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CEDIL Evidence Brief 5

Gender equality and social inclusion in WASH interventions: policy and practice insights from a systematic mapping exercise

Key messages

- While interest in improving and promoting equality and inclusion is growing in the water, sanitation, and hygiene sector (WASH), this has not translated into widespread evaluation of gender equality and social inclusion (GESI) outcomes in interventions.
- Measuring the transformative power of GESI outcomes should become a priority as a low proportion of studies in our evidence base include transformative outcomes that engage with systems of power.
- The WASH community should be encouraged to take on an intersectional approach when designing, implementing and evaluating WASH interventions, as our evidence base points to lack of disaggregated outcome data across different social factors.
- Few studies included explicit GESI mainstreaming components, and more research is needed to evaluate the impact of these activities to understand what mechanisms mediate or constrain transformative change occurring.
- To fully realise the potential returns of WASH investments for society, greater efforts are needed to evaluate GESI outcomes in the sector.

Introduction

Poor access to water, sanitation, and hygiene (WASH) services threatens public health and contributes to a range of gender and social inequalities [1,2]. Without access to safe water nearby, women and girls bear the burden of household water fetching and management in many regions due to gendered norms [3,4]. This sometimes results in musculoskeletal injuries [5], psychosocial stress [6,7], and gender-based violence [8]. Additionally, unpaid water fetching work can be extremely time-consuming, leaving no space for productive, educational or leisure activities [9,10]. Despite the disproportionate impacts of poor WASH, women and marginalised groups often have less say in the delivery and management of these services [11].

In addition to gender, inequalities related to accessing safe WASH services arise based on disability, age, ethnicity, caste, religion, and other social identities [12–15]. People with disabilities often face significant challenges accessing WASH services [14] and people experiencing homelessness or displacement are often denied their rights to safe water and sanitation [13]. These inequalities can be particularly pronounced when gender and other social identities intersect [16], such as in the case of displaced women and girls seeking safe and private facilities for menstrual hygiene management [17].

Recognition of these inequalities has translated into growing attention to gender equality and social inclusion (GESI) mainstreaming in WASH programmes, thought to contribute to both

more sustainable WASH services as well as to gender equality and women's empowerment as a stand-alone goal [18]. Despite the potential contribution of WASH to achieving gender equality and social justice, WASH interventions are often evaluated using a narrow range of health outcomes, such as diarrhoea and child growth [19,20].

This brief provides policy-relevant insights from our comprehensive mapping of evidence of GESI outcomes related to WASH interventions [21]. Our review aimed to answer the following question: What evidence exists on the GESI outcomes of WASH interventions in low- and mid-income contexts? Specifically, we collated and described evidence of inclusive and transformative GESI outcomes associated with WASH interventions.

Inclusive outcomes seek to address the different needs of girls, boys, women, men, and other social groups, ensuring access for all. These can be seen as accommodating gender or other social differences as they do not explicitly seek to redress gender or other social inequalities. Transformative outcomes deal with explicitly challenging power relations, harmful gender attitudes and social norms [22,23], such as through increasing women's meaningful participation in WASH decision-making processes. Our review highlights several important gaps that provide impetus to support greater incorporation of GESI into WASH intervention design, implementation, and evaluation [22,23].

Methodology

We applied a systematic mapping methodology and searched for both academic and grey literature published between 2010 and 2020 in 16 bibliographic databases and 53 specialist websites. Eligibility screening (with consistency checking) was conducted using predetermined criteria (published in a peer-reviewed protocol [24]), followed by meta-data coding and narrative synthesis. We used machine learning algorithms to support the title and abstract screening stage. A detailed description of all methodological steps is available in the systematic map report [21].

