



**Authorship and recognition
in knowledge production in
water, sanitation and
hygiene (WASH):
A guidance note**

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1 Introduction to the Guidance Note

The purpose of this document is to improve awareness about and provide guidance on practices that support the representation and amplify voices of researchers and professionals from lower- and middle-income countries (LMICs) in the production of knowledge about water, sanitation, and hygiene (WASH). Within this context, the guide focuses on the representation of LMICs in written materials, such as policy papers, research reports, presentations, guidelines, white papers, case studies, and academic, peer-reviewed publications. Parts of the guide may also be relevant to the recognition of contributors of non-written work, such as photographs, illustrations, and performances. We do not specifically focus on the recognition and representation of Indigenous knowledge in the Guidance Note, and further work is required in this area led by researchers with the appropriate expertise. An Indigenous point of view might challenge the focus on written texts and emphasize other forms of knowledge production such as oral histories and dance.

An increased focus on localization in the WASH sector has called for staff from international organisations to listen more to the voices of actors central to local economic and social development. This has contributed to removing barriers to public, private, and non-profit individuals demonstrating leadership and autonomy within their local and national decision making arenas. The guide seeks to support this trajectory, and also goes beyond a focus on the divide between higher-income countries (HICs) and LMICs, to recognise challenges of privilege and inequality that play out within countries and institutions.

The primary audience is the Bill and Melinda Gates Foundation (BMGF), which has funded the Guidance Note, and their grantees. It is also likely to be of interest to other researchers and professionals in WASH and international development working in not-for-profit, government, and private-sector organizations. While recognizing and acknowledging contributors in written outputs is the core focus, this Guidance Note also highlights broader system issues that surround knowledge production. It is intended that BMGF and other WASH actors will adopt and integrate these guidelines into grants and projects that have a knowledge production component.

The Guidance Note has been prepared by researchers from the University of Technology Sydney's Institute for Sustainable Futures (UTS-ISF) in collaboration with other experts within and beyond the WASH sector who are working on the decolonization of knowledge. The author's voice, "we", is from the position of UTS-ISF researchers, situated within a higher-income country university, who feel implicated in issues of authorship and recognition in the WASH sector and wish to identify ways to improve the practices of the sector. We conducted several consultations with researchers and professionals in LMICs to ensure the Guidance Note reflects their perspectives (references to data-collecting methods are cited in parentheses in the text). We also reviewed relevant literature and have drawn on that throughout this document. See Section 7 for further details on the approach taken to prepare the Guidance Note.

The Guidance Note explains key terms and their relevance to the international development and WASH sectors (Glossary), and situates this Guidance Note in BMGF organizational context and the international development WASH sector contexts (Section 2). It then describes the issues and challenges arising in regards to authorship and recognition (Section 3); provides guidance on acknowledging contributions and strengthening opportunities to amplify LMIC voices, including those of both researchers and professionals (Section 4); describes the principles underlying the decolonization of knowledge production (Section 5); and proposes future directions for knowledge production in WASH (Section 6).

Glossary of key terms

Lower-income and middle-income countries (LMIC): LMICs are a diverse group in terms of their sizes, populations, and income levels. Lower-income countries are defined as those with a gross national income (GNI) per capita of \leq \$1045 in 2020 (calculated with the World Bank Atlas method); lower middle-income countries are those with a GNI per capita of \$1046–4095; and upper-middle-income countries are those with a GNI per capita of \$4096–12,965. LMICs are distinguished from high-income countries (HIC), which are defined as those with a GNI per capita of \geq \$12,696 (The World Bank Group. 2022). The use of this term in the Guidance Note is consistent with its use by BMGF.

Global South: The term ‘Global South’ shifts the focus toward the analysis of geopolitical inequalities in power and away from concepts of economic development. The Global South’s interests often conflict with those of industrialized, neo-imperial powers. These terms provide an alternative to the concept of globalization and challenge the belief in the growing homogenization of cultures and societies (Dados & Connell 2012). The ‘Global South’ broadly refers to the regions of Latin America, Asia, Africa, and Oceania. These regions are predominantly lower-income countries (with the exception of North Asia) and are often politically or culturally marginalized. Europe and North America are referred to as the ‘Global North’. Australia and New Zealand have colonial legacies and so are ambiguously considered part of the Global North or Western powers, although they are geographically separate from them. There are diverse reactions to the use of the ‘Global South/North’ terms, including the critique that it creates an oversimplified binary. Other people, including those from the Global South, prefer to use this term (or similar) rather than those categorizing a country by GNI such as the term LMIC, including contributors to this document.

Sexual and Gender Minorities (SGM): The term ‘SGM’ includes lesbians, gay men, bisexuals, and transgender people (LGBT), intersex people, gender-nonconforming people, people who may identify as queer, or those who prefer no gender label at all (UNDP 2011, p. 28).

Intersectionality: Intersectionality examines how intersecting systems of power (e.g., sexism, racism, able-bodism) affect individuals in a multitude of ways and where forms of discrimination overlap to create further disadvantage (Choo & Ferree 2010). Taking an intersectional approach means considering the multiple exclusions and the heterogeneity of needs and capacities within identity groups.

Black, Indigenous, and people of color (BIPOC): ‘BIPOC’ is a term used to include black, Indigenous, and people of color (POC) when their experience is distinguished from the experience of white people. It is a contentious term because for some, combining these three groups can presume homogeneity and erase the particular histories and issues of the individual groups. For others, it is a useful way to include the voices of black people and those of Indigenous groups who have not yet been heard in the POC narrative (Garcia 2020). This term is most used in North America.

Social inclusion: ‘Social inclusion’ is defined as the process of improving the participation of people in society, particularly those who are disadvantaged, by enhancing their opportunities, improving their access to resources, hearing their voices, and respecting their rights (UN 2016, p. 17). Social inclusion requires that social exclusion be reduced by removing attitudinal, environmental, and institutional barriers that hinder the participation of any disadvantaged individual or group, on an equal basis with others. For example, inclusion approaches support the development of skills and confidence among those likely to be excluded on the basis of their identity, to increase their ability to participate.

Decolonization: ‘Decolonization’ refers to the process whereby a colonial state withdraws from a former colony, which in the mid-twentieth century has been associated with the self-determination of indigenous nations. The current meaning of ‘decolonizing development’ is contested. Calls for the decolonization of development are regarded as controversial by some policy-makers and international nongovernmental organizations (INGOs) because the concept implies that development is a form of colonization, whereas nations are sovereign and should themselves decide to accept or reject developmental assistance. To others, decolonization involves the critical scrutiny of current international development practices, rather than their complete rejection (Peace Direct 2021).

Decoloniality: In the 1970s–1980s, Latin American scholars analyzed the link between the concentration of power in politics and economics in Europe and North America with the ‘coloniality’ of knowledge (Quijano 1992). Coloniality enforces Eurocentric worldviews and value systems that devalue other ways of knowing, living, and being (in terms of gender, sexuality, and subjectivity). ‘Decoloniality’ is a way of deconstructing colonial ideologies and the privileging of Western thought, and of addressing the legacy of colonialism in contemporary culture and politics.

Decolonizing knowledge: Decolonizing knowledge involves the recognition of a plurality of values, practices, and knowledge, especially indigenous knowledge. The decolonization of knowledge makes visible ways of thinking and knowing, cultures, and ethical systems that have been suppressed in the interests of defending rationality and modernity (Mignolo 2007).

Voice: Decisions will be influenced by who is participating in the dialogue, whose voices are heeded, and who has the final say. Addressing inequality involves amplifying the voices of marginalized people, supporting their involvement in leadership and decision-making, and contributing to the redistribution of power.

Empowerment: ‘Empowerment’ is the process of rebalancing power and privilege, through conscientization (making ourselves and others aware of political and social conditions) and collective efforts towards structural change. Empowerment is closely linked to the gender–transformative change agenda, which puts values of accountability, inclusion, and nondiscrimination at the center of all undertakings, and works with the interests we have in common (Cornwall & Rivas 2015).

2 Relevance of the Guidance Note

2.1 Relevance to BMGF and links with the Diversity, Equity and Inclusion strategy

An organizational commitment has been made in BMGF’s Diversity, Equity, and Inclusion (DEI) framework to “embed diversity, equity, and inclusion as fundamental principles and practices across all of our work” (BMGF 2021). This Guidance Note supports the strategic direction of the DEI framework by outlining practices and principles that will elevate the voices of partners, professionals, practitioners and community members in the written outputs on WASH. The foundation’s work will be strengthened in effectiveness and impact, by hearing more from those who better understand the contexts and people which WASH work is intended to benefit.

