



REVIEW OF TECHNOLOGY-BASED INTERVENTIONS

TO ADDRESS CHILD MARRIAGE AND
FEMALE GENITAL MUTILATION

EXECUTIVE SUMMARY





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1. CONTEXT AND MOTIVATION OF THE STUDY

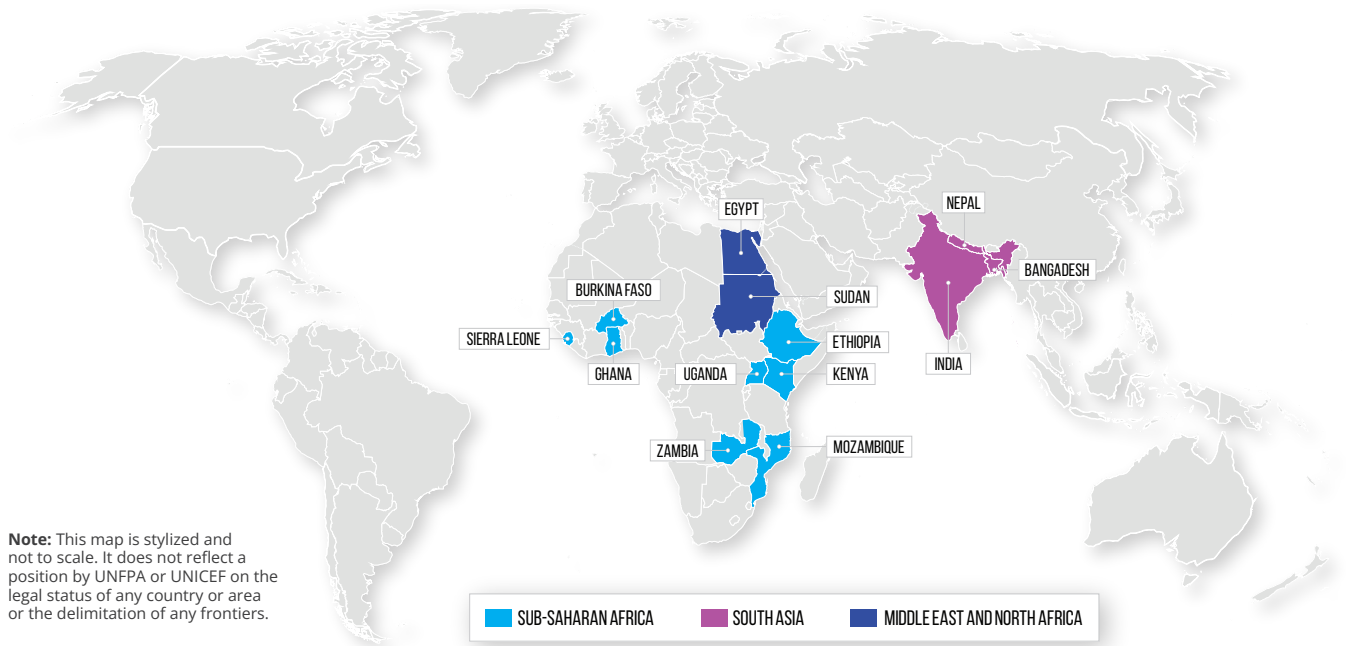
Over the past few decades, increased attention has been paid and global progress made to the mitigation and elimination of child marriage and female genital mutilation (FGM). Governments, international and non-governmental organizations, civil society organizations (CSOs), and the private sector have intensified their efforts in working together to put an end to these two harmful practices affecting millions of women and girls around the world. Despite growing evidence showing an overall

decline of child marriage and FGM across the globe, there is a pressing need to accelerate such progress to be on track in achieving sustainable development by 2030. The coronavirus disease 2019 (COVID-19) pandemic has also disrupted progress towards the full abandonment of these practices and put more girls at risk. At the same time, the pandemic also significantly expanded the use of digital technologies and solutions, which are making headway in addressing both child marriage and FGM. Previous technology-based interventions that have had successful impacts have been scaled up, while new and emerging ones show promising results in mitigating these practices in an effective, timely and sustainable manner. However, more research must be done to guarantee that these innovative solutions are better targeted and more effective in ending child marriage and FGM at regional, sub-national and national levels.

