

Promoting menstrual health and hygiene

Impact and lessons learned from two projects in Ethiopia and Madagascar

Issues related to menstrual health and hygiene (MHH) are now recognized and documented by the international community, especially in school settings. Nonetheless, there is still insufficient data to identify effective tools in this field. The impact evaluations of two innovative initiatives — one in Madagascar, co-financed by the Fund for Innovation in Development (FID), and the other in Ethiopia, supported by Agence Française de Développement (AFD) — demonstrate how evidence-based data can guide public decision-making to help improve the living conditions of people who menstruate.

A major phenomenon with multiple causes

Menstrual health and hygiene (MHH), defined as access to: (i) menstrual protection; (ii) facilities (safe and functional spaces to change and have access to soap and water); (iii) comprehensive health and education services, remains a global challenge. It affects nearly 500 million people across many countries, in particular in Africa.

The main causes identified include the high cost or absence of menstrual products, along with the lack of water and appropriate sanitary facilities, particularly in schools. There are also socio-cultural barriers, including high levels of stigma in the public and private spheres. These factors tend to be cumulative and reveal major geographical and regional inequalities, with glaring disparities between rural and urban areas in Africa.

A need for in-depth knowledge to better identify effective tools

While the scale of the phenomenon, along with its causes and barriers, are today relatively well known, context-specific knowledge production on effective tools is needed to promote access to menstrual health and hygiene. Further information is required about the various dimensions of effectiveness in regard to the improvement of practices, as well as the effects on health, academic learning, and girls and women's well-being. Past research on interventions in the field of menstrual health and hygiene shows that the effect on school absenteeism has been minimal. However, this research has generally not measured the impact on academic learning, as it has insufficiently covered the psychosocial effects of stigma.

Furthermore, most interventions have often focused on a single aspect of the problem (awareness-raising, access to products and facilities) and have mainly been conducted in schools, which does not provide a comprehensive response for those concerned. This calls for integrated and combined approaches that address the various identified barriers through several pillars of intervention.

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Specific impact evaluations to report on the effects of an integrated approach to projects

In this respect, two innovative projects have been implemented by the NGO CARE France and CARE's local offices in Madagascar and Ethiopia. They have adopted an integrated approach, taking simultaneous action on three components: providing access to menstrual products and sanitary facilities, and addressing stigma among people who menstruate and their communities (peers, teachers and educational staff, and adult focal persons). This type of approach remains infrequent due to the diversity of expertise required. Yet, the findings from the impact evaluations of these projects illustrate its effectiveness.

Separate interventions adapted to their context

The **Kilonga** program was deployed in **Madagascar**, in rural areas of the Amoron'i Mania region. It aimed to improve basic hygiene and reduce menstrual stigma by targeting three pillars:

- **A water, sanitation and hygiene (WASH) component:** construction of sanitary facilities, teacher training, creation of WASH committees
- **Access to menstrual products:** distribution of reusable protection locally made by seamstresses from the community, in a context where only 11% of schoolgirls have access to appropriate menstrual pads or protection, with the vast majority getting by with pieces of fabric or old clothes
- **Awareness-raising activities** focused on the social norms surrounding menstruation. Indeed, significant knowledge gaps and a culture of taboo persist: only 45% of girls have already heard a classmate talk about menstruation, 39% report that they cannot talk about it openly, and only 55% have been given information from their mothers or other adult focal persons. The program mobilized a network of "Young Girl Leaders", who were selected and received training to disseminate information, good practices, and positive messages.

In **Ethiopia**, the **Development Impact Bond (DIB)** project was implemented in 55 schools in the urban and suburban areas of the city of Adama (about 400,000 inhabitants). The same three pillars were deployed to address the issues related to the context of the intervention:

- **Access to appropriate sanitary facilities:** access to bathrooms and handwashing facilities, in a context where, when the project began, only 2% of the girls and women surveyed stated that they were always satisfied with the place where they changed their menstrual protection at school or at work; access to dedicated resting rooms, which schoolgirls highly appreciated as they helped them cope with their menstrual pain
- **Access to menstrual hygiene products:** by subsidizing hygiene kits comprising four reusable pads made in Addis Ababa by Mela for Her, a well-known Ethiopian brand whose products are now certified
- **Awareness-raising activities:** firstly directed towards specific targets and subsequently extended to the general public (including through theater performances and educational half-days)

For the last two components, the project mobilized different types of stakeholders, including universities, health centers, companies (notably in the industrial sector where women account for 90% of employees), religious and community groups, and savings and credit associations.