This work on authorship and recognition during knowledge production in WASH is consistent with key elements of the BMGF DEI framework:

- The Impact Principle: to “achieve the impact we want to have in the world by actively listening to our partners and the communities they work within and serve, investing in and **elevating their voices and ideas**”;
- The Pillar 1 of Partnerships and Voice: “how we work with grantees, suppliers, and partners is representative of, **addresses the needs of, and shares power with** the populations and communities we serve in order to achieve our best impact”;
- Voice 2023 Outcomes: “[t]he foundation intentionally **elevates diverse partners and partner community members** during learning sessions, advocacy engagements, media and social media”, which might be extended to include written materials and publications.

The BMGF Water, Sanitation, and Hygiene (WSH)’s Measurement, Evidence, and Dissemination (MEDS) community has recently held discussions about what DEI means for them and how DEI might be measured. Inclusive group norms have been developed that recognize that “we all share responsibility for being more inclusive, respecting diversity of voices and perspectives, proactively addressing power imbalances of HQ/field and Global North/LMIC and the colonial and historical context of which the WASH sector operates” (Rosenboom et al. 2021).

This Guidance Note is intended to raise awareness of the power imbalances between funders, grantees, and the wider partners associated with BMGF and address the issues related to recognition of their contributions. The Guidance Note may also be used to inform decisions about the prioritization and resourcing of action plans for the implementation of the DEI strategy.

2.2 Relevance to the international development sector

In this section of the Guidance Note, we introduce how decolonial thought influences the topics of authorship and recognition in knowledge production.

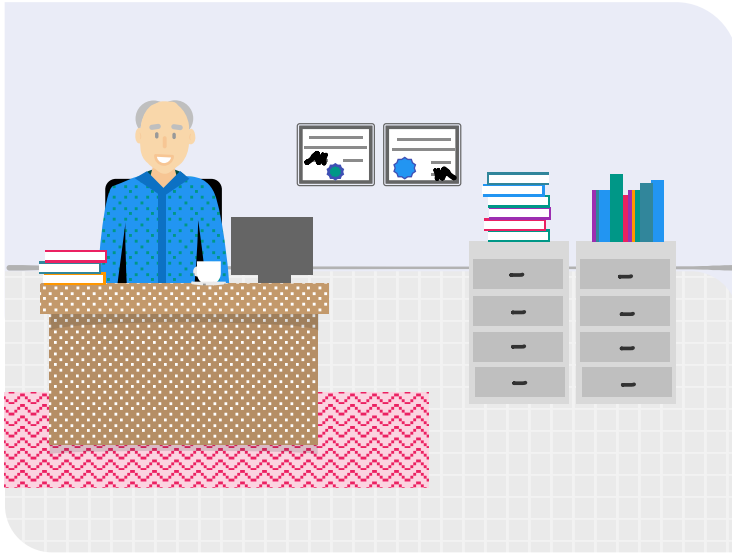
We exist and work in a world with a legacy of colonialism. Through its imperative to privilege some races and genders over others, colonialism effectively embedded racism and sexism in its governance and educational systems. The international development and WASH sectors were established within this context, and for those of us now working in these sectors, it is important to reflect upon our own privilege and how we engage with racist and sexist systems. This is a collective responsibility, especially for those in positions of power and privilege—to dismantle the inequalities imposed by structural racism and sexism (Worsham 2021).

Representations and knowledge of the world are situated historically and geographically (Haraway 1988). Feminist approaches highlight the importance of situating ourselves in time and place, to understand that we have only a partial perspective, and that this partial perspective affects our world views, values, and what we know as ‘truth’. This awareness is built through self-reflection and an openness to being challenged, which can improve our understanding of issues.

Decolonialization approaches encourage us to seriously consider other ways of knowing, doing, and being in the world. By challenging narratives about international development, WASH, and global economics, which assume universality or linearity, we can unmake these narratives and remake alternatives to ensure social justice and environmental sustainability.

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“Decolonizing development means disrupting the deeply-rooted hierarchies, asymmetric power structures, the universalization of Western knowledge, the privileging of whiteness, and the taken-for-granted Othering of the majority world” (Sultana 2019).

To decolonize knowledge and support the greater representation of marginalized voices, new types of networks are needed. Decolonizing is a relational process that requires solidarity networks to be established (Mignolo & Walsh 2018). Some types of networks might join together people who have relative privilege by being white, of a higher social class or caste, or in a powerful position of leadership and management, to hold dialogues among themselves about how to deconstruct the asymmetric power structures in which they participate. Other types of networks within an organization or community are made up of like-minded individuals from marginal entities (such as BIPOC), who share their experiences and build strategies together to push for change. These two types of networks have people with shifting affiliations and simultaneous membership of overlapping groups (Rocheleau 1995, p. 461). A third important type of network respectfully bridges different identities and levels of privilege, and the diverse members of these networks collaborate to create more inclusive cultures in organizations or communities.

The disruption of COVID-19 in 2020–2021 has been a catalyst for change for many in the international development sector. The hiatus in domestic and international travel, ‘social distancing’, and other measures to prevent the spread of COVID-19 have emphasized the role of international organizations in remotely supporting local agendas and actors central to international development, working in new ways so ensure that partners in the Global South have greater leadership and autonomy (Winterford et al. 2021).

3 Issues and challenges regarding authorship and recognition

3.1 Issues and challenges in international development

In this section, we outline the issues and challenges posed by authorship and recognition, which were identified during the development of this Guidance Note. LMIC authors are underrepresented in the written work published by the international development sector. Underrepresentation arises, in part, from an imbalance in the opportunities to lead knowledge-production processes and other inequalities within research collaborations. This perpetuates ethical concerns in the extraction of data and reproduction of ideas without appropriate recognition of sources of knowledge from marginalized communities and LMIC researchers. The representation of LMIC researchers is affected by several obstacles presented by academic publishing systems.

3.1.1 Underrepresentation and lack of opportunities for LMIC authors

LMIC researchers and professionals are underrepresented in leading written work in the WASH sector. For example, a recent analysis of the nine highest-impact global health journals found that almost 30% of publications of primary research conducted in LMICs involved no LMIC authors (Morton et al. 2021, p. 3). Even in the most-recent COVID-19 literature, 20% of publications of research conducted in African countries included no African authors (Morton et al. 2021, p. 3). This situation disadvantages authors from lower-income countries because authorship of published research directly affects administrative decisions about recruitment, tenure, and promotion, and awards in academia (Rees et al. 2017). This is concerning for the sector because HIC voices are represented more strongly than others, drawing attention to the likelihood of limitations and distortions in the understanding communicated in research.

LMIC practitioners sometimes have no opportunity to voice issues related to their local contexts in presentations and conferences. Many important internal meetings of INGOs and external conferences on international development topics are held in HICs, to the exclusion of stakeholders based in LMICs. Barriers to the participation of LMIC professionals include entry visas, travel costs, conference fees, and home responsibilities, such as childcare (interview, 2022). Even if conferences are convened online, the activities that mobilize key global knowledge tend to be based in head offices in HICs. This is especially problematic when the strategic discussions and decisions that are made in these forums in HICs concern interventions that will be implemented in LMICs. WASH Governance Expert, Euphresia (Kenya) shared her experience:

“At the beginning of COVID-19 in Kenya [in 2020], colleagues in the North asked about issues experienced to present on our behalf. Yet, COVID-19 provided an appreciation of contextualisation; it's not about declarative knowledge (know-what), procedural knowledge (know-how), but mainly reasoning knowledge (know-why). Affirmed but the fact that nobody had ever experienced COVID-19 before, wasn't it better practice if requests proposed us working together and [WASH] implementers on the ground were able to discuss our own issues?”

COVID-19 has encouraged more events to be held online or in hybrid form (online participation with some presenters together in person). Norms are gradually changing in the development sector, with increasing diversity of race and gender among the members of discussion panels. For example, the International Red Cross has been a champion in representing diverse perspectives in its events and media, and in promoting peer learning about the decolonization of knowledge in WASH.

Underrepresentation arises, in part, from an imbalance in the opportunities to lead knowledge-production processes. Partners from LMICs rarely set the agendas for international development initiatives or research. This barrier to opportunities is related to systems of funding that advantage HIC institutions in the countries in which the donors are based. HIC researchers involved in agenda-setting are given opportunities to bid for leading research grants and usually become lead authors.

As described by development professional, Stephen (Kenya):

“In terms of publications and who sets the agenda...often research topics come from the Global North, in a top-down approach. It should be the other way around where countries of the Global South decide on the topics they need to research. It also depends on funding and resources—the topics of research [set by donors and Global North organizations] mean Global South researchers should toe the line.”

As well as the paucity of international grants to LMIC institutions, other barriers can include poor funding from LMIC governments to their educational and research institutions and insufficient infrastructure for large-scale studies (such as scientific clinical trials).

