

Urban Sanitation Research Initiative

RESEARCH CALL

Incentivising private sector provision of faecal waste emptying services to low-income customers in Kisumu, Kenya

This research project is commissioned under the Urban Sanitation Research Initiative, which is a 2017–2020 research programme (www.wsup.com/research) core-funded by UK aid from the UK government, and managed by Water & Sanitation for the Urban Poor (WSUP). This research project will deliver A) an assessment of current core market performance for faecal waste emptying services in Kisumu on the demand and supply side, with an emphasis on the low-income segment of the market and barriers to private sector operation in low-income areas; contributing towards B) the identification of priority policy measures and/or public private arrangements for enhanced private sector targeting of low-income customers, based on negotiated consensus between the private sector and institutional stakeholders. The research aims to identify specific policy measures which are both potentially impactful and viable prospects for implementation: as such, we will strongly favour approaches which set out a clear path towards securing institutional commitment to trialling candidate measures.

Maximum budget under this Call: GBP 100,000 inclusive of VAT

Bids due: Before UK 1700 hours on 23rd July 2018.

1 About Water and Sanitation for the Urban Poor (WSUP)

WSUP is a not-for-profit company that helps transform cities to benefit the millions who lack access to water and sanitation. We were created in 2005 as a response to the unprecedented urban explosion that has left cities unable to provide basic services, such as access to a toilet or drinking water, to low-income communities. We are based in the UK with offices in six countries in sub-Saharan Africa and Asia. Since inception we have helped nearly 15 million people access better water and sanitation services.

WSUP has grown rapidly to a £10-12m organisation and has plans for greater expansion over the next few years. The organisation is now at a pivotal stage in its growth. In the business plan period 2016-2020, WSUP's ambition is to raise £65 million (an annual turnover of up to £18-20 million in FY2019-20), but more importantly to be recognised as a key player in the water and sanitation sector globally. It presently operates six well-developed, respected country programmes in Africa and Asia to strengthen public and private sector service providers to improve the delivery of affordable services to low-income customers. WSUP has recently expanded its portfolio of operations to include the building and strengthening of private sector provision in urban water and sanitation services and the sale of consulting services on all aspects of low income urban WASH (Water, Sanitation and Hygiene) to disseminate learning and increase impact. All of these operations are supported by research, communications, funding and finance and resources teams. For more information about WSUP's vision and approach, see www.wsup.com

2 About the Urban Sanitation Research Initiative

This research is being commissioned under the WSUP-led Urban Sanitation Research Initiative (www.wsup.com/research). The Urban Sanitation Research Initiative is a 2017–2020 research initiative currently focused in Bangladesh, Ghana and Kenya. The primary aim of this initiative is to deliver research that builds national evidence bases around pro-poor urban sanitation, and that drives policy change and wider sector change in the three focus countries. The initiative is managed by Water & Sanitation for the Urban Poor (WSUP) and core-funded by UK aid from the British people.

Within this wider initiative, the **Urban Sanitation Research Initiative Kenya** is managed by WSUP in strategic partnership with the Water Services Regulatory Board (WASREB) and the Ministry of Health (Division of Environmental Health).

The Urban Sanitation Research Initiative focuses on five broad areas: 1) sanitation businesses and market development; 2) institutional frameworks and capacity; 3) sanitation models, user behaviour, and user experience; 4) public finance and sanitation planning; and 5) regulation and smart enforcement. This Call is in Area 1.

For more information about the vision and aims of the Urban Sanitation Research Initiative, and for information about other Calls, see www.wsup.com/research

2.1 Sector influence aim

To identify and initiate policy measures which encourage the private sector to target low-income urban customers for the provision of faecal waste emptying services, resulting in enhanced private sector engagement and improved levels of sanitation access for low-income urban residents.

3 Nature of the research

3.1 Background¹

3.1.1 *The potential for private sector involvement in urban sanitation service provision*

Utilities or local governments in rapidly expanding cities can struggle to provide improved water or sanitation services to all urban residents. Those living in high-density, geographically challenging areas in these cities are much less likely to receive safely managed sanitation services, particularly if (as is often the case) those areas are populated by lower-income households and communities.² Residents of settlements judged by public authorities to be ‘informal’ (i.e. unofficial, ‘slums’ etc.) are similarly often overlooked by overstretched local governments, or not connected to centralised sewerage networks as a matter of policy. In the place of regulated and formal sanitation, many low-income urban residents resort to unsafe sanitation behaviour (e.g. connecting their latrine or septic tank directly to the storm drain network or water bodies) or employ others do so informally, such as manual pit emptiers who work without proper equipment, training or oversight.

There is therefore a gap in sanitation service provision which can be addressed by businesses offering safely managed sanitation services or products. Companies may choose to move into sanitation because of its ‘public good’ factor (the motivation behind ‘social enterprises’ which aim to generate social value as well as economic value). More generally, though, potential profit-making opportunities from a nascent and untapped market such as sanitation can incentivise certain entrepreneurs to expand into sanitation provision. Businesses generate value from multiple points along the sanitation service chain: treated faecal waste can be reused and sold (e.g. as fuel briquettes, soil conditioner, fertiliser); access to public funding (e.g. winning contracts from the public sector); and customers pay for the products or services.³ A study of 30 cities across Africa and Asia found that the market from these cities alone equated to around US \$134 million.⁴ For each privately-run mechanical emptying truck operating in each city at the time of the study, there were 14,860 households in Africa and 5,006 in Asia.⁵

