





## SanCop 22

## **Financing Sustainable Sanitation**

## **Synopsis**

The 22<sup>nd</sup> meeting of the UK's Sanitation Community of Practice was held on the 26<sup>th</sup> of November 2018 at Oxfam House in Oxford. The aim of the event was to discuss with the participants the needs and potentials of financing sanitation. The challenges of finding funding sources, data acquisition, correct understanding of terminology, financial sustainability, and equitable service provision were examined. An engaged audience discussed with an expert panel about key questions and challenges to ensure the fight financial instruments are used to fund the right service provision models.

Special thanks to Oxfam for hosting the event, with excellent support from Jola Miziniak.

This synopsis and the speaker presentations are available at <a href="https://www.susana.org/en/community/integrated-content/sancop-uk">https://www.susana.org/en/community/integrated-content/sancop-uk</a>

## Session 1 - Sanitation Costing

The day started with three announcements from the community:

- A call inviting inputs to the markets 'fact sheet' on Susana: https://bit.ly/2S7Xdou
- A call to become a signatory to the 'Nakuru Accord' to nurture a culture of transparency about failures in the sector: <a href="https://bit.ly/2CiosH6">https://bit.ly/2CiosH6</a>
- An announcement about the launch of Water Aid's Female Friendly Toilet guide: https://bit.ly/2ABfzYG

## Principles for assessing and reporting cost: economic vs financial costs - Ian Ross, LSHTM

lan's key message was that financing is fundamentally about who covers the costs for services, and that clearly defined terms and transparency are needed when reporting costs, regardless of the service's quality. He defined costing as the estimation of the costs of programmes or services - broadly speaking the cost of a service is the cost of supplying a service that already exists, and a programme is an intervention to change a level of service. He stressed the need to clearly distinguish between financial analysis (who pays for sth, how and when) and economic analysis (efficiency and how things are valued). As we underestimate how many people use data we publish, we must ensure good-quality data, consider time horizons, and lifecycle analyses to avoid poorly-informed decisions and inequitable investments. However, the purpose of the data collection should drive the research methods, as we must make concessions to the level of detail: Full economic evaluation (preparing 2 or more options for cost-effectiveness/cost benefit analysis), and partial financial evaluation (estimating the costs of a single programme) are economic purposes, whereas financial purposes include financial planning or resource requirement studies.

## Standardised costing metrics for urban sanitation - Tristano Sainati, University of Leeds

Tristano started by introducing the CACTUS project which is investigating costing, welfare and climate. He explained that there is a gap in the knowledge we have about costing compared to other industries, e.g. the energy sector, where the per watt cost of different forms of generation are known exactly. CACTUS is aiming to use a top down approach to create a costing tool and is willing to compromise on precision in order to get 'a ball park estimation' for urban sanitation services. To do this they have used the very strong assumption that there is a single operator who takes hold of the entire value chain and operates everything, buys all consumables etc. While there is no example of this this assumption in reality, it will force the project to polish the data it already has. It is also important to simplify data collection to create a system for third parties to collect their own data. The assessment is focused on the input and output of the sanitation service (rather than for example efficiency) in order to simplify. Typically data collection takes the form of asking NGOs what service they supply, how many people they employ etc. and then calculating Opex and CAPex. The project is also striving to be specific about whether the data collected is an assumption or actual cost. The intended final output will be a simple tool allowing users to choose filters and provide costing benchmarks for urban sanitation.

Tiered pricing models and subsidies for inclusive sanitation in Myanmar - Tom Wildman, Oxfam and Rob Mills, Social Finance



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Tom talked about work with the Myitkyina township in the North East of Myanmar, where Oxfam partnered with the municipality to investigate how their FSM services can be extended to reach greater coverage levels while maintaining affordability for the poorest. Oxfam used mixed methods to map the whole area's increasing demand for septic tanks and current types of septic tanks. They discovered potential for improving efficiency and service coverage, and developed a tiered pricing model which charges lower prices for poorer segments of the population while still increasing municipality revenues. Presented to the township council, those findings raised interest in the revenue they have been losing and a sense of pride in being an inclusive service provider. Following this they are now looking at funding support for the municipality to improve the sludge treatment process, implement and test the tiered pricing model, and expand services to the entire municipality. The overall vision is to partner with municipalities across Myanmar to become sustainable and inclusive service providers of FSM services.