For this purpose, the main goal of this assignment is twofold. Firstly, to conduct a comprehensive landscape mapping of key technology-driven¹ and technology-enabled² interventions to mitigate child marriage and FGM through the empowerment of girls; and secondly, to review the digital solutions and tools used in these interventions, their effectiveness and potential areas for improvement. By highlighting innovative ways to address these harmful practices, this study seeks to contribute to the achievement of gender equality and the empowerment of women and girls worldwide in both policy and practice.

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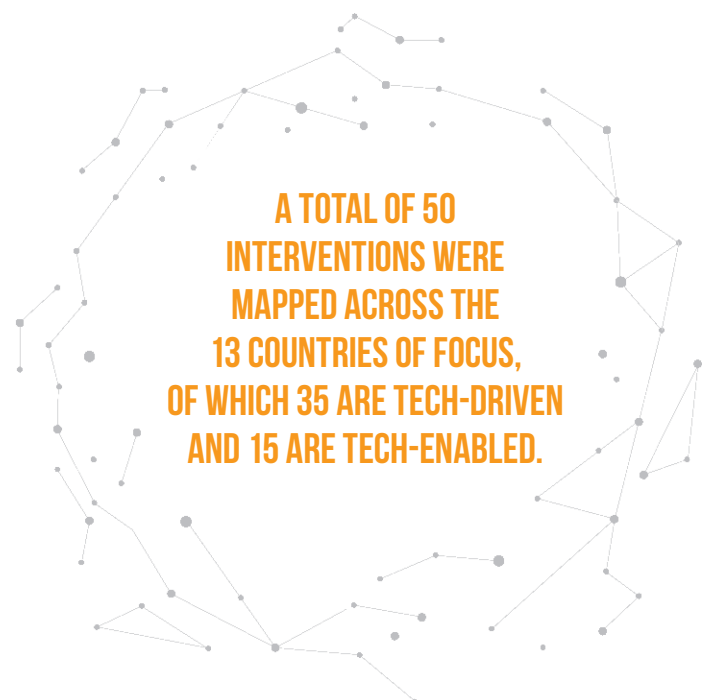
COUNTRIES WHERE MAPPING AND REVIEW OF KEY TECHNOLOGY-BASED INTERVENTIONS AND DIGITAL SOLUTIONS WERE CARRIED OUT



2. BRIEF OVERVIEW OF INTERVENTIONS MAPPED

The interventions mapped in this study stem from an initial landscape exercise conducted jointly by the United Nations Population Fund (UNFPA) and the United Nations Children’s Fund (UNICEF), followed by a comprehensive review of publicly available data and information on technology-driven and technology-enabled interventions addressing child marriage and/or FGM in 13 countries across Africa and Asia (see figure below). The compiled information was curated and complemented with insights emerging from key informant interviews conducted with local stakeholders and key actors actively working on addressing child marriage and FGM across different sectors. Each intervention mapped specifies the main stakeholders implementing, supporting and/or funding these projects; issues addressed (child marriage or FGM); types of technologies used; impact areas tackled; and whether and how an intersectional feminist lens was integrated into its design and implementation. A total of 50 interventions were mapped across the 13 countries of focus, of which 35 are tech-driven and 15 are tech-enabled, with the majority of these focusing on both harmful practices. This information is provided in detail

in the accompanying 13 country case studies, which summarize and assess the digital solutions currently in use to prevent and respond to child marriage and FGM.





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3. KEY FINDINGS

Stakeholders involved

Key actors actively working with UNFPA and UNICEF in addressing child marriage and FGM through tech-driven and tech-enabled interventions span governments, CSOs and non-governmental organizations (NGOs), and the private sector. Government institutions are vital in

democratizing interventions and scaling them up into national platforms. Moreover, government agencies with a specific mandate on women and children are also greatly involved in the development and implementation stages and, in some cases, eventually take over the management of these interventions. Stakeholders within the private sector mostly include telecommunication companies that help improve infrastructure for better connectivity to expand interventions to underserved areas. UNFPA and UNICEF also work closely with multiple media groups, CSOs and NGOs, especially youth and women's organizations who play an important role as both developers and users of these programmes. These organizations with local knowledge, experience and influence within communities further help in raising awareness on the interventions and the issues of child marriage and FGM.

Out of the 50 interventions mapped, only 23 are supported by UNFPA, UNICEF or both at different levels. The most impactful interventions are multi-sectoral initiatives, which involve a variety of partnerships across different stakeholders. In most interventions, UNFPA and UNICEF provide financial and operational support (technical design and implementation), which can come in the form of initial project funding, material provision, content development, training of facilitators and feedback mechanisms. Interventions that are not supported by UNFPA and UNICEF are led and managed by different CSOs/NGOs in partnership with government institutions.