Encouraging private sector involvement makes sense for public authorities and other implementers who want to leverage their budgets effectively; private businesses can offer speed, flexibility, innovation and customer-focused delivery, adapting their offering to different segments of the market, including the poorest.⁶ Much of the relevant literature regarding market-based sanitation provision therefore focuses on the incipient potential of private operators, and on how to encourage business entry and what is required for them to scale-up and expand.⁷

3.1.2 *Incentivising private sector targeting of low-income customers*

However, there has been less focus on whether such businesses are willing or able to offer an equitable and pro-poor service once they have entered the sector. Small/medium sanitation enterprises struggle to break even regardless of the sector in which they operate; in a sector as under-developed as urban sanitation, maintaining a solid profit margin is even more challenging. Even where there is a dearth of

¹ Sections 3.1 and 3.2 comprise information from a selected review of the global literature on sanitation businesses, particularly literature that examines barriers to and opportunities for sanitation businesses reaching the poor in Africa and Asia.

² Cummings et al (2016) What drives reform? Making sanitation a political priority in secondary cities; Rognerud et al (2016) IRC Trends Analysis, 2016-2025.

³ Schaub-Jones (2012) Sanitation as a business: Trends shaping the market for urban development. BPD/SEI.

⁴ Chowdhry & Kone (2012) Business analysis of faecal sludge management: Emptying and transportation of services in Africa and Asia. Bill & Melinda Gates Foundation

⁵ Chowdhry & Kone 2012

⁶ WSP (2011b) Sanitation markets at the bottom of the pyramid: A Win-Win Scenario for Government, the Private Sector, and Communities. World Bank; Koh et al (2017) Shaping Inclusive Markets: How funders and intermediaries can help markets move towards greater economic inclusion. Rockefeller Foundation, FSG.

⁷ Mills et al (2013) Critical success criteria for evaluating sanitation models. SHARE; O’Keefe et al (2015) Opportunities and limits to market-driven sanitation services: Evidence from urban informal settlements in East Africa. Environment and Urbanisation 27 (2); Scott et al (2017) Barriers and opportunities for sanitation SMEs in Ghana. WSUP;

professionalised, formal and safe sanitation services provided by either the public or private sector, as is the case in most of the cities where WSUP works, first movers are taking a considerable risk – particularly if they choose to serve lower-income communities.⁸

It should not be assumed that increased private sector participation will automatically equate to increased higher-quality service provision to the poor; donor interests and areas of focus will not necessarily align with those of private sector operators.⁹ A company's unmediated reaction to the market may not include serving areas that are perceived to be less profitable and riskier¹⁰ – whether because of the assumption that their inhabitants are less willing or able to pay for services, or because the costs of serving those customers constricts business growth (e.g. higher fuel costs if an informal settlement does not have a transfer station or dumping site). In Dakar, for example, the more 'formal' sanitation businesses became, the further they moved from household-level service provision, instead focusing on fulfilling larger contracts offered by government.¹¹ In Bangladesh, most companies surveyed indicated that lower-income communities were part of their target market, but 75% noted that poorer customers found it harder to pay on time.¹²

Public private arrangements provide a potentially powerful mechanism for incentivising private sector targeting of low-income customers. WSUP's experience supporting a public-private collaboration in multiple cities in Bangladesh demonstrates how the guarantee of public sector support offered by a public-private arrangement can be used as leverage to incentivise equitable service delivery. Under the "SWEEP" model, a 'pro-poor' mandate is built into the business model: WSUP-supported companies delivering mechanical emptying of pits and tanks on behalf of public sector bodies are contractually obliged to ensure that 30% of their customer base are from low-income areas.¹³ In return, the utility in Dhaka and the City Corporation in Chittagong charge the companies delivering mechanical emptying in their cities lower fees for the lease of their vacuum tankers. This is accompanied by differential pricing – a form of internal cross-subsidy – which leverages commercial gains from SWEEP's substantial middle and higher-income customer base to improve the service offering to low-income customers. Various forms of 'Smart' subsidisation are recognised elsewhere in the literature as a potential tool for increased lower-income engagement¹⁴, although there is a lack of consensus on whether subsidies enable or constrain businesses more broadly.¹⁵

Access to finance and financial support is a commonly cited constraint to sanitation SME expansion.¹⁶ Capital costs and expenditure on equipment, licensing etc. are all significant outgoing costs that can impact an SME during its start-up period within the sanitation sector. Chowdhry & Kone's analysis of mechanical emptying businesses in Africa and Asia found a link between fleet size and continued commercial success.¹⁷ Companies relying on a single truck were unstable and operated at a near loss. However, expanding fleets is extremely costly, particularly in Africa; whereas African companies charged more and earned more profit per truck than their Asian counterparts, this was offset by far

⁸ Chowdhry & Kone 2012

⁹ Berezziat (2009) The market for mechanical pit-emptying in Dakar & the realities of engaging entrepreneurs. BPD

¹⁰ Baker et al (2011) cited in Gero et al (2013) Private and social enterprise engagement in water and sanitation for the poor: A systematic review of current evidence. Institute for Sustainable Futures, University of Technology, Sydney

¹¹ Schaub-Jones (2010) Sanitation: just another business? The crucial role of sanitation entrepreneurship and the need for outside engagement. BPD.

¹² WSP/IFC (2013) Tapping the market: Opportunities for Domestic Investments in Sanitation for the Poor. World Bank.