Rob presented Social Finance's initial work on a new approach to subsidies for a new rural sanitation programme in Myanmar, working with Oxfam. The challenge is to design a subsidy programme to make rural sanitation work for everyone, when there are lots of delivery choices. These choices are both supply side (where subsidies reduce costs for everyone) or demand side (which allows household targeting, but are more expensive to run). There are at least three key issues to consider: 1. Targeting: Myanmar has almost no data on household poverty levels. There a various different ways of collecting data, but all are complex and the levels of poverty will change rapidly, so it's like shooting at a moving target. 2. Phasing: should you wait until higher income households have adopted sanitation systems before going to poorer households or immediately subsidise poorer households? 3. Size of subsidy: RCTs show that subsidies vary between 20-80% of cost, which seems to indicate that the delivery mechanism is more important than the amount. But nonetheless the program has to pick an initial level of subsidy.

All this uncertainty implies that designing a 'fixed' approach to subsidies in advance, for the duration of the programme, is almost certainly not going to work. An iterative approach is needed to solve all three issues. This emphasises ongoing data collection, analysis and programme design changes. Final thought - in the context of a market based approach you should not just assume a static affordability gap which you will with subsidies. Instead, you should aim to close the affordability gap by pushing down on the supply side and increasing the demand side through increasing willingness to pay, with subsidies then aimed at any remaining gap.

## Session 2 - Sanitation Funding

# Using microfinance to support households' investments in sanitation: does it really work? Goufrane Mansour & Delia Sanchez Trancon, Agua Consult

Gourfrane and Delia presented a case study of an effective microfinance (MF) project: Informal short term lending has been around for many years, microfinance is a formal approach to do the same from providers such as banks, NGOs, etc. Microfinance providers source capital from a range of sources, the interest rates are higher than traditional banking services 2-4% (40% annually) as they are more risky and have higher cost per transaction with lots of small loans. As some countries can't afford subsidies, and households are already the largest contributor to sanitation financing, MF enables the households to spread the high cost of sanitation over a longer time period. Delia and Goufrane have evaluated the water.org programme in 3 countries – partnered with 15 financial institutions in Indonesia, Peru, and the Philippines. They questioned if sanitation loans have been delivered, and if offering the loan actually moved households up the sanitation ladder. They found that there were almost half a million sanitation loans in the three countries, mostly for toilets with septic tanks or improving existing facilities. There was a high level of satisfaction with- and a high demand for the loans. However, these countries already had existing MF markets. Future research needs to focus on how to implement such markets in other regions.

## Beyond toilets, pipes and WWTP: financing nature based solutions for broader ecosystem improvements Sophie Trémolet, The Nature Conservancy (TNC)

Sophie introduced the TNC, who are working to close the loop around water resources for ecosystem benefits, protecting land and water, and considering water quality, scarcity, and connectivity. The sanitation sector has impact on freshwater biodiversity, which has seen dramatic declines. Nature-based solutions for water might complement/replace grey infrastructure. However, such an ecosystem approach requires very long-term planning (hundreds of years). There are barriers to addressing water catchment issues such as lack of incentive, institutional fragmentation, lack of awareness/will, lack of info, and lack of investment. These barriers are the same for sanitation, and probably other sectors too. Sophie then explained the use of Water Funds – based on the case of New York, who invested in land in the Catskills as conserved catchment, rather than a water treatment plant. To finance Water Funds, TNC enter the market by working with the incumbent water utilities, see if they can benefit from these approaches, and put them in cost effectiveness terms that the utilities understand and can justify – 1 in 6 can justify on just the cost, others need additional metrics such as carbon. A financial analysis is important to convince business partners of the importance of timing of benefits – e.g. CBS provides benefit much quicker than sewers. There are lots of similarities between the water resources and sanitation sectors, and one can learn from the other. Similar funds could be used to invest in projects with immediate costs and long-term benefits in the sanitation sector.