THE MOST IMPACTFUL INTERVENTIONS ARE MULTI-SECTORAL INITIATIVES, WHICH INVOLVE A VARIETY OF PARTNERSHIPS ACROSS DIFFERENT STAKEHOLDERS.


Tech features of the interventions

This study was able to map 35 tech-driven and 15 tech-enabled interventions. Following restrictive lockdown measures in most countries during the COVID-19 pandemic, previously tech-enabled initiatives needed to adapt and transform into tech-driven interventions (i.e., on-site training and consultations shifted to online platforms). These interventions use both traditional technologies such as radios and televisions, and modern ones like computers, mobile phones and the internet for example. The majority of these interventions employ a combination of both traditional and modern tools, while a select few use more innovative engines such as multimedia digital platforms, digital wristbands and interactive voice response (IVR) technology. The technologies used most commonly among these interventions are radios and mobile phones, since the former is a long-established communication channel, and the latter is supported by increasing mobile phone penetration in both Africa and South Asia.

The preliminary findings of this study reveal that these technologies made it possible to provide safe, timely and easy access to empowering information related to both child marriage and FGM at both individual and community levels. Based on interviews with key stakeholders involved in the development and implementation of these interventions, this has resulted in changes in beliefs and attitudes, outcomes that will be explored further in the second phase of this study in an in-depth assessment report. UNFPA and UNICEF have seen progress in both child marriage and FGM abandonment because of greater awareness of these harmful practices given more reliable channels to obtain real-time and trustworthy information. Communication significantly improved among all stakeholders involved and brought people closer to the service providers needed (i.e., medical care, legal aid, police support). These interventions, with their high reach and engagement, created alternative digital spaces, which opened and sustained a dialogue on child marriage, FGM and a range of other social issues.

Impact areas and key achievements

To holistically understand how these interventions have been impacting and bringing about significant change in the lives of women, girls and communities affected by child marriage and FGM across Africa and South Asia, this study used five categories of impact areas that combine elements from the socioecological model (e.g., individual,



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household and community dimensions) with the theories of change proposed in both the UNFPA-UNICEF Joint Programme on The Elimination of Female Genital Mutilation, and the UNFPA-UNICEF Global Programme to End Child Marriage. These categories include: (1) individual-level empowerment,³ (2) family and community engagement;⁴ (3) service development and strengthening;⁵ (4) legal and policy systems interventions;⁶ and (5) economic empowerment.⁷ It is important to note that some of these categories overlap within the design and main objective of the mapped interventions and are therefore complementary and not analysed from an individual perspective.

Of the 50 interventions identified, nearly all have **individual-level empowerment** and **family and community engagement** as their main areas of impact (46 and 41 interventions, respectively). Moreover, most of the interventions that are focused on providing knowledge and information to women and girls at the individual level by increasing awareness of their rights, health-related information (including sexual and reproductive health), financial literacy, interpersonal relationships and government services provision, also embedded components that seek to address and change traditional social, gender and religious norms, which usually contribute to the perpetuation of child marriage and FGM within families and communities. Furthermore, interventions that focus on promoting **economic empowerment** always have the individual level of empowerment and family and community engagement areas integrated into their scope of work.

Although half of the mapped interventions seek to develop and strengthen service provision, such as child protection systems, in order to provide better gender-responsive services to girls, only very few have any element focused on developing and implementing action plans, laws, strategies and/or policies at national or subnational levels. In this sense, it is important to highlight that organizations creating and implementing these interventions need to strengthen their ties and partnerships with governmental or legal entities so their initiatives can have greater reach and legal backing.

Considering that most interventions have as the main impact area the level of empowerment of the target population at the individual and community levels, these technological tools have provided easily accessible training and information to adolescent girls, school communities and the wider public to increase awareness on the consequences of child marriage and FGM and create behavioural change. For example, in Burkina Faso, UNFPA and UNICEF have seen greater awareness on both issues with more reliable channels to obtain real-time, trustworthy information. There are also more means to report cases and these interventions have also significantly improved communication among youth, community members, and authorities and other health-related service providers. In Bangladesh, following the need to implement more technological strategies for non-face-to-face access due to the COVID-19 pandemic restrictions, more people have been calling different helplines and engaging through radio programmes to receive counselling and legal services. Furthermore, radio programmes primarily broadcast in local dialects have been empowering more local communities through information that can increase people's social and economic development.