Results

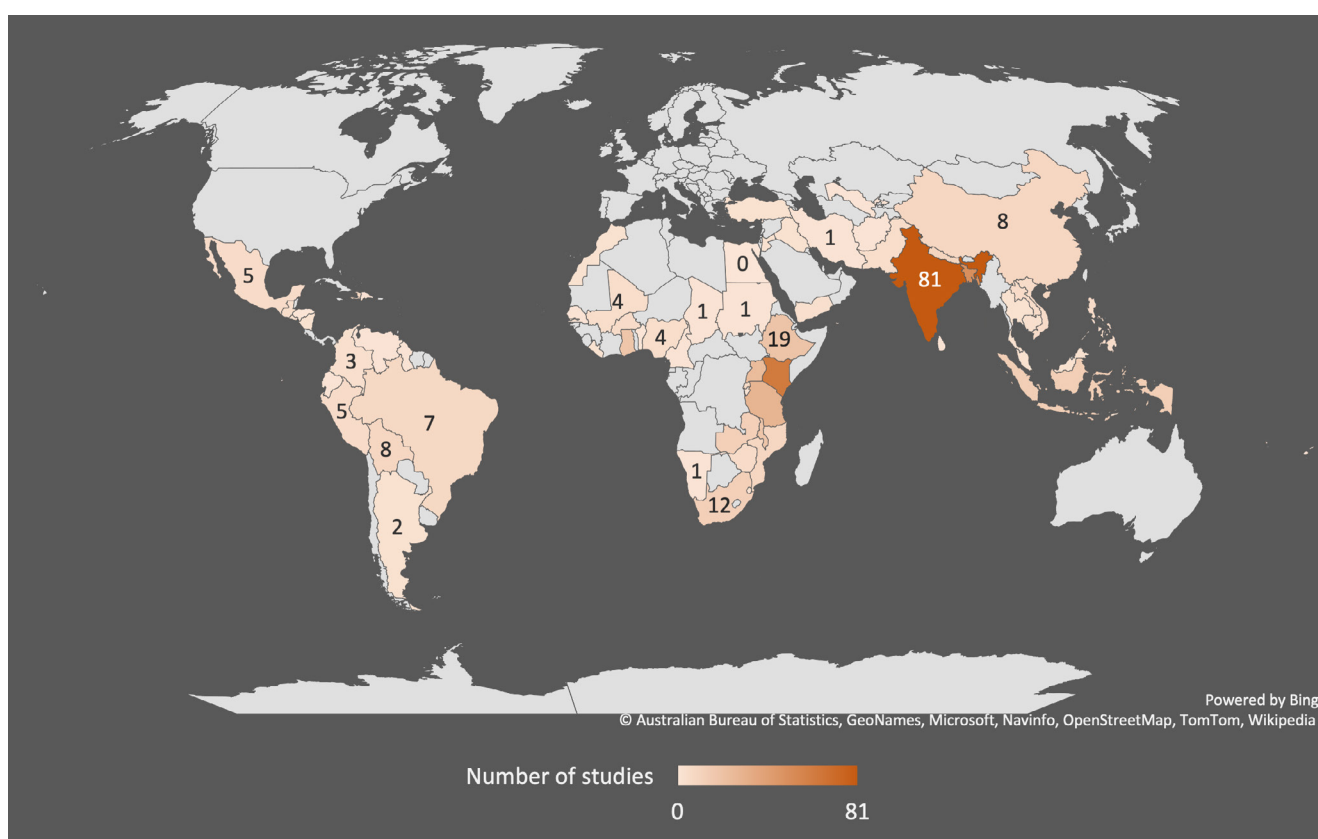
The evidence base included 499 publications in total across 463 intervention studies. Eligible studies from 62 low- and middle-income countries were identified, including 23 least-developed countries. Sub-Saharan Africa and South Asia were the most frequently

studied regions. India (represented in 81 studies), Kenya (62) and Bangladesh (49) were the most frequent research locations.

Of the 463 studies, 240 were quantitative research, with qualitative and mixed methods research also well-represented in the evidence base. Evaluations of intervention impacts accounted for 373 of the studies, while process evaluations were included in 74 studies. Our evidence base included 95 randomised experiments (including randomised control trials).