¹³ WSUP 2018 Incentivising the private sector to target low-income customers; WSUP (2017) Balancing financial viability and user affordability: an assessment of six WASH service delivery models.

¹⁴ WSP (2011a) Evaluating the political economy for pro-poor sanitation investments. World Bank; WSUP 2017; Blackett & Hawkins (2017) FSM Innovation: Case studies on the business, policy and technology of Faecal Sludge Management. Bill & Melinda Gates Foundation; SHARE (2017) Microfinance for sanitation: Policy Brief. LSHTM.

¹⁵ Gero et al 2013

¹⁶ Chowdhry & Kone 2012; O'Keefe et al 2015; Scott et al 2017.

¹⁷ Chowdhry & Kone 2012

higher variable charges (fuel, maintenance of less efficient trucks that cost more to purchase in the first place) and a lower eventual return on investment.

Policies that aim to reduce capital expenditure costs could therefore be of value in promoting private sector participation in sanitation (although examples of tailoring such measures to incentivise service provision to low-income customers are rare). Blackett & Hawkins (2017) identify that reduced rates for leasing basic equipment in Bangladesh and the Philippines contributed to business expansion. More broadly, well-designed governmental policies and frameworks can greatly aid sanitation business development, providing an “overall strategy of provision, which needs government direction, regulation and financial support”.¹⁸ On the other hand, overly burdensome regulation can either prevent businesses from reaching a level of stability where moving into more challenging areas can be considered,¹⁹ or can push companies into de facto illegality, avoiding paying minimum wage or ignoring legislation that would otherwise reduce profit margins (e.g. Giltner et al 2012). ‘Light-touch’ regulation can, in theory at least, restrict undesired practices and build consumer confidence.²⁰ Furthermore, household demand for sanitation can be catalysed by a combination of rewards/sanctions (potentially including subsidies delivered through voucher systems) and a varied offering of different technologies and long-term promotional and engagement strategies.²¹

Alongside policies, regulations and support provided by the public sector, there are other strategies that could feasibly enable businesses to improve their lower-income community engagement. These include demand creation strategies through market segmentation tools, investing in marketing, bundling services and products, developing new materials and technologies, diversification, client satisfaction assessments, and offering regular/scheduled emptying services rather than ad hoc call outs.²² Improving technical and business skills through training; incubating SMEs at the start-up stage; and setting up representative bodies so sanitation SMEs can adequately represent what the sector requires are also recommendations,²³ although there is generally a lack of analysis of whether these recommendations would definitely improve pro-poor delivery, or would contribute to sanitation business development without improving pro-poor services.

3.1.3 Legislative and institutional arrangements for sanitation in urban Kenya

National-level direction for urban sanitation services in Kenya is set by the Kenya Environmental Sanitation and Hygiene Policy (KESHP) 2016-2030, which recognises private sector involvement in environmental sanitation and hygiene services as critical. The 2010 Constitution created a new structure of devolved government in Kenya, dividing the country into 47 counties with fiscal and legal autonomy and the mandate to provide social infrastructure and ensure basic services. The Constitution devolves most sanitation functions and services to the 47 county governments, with the national government retaining responsibility for national policy, training, capacity building, technical assistance and standards formulation. The concurrent functions for which the county governments are responsible are wide-ranging and include sanitation planning and financing, resource mobilization, public and private partnerships, and procurement of sanitation products and technologies. The Constitution also requires county governments to decentralize their functions and the provision of their services where efficient and practicable to do so: section 48 of the County Government Act 2012 provides that the functions and provision of services of each county government shall be decentralized to the urban areas and cities within the county established in accordance with the Urban Areas and Cities Act (No. 13 of 2011).²⁴ However, this next stage of devolution has not yet come to fruition.

¹⁸ O’Keefe et al 2015

¹⁹ Scott et al 2017

²⁰ Pedi & Jenkins (2013) Enabling environment: What roles and functions are needed in the new sanitation market? Guidance Note 6, UNICEF.

²¹ WSP 2011a

²² Pedi & Rios 2011; WSP 2011b; Ikeda 2012; WSP/IFC 2013; Gero et al 2014; Blackett & Hawkins 2017

²³ O’Keefe et al 2015; Scott et al 2017

²⁴ See WSUP (2016) Legislative and Institutional Summary of Sanitation in Kisumu, Kenya

The key institutional actors in Kisumu in relation to urban sanitation service provision are Kisumu County Government – and specifically Kisumu County Public Health Office – and Kisumu Water and Sewerage Company (KIWASCO), the water and sewerage utility.

3.1.4 Private sector provision of faecal waste collection services in Kisumu

Kisumu is the third-largest city in Kenya, with a population rapidly approaching 400,000. A rapid assessment of sanitation enterprises and demand for sanitation services conducted by WSUP in 2016 found 7 private Vacuum Tank Operators (VTOs) to be operating in Kisumu, with an estimated 535 emptying jobs completed monthly. Contracts with the commercial sector are key to the viability of these businesses (manufacturing, hospitality, institutions, etc), constituting over 27% of jobs. Landlords housing the poor were found to pay twice as much as the better off to empty a toilet, in part because of the amount of rubbish found in pits and the dryness of the sludge, and in part because of higher transport costs associated with serving peri-urban areas – VTO customers are charged primarily by distance rather than volume of containment. Emptying of pit latrines was found to have relatively poor profit margins: the ability and willingness to pay of owners of pit latrines (typically landlords) is significantly lower than those of septic tanks, with a higher cost of emptying resulting in low margins; although at least 61% of households in Kisumu are reported to use pit latrines, only two VTOs stated that between 10 and 15% of their jobs concern pit latrines.

