

This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

Water tariffs in community-managed schemes: ongoing challenges for WASEP in northern Pakistan

PLEASE CITE THE PUBLISHED VERSION

PUBLISHER

WEDC, Loughborough University

VERSION

VoR (Version of Record)

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Tan, Jeff, Matt Birkinshaw, Sabrinisso Valdosh, and Karamat Ali. 2021. "Water Tariffs in Community-managed Schemes: Ongoing Challenges for WASEP in Northern Pakistan". Loughborough University.
<https://hdl.handle.net/2134/16867288.v1>.

42nd WEDC International Conference

ONLINE: 13 – 15 September, 2021

**EQUITABLE AND SUSTAINABLE WASH SERVICES:
FUTURE CHALLENGES IN A RAPIDLY CHANGING WORLD**

**Water tariffs in community-managed schemes:
Ongoing challenges for WASEP in Northern Pakistan**

Jeff Tan, Matt Birkinshaw, Sabrinisso Valdosh & Karamat Ali

United Kingdom

REFERENCE NO. 3157

This paper examines the challenges of tariff collection in the Aga Khan Agency for Habitat's Water and Sanitation Extension Programme (WASEP) first identified by Hussain, *et al.*, (2000). The issue of tariffs is central to successful operations and maintenance (O&M) and hence the long-term viability of water systems. Failure has been blamed on irregular or non-payment of tariffs (Kleemeier, 2000; Prokopy, 2005) related to the lack of ownership by communities (Doe and Khan, 2004; Calzada, *et al.*, 2017). In the case of northern Pakistan, it is argued that 'community management of RWSS has not been successful' because 'communities never "owned" the RWSS projects' (Ahmed and Alibhai, 2000: 61). The introduction of community-based water management (CBWM) thus aims for communities to take "ownership" and management of water schemes, including the regular (monthly) collection of tariffs (Doe and Khan, 2004; Calzada, *et al.*, 2017).

The WASEP approach to CBWM in northern Pakistan was outlined by Ahmed and Alibhai (2000: 64) who concluded that the 'inclusion of all members of the community in design and construction (men, women, rich and poor) has assisted in creating a true sense of community ownership and has helped achieve operation and maintenance goals'. They argue that 'the likelihood of a scheme to remain functioning is highly correlated with the level to which community participation and management is facilitated' and that the complementarity between community ownership and management means that water schemes 'are likely to remain functioning in the future' (Ahmed and Alibhai 2000: 64).

However, Jina, *et al.*, (2000: 86) suggest that community ownership or involvement does not automatically guarantee tariff collection, with non-payment due to a 'lack of committee and community awareness of the importance of the fees and lack of information on what happens with collected tariffs' along with difficulty 'convincing villagers to pay for water that they have a natural "right" to'. This is supported by Hussain, *et al.*, (2000: 76) who find that in 11 out of the 15 original WASEP schemes in 1998, 'the tariff collection strategy was not being followed satisfactorily'. Their findings from three villages show that two villages set tariff levels 50% lower than recommended by WASEP, but still only managed to collect tariffs from 44% and 86% of households for the whole year. In the third village with the recommended (higher) tariff, only 19% of households paid for the whole year (Hussain, *et al.*, 2000: 78).

This paper presents findings of a stratified household survey of 2,500 households across 10 districts in 50 rural and urban communities in Gilgit-Baltistan in 2020-2021. It includes results of user attitudes to, and support for, water tariffs that provide a long overdue update to early findings by Hussain, *et al.*, (2000). Although this paper falls under the "urban water management" theme, it investigates household payments of, and attitudes to, tariffs in both rural and urban projects in order to determine if and how WASEP can be scaled up to urban settings. The random sample of 25 rural and 25 urban projects were generated from a list of 397 WASEP projects in Gilgit-Baltistan. This data are supplemented by interviews with treasurers of Water Sanitation Committees (WSCs) in eight rural and four urban projects, and supported by financial records on tariff collections and O&M expenses.