A little over half of the studies in the evidence base focused on water supply (55%), followed by sanitation (43%) and handwashing (33%). Most studies (69%) described interventions implemented in rural settings, followed by urban settings (18%), slums and informal settlements (9%). Interventions were mostly implemented at the household level (57%), followed by community level (25%), school (19%), and individual (12%). Interventions implemented at the service provider level, in health care facilities, government offices, local markets or similar were less common.

Figure 1 Geographical distribution of studies (darker shades of orange represent higher numbers of studies per country)



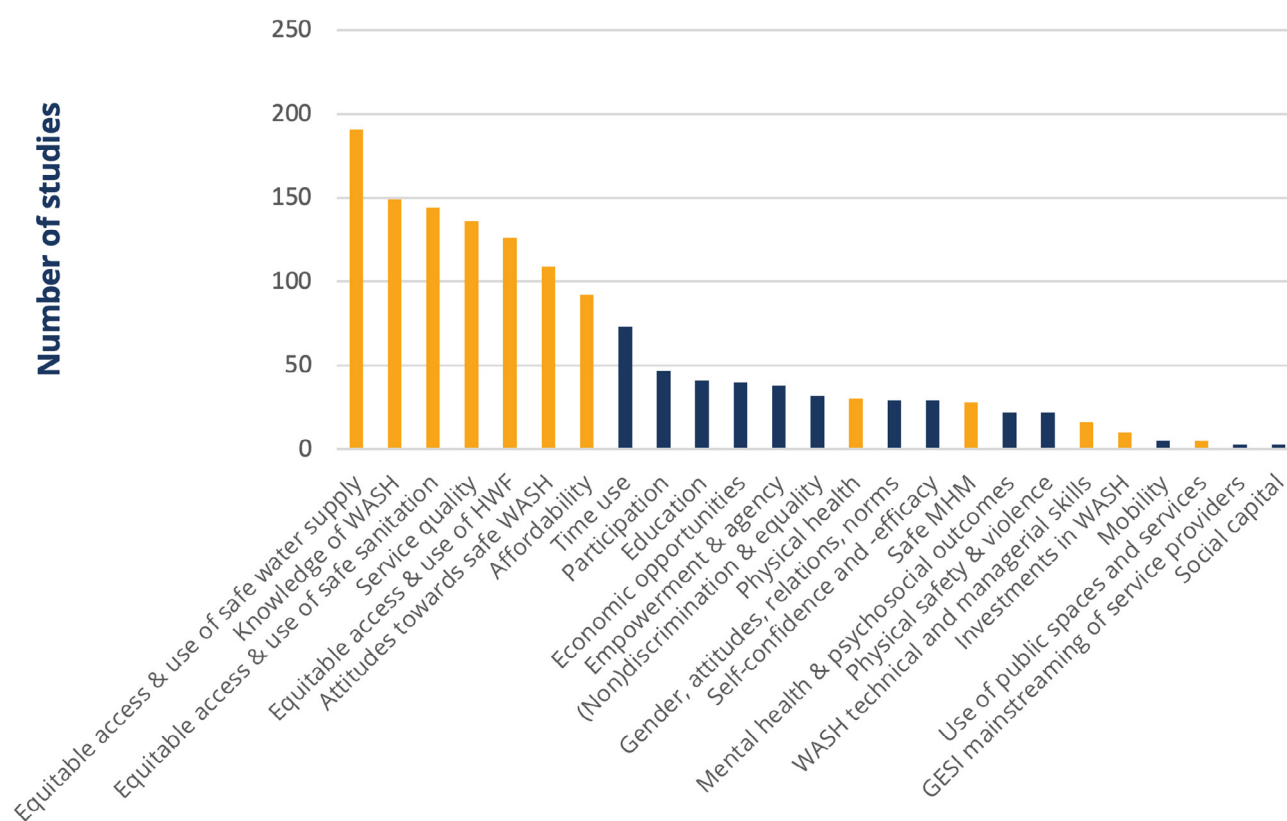


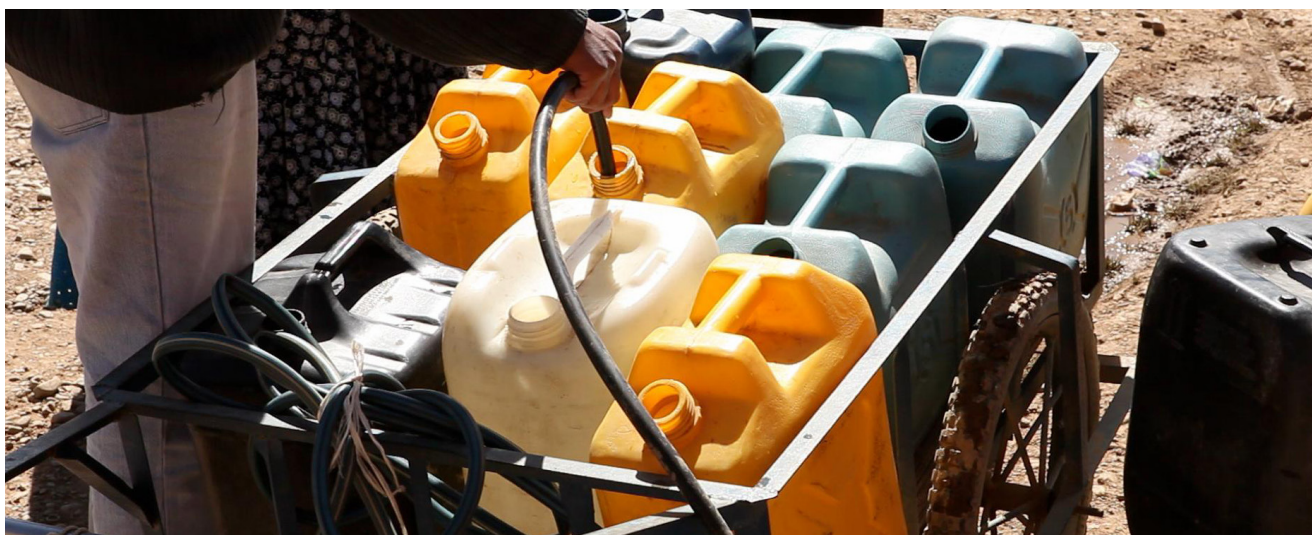
GESI outcome themes

We mapped a total of 25 GESI outcome themes, including 12 inclusive and 13 transformative themes. Across the evidence base, 94% of studies reported on inclusive outcome themes, while only 42% included transformative outcome themes, indicating a lower focus on the latter type of outcome. Inclusive outcome themes (reported in 435 studies), that focus on improving access and use of WASH for all users, encompassed equitable access and use of safe water supply (41%), sanitation (31%), hand-washing facilities

(27%), knowledge of safe WASH (32%), service quality (29%) and similar (Figure 2, blue bars). Transformative outcome themes (reported in 194 studies) related to changes in existing gender norms, roles or other power relations, included change in time use related to WASH activities (or time available for leisure, work or schooling and similar) (16%), participation in WASH-related activities (10%), education (9%), economic and livelihood opportunities (9%), empowerment and agency (8%) and others (Figure 2, orange bars).

Figure 2 Distribution of outcome themes across studies. HWF stands for hand-washing facility and MHM for menstrual hygiene management. Transformative outcome themes are represented with orange bars, and inclusive with green.





Many studies in the evidence base (58%) reported disaggregated outcomes across age, sex, or other social categories (that include disability status, caste, ethnicity, or religion). Outcomes were most frequently disaggregated by sex, which often meant collecting data only on women (reported in 173 studies, compared to 87 studies with data on men). A very small number of studies reported outcomes disaggregated across caste, ethnicity, or religion (17), people with disabilities (10), and adults above 65 years of age (7). No studies reported outcomes related to sexual or gender minorities. Overall, only 97 studies disaggregated data by more than one social category, which can provide evidence relevant to understanding intersectionality.