The assessment found strong evidence of suppressed demand: of the 7 companies providing vacuum tanker services in Kisumu, 5 came into the market between 2012 - 2016. The first one entered the market in 2002, and the second in 2010. Late entrants were not at a disadvantage, as the average monthly jobs of the last 3 businesses (market entry between 2014 and 2016) was 52, compared to a total average of 76. The lead VTO providing 220 jobs per month entered the market in 2013. While operational efficiency is likely to be significantly lower than 100%, the assessment concluded that elastic demand and the success of new entrants into the market suggests that minimum service levels have not yet been reached. Notwithstanding the market potential implied by these findings, significant barriers to entering the sector persist, notably the investment required to purchase a vacuum tanker (most investors interviewed for the assessment had strong businesses in other sectors, ranging from solid waste management to petrol, farming and management of a private hospital). Further challenges to market development are the relatively low licensing and dumping fees which restrict the ability of sanitation authorities to provide sanitation services.²⁵ Licensing of vacuum tanker operators is performed by KIWASCO; licensed providers dispose of sludge using KIWASCO wastewater treatment.

Informal, manual pit emptiers have proliferated in low-income areas of Kisumu due to weak regulation and enforcement, which discourages the private sector from acquiring a formal license to offer safe and professional emptying services. Manual emptying has been found to be the preference of most landlords – rather than hiring a VTO or building a new toilet – despite a majority having a negative opinion of manual emptying services. This preference is due primarily to the much lower cost of manual emptying, and the interconnected issue of solid waste making pits difficult for vacuum tankers to empty.²⁶ Since 2015, WSUP has been working to bridge the gap for formalised manual services by supporting a solid waste management business, Gasia Poa, to venture into FSM; and by working in partnership with Kisumu County Public Health Office and KIWASCO to create the conditions for safe and professional FSM services to thrive. This has resulted in the development of Standard Operating Procedures (SOPs) which aim to stimulate fair competition and raise standards. As an initial requirement, the SOPs require that enterprises working in FSM in Kisumu have three licenses: one to

²⁵ WSUP (2016) Rapid assessment of sanitation enterprises and demand for sanitation services: Kisumu, Kenya.

²⁶ Ibid

operate a business; a license to transport waste issued by the National Environment Management Authority; and a Hygiene and Operational License from the County Public Health Office.²⁷

3.2 Aims, approach and design

3.2.1 Over-arching aims and approach

The aim of this research is to identify and promote policy measures for the private sector to target low-income urban customers for the provision of faecal waste emptying services. We suggest the approach might be usefully framed as having two core components, outlined below.

Component A: assessment of core market performance for faecal waste emptying services in Kisumu

The research should begin with an assessment of current core market performance for faecal waste emptying services in Kisumu - addressing both the demand and supply side - with a focus on the low-income segment of the market. The assessment should incorporate i) existing policy measures for private sector participation in faecal sludge management in general terms, and for the targeting of low-income customers specifically; ii) an up-to-date assessment of the target customer base for private VTOs and formal manual emptiers, including the number of low-income households these businesses are currently serving, and the tariffs currently charged to low-, middle- and high-income customer segments; and iii) an assessment of the barriers and costs to the private sector of growing the low-income segment of the market and operating in low-income areas and informal settlements. We consider iii) to be particularly significant for the purposes of this research: bidders should carefully consider how to conduct this assessment and detail their approach in the proposal.

We envisage this phase of the research will incorporate significant primary data collection. This should certainly include key-informant interviews with a range of private sector actors – including licensed VTOs, licensed manual emptiers, and private sector actors not currently engaged in faecal waste collection services but with the potential to enter the market – to understand i) the barriers they face in providing faecal waste collection services to low-income customers specifically; and ii) their perceptions of the potential impact of candidate policy measures in alleviating these barriers. Researchers are expected to propose additional primary data collection and analysis that could strengthen the policy influence potential of the research, for example: detailed household surveys exploring the current sanitation and emptying situation in low-income areas of Kisumu; toilet and pit/tank characteristics including septic tank size; willingness to pay and low-income consumer attitudes to emptying; financial analysis and tariff modelling for VTO service extension to low-income customers; and VTO route mapping. These are suggestions only: we will privilege proposals which clearly justify the choice of primary data collection and analysis, and which articulate how this can be expected to contribute to the overall policy influence aim of this research.

Findings from this component should be consolidated into a single research paper aimed at publication in a peer-reviewed journal.

Component B: achieving negotiated consensus on priority policy measures

The results of Component A will feed into extensive consultation with local government institutions (notably Kisumu County Government and KIWASCO) and the private sector – as well as relevant ministries and business associations – to identify policy measures that might feasibly be implemented in the short to medium term to catalyse private sector participation in the faecal waste collection market and targeting of low-income customers. The aim of this Component will be to achieve negotiated agreement between key stakeholders on one or more priority policy measures. We note the end goal of the research is not to develop a comprehensive menu of options – although this will be a necessary

²⁷ See WSUP (2018) Regulatory reform: raising the standard of pit-emptying services in Kisumu.

stage of the process – but to prioritise a narrow subset of candidate measures which the researchers judge to be both realistic prospects for implementation and potentially impactful. Findings from this component should be presented in the form of 2-page Policy Briefs aimed at institutional stakeholders and Kenyan policy-makers.