The interconnected issues of credibility and prioritizing the visibility of the written work of HIC contributors over that of LMIC contributors undercut the value and recognition of LMIC knowledge and expertise. Work authored by HIC individuals may have higher perceived credibility in international development circles than that of LMIC authors, because it is more usual for HIC individuals to be considered experts in global content or technology. LMIC individuals are often recognized for their knowledge of the local context, which may be reductive. For example, INGOs that publish research reports about LMICs produced by international teams often list the corresponding author as a gender or sanitation specialist in the headquarters in Europe, North America, or Australia rather than the expert located in the LMIC who contributed the knowledge upon which the report is based (focus group discussion [FGD] with LMIC professionals, 2022). Thus, HIC individuals have greater visibility and recognition than those in LMICs.

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The reinforcement of knowledge systems and research norms of the Global North underpins the lack of recognition of research produced in the Global South. The research methods that have become predominant are those that are taught and valued by HIC academic institutions, such as surveys and interviews. This is to the detriment of the local epistemologies and participatory methods that are relevant in non-Western contexts (FGD with LMIC professionals, 2022).

Much research is conducted in colonial languages, such as English and French, to the exclusion of local languages. The choice of language can determine who is included or excluded from a project, and influence the authenticity of the data collected. It is a significant challenge to change the research norms of academic institutions and development organizations, to achieve greater inclusion and diversity in research processes and authorship.

The underrepresentation of LMIC professionals and researchers in the authorship of written work is paralleled by their underrepresentation in presentations and global conferences. This underrepresentation is linked, in part, to an imbalance in opportunities to lead knowledge-production processes and in the recognition of local expertise. These issues suggest that the creation of WASH knowledge is more likely to be influenced by the perspectives of HICs than by those of LMICs, based on this imbalance of opportunity

3.1.2 Inequalities within research collaborations

There are several types of inequalities in research teams, especially the power balance between HIC and LMIC team members, and these directly influence the authorship of and the recognition for the research output. Because HIC researchers and institutions often control the design and funding of a study, local partners have less negotiating power and less opportunity to express their views. LMIC researchers are frequently offered field-assistant or data-collection roles, with no opportunity to contribute intellectually to the written research output (Nobes 2017). In the worst cases, LMIC scholars in less privileged positions are employed to lead field work and to write grant applications or the first drafts of articles, but are made redundant before the written output is prepared for publication, with no accreditation as an author (Bhambra, Gebrial & Nişancioğlu 2018). In less extreme cases, LMIC researchers may contribute to the written output as authors, but have fewer leadership roles.

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The challenge of privilege not only plays out across the divide between HICs and LMICs, but also within countries. Within every country, there are elites who monopolize opportunities or play a gatekeeping role (interview with HIC professional, 2022). LMIC professionals reported that international development professionals who were educated in their own countries are more disadvantaged and sometimes overlooked for opportunities, whereas professionals educated in schools or universities in the Global North are more highly regarded (FGD with LMIC professionals, 2022).

Good practices in acknowledging the contributions of individuals to both the academic and gray literature is still unclear. Our research found a range of ways in which WASH-focused organizations acknowledge the contributors to written work. Some organizations list the organization’s name as author rather than crediting individuals. Others list editors or lead researchers as authors, and then list those people who shared their stories or were involved in field research in other ways in the acknowledgments. To some contributors, being listed in the acknowledgments section doesn’t imply the respect or value that being an author implies (interview with HIC participant, 2022). This lack of clarity about the best practice for acknowledgment means that some LMIC contributors have perceived inequalities within WASH INGO teams.

Inequalities in research collaborations based on race and geography are associated with other intersectional issues. In international development, as in many sectors, older people can hold authority over younger people and are unaware of the privilege that their seniority brings (interview with HIC professional, 2022). Sexual and gender minorities and women often face additional barriers to opportunities for leadership and decision-making roles. These disadvantages underpin the inequalities in authorship and must be addressed if more-diverse voices are to be heard.

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Although guidelines on the conduct of equitable partnerships do exist, there are no standardized mechanisms of accountability or methodologies with which to interrogate the equity of such collaborations. Many fields still lack specific recommendations on how to report authorship and contributorship within international partnerships and collaborations (Morton et al. 2021). It is hoped that this Guidance Note can provide directions for setting up equitable research collaborations and practices that recognize and acknowledge all contributions.



3.1.3 Ethical concerns in research

“Helicopter research”, “parachute research”, and “safari research” are terms that describe cases in which researchers from HICs conduct research in LMICs without ethical strategies for the acknowledgement of LMIC contributions or to ensure the beneficence of the research (Iyer 2018). HIC researchers conduct research in LMICs with the assistance of the local infrastructure and knowledge, and publish the results with no strong involvement of the research participants or the knowledge owners in the interpretation of the results (van Groenigen & Stoof 2020). In fact, they may extract the data they need but fail to share the research findings with local researchers, WASH professionals, or research participants at all. This is particularly an issue for professionals who are interviewed, but are given no opportunity to check the researchers’ interpretations of what they have said. Research findings can be presented by HIC researchers outside the local context and misinterpreted.

Another important ethical concern is research that benefits the authors but does not structurally improve the local community in which the research was undertaken. Indigenous communities have participated of research for years without any material improvement in their conditions. For instance, many Maori people have been led to believe that researchers take knowledge in a nonreciprocal and deceitful way (Smith 2021). This issue highlights the importance of transparency among international development researchers about the intentions of their projects, and of ensuring that research participants benefit through learning from research findings or in other material ways.

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3.1.4 Issues related to the publishing system

Several issues related to publishing systems affect the representation of LMICs in authorship. First, donors and HIC organizations have specific expectations of international publications (both of the gray literature and journal publications). These expectations can include that authors express their work in fluent English, with a particular structure and tone, and with the discipline-specific terms of international development. These writing norms advantage HIC professionals from appropriate social and educational backgrounds, and disadvantage LMIC professionals from other cultures and with other languages.

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Second, the concept of open access publishing is considered by some academics to be a blunt Eurocentric initiative that increases publishing barriers to LMIC institutions (Worsham et al. 2021). Although open access provides benefits in terms of broader readership and greater access to journals by LMIC professionals, the standard financial model of these journals requires that the authors pay an article-processing charge. If LMIC authors or their institutions do not have adequate funds, they may not submit articles to open access journals.

Article-processing charges are waived for authors from some LMICs by most journals of larger publishers, although the terms and conditions are not widely known. Research4Life is one initiative that supports the access of lower-income institutions to academic and professional peer-reviewed content. A criticism of this solution is that the waivers are unlikely to persist if the pool of LMIC authors increases (Nobes 2017). Countries in the Global South with the most active, growing research communities (such as South Africa and Indonesia) are currently ineligible for waivers (Research4Life 2022). Another approach is Subscribe to Open (S2O) which allows publishers to convert journals from subscriptions to open access, one year at a time if all subscribers agree to the offer. S2O relies on existing library subscription procurement processes and HIC institutions subsidizing publications. S2O works best for established subscription journals with stable subscriber bases, so is not well-suited to new subscription journals with growing subscriber bases (S2O 2022).

Third, the academic system preferences authors in journals with high impact scores, who are usually based in HICs. LMIC professionals are more likely to publish in lower-impact journals (Morton et al. 2021). Some tertiary institutions in LMICs are ranked against each other according to criteria set in HICs, such as citations in journals controlled by HICs (Nobes 2017). In some countries in the Global South, monetary incentives are granted by governments to individuals or universities for publications in journals with a certain impact factor (Rivera 2020). This pressures LMIC scientists to publish in HIC journals with foreign languages and with foreign agendas, rather than to publish in LMIC journals, which may be more relevant to their local context.

3.2 Issues particular to the WASH sector

In recent years, there have been positive changes in the WASH sector in terms of diversity, equity, and inclusion. More women and BIPOC have raised their voices in various global forums and been represented in positions of leadership. When women are in leadership roles in the WASH sector, more women-focused issues are considered (interview, 2022). For example, menstrual hygiene management is now a topic accepted by WASH professionals who are male, female, or nonbinary. It is also now recognized that the WASH sector must be strongly aware of power dynamics and gender and social inclusion, and must ensure that no harm is done by WASH interventions.

Nonetheless, challenges still exist in increasing the inclusion and recognition of LMIC voices in WASH knowledge forums. LMIC professionals and researchers are underrepresented in global knowledge activities. WASH professionals balance many priorities, and time may not be allocated in their work roles to produce presentations, written documentation of their practices, or guidance to share with others in the sector. WASH professionals may also lack the language or writing skills to produce written work of the high quality expected by the global sector. This imbalance must be addressed so that WASH professionals from LMICs who have technical knowledge and valuable experiences to share are given the opportunity to do so. Equally, there is a divide between researchers within universities in LMIC and WASH consultants who are commonly engaged by development agencies. Collaboration between LMIC and HIC professionals will require genuine effort and time on both sides to avoid tokenistic inclusion.

LMIC professionals and researchers are underrepresented in global knowledge activities.



