

Summary report

A Gathering Storm

This report summarises the findings of a multi-country study conducted in the Sahel region and is focused on climate change and its particular impact on the lived experiences of adolescent girls and young women.

The objective of the study is to more fully understand the gendered impacts of climate change, to determine what can be done to support adolescent girls and young women, and to inform the programme response of Plan International and its partners. The research was carried out by hera on behalf of Plan International.



About this map

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by Plan International.

Country Backgrounds



4 of the countries in this report

Guinea, Mali, Niger and Nigeria, are at high risk due to climate change.



1 of the countries in this report

Burkina Faso, is at very high risk.1

All the countries in this report are among the 30 countries in the world with the

lowest adaptation to climate change

when comparing the level of climate change impacts with the readiness to face the consequences.2

According to the latest Social Institutions and Gender Index:3 Five countries in this report are low on the gender equality index,

although there has been recent progress in Burkina Faso.

- By and large traditional gender roles remain dominant, rates of child, early and forced marriage are high and girls' and women's access to educational and economic opportunities limited. Gender-based violence is common.
- There are issues in all five countries with the lack of robust implementation of gender-related legislation.



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Introduction

For some years now Plan International has been focusing on gender inequality, working with girls and young women to fight for and claim their rights. This is a global struggle: everywhere girls are denied opportunities, their needs and rights ignored and this inequality only increases in times of crisis. Climate change brings with it famine and flood and destroys family livelihoods. It increases migration and violence as people struggle for land and resources. It amplifies gender and social inequalities and puts at risk critical human rights such as the right to food, water, health, and protection against violence. 4

The impact of climate change is particularly evident in the Sahel region of West Africa, where a combination of conflict, multifaceted violence, chronic food insecurity, displacement, and poverty-with serious gender-related consequences—is made worse by climate shocks.5 Everyone is affected but adolescent girls and young women have particular challenges to face.

This research is carried out by, and is focused on, the voices and experiences of girls and young women. It is based on Feminist Participatory Action Research (FPAR), a research methodology that aims at empowering structural change and starts with the rationale that adolescent girls and young women hold expertise and experiences relevant to the research topic and that their voices and experiences must form the heart of research and policy action.⁶ They are best placed not only to articulate what they are going through but also to know what might be done to improve, not only their lives, but that of the communities they live in.

"We're all delighted by these questions because before you, no one had come to us to ask about our concerns. It was a pleasure to have shared our suffering."

Adolescent girl participant (15-17 years old), Tillabery, Niger



Methodology

The study was carried out in two phases.

Phase 1

A literature review and limited key informant interviews (KIIs) were conducted to explore the policy gaps related to the gendered impacts of climate change, as well as to map existing actors and programmes. Research included ten countries of the Sahel: Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mauritania, Mali, Niger, Nigeria, and Senegal.

Phase 2

The central focus of this report, was conducted between April 2023 and October 2024 in Nigeria, Niger, Mali, Burkina Faso, and Guinea. The approach was collaborative, based on Feminist Participatory Action Research methodology. The hera team worked with 25 young co-researchers and their mentors and with Plan International's country and regional teams.

Co-researchers were central to the research.

They attended a series of training workshops and were involved at all stages: in design, implementation, and analysis.

They conducted

a peer-to-peer survey with 472 adolescent girls and young women participants



They facilitated a series of focus

group discussions



They engaged

in a photovoice activity -taking and commenting on photos—with a further 391 participants.



The study involved

863 adolescent girls and young women

age cohorts 15-17 and 18-24



A more detailed methodology can be found at



What Did We Want to Find Out?

The research aimed to answer the following research questions:



How do adolescent girls experience and perceive the gendered impacts of climate change in their lives and the lived realities of their peers?



What do girls and young women expect from authorities at international, regional, national, and local levels?



How have the co-researchers experienced and perceived the FPAR methods used as part of this research.



Phase One of the research process revealed that girls' rights are largely absent from climate change policies and programmes and girls and young women are not considered in all their diversity.

It also identified several thematic areas—food security, education, sexual and gender-based violence (SGBV), sexual and reproductive health and rights (SRHR)—where adolescent girls and young women were particularly disadvantaged.

The research focused on these to both explore girls and young women's lives and pinpoint what the authorities could do to alleviate the inequality and hardship they were experiencing as a result of climate change.