Subsequent to the identification of priority policy measures, researchers are encouraged to consider how they might leverage in-country expertise to initiate the introduction of these measures to achieve real policy change. We do not consider support to a rollout or implementation process to be a requirement of this research; however, we will strongly favour approaches which set out a clear path towards securing institutional commitment to trialling candidate measures.

3.2.2 Clarifications

3.2.2.1 *What qualifies as a policy measure?* Policy measures addressed by this research should be focused on lowering specific barriers preventing the private sector from reaching low-income segments of the market, as opposed to general policies or statements of support relating to the sanitation sector more broadly.

We emphasise that we interpret “policy” in a broad sense. A useful typology for assessing candidate measures could be i) specific policy measures relating to the ‘rules of the game’ of the market for faecal sludge management services - for example, income tax breaks and VAT exemptions for private sector actors engaging with the low-income segment of the market; fiscal exemption of equipment and sanitation technologies adapted to low-income urban areas; and reducing the formalisation costs incurred by private sector actors engaging with the low-income segment of the market in tax compliance, registration and licensing fees; ii) measures relating to the development and structuring of public private arrangements – for example, contract conditionality mechanisms to promote differentiated pricing of faecal sludge emptying services for low-income customers; and/or requiring a minimum low-income proportion of the customer base;²⁸ iii) targeted subsidy measures and/or public investment – for example, pit-emptying vouchers for low-income households; direct subsidy to operators serving low-income customers; and investment in transfer stations located in low-income areas; and iv) measures to address technical challenges specific to pit emptying in low-income areas: for example, the development and enforcement of minimum standards for toilet construction.

Considering the recent emergence of public private arrangements to support professional FSM services in Kisumu (see 3.1.4), we believe ii) offers real potential as a focus area for this research. Nonetheless, the above list is illustrative: researchers will be encouraged to explore innovative solutions that might respond effectively to the barriers identified in the market assessment, and which might realistically achieve negotiated consensus among key stakeholders. We emphasise again that candidate measures should be specific, not general.

3.2.2.2 *Should the research consider measures to promote general private sector participation in faecal sludge management?* This study focuses on policy measures aimed at enhanced targeting of low-income customers by the private sector in Kisumu. Measures to promote private sector participation in faecal sludge management more generally can be relevant, in so far as they may facilitate improved service provision to low-income customers in the longer term - although this should never be assumed. General participation incentives of this type should be included in the market assessment and should be considered when identifying opportunities for policy change; we consider it feasible such measures could be taken forward as a subset of final policy recommendations, but only

²⁸ For more on how WSUP has approached this challenge in Bangladesh, see WSUP (2018) Incentivising the private sector to target low-income customers.

if accompanied by mechanisms to ensure their adoption results in improved service provision and uptake by low-income customers.

Expanding on the typology outlined in 3.2.2.1, two further groups of policy measure expected to be relevant are iv) specific policy measures aimed primarily at overcoming barriers to market entry – for example, incentives for solid waste businesses to diversify into faecal sludge management, and government loan guarantees for financing vacuum tanker procurement [we acknowledge that such measures may be a necessary first step towards improved pit emptying services for low-income urban residents, and might usefully be included within this research; however, this would need to be accompanied by measures to incentivise targeting of low-income customers by these businesses in order to respond adequately to the spirit of this call]; and v) specific policy measures relating to supporting functions of the market, where identified by the situation analysis to be a critical constraint - for example, facilitating access to credit and business planning support (we reiterate that measures of this type must be clearly linked to sanitation).

We emphasise that this research responds to specific challenges WSUP has encountered in its work - how to balance commercial viability for the private sector with affordability of sanitation services and products for low-income customers.²⁹ Researchers will need to consider how candidate policy measures respond to this specific challenge.

3.2.2.3 To what extent is this research aimed at achieving change in Kisumu specifically, as opposed to urban Kenya more broadly? The primary aim of this research is to strengthen the low-income segment of the market for faecal waste collection services in Kisumu. We consider this focus to be appropriate in lieu of the highly decentralised institutional arrangements for urban sanitation service provision in Kenya. This point notwithstanding, it is possible the research will identify candidate policy measures which can only be effectively pursued and implemented at the national level; we consider such measures to be within the scope of this research. We certainly expect the research to generate findings applicable to other urban centres in Kenya; researchers should consider how they will promote national-level dissemination of research findings and set this out in their proposal.

3.2.2.4 What is the expected allocation of resource between components? We emphasise this study should be viewed as action research, the aim of which is to promote real policy change. While we expect the outputs from Component A to be of value as stand-alone documents, they should not be considered the primary outputs of this research; rather, Component A is included as a necessary first step towards identification of specific policy measures. As noted, we will strongly favour approaches which set out a clear path towards securing institutional commitment to trialling candidate measures.

3.3 Core requirements for work under the Urban Sanitation Research Initiative

The following are core requirements for work carried out under the Urban Sanitation Research Initiative:

- 1) Research must fully meet relevant research ethics requirements:** All research must be carried out in compliance with research ethics standards as rigorous as would be applied in a UK setting, and in compliance with the law and with best practice in the country or countries in which research is carried out.
- 2) Research design should pay careful attention to gender equality/equity considerations:** Bidders should explicitly ensure that their proposed design, analysis and research-into-policy work is taking full account of gender equality and equity.