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Paul is the Director of WASH at the Stone family foundation, a private UK family foundation that brings a business-like approach to the charity sector and is an advocate of market-based solutions in WASH. The foundation provide risk capital to support new ideas with potential for significant scale and impact, with the vision to establish financially sustainable WASH enterprises. They do so through direct funding, grants, but also consider investments, and non-financial support – e.g. in sales and marketing, strategy and business models. They directly support a number of enterprises such as Sanergy, and ask how they can become financially sustainable, as well as wider initiatives like the CBS alliance, WSUP, etc. They are currently testing an innovative finance model, called 'Revenue Royalty': instead of fixed-term repayments, the goal is a multiple, e.g. 1.3 x the original investment. The repayment is a % of revenues generated, e.g. 15%, and the loan ends when the multiple is achieved. As revenues fluctuate with business performance, the repayments fluctuate too. This accounts for startup periods, seasonal revenue changes, and bad years.

## **Panel Discussion**

**Panellists:** Jonathan Parkinson (IMC Worldwide Ltd), Barbara Evans (University of Leeds, UK), Tom Wildman (Oxfam), Paul Hutchings (Cranfield University) and Sophie Trémolet (The Nature Conservancy)

**Overview:** Our expert panel, facilitated by Jonathan Parkinson from IMC Worldwide, discussed the range of funding sources for sanitation available which are complementary to traditional aid funding, the appropriateness of different funding sources for different parts of the sanitation chain, blended funding approaches, and the success of these approaches in delivering value for money, sustainability of services, and equity of provision.

#### **Key Points:**

- Jonathan Parkinson opened the discussion by referring to the recent DFID policy brief titled 'making the
  most of WASH', which focuses on building a business case for sanitation; mobilising private finance,
  innovation and diversity in finance.
- Sophie Trémolet clarified the difference between 'funding' and 'financing' funding refers to sources of money to cover costs, usually understood via the '3 Ts' Tariff, Taxes and Transfers. **Tariffs** are usually cash 'fees' but can also include 'sweat equity' (i.e. time spent building a latrine / unpaid labour costs by user households), otherwise known as opportunity cost of time. **Transfers** are often one-off; external transfers from philanthropy organisations and/or international donors e.g. DFID. WB loans can also be classed as concessional financing (not market-rate). A bond is also a loan that is traded on the financial market, and repaid as interest (fixed or flexible). Bonds can be issued by governments or corporations. **Taxes** are often public subsidies by municipalities or national governments. All of these payments cover costs, and can be included under 'financing'. However, when we talk about financing this is what is mobilised 'up front'. We need to mobilise more finance in the WASH sector to promote benefits. Sophie also clarified the distinction between 'economic' flows of benefits (e.g. CBA; which are not always monetised) and financial analysis of costs and revenues. Ian Ross remarked that it is not a financial cost if there is no transfer of money.
- Barbara Evans noted that there are blurred understandings of finance when we talk to people from different sectors. It is important to clarify exactly what we mean, and take into account time perspectives e.g. market-values, especially when ex-ante (based on forecasts).
- Jonathan Parkinson asked if there are any funding options, other than microfinance (MFI) available to households who want to invest in sanitation. Barbara Evans noted that, even if you focus on the household level in sanitation, there are many stakeholders in the conversation (i.e. national, local government). It is important to set out all possible objectives from the outset, before selecting financing instruments. For example, do you start from wanting to ensure existing services are maintained, or services are extended to new households / areas? This involves different levels of finance, and quality of service. There are also important differences according to your desired outcome e.g. health; behaviour change, improving the environment or job creation? The first step is to get everyone to set out what they are ultimately trying to achieve.
- Paul Hutchings talked about repayable finance and concerns over equity (i.e. ability to repay; opportunity
  and risk; incentives), as certain communities (more able to repay) may be 'cherry-picked' for
  interventions. Paul also highlighted the large financing gap in sanitation more investment is needed, as
  well as new ways to work e.g. bringing in other corporate actors, accountability mechanisms etc. Paul
  also noted that corruption is still a challenge, especially among utilities. Funding is also not spent
  efficiently.
- Sophie Trémolet highlighted that a large obstacle for finance is the lack of 'creditworthy' borrowers (e.g. utilities). MFI, on the other hand, is building up a track-record and evidence base (with creditworthy households). Lack of creditworthy borrowers (such as utilities) is why 'blended finance' is so popular it entails strategic use of philanthropic or public grant money to leverage commercial finance, and the commercial lender can take on more risk. Barbara Evans noted that there is a path in the middle of public and private financing. Unfettered privatisation is also not going to bring most benefits.