Evaluation methodologies

The impact evaluations of these projects were conducted by the Paris School of Economics (for Madagascar) and ITAD/JaRco (for Ethiopia). Despite the different contexts and methods of intervention, the evaluations both shared the same strong methodological rigor and the common objective of scaling up and assisting public decision-making. Using quasi-experimental approaches and a comparison with control groups, they covered a wide range of effects, including school attendance, psychosocial well-being, mental health, knowledge and behavior among girls in terms of hygiene and health, levels of stigma, and social integration.

In **Madagascar**, a research team composed of Karen Macours, Julieta Vera Rueda and Duncan Webb conducted a randomized controlled evaluation among 2,255 students in 140 schools between 2021 and 2023. The objective was to measure the combined effects of access to facilities and hygiene products and the reduction of stigma in schools, as well as the impacts on academic learning and girls' willingness to attend school. A second phase, launched in August 2024, is analyzing the comparative cost-effectiveness of the infrastructure and awareness-raising components ("Young Girl Leaders").

In **Ethiopia**, the impact evaluation was conducted between 2022 and 2023 among 1,380 students in 55 schools and their communities. It was part of AFD's first DIB led by the NGO CARE, in partnership with BNP Paribas and the French Ministry for Europe and Foreign Affairs. Based on a Difference-in-Differences method,^[1] it evaluated four key indicators – the coverage ratio for the needs of people who menstruate, the population's level of knowledge of menstruation, access to appropriate sanitary facilities in schools, and access to menstrual products –, as well as psychosocial indicators such as self-confidence, school attendance, and the perception of social norms around menstruation.

Convergent and promising results

While the results of these evaluations are linked to two separate interventions with different approaches and methodologies, they converge on several points, including the increase and improvement in practices that ensure access to menstrual health and hygiene (see infographic).

In Madagascar, the evaluation confirms that significant effects have been achieved on both **academic learning** (+15% for grade promotion) and well-being at school. It also highlights the central role of the psychosocial dimensions in the observed effects. The "Young Girl Leaders" component has had a particularly significant impact on both menstrual practices (+48%) and the perception of stigma. This has resulted in reduced stress levels and a higher share of girls saying that they can speak more freely about the subject (+21%). Furthermore, there has been an increase in knowledge about

[1] The Difference-in-Differences method compares the evolution of the group exposed to the intervention, before and after the intervention, with the evolution of a similar group in another region not exposed to the project.

Impact evaluations: Lessons learned from two projects for access to menstrual health and hygiene



The NGO CARE France implemented two projects: DIB (Development Impact Bond) in Ethiopia and Kilonga in Madagascar. While the projects were different, they were both based on an approach combining:



ACCESS TO MENSTRUAL PRODUCTS



APPROPRIATE FACILITIES



COMMUNITY AWARENESS-RAISING

Development Impact Bond project

📍 **Ethiopia:** City of Adama and its suburbs.
Supported by AFD.

- +20%** Coverage of menstrual needs, measured by the Menstrual Practice Needs Scale
- +26%** Confidence among girls to cope with their periods at school
- +12%** Use of reusable pads



The awareness-raising component had less of an impact on boys. Specific messages are necessary to target boys.



Increase in the supply of alternative disposable, biodegradable, and bio-based products, in partnership with the private sector.



Kilonga project

📍 **Madagascar:** Amoron'i Mania region.
Supported by FID.

- +15%** Promotion to a higher grade for girls
- +48%** Menstrual hygiene practices
- +21%** Girls with less anxiety: they say that they can talk about the subject with their classmates



Removing taboos related to periods has improved the conditions and quality of learning more than tackling school absenteeism among girls.



A scale-up is considered in partnership with the Ministry of Education of Madagascar and the World Bank.

3 common lessons



Measure the impact – the data produced by the evaluations make it possible to:

- Adapt the interventions to address real needs
- Estimate the cost-effectiveness of the various components



Optimize the impact through integrated and coordinated approaches combining:

- Various convergent tools for the intervention
- A diversity of complementary stakeholders: private operators, NGOs, institutions, funders, communities of young beneficiaries



Scale up on the basis of an impact built on:

- Robust scientific evidence to help guide decision-making and roll out tried-and-tested solutions
- A structured dialogue over time and based on the data produced

menstrual hygiene (+10%), as well as in general knowledge about hygiene (+17%). These results demonstrate the considerable effectiveness of targeted interventions on menstrual health and hygiene, with learning outcomes comparable to 10% of the most effective educational programs, while no significant effect has been observed on school absenteeism.

