



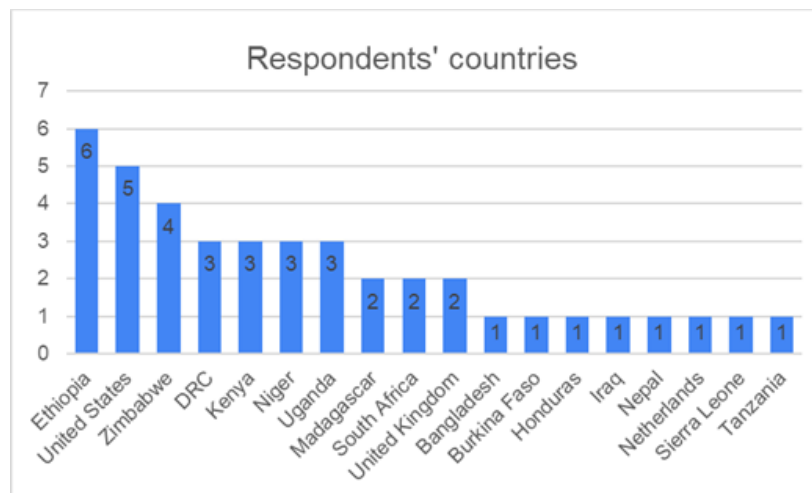
An update on PRO-WASH and SCALE research into Multi-Use Water Systems

Multi-Use Water Systems (MUS) is an approach to water service delivery that takes into account the needs of both WASH and agriculture activities. Essentially, a MUS is designed to supply domestic water *as well as* water for productive uses, such as irrigating a garden or operating a small business. By providing reliable water access to communities or households, MUS can boost users' resilience to shocks and stresses, improve food security, and support livelihoods. But they can also present a more complex set of challenges than single-use water services, which are not always solved by standard approaches to WASH infrastructure.

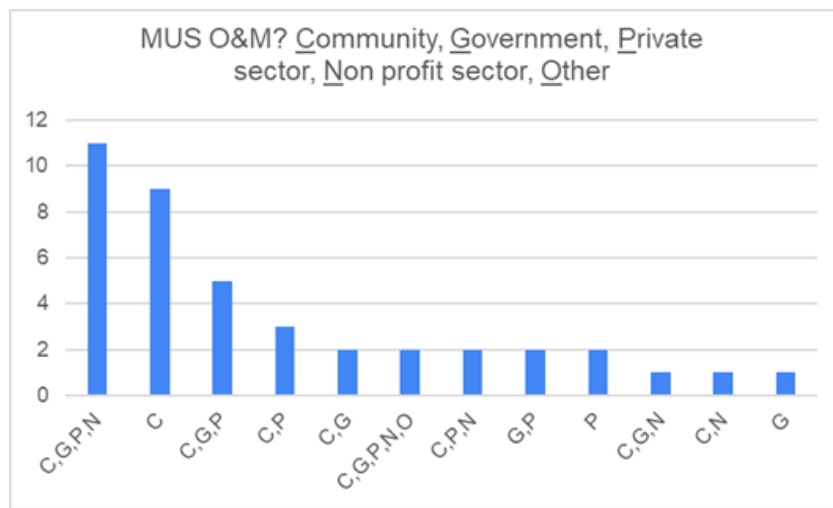
MUS is already a part of many USAID Bureau for Humanitarian Assistance funded Resilience Food Security Activities (RFSAs), and RFSAs partners have shown continued interest in learning about ways to improve the operation and sustainability of these systems. In response, [PRO-WASH](#) is now collaborating with the [SCALE](#) Award to jointly initiate and fund research into one or more key issues in MUS, in collaboration with RFSAs partners. The focus will be on applied research, ideally resulting in tools, guidance or findings relevant to multiple BHA partners that support food security and WASH activities.

