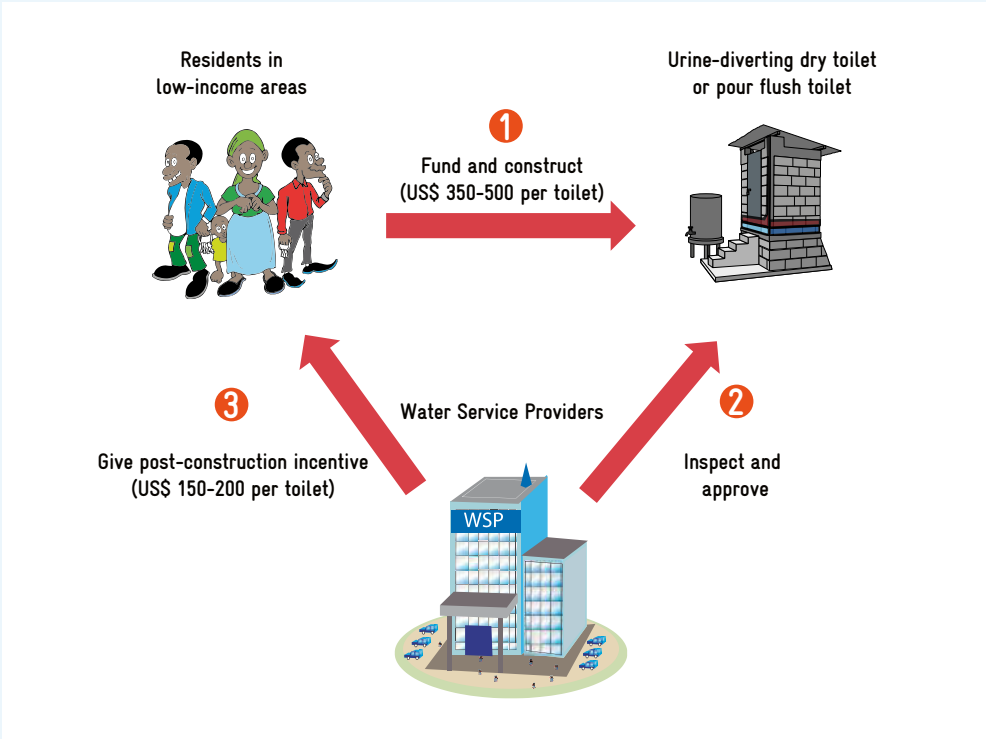
In most urban low income areas in Kenya, for example, the majority of residents are renting their accommodation. There are between four and ten households on a typical plot. Landlords might live on the plot or not. Due to these existing settlement structures, the UBSUP subsidy concept considered landlords (and not individual households) as the recipients of the subsidy payments.

5.5. Type of subsidies and the amount

There are several different types of household sanitation subsidies: up-front versus post-construction subsidies, fixed versus variable subsidies and direct versus indirect subsidies.

Direct subsidies are monetary payments made directly to the recipients (landlords or tenants) for the construction of a toilet. **Indirect subsidies** do not involve cash payments to recipients. Instead services and/or materials are provided to recipient to facilitate the construction of toilets. For example, artisans and/or materials such as bricks are make available for the construction of the toilet.

Upfront subsidies are direct or indirect contributions provided to the recipients before and/or during the construction of the toilet, while **post construction subsidies** are direct cash transfers made after the construction of the toilet has been completed.



Picture 8: Scheme of the Kenyan UBSUP Programme subsidy
Source: GIZ, Authors

44) KES 20.000 and KES 15.000 respectively.

Type of sanitation infrastructure	Approximate cost CFA)	Subsidy	Household contribution
Ventilated improved double pit	415 830	56%	44%
Ventilated improved single pit	261 837	58%	42%
Manuel pour flush toilet	293 900	27%	73%
Urine Diverting Dry Toilet UDDT	260 010	55%	45%
Rehabilitations	75 000	54%	46%
Simple pit latrine (puisard-bac)	85 750	17%-21%	83%-79% (depends on size of slab)
Pit shower (Puisard-douche)	203 850	25%	75%

Table 3: ONEA's subsidies for different types of sanitation infrastructure in Burkina Faso.

Fixed subsidies mean that the subsidy amount (whether direct or indirect) is always the same. **Variable subsidies** may vary depending on various factors such as the type of toilet constructed.