Findings

1. Living with climate change

Food Security

Although many of the survey participants, 49 per cent, wanted more information about climate change—only in Burkina Faso is the subject embedded in the school curriculum—adolescent girls and young women linked the food insecurity they and their families were experiencing directly to climate change. They could see that extreme weather events—flooding, heavy rain, extreme heat and drought—all contributed to inconsistent agricultural seasons, a decrease in crops, and livestock, as the photo below illustrates, who could not be fed.







a serious impact on animals.

They are also suffering due to the difficulty of obtaining fresh grass, which is their main source of food."



Photo taken by young woman co-researcher in Ouahigouya, Burkina Faso

Findings

Food security is the most prominent casualty of climate change and one that the participants are most aware of. In all five countries, food is in short supply. There are no crops to sell and no money to buy other necessary items.

"We're not fulfilled, we have to suffer to eat and drink."

Adolescent girl participant (15-17 years old), Ouahigouya, Burkina Faso

"We eat bran meant for cattle because of hunger."

Adolescent girl participant (15-17 years old), 8 Tillabery, Niger

Strategies adopted to cope with this include:

- reducing the number of meals per day;
- engaging in informal/casual labour to earn money for food;
- borrowing food or money from others.

In some communities, lack of resources and unmet needs led to a reported increase in child, early and forced marriage.

Many adolescent girls and young women also described resorting to exchanging their bodies for food or money.

"Climate change has led girls and women to exchange their bodies for food." Young woman participant (18-24 years old), Konduga, Nigeria

Poverty and the struggle for resources have also led to increased sexual and gender-based violence in other ways.

Participants reported that adolescent girls and young women had to walk much further to fetch water exposing them to a greater risk of violence, and sexual harassment.

Photovoice
Every picture tells a story

are using the river water to drink since they do not have other source of water, they easily have disease. Girls go long distances to fetch water and so are prone to sexual harassment, sexual exploitation, and physical harm. It also affects personal hygiene."



Photo taken by young woman co-researcher and participant in Konduga, Nigeria



Findings

Sexual and gender-based violence and sexual and reproductive health and rights



Photovoice
Every picture tells a story

"This was a river, where we used to buy fish. It's a source of irrigation for our farm, but now it's dried up....

Farmers who grow rice are now looking for other means of subsistence because of the drought, such as charcoal processing, which increases insecurity: abduction of girls, forced marriages and child marriages."

Photo taken by young woman co-researcher in Konduga, Nigeria

The subject of sexual and gender-based violence and sexual and reproductive health and rights is shrouded in silence, and the young women co-researchers' analysis in Nigeria and Guinea revealed significant barriers to open discussions.

In Niger, talking about sexual and reproductive health is considered taboo. When participants did note issues in their communities they did not necessarily link them with climate change. However, it was clear in the overall responses that the link between climate change events, poverty and food insecurity had led to varied instances of sexual and gender-based violence.

"If you have not eaten anything, you are forced to give your daughter in marriage." Young woman participant (18-24 years old), 10 Coyah, Guinea

Fifty-nine per cent of participants also reported that, as families struggle for basic necessities, adolescent girls' and young women's domestic labour increases and becomes more dangerous. The same economic pressure can also lead to more instances of domestic violence.

"There's domestic violence because some men can't stand the fact that there's no food in the house. As a result, they beat their wives because they say it's their fault." Young woman participant (18-24 years old), Mali

Overall, the disruption brought about by climate change—displacement, poverty, and breakdowns in law, policing and social support systems—increases the risks of trafficking, exploitation, and gender-based violence.

Findings

Education

The struggle for money and resources also impinges on adolescent girls and young women's ability to stay in school.

is gardening. Because of her low agricultural yields, she does not have enough income to pay for my education and that of my brothers, so I have to drop out of school to help her at home." Adolescent girl participant (15-17 years old)," Coyah, Guinea

In most communities, gender norms dictate that domestic work is very much the responsibility of women and girls: most survey respondents do general household chores, prepare food, and collect water and firewood.

The majority agreed that climate change has increased the time they spend on chores which leaves less time for study or attending school.