GESI mainstreaming in WASH

Out of 463 studies in the evidence base, only 22% (104 studies) reported interventions that included GESI mainstreaming components in the intervention design. The majority of these components involved capacity building and training (including individual and group mentoring of women) (40%), followed by provision of participation and leadership opportunities (such as activities to improve financial independence or inclusion in decision making) (25%) and WASH infrastructure (19%) (such as female-friendly toilets).

GESI mainstreaming activities further included product provision (e.g., water filters, pads, hygiene kits) (18%) and financial support (such as the provision of tariffs, loans and subsidies)

(14%). Interventions with GESI components mostly targeted specific gender identities (78%) and primarily women (52%) and girls (24%) in implementation activities. Other social categories, such as people with disability status, those who are chronically ill, and other marginalised social groups accounted for an additional 19% of all targeted categories. Interventions with GESI components in our evidence base seldomly targeted children (4%) or adults above 65 years old (3%).

Discussion and policy recommendations

While interest in improving equality and inclusion in the WASH sector is growing, our review showed a number of gaps related to disaggregation of GESI outcomes by social factors, evaluation of transformative outcomes, and inclusion of GESI mainstreaming in WASH interventions. To address these gaps, it is critical to both design interventions to have positive GESI impacts and minimise risks. It is also critical to effectively evaluate the outcomes to improve the evidence base through regular collection of qualitative [25–28] and quantitative data.

In terms of policy recommendations, firstly, we recommend that measuring transformative GESI outcomes of WASH interventions should become a priority. These transformative GESI outcomes have the greatest potential of achieving gender equality, human rights, and the empowerment of disadvantaged groups. We identified comparatively fewer reports of transformative



outcome themes compared to inclusive outcome themes. Addressing gender inequalities is often described as a key aim of WASH programmes so this highlights an important evidence gap. While inclusive outcomes are important to meet the WASH needs of all groups, they do not address structural barriers to gender equality.

Secondly, we recommend that the WASH community should broaden reporting of GESI outcomes across a larger range of social factors and use an intersectional lens. Disaggregated outcome-related information across sex and different social categories in our review were provided in only slightly over half the studies, and the data mostly related to women and girls. More research is needed to understand the impact of WASH interventions (and especially those with GESI components) for other gender and social identities such as sexual and gender minority populations [29], different age or socio-economic categories, people with disabilities, and other identity markers. Future research should also explore outcomes of WASH interventions using an intersectional lens because gender often intersects with other forms of exclusion.

Finally, we recommend greater GESI mainstreaming in intervention design and implementation. We found that only 22% of studies reported on GESI mainstreaming components and this indicates relatively low take-up in practice despite frequent discussion of GESI in the WASH sector. This is important because, regardless of whether a WASH intervention includes explicit GESI mainstreaming, it will still result in social and gendered outcomes, whether positive, neutral or negative [30]. Future research should identify the most effective GESI mainstreaming components for facilitating transformative change in different contexts. This evidence is needed to design interventions that effectively challenge and transform harmful gender norms and power relations in the WASH sector that hold societies back from achieving sustainable WASH services and equality for all.

About this brief

This brief was written by Biljana Macura, Sarah Dickin, Carla Liera, Adriana Soto, Karin Hannes, Laura del Duca. It is based on the following paper: Macura B, Foggitt E, Liera C, Soto A, Orlando A, Del Duca L, Carrard N, Hannes K, Sommer M, Dickin S (2023) Systematic mapping of gender equality and social inclusion in WASH interventions: knowledge clusters and gaps. *BMJ Global Health* 2023;0:e010850. doi:10.1136/ bmjgh-2022-010850.