In **Kenya**, landlords received a **direct, fixed subsidy** of approximately US$200 for a new toilet or US$150 for the rehabilitation of a toilet.[44] This was a post-construction subsidy, made in a single payment. The subsidy for a new toilet represented approximately 40% of the estimated average cost of a new toilet and the amounts were standardized to avoid administrative complexity (Picture 2).

In **Burkina Faso**, the National Wastewater and Excreta Sanitation Programme implemented three types of variable subsidies.[45] Very poor and vulnerable households were eligible for a **100% subsidy** for household toilets. Wealthy households benefited from awareness raising activities only, with the objective to increase their willingness to finance their own toilets. All other households were eligible to benefit from a partial subsidy.

ONEA's strategic approach aimed to provide a range of low-cost, easy-to-maintain sanitation technologies that were affordable to households through a variable subsidy approach (Table 3).

In the case of household sanitation facilities, ONEA provide **indirect, up-front, partial subsidies** through two mechanisms:

1. **Materials and labour approach:** The household gathers some materials and pays the masons directly for the construction. ONEA provides an in-kind subsidy through a voucher (e.g. for slab, solid brick, sheet metal, door, claustra, and toilet bowl for pour flush toilet. The subsidy is about 60% of the latrine cost. This was the most common approach.

2. **Turnkey approach:** The household pays its cash contribution through a financial institution. The latrine is then built for the household. The subsidy is for 80% of the latrine cost. Approximately 13 000 toilets were built through this mechanism in ten cities between 2012 and 2018, reaching about 130 000.

45) This plan is abbreviated as AEUE NP 2016- 2030.

Picture 9: Household survey in Burundi

© GIZ Burundi, Britta Radike

5.6. Selection criteria

Once the target group has been clearly identified and the type of subsidy and subsidy amounts defined, it may not be possible to provide a subsidy to all of the eligible group for practical or financial resourcing reasons. It therefore may be necessary to prioritise the allocation of subsidies and to develop selection criteria to facilitate this process.

There are likely to be trade-offs between speed of implementation and the extent of the reach to the very poor. For example, the decision for geographical targeting through MajiData in Kenya came with the risk that water utilities would intentionally reach out to the most affluent or easiest to reach low income areas and hence leave the more difficult areas behind. However, given the goal of quick uptake and proof of concept of the UBSUP programme, this was considered to be an acceptable trade-off.

5.7. Accompanying demand creation measures

Sufficient demand for household sanitation among the target group is a prerequisite to the uptake of subsidies. Clear communication of the subsidy programme's goals and strategy is important to avoid the above-mentioned unintended consequences. Sanitation campaigns can increase the target group's willingness to invest their private capital into their

household toilet and prevent misunderstandings about the subsidy implementation process. In most contexts, awareness campaigns and other demand creation measures should therefore accompany the subsidy implementation.

These awareness and demand creation measures work best when led by nationally mandated institutions. While NGOs can play a role in implementing awareness raising measures, e.g. through CLTS programmes, isolated, project-based campaigns are less effective than those directly linked to the service providers and line ministries. Ideally, nationally mandated institutions should lead these initiatives.

In **Kenya**, the water utilities took on the awareness raising and sanitation marketing activities themselves. The UBSUP sanitation social marketing approach was an elaborate marketing methodology aimed to improve access to basic sanitation services and was built along the entire sanitation chain. It targeted both the households and tenants, the policy makers, the service providers and entrepreneurs (private sector) with targeted messages to inspire them to play their roles in improving sanitation services for the residents of urban low income areas. Sanitation marketers were hired to create demand in the underserved and marginalized areas on behalf of the water utilities through mechanisms such as door to door campaigns.

In **Burkina Faso**, ONEA promoted the construction of toilets through TV and radio messages, making it known to every household the opportunity to request ONEA's support to build a toilet.

Picture 10: Marketing poster in Burkina Faso

Picture 11: Sanitation marketers in the UBSUP programme, Kenya

5.8. Timing and exit strategy

It is hard to abolish a subsidy once it is put in place. Even where subsidies do not effectively reach their intended beneficiaries, they often become entrenched owing to the interests of the stakeholders who benefit from them (Table 4).[46] Therefore, the when proposals are made to implement a new subsidy, there should also be an exit strategy. Unfortunately, this seldom occurs.

A lack of transparency with respect to the amount of money flowing into subsidies is another critical bottleneck that inhibits the design of an appropriate exit strategy. If it is not known how much money was spent on a subsidy in the first place, it is hard to know the implications of removing or reforming a subsidy.