The main achievements of these technological interventions, whether tech-driven or tech-enabled, rely not only on the effectiveness of their products' ideation, proof of concept, lifecycle and scalability, but also on factors resulting from a combination of context-based social, economic and technological development at local and regional levels. As previously mentioned, the majority of these interventions employ a combination of both traditional and modern tools, and the re-use and adaptation of these technologies was necessary due to COVID-19 constraints, which served as a catalyst to look for alternative, innovative channels to reach communities. For example, in Ethiopia, advocacy and grassroots organizations working on child marriage and FGM have



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enhanced their media capacity by revitalizing their social media platforms and websites. In India, interventions such as Love Matters and Naubat Baja created an alternative digital space/channel to provide free, correct and accurate information, challenging traditional views and sensitizing people on child marriage and a range of other social issues.

The general state of digital and technological development in most countries covered in this study has improved despite economic setbacks brought by the pandemic. The COVID-19 period made it possible to learn and explore more technological aspects in remote areas, and more people have access to electricity and a mobile network. Yet, one of the biggest challenges still seen across-the-board in both Africa and South Asia is digital inclusion, internet penetration and the gender digital divide. Although some countries have been investing in strategies to improve and increase digital literacy among the population, such as the case of Nepal with the Digital Nepal Framework policy launched in 2018, this kind of progress is not yet comprehensive and universal among all countries. Basic features such as calls, short message service (SMS) and voice-based services remain ideal in reaching wider and more marginalized groups. Furthermore, the gender digital gap poses additional barriers and threats to equal access to the benefits brought about by the digital and technological age. In Africa, despite unprecedented growth in the mobile industry across countries, a gender gap in mobile phone ownership persists, with 82% of male owners compared to 69% of female owners.⁸ For most internet users in the region, particularly women, their primary means of accessing the internet is through mobile phones, however women in Africa are still 41% less likely than men to use the internet through this device. South Asia also has the largest gender gap in terms of mobile

ownership compared to any other region worldwide with 62% of women and 94% of men owning mobile phones, while East Asia and the Pacific stands in contrast with only a 1% gender gap.⁹ In this sense, there is a need for UNFPA, UNICEF, national and sub-national governments, CSOs and the private sector to strengthen their ties and partnerships not only to improve the technological and digital infrastructure of their countries, but also to make these and new tech-based interventions less costly and more accessible, as well as to close the gender digital gap.

Intersectional feminist approach

An innovative angle adopted in this study was the identification and analysis of intersectional feminist lenses embraced by the interventions mapped. Intersectionality is an analytical tool commonly applied in feminist studies to emphasize the simultaneity of oppressions that some groups face in a more exacerbated environment given the different identities they hold, such as age, race, ethnicity, class and sexuality. This approach was assessed in the mapping of the interventions by analysing whether the organizations creating and/or implementing such interventions have embedded an intersectional approach into their products' ideation, proof of concept, lifecycle and scalability, particularly by prioritizing girls' and women's voices during the design, piloting, implementation, evaluation and scalability of these initiatives.

This assessment was guided through the use of four main indicators: (1) if **consultations with experts and/or community leaders** were carried out; (2) if these interventions incorporated, at any stage, **consultations with the populations targeted**, especially girls and women of different ethnicities, ages, sexual orientations, classes and other social markers; (3) if **monitoring and evaluation activities** were part of the intervention; and (4) if the intervention is designed or implemented, partly or completely, by a **women- and/or girl-led organization(s)**.

Of the 50 interventions identified, this study did not have access to data on potential intersectional feminist strategies for about half of them (23).¹⁰ Of the 27 interventions where this data was collected, nearly all organizations conducted consultations with gender or thematic experts and/or local leaders at some stage of their products' design, development and implementation. Fifteen interventions have adopted monitoring and evaluation activities, and 13 organizations carried out consultations with the populations targeted by their



initiatives, encompassing primarily girls and adolescent boys vulnerable to harmful practices. Finally, only 6 of the 27 interventions have been designed and/or implemented by a women- and/or girl-led organization.