The household survey illustrates an ongoing concern identified in earlier WEDC studies by Jina, *et al.*, (2000) and Hussain, *et al.*, (2000) that tariff payments remain a challenge. This is despite high levels of

community participation and a strong sense of ownership of WASEP by communities. Over 70% of rural and over 60% of urban respondents took “some”, “quite a lot” and “a lot” of responsibility for WASEP projects. However, only 33% of rural and 44% of urban households paid at the start and monthly, with 56% rural and 48% urban only paying at the start. Data from the WSC interviews mirrors this. Of the 12 WSCs, only six (rural) WSCs have fixed monthly tariffs, three (urban) WSCs have no collection, one (rural) WSC has had no collection in the last five years, and one rural and one urban WSC have collections on a needs basis.

As a result, tariff collections do not appear to cover operational costs, minor repairs, and major repairs in urban WSCs (75% of which do not have any tariff system in place). Tariffs cover only 38% of operating costs, 75% of minor repairs, and 25% of major repairs in rural WSCs. This is reflected in operating deficits in 50%-67% of WSCs. Without regular tariff payments, nine out of 12 WSCs requested external support from WASEP or the Public Works Department for O&M costs, major repairs and other (unforeseen) costs. These findings suggest that attitudes to, and payments of, water tariffs are not necessarily associated with a sense of ownership brought about by CBWM, and long-term sustainability may continue to require external intervention.

References

- Ahmed, J. and Alibhai, K. (2000) ‘Community Management of RWSS in Northern, Pakistan’, *26th WEDC Conference*, Dhaka, Bangladesh.
- Calzada, J., Iranzo, S., and Sanz, A. (2017) ‘Community-Managed Water Services: The Case of Peru’, *Journal of Environment and Development*, 26(4): 400-428.
- Doe, S. and Khan, M. (2004) ‘The Boundaries and Limits of Community Management: Lessons from the Water Sector in Ghana’, *Community Development Journal*, 39(4): 360–371.
- Hussain, M., Khan, S. and Alibhai, K. (2000) ‘Water Tariffs: A Challenging Issue for WASEP Implementation’, *26th WEDC Conference*, Dhaka, Bangladesh.
- Jina, L., Alibhai, K. and Alam, N. (2000) ‘Ensuring Sustainability Through Technical Monitoring and Evaluation’, *26th WEDC Conference*, Dhaka, Bangladesh.
- Kleemeier, E. (2000) ‘The Impact of Participation on Sustainability: An Analysis of the Malawi Rural Piped Scheme Program’, *World Development*, 28(5): 929-944.
- Prokopy, L.S. (2005) ‘The Relationship Between Participation and Project Outcomes: Evidence from Rural Water Supply Projects in India’, *World Development*, 33(11): 1801-1819.

Contact details

Jeff Tan is Associate Professor of Political Economy at the Aga Khan University-Institute for the Study of Muslim Civilisations in the UK. He has been a consultant to the UN Special Rapporteur on the Human Rights to Safe Drinking Water and Sanitation and is principal investigator on a British Academy-funded project on community-based water management in Gilgit-Baltistan, Pakistan.

Jeff Tan:	Aga Khan University, Aga Khan Centre, 10 Handyside St, London N1C 4DN, UK. Email: jeff.tan@aku.edu Website: www.aku.edu/ismc
Matt Birkinshaw:	Aga Khan University, Aga Khan Centre, 10 Handyside St, London N1C 4DN, UK. Email: matt.birkinshaw@aku.edu Website: www.aku.edu/ismc
Sabrinisso Valdosh:	Aga Khan University, Aga Khan Centre, 10 Handyside St, London N1C 4DN, UK. Email: sabrinisso.valdosh@student.aku.edu Website: www.aku.edu/ismc
Karamat Ali:	Karakoram International University, University Road Gilgit, Pakistan, 15100. Email: karamat.ali@kiu.edu.pk Website: https://www.kiu.edu.pk/