None of the GIZ programmes we consulted was able to provide an example exit strategy. However, Burkina Faso's National Programme for Sanitation includes communication campaigns to incentivize households to construct their own latrines without any subsidy. The approach aims at eliminating subsidies in the long run.

Table 4: Life Cycle of a Subsidy Regimey

Source World Bank (2019) Adapted from Inchauste, Victor, and Schiffer (2018).

Beneficiary type and benefit size	Citizen benefits are large	Citizen benefits are small
Special interest benefits are large	Entrenched subsidy → Democratization of subsidy; Reconcentration → Expanding special interests → Initial subsidy	
Special interest benefits are small	Populist reforms; Extensive reform	

46) World Bank (2019).

5.9. Regulation and technical standards

Subsidy schemes need to be accompanied with an appropriate specification of technical standards for the toilets to be constructed. Programmes to develop household sanitation subsidies therefore can facilitate the establishment of these standards. This standardization, in turn, can facilitate the development of local markets for sanitation businesses and their formalization. Which standard is appropriate needs to be assessed on a case-by-case basis.

In **Burkina Faso**, the subsidy programme prescribed a minimum quality for latrine construction. ONEA also developed a mechanism to assure the quality of slabs and bricks. As part of this mechanism, norms have been defined to guarantee the quality of the fabrication of slabs and bricks covered by the subsidy. The consulting engineers, masons and prefabricated materials are all certified by ONEA for latrine building.

5.10. Scalability

To achieve the desired impact, sanitation subsidies need to be scalable. At GIZ, we believe that scaling-up can only succeed when the partners in the responsible Ministries, utilities, and implementing organizations assume ownership of the process. This is reflected, for example, in GIZ's experience in Kenya and Zambia where new pro-poor sector policies were operationalized, enabling sustainable investments in last mile water and sanitation infrastructure through the establishment of trust funds.[47]

The *Guidelines on Scaling-up*[48] for GIZ programme managers and planning officers offers a range of tools to build scalability into an approach from the very start. These tools include, among others, an analytical tool to identify key actors in a cooperation model, a process mapping tool, and an impact model.

In **Burkina Faso**, a collaboration between the Ministry of Housing and City Planning and the Ministry of Finance made it compulsory to build a latrine in one's house in order to acquire an urban residence licence. This created a strong foundation for scaling-up sanitation provision.

In **Kenya**, UBSUP has been designed to be scalable, as the programme is firmly anchored within the relevant sector institutions. However, the Kenyan water service providers still have no legal obligation or mandate to improve household sanitation facilities. UBSUP thus relies on service providers' social responsibility and dedication to improve the public and environmental health for the population within their service area. Furthermore, because UBSUP was wholly reliant on external funding, it remains to be seen whether the service providers will continue to implement the subsidy scheme without funding from the Water Sector Trust Fund.