²⁹ For more on WSUP's experience in this area, see WSUP (2017) Balancing financial viability and user affordability: an assessment of six WASH service delivery models; and WSUP (2018) Incentivising the private sector to target low-income customers.

- 3) Research-into-policy should be considered a core element:** Research-into-policy should be considered a core element at all levels and stages of research design; not an after-thought once the “real research” has been completed.

For more detailed explanation, see the Core Requirements Form attached as Appendix A, which must be completed by all bidders and submitted with the bid (see Section 9).

3.4 Deliverables

The following deliverables are required:

- a)** an inception report for WSUP (about 5 pages) detailing the methodology to be followed, within 6 weeks of project start;
- b)** the main final report of Component A, presenting consolidated findings as a research paper in the publication format required by a named peer-reviewed journal, within 6 months of project start;
- c)** 2-page Policy Brief summarising key results from Component A for national readership in Kenya, likewise within 6 months of project start (this deliverable could provide a high-level summary of results or focus on a subset of findings judged to be of particular interest – to be agreed in consultation with WSUP).
- d)** PowerPoint slide-sets for presentation of the key findings of Component A to key stakeholders;
- e)** Two short (2-page) Policy Briefs summarising the final results of Component B for national readership in Kenya (i.e. outlining the priority policy measure/s and potential way forward, as identified and agreed in the stakeholder consultation process). The core focus of the respective Policy Briefs will be agreed in consultation with WSUP.
- f)** One final report (approximately 8 – 10 pages) detailing the process and results of Component B for Kenyan and global audiences. We do not require submission of this output for publication to a peer-reviewed journal, although researchers are free to propose this.

In addition, we require **g)** a brief monthly email update on progress (bulletpoint format is sufficient).

The inception report (a) must include a specific short section indicating how the Core Requirements (Appendix A) will be met.

Bidders may also choose to offer additional deliverables, potentially including documents, powerpoints, workshop presentations, blog posts or videos for the Urban Sanitation Research Initiative website, designed for in-country or international communication.

All deliverables (including draft-stage submissions) should be written and laid out to publication-ready standard, with strong attention to clarity of structure, quality of wording, and professional layout; reports of poor quality will not be accepted.

Deliverable (b) is a research paper, to be written as a journal article in the format of a named journal, not as a report for WSUP or country-level stakeholders. We do not require research papers to be submitted to the named journal by the specified deliverable date; but we will non-contractually expect publication, and will favour bidders who have a significant academic publication record and own-incentives for prompt journal publication. We (WSUP and the partners of the Urban Sanitation Research

Initiative) expect to have full opportunity, with sufficient time allocation, to review and respond to research papers in journal article format; we reserve the opportunity to withhold corresponding payment until we are satisfied with the quality of each paper, which may require no modifications, minor modifications, or major modifications. Our focus will be on methodological/intellectual quality and readability; if there is any disagreement about interpretation of findings and questions of judgement, we will request that our views be given sensible consideration, but in the final analysis respect the researchers' academic independence.

If the researcher judges it necessary, WSUP will respect embargo on reporting findings to be published in a peer-reviewed journal. However, this is a policy influence programme, and WSUP will expect to be able to make public headline findings (typically understood to mean any content that is included in the Abstract, though with re-wording, and potentially including basic methodology detail and headline findings not included in the Abstract but required for reasonable understanding of the study's central findings) before journal publication. We expect a mutually constructive approach on this: WSUP recognising that the researcher may not be able to make full findings public before journal publication, the researcher understanding that WSUP must have the option to immediately disseminate headline findings to key audiences. One approach which bidders may find useful is to commit to delivery of a 1-3 summary report on findings for free use by WSUP and partners: this approach will ensure that the researcher maintains control over precisely what elements are made public and precisely which should be considered embargoed until journal publication (though this does not rule out the possibility of WSUP requesting additional information be made public if the summary omits detail necessary for headline understanding).

3.5 Schedule

Date	Milestone/deliverable
<i>Before UK 1700, 23rd July 2018</i>	<i>Bid submission</i>
<i>30th July 2018</i>	<i>Start date</i>
<i>10th September 2018</i>	<i>Deliverable a: inception report</i>
<i>21st December 2018</i>	<i>Draft deliverable b (final report, Component A); draft deliverable c (policy brief); deliverable d (powerpoint slides for key stakeholders)</i>
<i>21st January 2018</i>	<i>Final deliverable b, c</i>
<i>26th May 2019</i>	<i>Draft deliverable e: 2x policy briefs</i>
<i>14th June 2019</i>	<i>Final deliverable e</i>
<i>29th June 2019</i>	<i>Draft deliverable f: final report, Component B</i>
<i>19th July 2019</i>	<i>Final deliverable f</i>

We stress that this is a 12-month project with no possibility of costed or no-cost extension, and research design will need to take this into account. Final deliverable F will be the trigger for final payment: because this is non-critical we have allowed generous time, but bidders are welcome to bring this forward if they prefer. We expect work to begin on Component B no later than early October 2018 (upon submission of draft deliverables b and c and deliverable d): researchers may consider beginning this component earlier to safeguard against delays and to maximise stakeholder engagement.