4 Guidance on practices that support the representation of LMIC professionals and researchers in written work

In this section, we describe practices that support the representation of LMIC professionals and researchers and create an enabling environment for their inclusion and empowerment in the WASH sector. Systemic changes are required to decolonize the social and economic systems of international development, in which the WASH sector operates, which requires both radical change and incremental change. The areas of practice described below predominantly support incremental change within the existing system of WASH knowledge production, but still aim to challenge and push the boundaries of the existing system whilst working within it. More radical re-thinking of the sector requires further discussion, which we hope will be prompted by this initial work.

These practices relate to the multiple audiences of this Guidance Note including BMGF, grantees, researchers, and WASH practitioners. Depending on how each reader is positioned in identity, role and organisational type, different access points will be available to initiate change. It is especially pertinent for those who hold financial and decision-making power in the WASH sector to consider a wide range of the proposed practices. We recommend for readers to review the range of suggested practices to identify those that are most applicable for you and your organization to implement.

An overview of these areas of practice is shown in Figure 1. Readers will note that only one of the sub-sections deals directly with recognizing and acknowledging contributors in written outputs (Section 4.5) which is the core focus of this Guidance Note. This is purposeful, as it is the many decisions and practices that surround the production of a written output that provide the opportunity to change practices at a more systemic level.

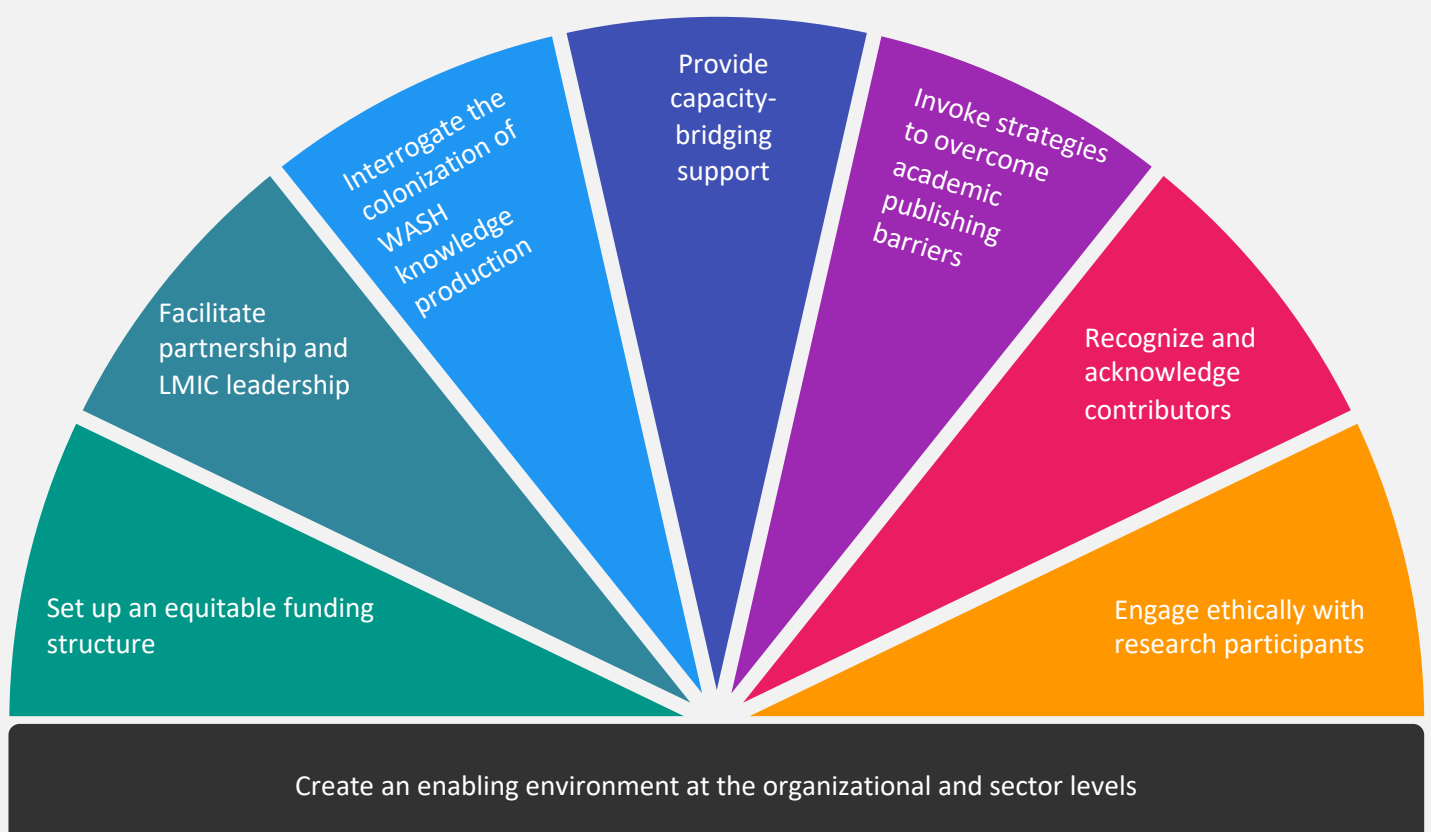


Figure 1. Eight areas of practice that support the representation of LMIC perspectives in written work and amplify their voices during knowledge production. Source: Authors.



4.1 Set up an equitable funding structure

To address the power imbalances between HICs and LMICs, it is important to set up funding structures in an equitable way.

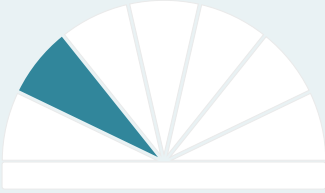
Accelerating the resourcing of LMIC organizations and individuals (localization) will increase their capacity to lead and take authorship of the written work related to their funded projects. BMGF is recognized by WASH stakeholders as a good exemplar of this principle because it aims to increase the share of its funding awarded to local organizations in LMICs (Atim 2021). To increase the number of LMIC organizations funded, donors can support them with funds or training to strengthen their capacities to write project proposals and to set up equitable partnerships with HIC organizations.

While funding must be shared in a more equitable manner between HIC and LMIC actors, it should be ensured that these organizations or individuals have the capacity to achieve a positive impact, and hence mechanisms to fund HIC and LMIC to work collaboratively remain important. Another possibility is that funding arrangements be reversed so that LMIC institutions themselves choose HIC institutions with which to partner, when the skills of the institutions are complementary.

In international collaborations funded by HIC organizations, donors can influence change by requiring the inclusion of LMIC professionals or researchers as authors in the written work associated with the funded project (interview, 2022). This change can be encouraged by WASH-focused organizations and publishers taking action to set and monitor targets for diverse representation in authorship. Ideally, part of the budget should also be allocated to compensate participants for their time and their intellectual contributions to the research or to produce other types of written work.

SUMMARY

- **Increase resourcing of LMIC organisations and individuals** towards increased capacity to lead knowledge production and subsequent authorship of written work in funded projects
- **Consider revised funding arrangements** support LMIC and HIC to work collaboratively, including placing LMIC in the lead so they may enlist their own choice of HIC partnership where appropriate
- **Create donor requirements for inclusion of LMIC professionals and researchers as authors**, including any relevant require budget to ensure compensation for time required



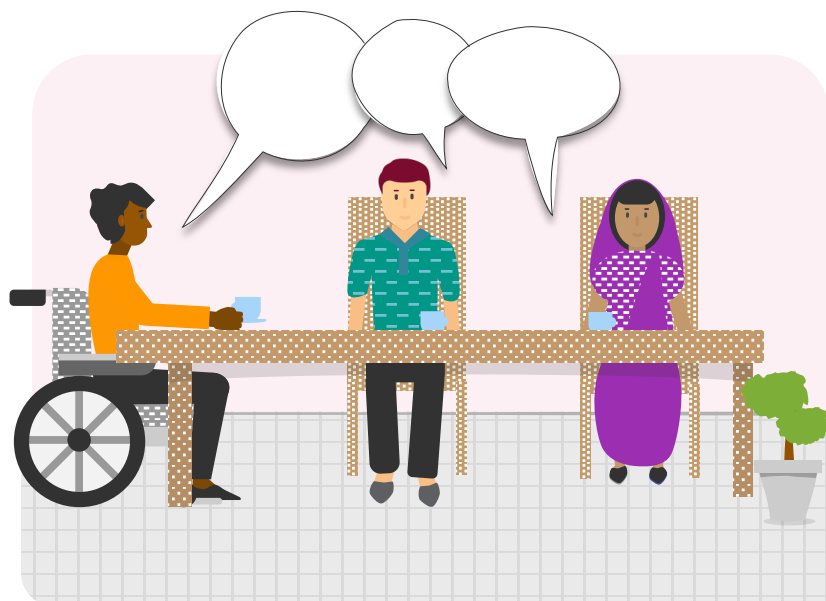
4.2 Facilitate partnership and LMIC leadership

The actors most closely associated with the delivery and sustainable use of WASH services at the local level—including LMIC governments, service providers, and communities—should be involved in setting the research agenda and the design. Research undertaken in LMICs should reflect the priorities for WASH set by local experts (Atim 2021), and should not be driven by the interests of HIC governments, NGOs, or universities. As stated by an LMIC professional, “Having a research team led by people from the Global South really helps to make the work and coordination more equal and participatory” (FGD, 2022).