In Ethiopia, the most significant impact result relates to the **coverage of menstrual needs**. The increase has exceeded the project's initial objectives and shows that there has been a real change. Indeed, this aspect is measured by a complex indicator (MPNS-36), which is composed of 36 questions classified into 6 categories (including an enabling environment at home and in public transport, confidence in the products used, a sense of safety when changing, etc.). There has been an improvement in each of them. The project's other significant results include an improvement in girls' confidence in managing their periods at school (+26%) and an increase in the use of reusable pads (+12%). However, raising awareness in a school environment, in particular in large schools in Adama (with up to 2,000 students), posed a major challenge. It was necessary to organize large-scale activities (shows, educational half-days), as focusing solely on small groups of students was insufficient. In addition, despite increased involvement of boys in the awareness-raising activities, they have learned little, highlighting the need for targeted messages.

Better target to better invest: lessons learned and the current challenges of scaling up and guiding public decision-making

These impact evaluations have helped to better identify the beneficiaries' needs and orient the interventions towards more appropriate and effective solutions, from which it is possible to draw common lessons and recommendations.

Develop integrated and coordinated approaches

The results confirm the relevance of an integrated approach. It requires reinforced coordination between

the water, education, and health sectors. Close coordination between school projects and local communities is also needed to ensure the ownership and sustainability of the facilities despite their high construction and maintenance costs. The two projects have especially shown the importance of developing effective awareness-raising activities that are tailored to the diversity of stakeholders who need to be mobilized (including girls, boys, and communities).

Draw on data to better understand and respond to needs

In Ethiopia, the initial collection revealed that 20% of girls preferred disposable pads. The awareness-raising messages were consequently adapted and a pilot project for the production of biodegradable disposable pads was launched in partnership with the private sector. In Madagascar, the impact on learning abilities was greater than on school attendance. This was largely due to an improved atmosphere at school and reduced anxiety levels, which demonstrate the relevance and importance of the "Young Girl Leaders" awareness-raising component. This also makes the case for **a degree of flexibility in adapting the activities to the beneficiaries' uses and preferences as the project progresses**. It is also important to anticipate and open up the opportunity for long-term studies and research, including several years after the intervention, to measure behavioral changes and impacts in the long term.

Support the scaling-up with robust data and a structured dialogue between researchers, project operators, and public authorities

In Madagascar, the Ministry of Education and international donors were extremely interested in the evaluation and in particular in its results regarding academic learning. Discussions are ongoing on the possibility of scaling up the approach nationwide and replicating it in other contexts. In Ethiopia, the evaluation has also served as a basis for a national dialogue framework with the authorities and a jointly developed draft roadmap on menstrual health and hygiene.

References

AFD and Impact Tank. 2024.

« Précarité menstruelle : un défi sociétal, collectif et systémique ». *Usbek & Rica*, June, 4 2024.

Benshaul-Tolonen, Anja, Garazi Zulaika, Marni Sommer and Penelope A. Philips-Howard. 2020.

"Measuring Menstruation-Related Absenteeism Among Adolescents in Low-Income Countries". In *The Palgrave Handbook of Critical Menstruation Studies*, edited by Chris Bobel, Inga T. Winkler, Breanne Fahs B, Katie Ann Hasson,

Elizabeth Arveda Kissling et Tomi-Ann Roberts, 705-23. Singapore: Palgrave Macmillan.

Macours, Karen, Julieta Vera Rueda and Duncan Webb. 2024.

Menstrual Stigma, Hygiene, and Human Capital: Experimental Evidence from Madagascar. Working Paper 2024-13. Paris: Paris School of Economics.

Unicef and WHO. 2023. *Progress on household drinking water, sanitation and hygiene 2000-2022. Special focus on gender*. New York: Unicef, WHO.

Unicef Ethiopia. 2017. *Menstrual Hygiene Management In Ethiopia. National Baseline Report from Six Regions of Ethiopia*. n.l.: Unicef.

WHGI. 2017. *Menstrual Hygiene Management. Ethiopia, 2017. Performance Monitoring and Accountability 2020 (PMA2020)*. n.l.: John Hopkins Water Institute, WHGI.

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