4 Team profile

We are happy to consider any proposed team structure (i.e. any combination of universities, research institutes, research consultancies or individual consultants, with any geographic distribution) that provides the required skills and capacity. Our strong preference is for a single prime through which all

contacts, contract negotiation and invoicing should be managed. The prime should be able to achieve strong presence in Kisumu (whether through existing own-staff, or through subprimes or subcontracting or other arrangement). The research team should have a) strong understanding of urban sanitation in general, and sanitation business development in particular; b) strong understanding of market-based approaches and wider market development issues; c) strong capacity for cross-sectoral policy analysis; and d) demonstrable capacity to manage a significant research project. It may not be necessary for the research lead to be expert in all of these areas, but strong concept understanding across all areas will be essential. We are happy to respond to queries about team structure during the bid preparation period.

5 Intellectual property

This is an academic research contract, and as such the researchers will retain full intellectual property rights for this research, subject to the deliverables requirements indicated above, but with full rights granted to WSUP immediately and in perpetuity to reproduce and use the findings of the research as WSUP deems fit, including in WSUP publications drawing on the research findings, and including by partners of the Urban Sanitation Research Initiative. In any use by WSUP or partners of findings arising from this research, the researchers will be duly credited. For full details of intellectual property rights, bidders should review WSUP's standard Research Agreement, available on request. [See also comments above under Section 3.4, in regard to publication of headline findings by WSUP and partners before journal publication.]

6 Reporting and liaison

The Task Manager for this work will be Sam Drabble (WSUP Head of Research & Learning). Close liaison will also be expected with key WSUP Kenya staff in Nairobi and Kisumu (Kariuki Mugo, Country Programme Manager; Josphine Maina, Research & Policy Lead; Emanuel Owako, Project Manager, Kisumu; Susan Kanga, Assistant Project Manager, Kisumu); and with the Urban Sanitation Research team in London (Guy Norman, Director of Research & Evaluation; Rosie Renouf, Research Officer).

7 Contract terms

A standard WSUP Research Agreement format will be used, subject to the Researcher's agreement with the terms.

Where the bidder is a consortium, a contract (Research Agreement) will be signed with a single prime; we cannot consider multiple contracts under a single Call.

8 Payments

8.1 Payment schedule

Payment will be 25% on contract signature, 40% on acceptance by WSUP of final version of Report for Component A, and 35% on acceptance by WSUP of final version of Report for Component B. All payments will require prior invoicing. All payments will require prior invoicing.

8.2 Budget

Up to GBP 100,000 inclusive of VAT (sales tax) or other taxes; this amount will be expected to cover all costs, including any sub-contracting of staff, any travel costs, and the full costs (including venue and participant travel costs as required) of any workshops or similar meetings. Over and above this budget,

WSUP will additionally consider bearing a cost of up to GBP 1,500 for journal publication, if the selected journal/s for publication of this research require payment for open-access; this will be subject to specific negotiation with the selected bidder (likely including a time-limit of article acceptance for publication within 6 months of the termination of this contract).

9 Bidding procedure

9.1 Bid format

Bid format is designed to make bidding relatively easy, with a focus on the proposed methodology. Bids should be submitted to erl@wsup.com before UK 1700 hours (5 pm) of 23rd July 2018. We stress the importance of adhering strictly to the instructions below, including word counts; we do not expect to receive long standard texts detailing bidders' previous experience, over and above the requirements indicated.

The bid document should contain only the following numbered sections:

- 1) **Name of lead bidding organisation**
- 2) **Name and email of primary contact**
- 3) **Brief summary of relevant experience of lead organisation and other participating organisations or key individuals, indicating and describing 3 recent most-relevant projects** (*max 750 words*)
- 4) **Statement of the justification for and aims of this research as expressed by the bidder.** We are interested primarily in academic justification, not ethical justification (*max 400 words*)
- 5) **Statement of the approach and methodology to be used** (*max 2000 words*). This statement can include decisions left open pending more detailed analysis, but we encourage bidders to develop a strong methodology (including clear statement of the duration and likely scheduling of all work including in-country work). [See also Section 3.3 and Appendix A.]
- 6) **Statement of the available start-up date and anticipated final completion date.** See Deliverables section.
- 7) **Statement of anticipated day allocations of all participants in the research.** Include any sub-contracted participants, with participants named as far as is possible.
- 8) **Summary budget breakdown in tabular form in GBP.** Clearly indicate total budget (maximum GBP 100,000 inclusive of VAT).
- 9) **Indication of first-choice named open-access journal/s for publication of this work.** Please indicate any requirement for payment for open-access.

You should also separately attach the following two documents:

- A) **Up to five CVs** including a) **the lead researcher** (i.e. person who will take primary responsibility for design and management oversight of this research, and for research journal publication) and b) **the person with highest allocation of days**. [*This may in some cases be the same person.*]
- B) **A completed copy of the Core Requirements Form:** see Appendix A.

In summary: your submitted bid should comprise 2 documents plus 1-5 CVs.

Please name your files as follows, where XXXXX is a single-word no-spaces summary bidder name (e.g. JENKINSON, CUNIKRI, URBANRT) of up to 10 letters:

XXXXX-bid

XXXXX-core-requirements-form
 XXXXX-CV1 (etc)

9.2 Bid scoring criteria

Bids will be scored on the following criteria:

CRITERION	Points
a) Adherence to requirements for bid format and demonstration of clear writing/formatting skills	10
b) Quality and appropriateness of research team, as evidenced by Bid Sections 3, 7 and CVs	30
c) Strength of understanding of the research concept, and strength of methodology, as evidenced by Bid Sections 4 and 5	30
d) Demonstration that this research will effectively meet the core requirements, as evidenced by the Core Requirements Form (appendix A)	15
f) Value for money within available budget	15
TOTAL	100

9.3 Pre-submission consultation

We are very happy to respond to clarification queries of any sort prior to bid submission: please email erl@wsup.com. Where we consider that the response to a query should (for reasons of fairness) be shared with all bidders, we will do so by emailing all bidders who have already contacted us to express an interest in bidding: if you want to be included in any such mail-out, please let us know promptly.