Sensitivity to the power dynamics within WASH organizations is essential when projects with new or existing partners are initiated. Funders or prospective international partners must contact local staff to discuss their interests and their capacity to contribute to new projects, rather than assuming that senior management will speak for them (interview, 2022). How best to include WASH practitioners in knowledge production must be considered, taking into account that staff might already be occupied with the implementation of existing projects. For example, forward planning with local partners can be done with a bottom-up approach, so that the local partners generate the initial ideas for the research and set the timelines according to their schedules.

Funders and grantees, or INGOs and local partners, must set up intentional conversations about the power dynamics that influence their relationships (Peace Direct 2021). It is important to establish safe spaces for these conversations, in which reflexivity and the expression of different perspectives are encouraged and listened to. It is everyone’s responsibility to hear and amplify the voices of those members who are usually marginalized.

As one means of verification, a structured reflexivity statement can be submitted by the authors of a written work. Reflexivity means reflection on identity and power dynamics within knowledge creation. Authors might describe the ways in which the partnership has promoted equity. Editors and reviewers should develop standardized and transparent methods to examine reflexivity statements as a component of their assessment of research for publication (Morton et al. 2021).



Regardless of how funding arrangements are structured, there are ways to work towards the greater equalization of power and to function in a genuine partnership. At the outset of a collaborative project, the core principles the partnership will follow and the project roles different people will play must be discussed and agreed to. Who will author the written work associated with the project must be agreed and the responsibilities of each author decided.

Opportunities must be provided for LMIC professionals and researchers to gain experience and skills in authorship. For example, written work might be divided between all members of the partnership so that each member is the lead author of one piece, supported by the others. Some members of a research team may be most comfortable gaining experience by initially leading the authorship of a background paper or blog, rather than an academic paper (interview, 2022). LMIC researchers and professionals should be supported to produce written work that is valued in the local context. For example, publishing a media release about the research may be an effective way to influence policy or practice and to amplify the impact of a written publication.

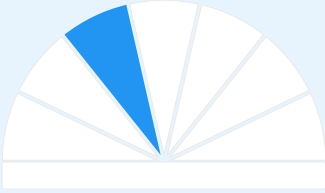
Co-operative creation by HIC and LMIC team members should be encouraged. This co-creation might involve joint research design, sharing writing tasks, or the review of the written output. According to Christine Moe, WASH researcher (USA),

“Co-creation helps us get better-quality research. When researchers have the same passion but complementary skills, this is the best basis for collaboration.”

When a systems approach is followed, opportunities for co-creation and the building of relationships between WASH actors can lead to better outcomes (interview with HIC professional, 2022).

SUMMARY

- **Ensure local LMIC actors are involved** in setting research agendas and design to reflect their priorities
- **Be sensitive to power dynamics in WASH organisations**, and to local existing priorities and commitments that affect ability to contribute and to shape knowledge production activities
- **Set up intentional conversations about partnership power dynamics** and create safe spaces for expression of different perspectives
- **Include reflexivity statements in written documents**, outlining how a partnership behind the knowledge production was conducted including how equity was addressed
- **Begin collaborations with explicit discussion of discussion of authorship** priorities, intentions and roles
- **Strengthen opportunities for LMIC professionals and researchers as authors**, by sharing lead authorship across different outputs, developing diverse types of outputs that require different levels of writing skill
- **Support co-creation in HIC and LMIC teams**, including joint research design, sharing writing tasks and building on complementary skills



4.3 Interrogate the colonization of WASH knowledge production

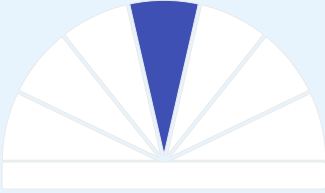
It is important to interrogate the colonization of WASH knowledge production and to avoid perpetuating these inequalities. One way to achieve this is to consider who is deciding the frame or analytical lens of a piece of written work, and the implicit or explicit aims of those involved. Be aware that HIC journals and media platforms can sometimes perpetuate ‘the colonial gaze’ by portraying people in LMICs as ‘the Other’, and portraying the HIC development expert as ‘the white savior’. Instead, amplifying the stories told by LMIC actors from their own points of view can provide a rich and nuanced picture of the development context.

Research methodologies must also be examined critically. Question the preference for technical, quantitative models as ways of interpreting and presenting information, because they can minimize the dynamics of the local context (Atim 2021). Equally, where such quantitative methods are appropriate and meaningful in the relevant investigation of WASH systems, ensure the findings are then placed carefully in the wider social and institutional contexts. Also be clear about the reasons for choosing particular qualitative methods, and avoid presenting scientific research as objective and neutral, because scientists are always embedded in the social contexts that they study.

To decolonize knowledge production in WASH, LMIC experts must be supported to identify culturally specific frameworks, methods, and indicators that can be used to evaluate programs and research relevant issues (Peace Direct 2021).

SUMMARY

- **Avoid perpetuating inequalities in WASH knowledge production**, through considering who is deciding the frame or analytical lens of a piece of written work, and amplify the stories told by LMIC actors
- **Examine research methodologies critically**, and situate findings in the wider social and institutional context
- **Support LMIC experts to identify culturally specific frameworks, methods, and indicators** to evaluate programs and research relevant issues



4.4 Provide capacity-bridging support

LMIC professionals should be supported to overcome the structural barriers to their representation in written output. The assumption that a lack of expertise underlies this imbalance of LMIC representation must be discredited. Capacity bridging is an approach that connects partners with the resources and power they need to implement successful projects (Peace Direct 2021), and signifies a mutuality of support between HICs and LMICs.

Capacity-bridging initiatives support LMIC researchers and professionals to gain experience and confidence in producing written work. This support can include specific training in writing (including in expression and grammar) by writing experts. This can be supplemented with mentoring by WASH specialists in HICs who are experienced in publishing and willing to provide content expertise to LMIC collaborators through analytical and writing processes (Sindall, Barrington & Shaylor 2020). It is important that honest and constructive feedback is given by mentors and reviewers to improve the quality of writing (interview with HIC professional, 2022). Another suggestion is that LMIC individuals be mentored to develop skills in peer review, so that they can gain insights into the publishing process and expand the pool of reviewers. Care should be taken by mentors to avoid condescension or the reinforcement of colonial structures. There may also be scope for peer-to-peer mentoring about authorship within LMICs (Rosenboom et al. 2021).

Although supporting the skill development of LMIC individuals is important from an equity perspective, it is also important that HIC INGOs and academic institutions ‘unlearn’ problematic beliefs. These beliefs include that fluency in English reflects intelligence and that non-native English speakers should work hard to reach the standards of native English speakers. The cultural and professional contexts of authors must also be considered, and the recognition that knowledge artifacts written in other languages are also legitimate. There should be a mutual expectation of both HIC and LMIC professionals and researchers learn other languages so that they can integrate knowledge from different language groups.

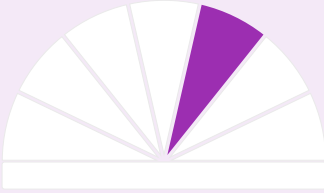
Although supporting the skill development of LMIC individuals is important from an equity perspective, it is also important that HIC INGOs and academic institutions ‘unlearn’ problematic beliefs.

Capacity bridging might also include the mentorship of HIC researchers by LMIC researchers on ways to better conduct research in the LMIC social context, e.g., how to use participatory and inclusive research methods that are culturally relevant and empower participants (interview, 2022). To help bridge differences in language and disciplines, the MEDS community recommends using inclusive vocabulary and simple terminology, and avoiding jargon (Rosenboom et al. 2021).

WASH practitioners from both HICs and LMICs must allocate time in their work roles to focus on producing written work. It would be helpful to have a fellowship program to support individuals based in LMICs, who have less access to resources, to allow them to dedicate the necessary time (interview with HIC professional, 2022). Funders could also include in grants stipends for LMIC partners to analyze data and prepare them for publication (Rosenboom et al. 2021), or to fund time for HIC researchers to provide support and guidance where beneficial or when needed.