With the increasing activities of women's movements on a global scale to mainstream intersectional perspectives into projects to combat violence against women, and specifically in this study to mitigate child marriage and FGM, it is considered promising that almost all the interventions for which we had access to data have at least conducted consultations with gender or thematic experts and/or local leaders. Overall, these consultants allowed the interventions to integrate a gender perspective more efficiently, and/or address the intersectional aspects of target groups. However, these efforts are still low compared to the number of organizations that have adopted monitoring and evaluation strategies, which allow not only an assessment of the impacts of these interventions on communities, but also open an opportunity to generate disaggregated information, gender-sensitive/responsive indicators, and the creation of more effective strategies to increase access to the benefits. Moreover, the heart of intersectional feminist lenses is backed precisely in the justification that the voices of girls and women (or the target population) must be heard, understood and amplified. The fact that only 13 organizations have carried out consultations with the target group(s), and that only 6 are led by women, should be seen as an important red flag within local, national and international groups now actively working to end these harmful practices in Africa and South Asia.



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4. REGIONAL OUTLOOK AND TRENDS

Among the interventions mapped, the majority addresses both child marriage and FGM. Most programmes tackling both issues have a broader scope of work, which includes sexual and reproductive health and rights, the empowerment of women and girls, and digital literacy. There are 16 and 11 interventions mapped that specifically work on child marriage and FGM respectively. This can be attributed to a higher child marriage prevalence among the countries of focus – most of which are from Africa where the practice is concentrated – and FGM being less common in South Asia with limited data available, despite the practice still taking place.

In both Africa and South Asia, the COVID-19 pandemic sharply accelerated the digital innovation, reliance and demand for more accessible and effective digital infrastructure. The largely young demographic in both regions has also driven organizations to develop more interventions that appeal to young people and address child marriage and FGM-related issues in an informative, creative and engaging way. Interventions that create safe spaces for young people also proved to be successful in both reach and popularity, especially in South Asia where religious and traditional beliefs strongly underpin how sexual and reproductive health and other gender-related issues are discussed.

Developing and sustaining tech-based interventions relies on a strong, enabling technological environment

but having such a technological landscape does not necessarily translate into a lower prevalence of child marriage and FGM, especially when such practices are deeply rooted in religious and cultural beliefs. Such is the case in North Africa where despite Egypt's advancing technological environment and Sudan's nascent tech landscape, these countries continue to have some of the highest rates of FGM in the whole continent. Thus, their tech-based interventions focus more on changing norms and attitudes. Meanwhile, countries in West Africa where both practices are already illegal, except for Sierra Leone, work on interventions that strengthen services (whether in terms of reporting cases or health-related services) on top of promoting social and behavioural change. In West Africa where approximately half of the population lives in rural areas, interventions also tend to have a more granular approach in permeating different communities by expanding at local levels first before scaling up elsewhere.

Eastern Africa remains far behind the rest of the continent in terms of technological infrastructure. However, the region is home to successful mobile application-based interventions – such as U-Report founded in Uganda and RapidPro in Zambia – which have been scaled up to more countries in the region and beyond. Driven by high government support for digital literacy across Eastern Africa, this serves as a good basis for adopting more tech-based approaches in the region to address child marriage and FGM.



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5. OPPORTUNITIES AND CHALLENGES

Understanding why more than half of these interventions use tech materials or services as the core component of their programmes points to a growing interest in innovative approaches to mitigating child marriage and FGM and how such tools can reach a wider target audience, particularly women and girls. Tech-based solutions complemented by on-the-ground interventions have demonstrated a stronger impact and reach, as well as close collaboration among stakeholders from various sectors, which includes the target audience themselves from design to implementation. Other key success factors are having tailor-fit tools adapted to different target groups and countering misinformation on child marriage and FGM.

However, several challenges remain that hinder these interventions' greater reach, use and effectiveness: the cost, the digital gender gap, and the deeply ingrained patriarchal culture. First, it is expensive to introduce digital interventions in countries with a poor technological landscape. The cost to acquire devices hinders the adoption of these tools at the onset followed by the cost to call and connect to the internet. Interventions using mobile phones are predominant but limited to basic call

and SMS-based services. However, improving smartphone penetration can open opportunities for more innovative interventions. UNFPA and UNICEF's existing partnerships with telecommunication operators and service providers can help strengthen the technological capacity, accessibility and reach of these programmes. As it stands, women and girls are least likely to have access to these technologies and a lack of digital literacy and training also prevents them from extracting the most value from these devices. Funding for access and the development of tech-based interventions is an aspect which UNFPA and UNICEF can directly support, as well as providing more training programmes to empower women and girls to become digitally literate users. Finally, underlying these problems is the patriarchal culture that inhibits their full participation in these interventions. UNFPA and UNICEF have the opportunity to promote and engage in more multi-sectoral interventions and provide implementing and supporting organizations with guidance on how they can incorporate an intersectional feminist approach in their programmes, whether through creating more streamlined feedback mechanisms or training gender experts and women leaders.