Appendix A: Core Requirements Form

As indicated in Section 9.1, all bids should include a completed copy of this Core Requirements Form, which asks you to briefly clarify how your proposal will meet the three core requirements of research under the Urban Sanitation Research Initiative, as outlined in Section 4.

Requirement 1: Research must fully meet relevant research ethics requirements

All research must be carried out in compliance with research ethics standards as rigorous as would be applied in a UK setting, and in compliance with the law and with best practice in the country or countries in which research is carried out. We note that some types of research (*for example, a study involving invasive treatments or biopsy sampling of human subjects*) will have extremely stringent research ethics requirements; other types of research (*for example, a desk study of institutional frameworks*) will have minimal research ethics requirements, beyond the need for due rigour, balance and consultation, and informed consent in any interviews; other types of research (*for example, a study involving household survey to collect information about slum communities*) will have research ethics requirements intermediate between these two extremes. We note also that researchers must take full responsibility, at the bidding and research implementation stages, for ensuring that relevant research ethics requirements are duly met, in letter and in spirit.

QUESTIONS YOU NEED TO ANSWER: How will you ensure that your research is carried out in compliance with research ethics standards as rigorous as would be applied in a UK setting, and in compliance with the law and best practice in the country or countries in which research is carried out.

write here, maximum 150 words (please adhere strictly to this maximum word count)

Requirement 2: Research design should pay careful attention to gender equality/equity considerations

Bidders should explicitly ensure that their proposed design, analysis and research-into-policy work is taking full account of gender equality and equity. This is NOT a tick-box requirement for “including gender” in all research (indeed, bids may be scored down for “including gender” in tick-box ways which unhelpfully divert the research from its primary focus). Rather, our goal is to ensure that all bidders demonstrate that they have given serious thought to the possible implications of their research for women and girls, and include gender considerations in appropriate ways where this is important to exploration of the primary research question/s.

i) If this research in any way develops, or feeds into development of, a sanitation technology, sanitation service delivery model or sanitation policy, then this should be done in ways that ensure that that technology or model or policy fully meets the needs of women and girls; specific requirements of women and girls (including, but not restricted to, menstrual hygiene management and safety after dark) should be given due attention.

ii) If this research in any way assesses sanitation service quality, or recommends ways in which sanitation service quality should be assessed, then this should be done in ways that fully explore and disaggregate possible differences in sanitation service quality as experienced by women and girls and by men and boys; again, specific requirements of women and girls should be given due attention.

iii) If this research in any way uses or promotes some form of community consultation or expert consultation, then this should be done in ways that ensure that women’s voices are heard as loudly as men’s.

iv) More generally, researchers should interrogate their designs to consider gender implications in all respects and at all levels: for example, a WTP study might (or might not) find it relevant and useful to explore whether WTP differs between women and men; an organisational capacity study might (or might not) wish to explore whether women are represented in high-level decision-making. Again, we stress that we do not require tick-box “inclusion of gender” in all projects; rather, we require that bidders give serious thought to possible gender implications, and include gender-disaggregational elements or other gender-related considerations in their design and analysis where this is important to exploration of the primary research question/s.

QUESTIONS YOU NEED TO ANSWER: In what ways are gender considerations relevant to your proposed design, analysis and research-into-policy work? If you have included gender-disaggregational elements or other gender-related elements in your design, please briefly list these elements.

write here, maximum 150 words (please adhere strictly to this maximum word count)

Requirement 3: Research-into-policy should be considered a core element

Research-into-policy should be considered a core element at all levels and stages of research design; not an after-thought once the “real research” has been completed. Bidders should demonstrate that they have given serious thought to policy influence and policy translation of their findings: this may include [*among other possible elements*] **a)** appropriate consultation at the start-up phase, to ensure that key actors are “on board”, or at least that their needs and attitudes have been meaningfully taken into account; **b)** detailed analysis at the design stage of policy context and policy-influence aims and challenges, with consideration of relevant specific aspects such as “windows of opportunity”; **c)** detailed analysis of how in-country actors might need to be involved in the research and/or its subsequent dissemination, in order to maximise chances of policy influence outcomes; **d)** due consideration of dissemination of methods and findings throughout the project, not just at the end; and **e)** inclusion within the team of individuals with specific responsibility for editing to ensure high-quality text. Larger projects may choose to include individuals with specific responsibility for policy translation. We note that WSUP Research & Policy Leads in each of the research countries will expect to be closely involved in research-into-policy work, and you can depend on some support in this area: this can reasonably include WSUP responsibility for preparation of non-academic publication materials summarising key aspects of aims, methodology and eventual findings. [*Here we draw attention to Section 8.2, which states i) that any workshop events included within your bid must be fully funded from your budget, but ii) that WSUP will consider requests over and above budget to cover the costs of open-access academic publication.*]

QUESTION YOU NEED TO ANSWER: In what ways does this project ensure a pro-active research-into-policy focus?

write here, maximum 150 words (please adhere strictly to this maximum word count)

Please submit a completed copy of this form attached as a separate file to you bid.