SUMMARY

- **Connect partners with the resources and power they need to implement successful projects** through capacity bridging that values mutual support and exchange
- **Develop the skills of LMIC individuals** through training in writing, mentoring from WASH specialists, and giving honest and constructive feedback
- **Mentor LMIC individuals in peer review processes**, developing a deeper pool of reviewers for publishers
- **Consider the cultural and professional contexts of authors**, and expand opportunities for knowledge production in multiple languages
- **Mentor HIC researchers on ways to better conduct research** in the LMIC social context
- **Use inclusive vocabulary and simple terminology, and avoid jargon** to help bridge differences in language and disciplines
- **Support allocation of work time to produce written outputs**, through fellowship programs or including budget in project grants



4.5 Invoke strategies to overcome academic publishing barriers

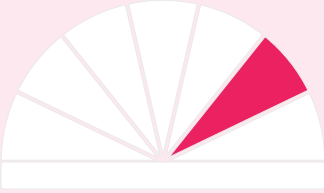
There are many strategies that WASH journal editors can use to support the greater representation of LMIC authors in their journals. To ensure more equal representation, journals can require that papers include in the author team, authors and institutions from the LMIC in which the data were collected. Some journals, such as the Journal of Water, Sanitation & Hygiene for Development (WaSHDev), already specify this requirement (interview, 2022). Journals should also invite at least one qualified reviewer from that country, where possible (van Groenigen & Stoof 2020). To avoid Eurocentrism, the editorial boards of journals should also be representative of the journal's author base and the countries represented in the research published (interview, 2022). Journals should also remove arbitrary limits on the numbers of authors permitted on manuscript submissions, to support the equitable inclusion of those currently disadvantaged by these limits (Morton et al. 2021).

To increase the diversity of topics covered, WASH journals could promote special editions that focus on issues of the Global South (interview with HIC professional, 2022). For example, IWA Publishing invited submissions for a special issue of H₂Open Journal that aimed to “bring the voices of practitioners and researchers in LMIC to the fore” on the topic of strengthening systems and realizing human rights in WASH (IWA Publishing 2021). Papers were required to have at least one author from an LMIC and LMIC authors were encouraged to be the lead author, where feasible and appropriate. A mentorship system was made available to support these contributors. A key lesson has been the need to resource this type of work to ensure such arrangements can be supported effectively. Another suggestion to increase both the opportunities for LMIC professionals to contribute and the usefulness of the articles published is the production of simple WASH practice papers for a non-academic audience (interview with HIC professional, 2022).

As well as the writing support for authors suggested above, journals might provide editors and/or translators who have technical knowledge of the sector to support authors whose working language is other than English. They would help with the accurate translation of the authors' work and support the authors through the editing process, allowing them to be published in an English-language journal. Alternatively, relevant journals could publish papers in a wider variety of languages (other than English or French) to support a broader authorship and readership.

SUMMARY

- **Include authors and institutions from LMIC** where data collection took place or the research setting, as one of the journal publisher's requirements
- **Represent the journal's author base and countries represented in the research published** on editorial boards of journals
- **Remove arbitrary limits on the numbers of authors permitted** on manuscript submissions
- **Promote special journal editions focused on issues of the Global South**, and encourage lead authors from LMIC
- **Provide editors and/or translators to support authors** whose working language is other than English
- **Publish journal papers in a wider variety of languages** to support a broader authorship and readership



4.6 Recognize and acknowledge contributors

To respect the contributions made by LMIC professionals and researchers to written work, an inclusive and broad definition of ‘author’ should be adopted (interview, 2022). To achieve an inclusive definition of authorship, we must challenge how different types of contributions are valued, e.g., attributing the same value to data collectors as to other researchers. All individuals involved in the development of a written work should discuss and agree upon the type of contribution that constitutes authorship, as per the Montreal Statement on Research Integrity:

“Collaborating partners should come to agreement, at the outset and later as needed, on standards for authorship and acknowledgement of joint research products. The contributions of all partners, especially junior partners, should receive full and appropriate recognition” (WCRI 2013).

The types of contributions that constitute authorship might include obtaining funding and establishing the research team; research design; data collection; data analysis; writing and communications; and conceptual input (FGD with LMIC professionals, 2022). The lead author should be the person who contributed most to the written work, rather than the most senior person in the institutional hierarchy.

Some journals allow a description of the contribution of each author to a piece of work to be published. This practice of recognizing the contribution of each author could also be adopted by WASH organizations when publishing guidance notes, policy papers, and reports. Some organizations prefer to publish work under their brand rather than under individual authors, and there may be valid reasons to do so. However, the reasons for naming or maintaining the anonymity of authors must be collaboratively discussed and decided, as appropriate, for the context of each piece of work.

“Recognition [of contributors from the Global South] should be done. There is no room for leaving people out of studies who have contributed, which speaks to the issue of being extractivist, and recognition going onto other people. It reinforces a ‘we’ and ‘them’ narrative. We all need to be careful. It can create a status quo, of some people appearing in multiple studies. The Northern researcher, if you are trying to change, needs to work collaboratively, acknowledging some people have skills and experience in research, and empowering those to do their own research.” – Stephen (Kenya)

“I have been part of research projects with people in an institution in the Global North and it was a pleasure to work with them. Yes, they led the process but also at each step of the way, they ensured you had a say in how it was to be written or portrayed. Without you needing to bring it up, they acknowledged you as a co-author, and that motivates you to do more. I think it is important for people to feel valued and be properly acknowledged.” - Inclusive WASH practitioner

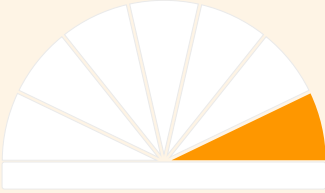


There are practical ways to support contributors to better control how their perspectives are portrayed in written work. First, the sense of the initial findings must be established between the knowledge contributors, those writing up the work, and other stakeholders in the sector. Second, the written draft must be shared with all contributors, to ensure that they approve of how they have been interpreted and acknowledged. Because these co-creation approaches require time, projects must be structured with flexible timelines and the understanding of those who fund or commission the research or written work. Contributors should also be informed of their involvement at the start of the project and the time this will take, so they can make an informed decision about their participation and not be overly burdened.

Appropriate recognition of the contributors to written work requires a sensitive discussion of authorship and acknowledgment, which could be shaped by organisations bringing principles for decolonizing knowledge production to such discussions. Team decisions must be made to ensure that this process feels transparent and fair.

SUMMARY

- **Adopt an inclusive and broad definition of authorship**, challenging how different types of contributions are valued
- **Discuss and agree on the type of contribution that constitutes authorship**, among the team of individuals involved in producing a written work
- **Describe the particular contribution of each author** to a piece of work, whether it be a journal article, guidance note, policy or report
- **Establish the sense of the initial findings** between the knowledge contributors, those writing up the work, and other stakeholders
- **Share written drafts with all contributors**, to ensure that they approve of how they have been interpreted and acknowledged
- **Ensure flexibility of timelines from funders or commissioners** of research or written work, to allow for co-creation approaches to knowledge production



4.7 Engage ethically with research participants

It is critical that research participants are engaged in ethical practices and that the contributions of individuals outside the research team are acknowledged. Benefits and credibility are gained by attributing knowledge to various individuals, by quoting them directly and with photographs and personal names (FGD with LMIC professionals, 2022). In fact, it can be empowering for marginalized groups to have their stories and opinions shared widely. However, this benefit must be weighed against the risk of endangering research participants by revealing their identities (FGD with LMIC professionals, 2022). Research participants who are vulnerable and may not understand the context in which the research findings will be shared must be protected. These different risks and preferences must be weighed up during the ethical approval process, so that participants are given more voice and authority in the research process.

Research should be guided by ethical principles to ensure that activities ‘do no harm’ to the individuals involved in or impacted by the research. The principles of ethical research include four concepts (NHMRC 2018):

1. **Respect for human beings** — respect is an overarching consideration that recognizes the intrinsic value of every human being. Respect involves honoring the rights, privacy, dignity, and diversity of those contributing to research.
2. **Beneficence** — is underpinned by the concept of ‘do no harm’ and involves managing the risks to participants and ensuring benefit.
3. **Research merit and integrity** — high-quality, well-designed research is conducted by individuals or organizations with sufficient experience and research competence.
4. **Justice, related to equity** — there is a fair process for the recruitment of research participants; no unfair burden of participation on particular groups; no deliberate exclusion of minority voices and the fair distribution of, and access to, the benefits of participation in research.

Research with a social justice aim involves listening to marginalized individuals, whose voices often go unheard. This means creating space for the participation of BIPOC and minority groups in LMICs, and avoiding tokenistic inclusion (Sultana 2019). Research findings should be shared with the beneficiaries in a format and language they understand, and they must benefit from these findings in terms of their own knowledge.

SUMMARY

- **Acknowledge contributions of individuals outside of the research team**, to recognize their voices and authority in the research process
- **Weigh up the benefits of attributing knowledge to research participants versus the risks of endangering them** through revealing their identities with quotations, photographs and personal names
- **Be guided by the ethical principles of research:** respect for human beings; beneficence; research merit and integrity; and justice
- **Create space for the participation of BIPOC and minority groups in LMICs**, and avoid tokenistic inclusion



4.8 Create an enabling environment at the organizational and sector levels

WASH-focused organizations can play an important role in creating an enabling environment for the inclusion and empowerment of LMIC professionals and researchers.

