Shining the spotlight on household investments for water, sanitation and hygiene (WASH): let us talk about HI and the three ‘T’s

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ABSTRACT

This editorial/discussion paper argues that the use of the three ‘T’s financing source framework (taxes, tariffs and transfers) leads us to ignore key costs to the customer, especially the poor customer, of accessing an adequate level of the water, sanitation and hygiene (WASH) service. These costs include household investment (HI) for self-supply (commonly excluded from tariffs) and time costs of water collection and travelling to a place of open defaecation. We propose an adaptation to the framework, which we call ‘HTs and the four ‘T’s’.

Key words

This editorial/discussion paper argues that in order to properly understand financial flows in water, sanitation and hygiene (WASH) and develop appropriate policies that there is a need to explicitly add household investments (HIs) to the vocabulary of the three ‘T’s financing source framework (taxes, tariffs and transfers). National surveys of household expenditure and WASH use need to be enhanced to collect more nuanced data. A stronger emphasis on research that enables a better understanding of HIs on WASH is also needed. In summary, we propose a change of vocabulary from the three ‘T’s to ‘HI’s and the three ‘T’s’.

WATER AND SANITATION FUNDING SOURCES: THE THREE ‘T’S

In 2010, the Organisation for Economic Co-operation and Development (OECD) published a landmark report on water financing that has helped to better conceptualise the funding sources that finance water and sanitation services (OECD 2010). Drawing on the formulation of the 2003 Camdessus Panel (Winpenny 2003), the OECD publication set out the three ‘T’s (tariffs, taxes and transfers) as ‘the ultimate financial sources of investment for the water sector’. The publication emphasises the importance of strategic and financial planning to find the right mix of the three ‘T’s for achieving targets and leveraging other finance sources (OECD 2010).

The 2010 OECD publication states that while there are hundreds of financiers in water and sanitation that all finance originates from three main sources, those being donors (=transfers), public funds from the government (=taxes) and what customers pay out of their pocket for their services (=tariffs). The private sector is not explicitly included but rather incorporated in the Tariffs paid by customers, if there is full cost recovery from the user or partially paid by taxes or transfers in the case of public–private partnerships. The three ‘T’s language has become a common vocabulary of water and sanitation sector specialists.

TRANSFERS, TAXES AND TARIFFS DEFINED

The simplicity of the single words used in the three ‘T’s cleverly combines some complexity. Transfers cover a whole range of donors, concessional and grant finance, from
multilateral agencies, bilateral donors, international and national non-governmental organizations, community service organizations and so on. Taxes cover all the different sources of tax, both local and national, whether income, property, value-added, import duties and earmarked taxes for the water sector. These tax sources cover direct subsidies to providers or customers, as well as the loans being repaid by the government to multilateral organizations or private loan providers.

The two applicable Merriam-Webster definitions of the tariff are ‘a schedule of rates or charges of a business or a public utility’ and ‘price, charge’. These are in line with the OECD framework, whereby a Tariff would cover everything that the customer pays for the service, i.e.

- direct monthly fees (fixed or volumetric) paid to the service provider
- other ‘discretionary’ costs which vary day to day, month to month, year to year and are paid to a range of providers.

However, the word tariff is generally associated with user fees in the form of (monthly) water bills. This narrow interpretation leaves out other important investments that households make for water and sanitation services. These include paying for capital items such as a water supply or sewer connection; capital investments in onsite water and sanitation infrastructure such as wells, water tanks and household sanitation (self-supply); other payments for the maintenance and running of services; fees paid for public toilet use and regular purchases of bottled/sachet water.

**HOUSEHOLD INVESTMENTS**

Based on survey responses by 25 national governments in 2016/17, the Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) reports that an estimated 66% of US$ 43 billion of annual WASH expenditure (i.e. US$ 28 billion) is from household contributions (WHO 2017a). The corresponding household contribution figures for 2018/19 from 35 responses were 66% of $52 billion (i.e. 34 billion) (WHO 2019). Household contributions refer to both tariffs (as defined above) and HIs in self-supply. While there may be concerns about the accuracy of the GLAAS estimates, the data suggest that household contributions are significant, and WHO (2017a) states that household contributions may actually be underreported.