5.11. Monitoring and evaluation

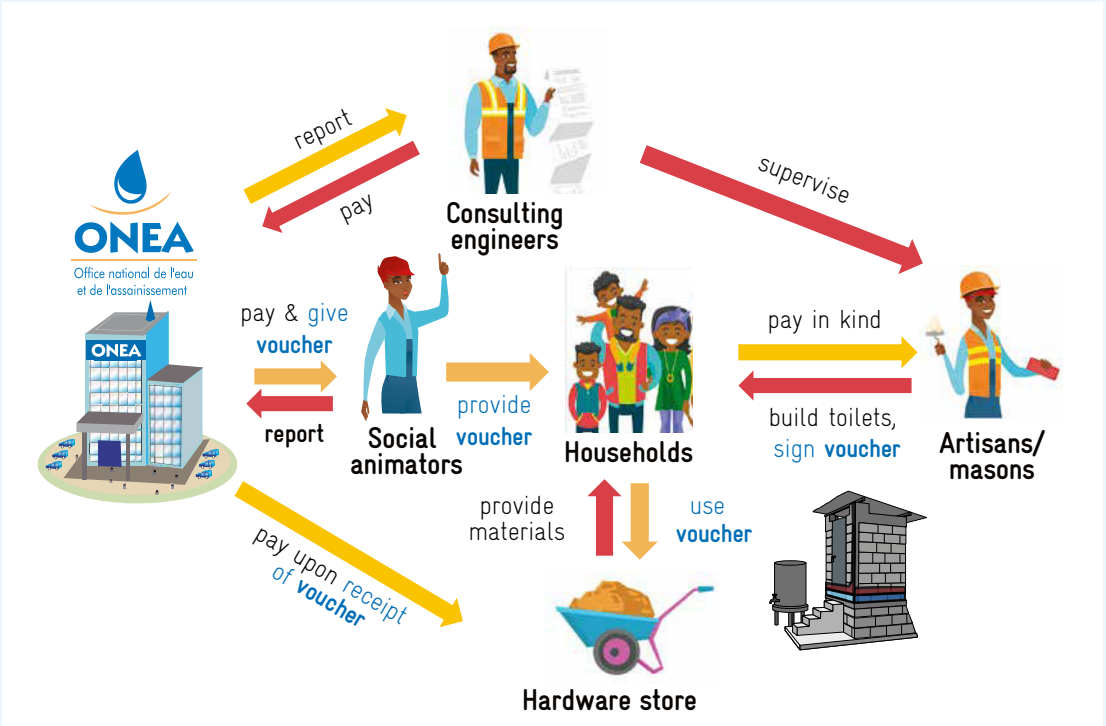
Monitoring and evaluating the outcomes of household sanitation subsidies is paramount to ensure that the intended policy goals are met. In light of potential unintended consequences, special attention needs to be given to the effectiveness of targeting and the extent to which the subsidies contribute to accelerating access. The knowledge gained in the process of monitoring and evaluating is necessary to ensure that the subsidy targets the right recipients.

47) See GIZ (2015).
48) GIZ (2016).

The sanitation subsidy programme in **Kenya** monitored progress through monthly and quarterly reporting. The utilities sent reports to the Water Sector Trust Fund through the County Resident Monitors based in the County. Annual Reports were sent to development partners. Online monitoring tools such as Safisapp and Majidata and excel reporting templates were used. These tools were constantly updated, while the dashboard was managed by the Water Sector Trust Fund.

In **Burkina Faso**, ONEA outsourced the monitoring and evaluation function to consulting engineers. The consulting engineers reported to ONEA on the number of households requesting toilets, the household contributions towards the construction, the number of households that have received the subsidy and the total number of toilets built. The engineers also supervise the full construction process. ONEA technicians conduct field visits to inspect the work and update the inventory.

Through a voucher system and construction tracking sheets, ONEA was able to effectively collect information at each step of the process, thereby creating a transparent track record of implementation. The voucher functions as a substitute for cash payment, as households exchange it for construction materials, and the delivering firm hands the voucher back to ONEA to receive payment for that material. When handed back to ONEA, the voucher contains signatures from the construction supervisor, the mason, the representative of the household, and the construction material seller, creating a documented record. The voucher system creates transparency and reduces opportunities for corruption and bribes.



Picture 12: Monitoring and evaluation through a voucher system in Burkina Faso

Source: GIZ, Authors, 2019

The following table can be used to evaluate a subsidy scheme. This table was applied to gather GIZ's experience in several countries. It can also be used in individual subsidy evaluations.

Performance Criteria	Please describe your approach	Did you meet the objective?	Challenges?
Effectiveness			
Accomplishment of objective			
Targeting			
Scalability			
Speed			
Efficiency			
Minimal distortion			
$/output			
Admin costs			
Sustainability			
Economical			
Financial			
Ecological			
Social			
Resilience			
Simplicity, stability			
Flexibility, adjustability over time			
Private Sector Participation			
Private Sector Development			
Transparency			
Monitorability			
Predictability			
Politics			
Visibility			
Constituency			
Votes			
Fast disbursements			

Table 5: Tool for Evaluating Subsidy Performance

Source: Adapted from GIZ 2009: "Energy subsidies: Why, when and how? – A think piece".

6 CONCLUSIONS

This review of GIZ's experience in African countries with household sanitation subsidies offers the following conclusions:

1. The evidence shows that **household sanitation subsidies can be an appropriate policy tool to reach those left behind**. Some African utilities, notably in Kenya and Burkina Faso, have successfully implemented household sanitation subsidies to scale up access to sanitation. In comparison with subsidizing suppliers of household toilets or the expansion of sewer networks, subsidies to households offer an opportunity to target recipients directly and at a lower unit cost.