Diversity, Equity and Inclusion (DEI) policies should be implemented in the WASH private sector, by governments, research organizations, civil organizations, and INGOs. DEI can be implemented through staff codes of conduct, job descriptions, objectives, accountability, performance management systems, and training (Worsham et al. 2021). It is important that DEI policies are developed and implemented collaboratively, with systems in place to ensure their ownership by the staff within an organization. Building the internal capacity of staff is necessary to improve their sensitivity and competence in addressing DEI issues, especially those staff with leadership roles. Organizations such as BMGF that are already implementing a DEI policy might connect with other organizations working toward the same goals, both inside and outside the sanitation sector, to be held accountable by and to inspire each other (Worsham et al. 2021).

The effective implementation of DEI requires an internal organizational culture that is reflexive and open to change. The organization should provide a platform for staff and partners from marginalized groups to voice their concerns over current systems and practices, to hear about issues, and to develop solutions to improve DEI (Worsham et al. 2021). These concerns may include DEI issues that relate to both the internal functioning of the organization and in how it works with others in the sector. Groups, such as MEDS, with diverse memberships and that undertake constructive discussions about DEI issues should continue to be supported and strengthened. Progress in implementation of DEI should be monitored and achievements celebrated by the organization, so that the benefits of DEI are felt, and further progress encouraged

The WASH sector should continue to focus on the representation and visibility of LMIC professionals and researchers in the events it convenes. More learning events and conferences should be held in LMICs and in hybrid forms, to allow the attendance of a more diverse range of participants (interview with HIC professional, 2022). Peer learning in topics of decolonizing knowledge and development should be continued, with the prioritization of BIPOC representation at events and in discourse.

SUMMARY

- **DEI policies should be developed and implemented collaboratively** by WASH organizations, ensuring ownership by staff within the organization
- **Build the internal capacity of staff** to improve their sensitivity and competence to address DEI issues, including organization leaders
- **Provide a platform for staff and partners from marginalized groups** to voice their concerns
- **Celebrate progress made and achievements** in implementation of DEI, so that the benefits are felt and further progress encouraged
- **Continue to focus on representation and visibility of LMIC professionals and researchers in WASH sector events**, and facilitate greater participation by holding events in LMICs and in hybrid form
- **Continue peer learning** in topics of decolonizing knowledge and development

5 Principles for decolonizing knowledge production

The WASH sector and international development have colonial foundations, and knowledge production in the WASH sector can perpetuate colonial dynamics. The practices outlined in Section 4 seek to address the inequalities between HIC and LMIC actors by decolonizing knowledge creation in the WASH sector. Below, we outline seven broader principles of decolonization that underpin these practices. The principles and explanatory notes offer prompts for researchers and other relevant actors to consider when funding, designing and implementing research and knowledge production, to progress towards a decolonized WASH sector.



Decolonizing development requires practitioners and researchers to unmake and remake development. It is important to understand that we are ‘rebuilding the plane while flying it’. The norms of the development system we are working within must be deconstructed. This will include transforming the power imbalances of the development sector through radical action and by challenging the status quo. Remaking development will also include incremental changes, for example, by integrating DEI into development organizations and increasing LMIC representation in publishing and knowledge forums.



Equitable partnerships are the foundation of effective WASH knowledge production. WASH partnerships are inherently political. There are multiple interests and agendas inherent in development initiatives including knowledge production. Partnerships are further complicated by the diverse cultural contexts involved. Awareness of the political nature of partnerships, the close engagement between funders and their partners, the embrace of the multiple perspectives of these partners, and agreed approaches to operationalizing guidance can support equitable partnerships and the co-creation of knowledge.



LMIC practitioners are experts in their own contexts. LMIC practitioners are well placed to articulate priorities and to produce culturally-relevant knowledge artifacts. There may be gaps in the knowledge of HIC actors about the local (LMIC) political economy. In many cases, HIC actors are better placed to support the efforts of local partners, rather than to lead research. The support of LMIC partners by HIC actors may include support for demand-based capacity bridging.



The contributions of knowledge producers (especially those from LMICs) should be proactively acknowledged and amplified. The insights of knowledge contributors must be acknowledged, attributed, and celebrated. Appropriate recognition is consistent with ethical research practice, and encourages diverse ‘voices’, as Adali (2020) noted:

“Weaving nets of safety, support and care makes individuals and communities open up and express themselves authentically as active change-makers.”



A transdisciplinary approach can support the WASH sector to value and integrate different knowledge systems. Transdisciplinary approaches value a plurality of perspectives, methodologies and world views, and can integrate this diversity into the knowledge production process (Bhambra, Gebrial & Nişancıoğlu 2018). For example, practitioners may consider the diverse perspectives of people of different genders, ages, ethnicity, abilities, education, and disciplines. This approach is consistent with a decolonized mindset.



Barriers to accessing knowledge must be removed. The publishing system presents multiple barriers to people from LMICs and requires many structural reforms. The removal of such barriers may include the increased use of diverse case studies and sources relevant to LMIC contexts; the translation of documents into different languages; access to documents and digital content for people living with disabilities; and availability of open-access documents to LMIC authors and waiving the article-processing charges for those authors.



Reflexive practice, dialogue, and openness to feeling uncomfortable are positive signs of deepening self-consciousness. Reflexive practice on identity and power dynamics and acknowledging the colonial legacy of people and places can mitigate the hierarchy in knowledge creation. ‘Reflexivity’ means deep reflection on our identity, privileges, personal histories, values, and world views, and how these influence our approach to knowledge creation and our ability to contribute to knowledge creation. As stated by Sultana, the alliances and solidarities we form are influenced by our own identities, abilities, ethics, and the issues upon which we focus (2019, p. 40). Reflexivity can also be applied to power dynamics and their implications for knowledge creation, so we can demonstrate accountability by challenging the position from which we speak.

6 Future pathways for knowledge production in WASH

6.1 Holding up a mirror to current practice

This Guidance Note has highlighted various issues and challenges hindering the recognition of LMIC knowledge producers and has suggested practices and principles that will allow us to move forward in a positive direction. It is necessarily incomplete because decolonization is an ongoing collective project and does not have a prefigured set of goals. **The Guidance Note is an invitation to hold a mirror up to current practice, to begin conversations, and to make necessary changes.** These changes will require us to alter our mindsets and practices, and those of communities with which we work, rather than brainstorming ways to make change happen for others (Adali 2020).

6.2 Initiatives to promote decolonization in WASH

Many efforts are currently being made to support decolonization in WASH. Some donors are working to understand the needs, priorities, and capacities of organizations at the local level so that they can be funded directly (localization). There are grants that target LMIC researchers and the special editions of journal that prioritize LMIC authors. Critical conversations are taking place in the associations and networks of diverse sectors, such as the Sustainable Sanitation Alliance (SuSanA) and the Faecal Sludge Management Alliance (FSMA). There is an increased focus on diversity in gender, race, ethnicity, and age in the compositions of panels and presentations.

However, other initiatives can still be taken to promote decolonization and foster greater diversity, equity, and inclusion in WASH. The sector requires more-explicit facilitated conversations on decolonization in WASH and the sharing of experiences, as well as raised awareness. To facilitate the participation of more-diverse players in WASH events, more events should be held in the Global South and in other local languages. There should also be more-structured approaches to expanding the research capacities for WASH in LMICs, and supporting the roles of LMIC governments in multi-stakeholder processes and policy engagement.

Transformation of the WASH sector will take some time. There is both skepticism and resistance to change, as well as enthusiastic advocates of the decolonization of WASH. Decolonization requires difficult questions to be asked and various possibilities to be envisioned collectively, to foster hope of a better future (Sultana 2019).

7 Approach to preparing the Guidance Note

The Guidance Note on authorship and recognition in knowledge production in WASH was developed as part of research funded by a grant to UTS-ISF from BMGF. A literature review, focus group discussions (FGD), and qualitative interviews, together with consultations with BMGF staff, informed the Guidance Note.

The purpose of the literature review was to identify the diversity of thinking about the decolonization of research and practices that supports the representation of LMIC professionals and researchers in the production of written output in the WASH sector. Key documents were selected based on a geographic spread of authors, and mainly included recent sources (2015–2021). The types of documents included reports, strategic plans, blogs by practitioners and researchers, academic articles, discussion pieces, and books.

UTS-ISF identified sector professionals and researchers who had demonstrated interest in and a critical perspective on decolonizing knowledge in WASH or international development. A mix of genders, junior and senior career levels, lower-, middle-, and higher- income country backgrounds, and a variety of relevant disciplines were represented. This group was identified by asking contacts in the WASH sector (Rural Water Supply Network, FSMA, and SuSanA) for recommendations, and through UTS-ISF's existing networks. Two FGDs, with participants in Asia and Africa, and four individual interviews, with participants in Europe and the USA, were conducted remotely in January 2022. BMGF staff who had focused on DEI and gender in the Foundation's work in Africa were interviewed over the same period. These activities were carried out with the approval of the UTS Ethics Review Committee and in accordance with the ISF Code of Ethical Research Conduct.