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- Tom Wildman shared some experiences from Oxfam's work in Myanmar. He noted that market-based approaches and WASH models need money to operate. The key challenge when working in fragile and chronically vulnerable contexts (where utilities are not yet creditworthy) is to ensure that the poorest are not priced out of models. There are also important differences between larger urban areas, where you can make more efficient (e.g. digital billing) systems, and small villages. The poorest also live in areas that are often flood-prone, with collapsing soils etc, so need more money (beyond loans).
- Tom noted that if catering for the poorest (and keeping interventions affordable), then creditworthy status is difficult. It's therefore important to finance 'smartly' with financial instruments that incentivise sustainability and viability but also inclusion e.g. pro-poor subsidies and transparent billing (Kenya), or revolving funds and cross-subsidies (Philippines). Payment-by-results, on the other hand, is NOT necessarily a funding mechanism that will promote sustainability and inclusion.
- Lucy Stevens (Practical Action) noted that there are still disparities between sewerage and on-site, as
  utilities have no mandate to deliver on-site sanitation. Whose commercial viability are we building? Who
  is responsible for delivering what? Lucy also highlighted the gender divide in women's access to
  sanitation and social enterprises.
- Paul Gunstensen (Stone Family Foundation) provided the example of the WSUP/SWEEP model in Dhaka, Bangladesh that incentivises cross-subsidies in the business itself, via a contractual obligation for 30% low-income coverage.
- Sophie Trémolet noted that Container Based Sanitation (CBS) takes away the barrier of finance, and shifts from investment to service-based model, so the cost sits elsewhere. In that sense, CBS is a financing mechanism. Sophie emphasised the importance of citywide planning - focusing on different technical solutions and financing mechanisms.
- Anna (DFID) shared DFID's future priorities around urban sanitation. There are currently numerous teams writing business cases for funding this sector. DFID is focused on SDGs, systems and innovation, with a multi-disciplinary focus in different sectors, e.g. public financial management and corruption; how to make utilities credit worthy. There will also be research funding for urban sanitation programmes, building on SHARE, WSUP, focusing on evidence and innovation e.g. sustainable business models and innovative financing; up-scaling. Can put seed-funding and risk-funding into ideas.
- Jola Miziniak (Oxfam) called for more action research combined with programming, as financing and accountability go hand in hand. This requires alignment of interests, incentives and timelines.
- Jon Lane (consultant) offered advice to non-finance specialists 'If confused, think how you are going to achieve universal urban sanitation, then think about financing needed to achieve this (e.g. inclusive citywide sanitation, service sector rather than infrastructure, balance technologies and circular economy and re-use of toilet resources, how will we get sanitation for all)'.
- Sophie Trémolet noted that the tendency is to focus on health drivers then environment; but if we look at
  plastics (and pollution), environmental sensitisation is a key driver of change. We need to re-visit the
  extent to which environmental drivers could bring incentivisation for investment in sanitation. Barbara
  Evans cautioned that the environmental argument could make 'doing nothing' attractive (e.g. neglect
  slum dwellers 'living in shit'), so caution is needed.
- Long-term funding commitment (with involvement of utilities, private sector and households) is ultimately
  required for sustainable sanitation.