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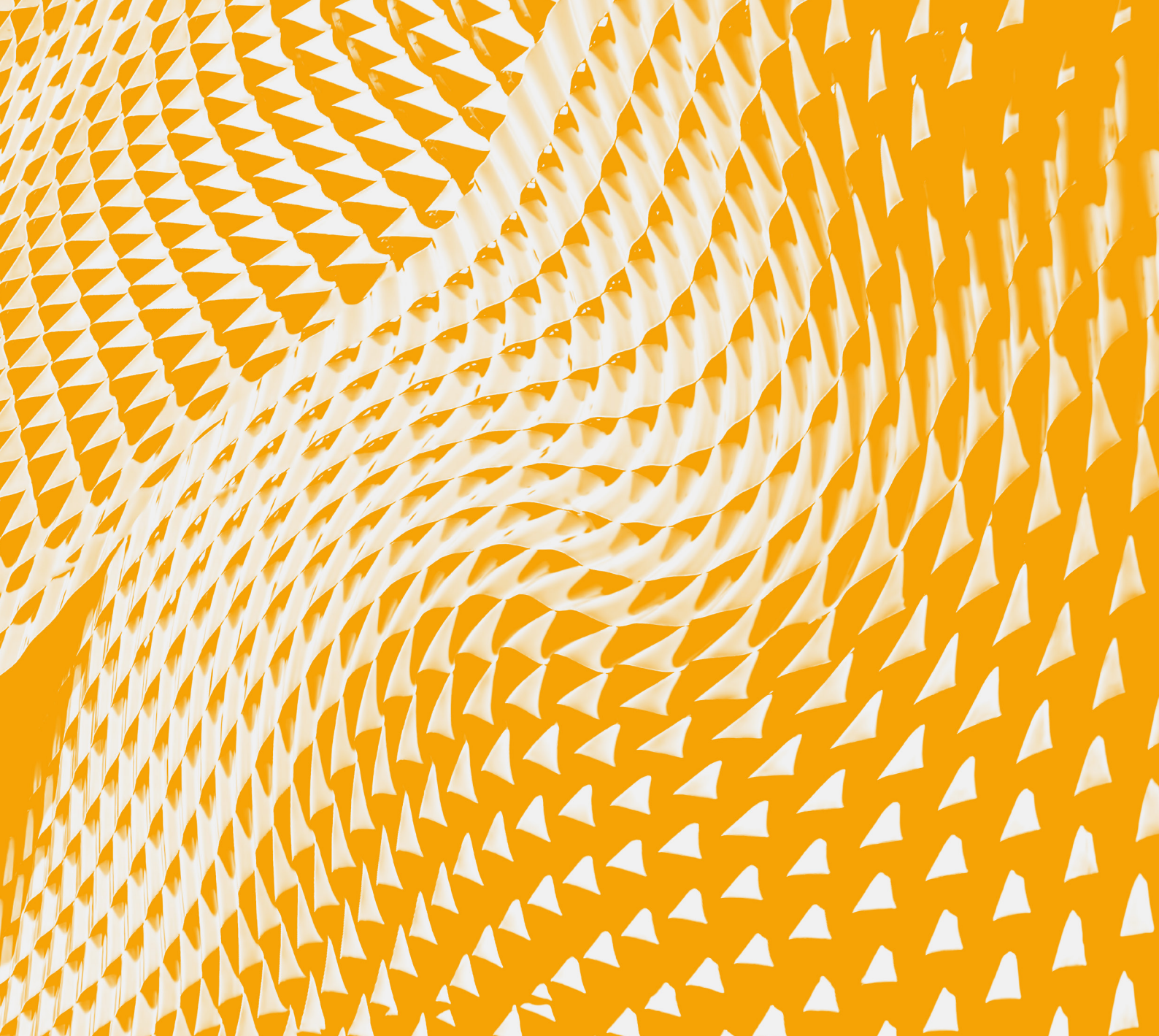
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