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6. RECOMMENDATIONS

Following a brief assessment of the tech interventions identified in this study, the main recommendations are based on four of the nine key principles for digital development: design with the user; design for scale; build for sustainability; and be collaborative.

User-centred design – also referred to as design thinking or human-centred design – seeks to know the people you are designing for through conversation, observation and co-creation. As previously observed, although most interventions undertook consultation with experts in gender or other thematic fields to ensure that their interventions integrated local perspectives and were relevant and accessible to users, only a few consulted with the target groups that would benefit from their initiatives. In this sense, it is necessary that feminist intersectional approaches go beyond the field of thematic and/or technical tutoring to really understand what these populations need, what are their priorities, and how their programmes can therefore have a greater positive impact and make significant social, economic and behavioural shifts to end child marriage and FGM using digital solutions.

In **design for scale** and **build for sustainability**, the main idea is that these interventions can and should go beyond the pilot population to impact the most difficult to reach and vulnerable groups. These populations inhabit extremely remote regions where access to information, education or any element of digital and technological tools remains scarce. As mentioned earlier, although many initiatives have improved and adapted to the digital

changes brought about by the COVID-19 pandemic, factors such as internet penetration and access not only make it difficult for innovative digital solutions to take place, but also block current strategies from reaching these more vulnerable populations and being scaled up beyond the sub-national level. Frequently, factors related to funding, lack of resources and infrastructure are what prevent access to and use of the internet in a universal way. Hence, intergovernmental international organizations, mainly UNFPA and UNICEF, which usually provide financial, technical and operational support to implementing agencies, can and should work with stakeholders across different sectors but particularly the private sector, to secure funding or partners that take these initiatives to new communities or regions and maximize their long-term impacts.

Finally, and hand in hand with the previous recommendation, **being collaborative** stands for sharing information, insights, strategies and resources across projects, organizations and sectors, leading to increased efficiency and impact.¹¹ It not only means securing and strengthening existing partnerships through a multi-sectoral approach but enabling other organizations and communities to access the tools, knowledge and technological and digital capacity that these initiatives are creating and implementing. Although this type of collaboration has been observed among some interventions (e.g., Love Matters, U-Report), in which the products themselves have been replicated in other countries, the majority still lack this type of support and collaboration.

ENDNOTES

- 1 Technology-**driven** interventions are those comprising policies, programmes, and initiatives that **use technological materials or services as the core component** of their intervention to empower girls and women in order to directly tackle and mitigate child marriage and/or FGM.
- 2 Technology-**enabled** interventions are those comprising policies, programmes, and initiatives that **use technological materials or services to enable some part of their intervention** to empower girls and women in order to directly tackle and mitigate child marriage and/or FGM, **but it is not their main tool or main focus**.
- 3 Interventions that focus on providing girls and women with information and skills so that they can make effective choices about their lives, understand their rights and express their opinions.
- 4 Interventions that seek to address social, gender and religious norms by increasing knowledge, awareness and understanding of harmful cultural practices among community and family members, such as parents, male breadwinners, traditional and religious leaders.
- 5 Interventions centred on creating and enhancing education, knowledge of sexual and reproductive health and rights and gender-based violence, among others, to provide better gender-responsive services to girls.
- 6 Interventions focused on developing and implementing national action plans, laws, strategies, policies and programmes to address FGM and/or child marriage, with the primary objective of empowering and protecting women and girls who are most at risk of FGM and/or child marriage.
- 7 Interventions seeking to address the underlying drivers (especially poverty and lack of social protection) that girls and their families face, and which can lead to child marriage and FGM.
- 8 Economist Impact. (2022). *The Inclusive Internet Index*. [Dataset]. Retrieved from: <https://impact.economist.com/projects/inclusive-internet-index/>.
- 9 GSMA. (2021). *The State of Mobile Internet Connectivity Report*. Retrieved from: www.gsma.com/r/wp-content/uploads/2021/09/The-State-of-Mobile-Internet-Connectivity-Report-2021.pdf.
- 10 The identification and analysis of the intersectional feminist approach has been gathered and produced from an exhaustive review of the literature, in combination with data collected through key informant interviews. It is important to note that it was not possible to conduct key informant interviews for all the interventions identified in this study.
- 11 Principles for Digital Development. (n.d.). *Be Collaborative*. Retrieved from <https://digitalprinciples.org/principle/be-collaborative/>.

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