The UTS-ISF researchers only read documents and conducted interviews in English, and note this may have limited the diversity of input into the Guidance Note. Surveying LMIC governments about their opinions on the production of WASH knowledge was beyond the scope of this project.

The documents and notes from FGDs and interviews were analyzed thematically and the results formed the basis of the Guidance Note. The participants in the FGDs and interviews were invited to review the draft Guidance Note, and a workshop with the participants from LMICs in Asia and Africa was conducted to validate the findings and gather feedback to improve the draft. The last stage of the review of the Guidance Note involved input from BMGF and collaborative discussion.



Reflexivity statement

The Guidance Note was prepared by UTS-ISF, which is recognized for its research leadership in development effectiveness, and providing evidence to support partners to resolve challenges in WASH policy and practice in Asia and the Pacific. The first author, Tamara, specializes in gender equality and social inclusion issues in her research on international development. The second author, Juliet, works across a breadth of WASH issues, taking an applied, transdisciplinary research approach that values diverse knowledge and multiple disciplines, and embeds partnership practice.

Tamara is a white, middle-class, nondisabled female, who recognizes the racial and class privileges she holds. Tamara grew up in Australia, worked for 5 years as a development practitioner in Indonesia, and studied for 2 years in the Netherlands for an MA in Social Policy for Development, with diverse students from the Global South. Two colleagues from the MA program provided input for this Guidance Note. Tamara has been based in Sydney, Australia, for the past 4 years, with frequent engagements with NGOs and research partners in Asia and the Pacific. Juliet is also a white, middle-class, nondisabled female, who grew up in the UK and Australia and has spent significant periods in several countries in Asia and the Pacific. She is a Professor at UTS-ISF and dedicated to using her privilege to shift unjust dynamics.

Tamara led the literature review, data collection process, drafting the guidance note, making sense of the findings and incorporating inputs from contributors and reviewers. Juliet provided substantial input in directing the project, supporting FGDs and workshops, making sense of the findings and reviewing and revising drafts. The Guidance Note has also benefited from suggestions from other colleagues from the international development team at UTS-ISF, and we particularly acknowledge Dr Ian Cunningham who contributed to the principles in Section 5.

In reflecting on the production of this guidance note, the authors suggest that future iterations of this guidance note be jointly developed by LMIC and HIC authors, with LMIC authors in a leadership role, in line with the proposed practices and principles. This would require greater resources than were available to produce this initial document on authorship and recognition in knowledge production in WASH, but would provide alignment and ‘walk the talk’ of decolonization of knowledge in the WASH sector.

References

- Adali, A. 2020, 'Decolonising systems thinking', London International Development Network, <<https://medium.com/the-lidn-weekly-roundup/decolonising-systems-thinking-57eebc0a94e9>>.
- Atim, C. 2021, 'Opinion: 5 ways to decolonize global health and build greater equity', Devex, <<https://www.devex.com/news/opinion-5-ways-to-decolonize-global-health-and-build-greater-equity-100240>>.
- Bhabra, G.K., Gebrial, D. & Nişancioğlu, K. 2018, *Decolonising the University*, Pluto Press, London.
- BMGF 2021, *Diversity, Equity and Inclusion Framework*, Bill and Melinda Gates Foundation.
- Choo, H.Y. & Ferree, M.M. 2010, 'Practicing intersectionality in sociological research: A critical analysis of inclusions, interactions, and institutions in the study of inequalities', *Sociological Theory*, vol. 28, no. 2, pp. 129-49.
- Cornwall, A. & Rivas, A. 2015, 'From 'gender equality and 'women's empowerment' to global justice: reclaiming a transformative agenda for gender and development', *Third World Quarterly*, vol. 36, no. 2, pp. 396-415.
- Dados, N. & Connell, R. 2012, 'The global south', *Contexts*, vol. 11, no. 1, pp. 12-3.
- Peace Direct. 2021, *Time to decolonise aid: insights and lessons from a global consultation*, Peace Direct, Adeso, Alliance for Peace Building & WCAPS, London.
- Garcia, S.E. 2020, 'Where did BIPOC come from?', *The New York Times*, online, 17 June 2020, <<https://www.nytimes.com/article/what-is-bipoc.html>>.
- The World Bank Group., 2022, *World Bank Country and Lending Groups*, <<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>>.
- Haraway, D. 1988, 'Situated knowledges: The science question in feminism and the privilege of partial perspective', *Feminist Studies* vol. 14, no. 3, pp. 575-99.
- Iyer, A.R. 2018, 'Authorship trends in the Lancet global health', *The Lancet Global Health*, vol. 6, no. 2, p. e142.
- Mignolo, W.D. 2007, 'Delinking', *Cultural Studies*, vol. 21, no. 2-3.
- Mignolo, W.D. & Walsh, C.E. 2018, *On Decoloniality: Concepts, Analytics, Praxis*, Duke University Press, Durham and London.
- Morton, B., Vercueil, A., Masekela, R., Heinz, E., Reimer, L., Saleh, S., Kalinga, C., Seekles, M., Biccard, B., Chakaya, J. & Abimbola, S. 2021, 'Consensus statement on measures to promote equitable authorship in the publication of research from international partnerships', *Anaesthesia*, vol. 77, pp. 243-7.
- NHMRC 2018, *National Statement on Ethical Conduct in Human Research*, Australian National Health and Medical Research Council
- Nobes, A. 2017, 'Must we decolonise open access? Perspectives from francophone Africa', *journalologik*, weblog, <<http://journalologik.uk/?p=149>>.

- IWA Publishing, 2021, *H2Open Journal Special Issue*, <https://iwaponline.com/h2open/pages/wash_strategies_special_issue>.
- Quijano, A. 1992, 'Colonialidad y modernidad/racionalidad', in H. Bonilla (ed.) *Libri Mundi*, Tercer Mundo Editores, Ecuador, pp. 437-48.
- Rees, C.A., Lukolyo, H., Keating, E.M., Dearden, K.A., Luboga, S.A., Schutze, G.E. & Kazembe, P.N. 2017, 'Authorship in paediatric research conducted in low-and middle-income countries: parity or parasitism?', *Tropical Medicine & International Health*, vol. 22, no. 11, pp. 1362-70.
- Research4Life 2022, *Eligibility for access to Research4Life*, <<https://www.research4life.org/access/eligibility/>>.
- Rivera, H. 2020, 'Authorship malpractices in developing countries', *Central Asian Journal of Medical Hypotheses and Ethics*, vol. 1, no. 1, pp. 69-74.
- Rocheleau, D. 1995, 'Maps, numbers, text, and context: mixing methods in feminist political ecology', *Professional Geographer*, vol. 46, no. 4, pp. 458-66.
- Rosenboom, J.W., Ban, R., Scott, P.; McVay, M.; Lau, D. 2021, *MEDS Convening*, 2020/2021 Series, November 2021, Bill and Melinda Gates Foundation.
- S2O 2022, *Subscribe to Open: FAQs*, <<https://subscribetoopencommunity.org/>>.
- Sindall, R., Barrington, D. & Shaylor, E. 2020, 'Words Fail Us: Racism in International Development Publishing', <<https://www.engineeringforchange.org/news/words-fail-us-racism-international-development-publishing/>>.
- Smith, L.T. 2021, *Decolonizing Methodologies: Research and Indigenous Peoples*, Zed Books Ltd., London and New York.
- Sultana, F. 2019, 'Decolonizing development education and the pursuit of social justice', *Human Geography*, vol. 12, no. 3., pp. 51-46.
- UN 2016, 'Identifying social inclusion and exclusion', in United Nations Department of Economic & Social Affairs (ed.), *Leaving No One Behind: the Imperative of Inclusive Development. Report on the World Social Situation 2016.*, New York.
- UNDP 2011, *The Sustainable Development Goals Sexual and Gender Minorities*, <https://www.undp.org/content/dam/undp/library/HIV-AIDS/Key%20populations/SDGs_SexualAndGenderMinorities.pdf>.
- van Groenigen, J.W. & Stoof, C.R. 2020, 'Helicopter research in soil science: A discussion', *Geoderma*, vol. 373, [114418].
- WCRI 2013, 'Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations', paper presented to the 3rd World Conference on Research Integrity, 5-8 May, <<https://wcrif.org/guidance/Montreal-statement>>.
- Winterford, K., Willetts, J., Gero, A. & Megaw, T. 2021, 'International development research in the time of COVID', Development Policy Centre (Devpol) ANU, Canberra, <<https://devpolicy.org/international-development-research-in-the-time-of-covid-20210608/>>.
- Worsham, K., Sylvester, R., Hales, G., McWilliams, K. & Luseka, E. 2021, 'Leadership for SDG 6.2: Is diversity missing?', *Environmental Health Insights*, vol. 15.