The phenomenon of self-supply in urban and peri-urban areas is increasingly recognised in the literature in terms of its importance as well as a scale (Grönwall 2011, 2016; Chakava et al. 2014; Peloso & Morinville 2014; Healy et al. in press). Essentially, users are investing their own resources to construct their own private water supply services in response to unreliable piped supplies or a complete lack of service. The GLAAS (WHO 2017a) presents data for tariffs versus payments for self-supply for seven countries. As an example, self-supply payments are estimated to have exceeded tariff revenues by three times in Bangladesh (2015) and by 11 times in Ghana (2014), while in Brazil (2014), the revenue generated from tariffs exceeded self-supply expenditures by 56 times (WHO 2017a). Notably, much remains to be learned about the types and scale of self-supply, its advantages and disadvantages and the economic, social and political, as well as environmental implications.

Key data sources for household expenditure include the Living Standards Measurements Surveys (LSMS) and Income and Expenditure Surveys. These typically ask questions on the household monthly water charges (i.e. tariffs) and may include wastewater charges. However, non-monthly or seasonal costs including HIs such as buying bottled/sachet water or constructing, running and maintaining self-supply services are generally not captured. Essentially, our understanding of WASH finance remains inadequate.

**FINANCIAL TRACKING**

The UN-Water/WHO TrackFin initiative is trying to address major information gaps by encouraging countries to adopt a methodology to track financing to the WASH sector, referred to as WASH accounts (WHO 2017b). HIs are an explicit feature of TrackFin with self-provided domestic and non-domestic use; self-provided users and user self-finance all considered. User expenditure on self-supply is one of six defined financing types alongside (i) tariffs for services, (ii) domestic public transfers (including taxes) and
transfers through (iii) international grants and donations, (iv) voluntary contributions/grants and (v) repayable financing.

**MULTIPLE SOURCES**

Most national surveys, including the Demographic Health Survey (DHS) only ask about the primary drinking water supply. The Performance Monitoring and Accountability (PMA) Survey provides insights into secondary as well as the main drinking water source for a number of countries. Secondary sources can play a very important role, a reality that has policy implications. In this case, it may show a need for better groundwater protection and monitoring. There may also be seasonal differences in water use, for example, increased use of domestic rainwater in the wet season (UBOS 2004) which likewise has implications for the policy. In the aforementioned case, efforts to boost rainwater storage could improve water access at low cost. As in the case of HIs, our understanding of household water use is incomplete. Unless we can understand more about the water sources actually being used, policies will only focus on one part of the picture.

**CONCLUSION**

The narrow interpretation of Tariff within the three ‘T’s shines a spotlight on Tariffs but leaves other HIs in the dark. Given the extensive (and growing) HIs being made for water and sanitation services (particularly self-supply), we believe it is time for new vocabulary, for conversations that focus the attention of policymakers onto the choices that millions of people actually make.

The authors propose that rather than re-interpreting the term ‘tariff’, an addition is made to the three ‘T’s vocabulary. The term ‘Household Investments’ (‘HI’ for short) would reflect people’s own investments in their own services. Among other benefits, the inclusion of HI would help to bring the small private enterprises that deliver services out of the policy darkness in which they currently operate. The categories proposed by TrackFin, which includes HIs, provide a solid basis for robust financial monitoring.

Secondly, it is time to bring ‘HI’ into national surveys. The organisations behind the LSMS and other Income and Expenditure Surveys should consider how to capture household expenditures on water and sanitation that are beyond tariffs. A more nuanced picture of what people are actually spending will not only inform policy decisions, but it will also improve our understanding of affordability. In tandem, there is a need to recognise the hidden and multiple ‘HI’s in water use. Let national surveys be enhanced so that they start to shed more light on the multiple sources that people actually use, as well as seasonal differences. A better understanding of how people without a reliable (and safe and affordable) piped water supply meet their needs can help policies and strategies for WASH to be more relevant, enable targets to be met and better capitalise on the finance that is already being leveraged.

Thirdly, ‘HI’ should feature much more within the research. Let us find out more about the scale, advantages and disadvantages, and the economic, social and political, as well as environmental implications of HIs in WASH.

In summary, let us widen the spotlight and start talking about ‘HI and the three ‘T’s’ as the foundation for strategic and financial planning for WASH, it should become part of the common vocabulary of water and sanitation experts in policy-making, achieving targets and leveraging other financing sources.

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First received 5 November 2019; accepted in revised form 13 January 2020. Available online 17 February 2020