In the last few months, PRO-WASH and SCALE have worked closely with RFSAs and sector experts to understand some of the key issues that impact MUS sustainability. This work included a survey of 42 RFSAs and MUS experts world-wide, more than two thirds of whom either work for, or have worked for, a RFSAs. About the same proportion are currently working on a program with an existing MUS activity that would benefit from partnering with a research entity to carry out further research into MUS. The survey was followed up by more in-depth one-on-one interviews with about one in five of the survey respondents, together with a review of relevant literature and a more detailed analysis of the survey data.

MUS survey respondents were drawn from around the world, as the following chart shows:

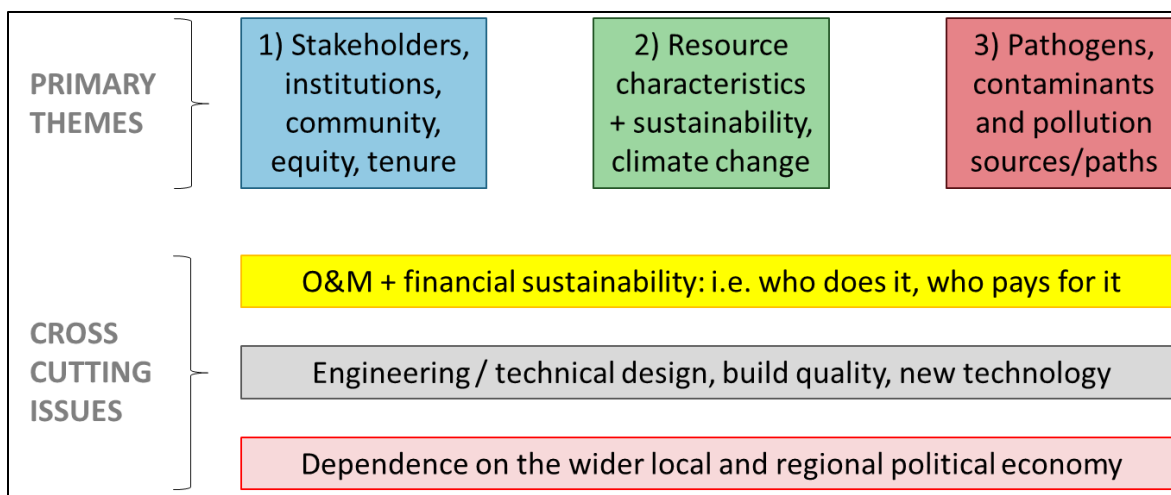


One central issue that arose was who (or what) should take overall responsibility for the operation and maintenance (O&M) of a MUS system, once it has been installed. Should this be the community, the government, the private sector, the non-profit sector, or somebody else? The following chart shows the range of survey responses to this question. Most survey respondents valued community ownership and responsibility, often because other entities or “external actors” are not available or are not reliable. Only 5 respondents (12%) saw no role at all for the community, while nine respondents felt that the community alone should take on this responsibility. The one-on-one interviews did however raise concerns with “community only” O&M, as MUS requirements for O&M are typically higher than for domestic-only sources. with Most respondents (71%) wanted a partnership of some kind (a “joint effort,” as one respondent put it). It can be seen that the most respondents (11) favor some combination of community, the government, the private sector, and the non-profit sector working together.



Apart from the institutional issues around O&M responsibility, and the associated important question of financial sustainability, survey respondents also focused on the characteristics of the water resource (volume and quality) that sustains a MUS. How can we know whether the resource will be robust enough to support the additional volumes demanded by a MUS? Closely related to this was the question of pathogen contamination and water quality: many MUS sustain livestock or are used to grow crops, and microbiological pathogens, fertilizers and pesticides can easily become a problem.

The PRO-WASH and SCALE team have summarized the main survey issues in the following diagram, identifying three primary themes and three cross-cutting issues that apply to MUS:



SCALE and PRO-WASH are now working on identifying a program partner and defining two or three key research questions, which will form the basis of a call for proposals and the foundation of the actual research itself. The research is scheduled to be completed roughly 12 months from now. Watch this space for a Request for Applications (RFA), dropping soon. We thank all of those who have contributed to this effort by completing the survey, participating in an interview, or sharing literature and materials with us.

This brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the SCALE and PRO-WASH Awards and do not necessarily reflect the views of USAID or the United States Government.