2. In the context of the Sustainable Development Goals, the design and targeting of household sanitation subsidies should be **evaluated**, above anything else, **against leave no one behind criteria**. Negative perceptions of sanitation subsidies are related to poor subsidy design with poor targeting. While trade-offs are part of any policy instrument design process, the use of a clear set of design variables (Table 2) can help to facilitate a more systematic approach to subsidy design by analysing key choices and helping decision-makers come to informed decisions, resulting in smarter subsidies and better outcomes.

3. **Tariffs and user payments are the most sustainable source of funding for sanitation subsidies**. Utilities control revenue collection from tariffs directly. User payments for on-site sanitation solutions are also directly negotiated between the service provider and the user. Besides tariffs and direct transfers from the government, surcharges on the water bill can constitute an effective source of funding for household sanitation subsidies.

4. Subsidy systems should be given a clear **legal basis**. It can be advantageous to combine subsidy reforms with wider sector policy reforms.

5. **Sanitation campaigning and demand creation** should be an integral part of any subsidy model. These awareness and demand creation measures coupled with financial measures work best when linked to nationally mandated institutions. NGOs can play a role in implementing sanitation campaigns such as CLTS, but should strive to move away from isolated, project-based campaigns towards stronger cooperation with water service providers and line ministries. Nationally mandated institutions should be in the driver's seat.

6. **Determining an exit strategy** when implementing a new subsidy is important to avoid the subsidy becoming entrenched and a loss of focus on the intended target group.

7. Subsidy schemes should be accompanied by a framework to **monitor results and track impact**, particularly on the intended target group. This is necessary in order to identify any unintended consequences.

8. **Flexibility** to adjust the approach in light of unintended negative consequences is paramount. The proposed evaluation tool for subsidy performance (Table 5) can facilitate the process of reviewing the subsidy's effectiveness and adjusting it where necessary.

In the end, the case for sanitation subsidy is something that needs to be assessed rather than assumed. An important starting point is to review the nature of existing subsidy arrangements and consider to what extent they are effective in reaching the poor. Reforming existing subsidies to be more pro-poor could yield significant benefits.

In order to achieve the Sustainable Development Goal of achieving universal access to safely managed sanitation, new approaches to sanitation subsidies are necessary. Sanitation coverage has remained low in most countries in Sub-Sahara Africa and the majority of existing subsidies favor the wealthy. To be more effective, subsidies need to more targeted and pro-poor.

This paper has provided evidence that subsidies for the construction of household toilets can contribute towards increasing sanitation coverage for those left behind. In order to be effective, these subsidies need to be well designed and implemented. This requires context-specific smart subsidy design, an approach set out in this paper.

Beyond the examples contained in this paper, other experiences with household sanitation subsidies are yet to be studied. It is hoped that this paper will encourage and stimulate further work and discussion on this important topic, including better comparative studies on the performance of different subsidy approaches. **Two billion people without access to basic sanitation facilities may be counting on it**.

ANNEX

Brief overview of country case characteristics (Source: Authors)

	Kenya	Burkina Faso
Objective	• Affordability • Demand creation • Development of sanitation chain (service provision and infrastructure)	• Affordability • Demand creation • Focus on latrines/toilets only (now changing)
Financing source	• External/grants • Sanitation levy in Water Act 2016 (yet to be implemented)	• Sanitation tax/levy –>Household Sanitation • 4% of water bill • Industrial surcharge? • + External/donors – Grants/Budget support
Legal & institutional framework	• Embedded in national institutions • Utilities implement	• Implemented by national utility • Strategic framework –> ONEA
Target group/selection	• Geography (MajiData) • Landlords (tenants)	• 2% of households = 100% subsidy • Criteria for 2% missing • ONEA/Ministry of Health and Social Action –> criteria for identifying poor HH –> too many rich households included?
Type of subsidy	Post-construction + social marketing	1. In kind/materials provided 2. Upfront financial support
Amount, timing, exit	• Fixed amount – New – Rehab. • Exit strategy was missing?	1. 60% of latrine cost 2. 80% of latrine cost
Regulation	Regulator: • Sanitation Coverage indicator? • MajiData • Tariffs + business planning – Guidelines?	• Standardization –> technical, financial • No regulator • Performance contract with government –> sanitation indicator?
M & E	• Utility –> reports • Social marketers • County Resident Monitor (CRM) • WSTF • Verify	• ONEA through consultants verifying construction • Consultants report via construction tracking sheets • Sanitation marketers
Common Challenges: Fast disbursement; Donor coordination; Targeting; Exit Strategy.		

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