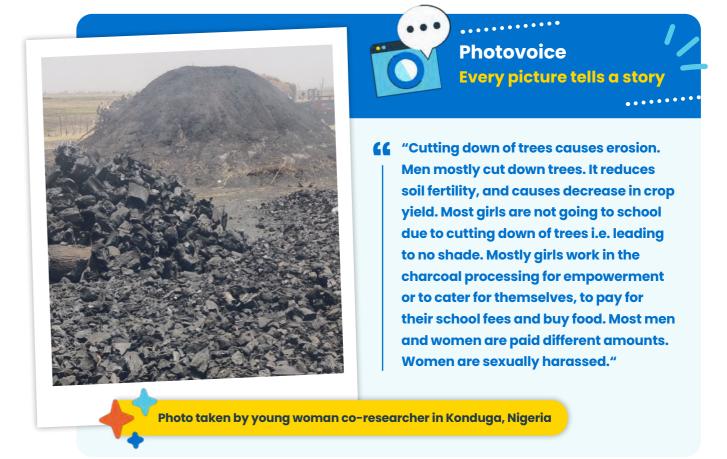
Adolescent girls and young women also often feel compelled to contribute to the family income by taking on casual and often hazardous work.

of food and poor rain, children
especially girls feel that going to
school is a burden because they
have other important things to
do, like hawking and labour."

Adolescent girl participant (15-17 years
old), 12 Konduga, Nigeria

"Due to high temperatures, lack

Findings





Once girls drop out of school their chance of early and forced marriage increases, as does their involvement in life-threatening occupations like mining. The impact, both of early marriage and the lack of education, on their future lives and prospects is immeasurable.

marriages and child marriages, I myself am traumatised, because if your parents do not have the means to provide for your family needs, they give you up very early for marriage, so I am affected." Young woman participant (18-24 years old), 13 Bla, Mali

Findings

Health

The impact on adolescent girls' and young women's health was many-sided and not just based around sexual and reproductive health and rights.

This was of course an issue as access to already overstretched health care centres, providing contraceptive and pregnancy care and support, was further impeded as roads were washed away, bridges destroyed and journeys became hazardous or impassable.

the "When it rains a lot, access to the health centre is not easy for some people, so they have to stay at home and self-medicate." Adolescent girl participant (15-17 years old), 14 Segou, Mali

The study also found that adolescent girls and young women face challenges in maintaining menstrual hygiene which, as well as being upsetting and potentially psychologically and physically damaging, also affects school attendance.

the cloth you use for your period, it creates other (health) problems."

Adolescent girl participant (15-17 years old), ¹⁶ Ouahigouya, Burkina Faso

Mental health issues, although not extensively discussed, include increased stress, anxiety, and general unease, often linked to food insecurity, displacement, and loss of livelihood.

Participants also cited:

- pollution outside of their homes as a health hazard, and further explained that environmental degradation, such as garbage-filled rivers, made the effects of climate change, such as flooding, worse;
- headaches, skin infections, faintness, and increased death in the community, associated with heat and linked to climate change;
- increased incidence of malaria cases, due to flooding and stagnant water.



"It used to be a marigot, where the girls washed themselves and their clothes, and drew water for cooking. Next to it were crops. Now it's destroyed, people have started throwing rubbish, and that's destroyed the marigot and the crops next to it. Hospitals come and throw away their medical waste, including injections. Children take them and can injure themselves, leading to illness. When there are heavy rains, the water rises and overflows, creating floods and penetrating houses, with the risk of migration."



Photo taken by young woman co-researcher in Coyah, Guinea

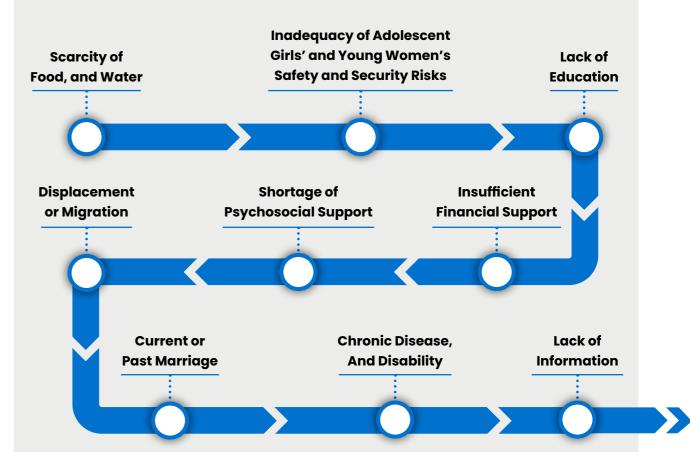
Findings

Food, water and education were reported as unmet needs by the most survey participants, followed by financial support, psychosocial support and information.

Many who reported these needs as unmet also experienced displacement or migration, chronic disease, current or past marriage, or disability. There was little distinction between the individual countries and everywhere the main themes overlapped.

"Climate change significantly affects adolescent girls, particularly in terms of food security, education, sexual and reproductive health and rights, and sexual and gender-based violence... Addressing these impacts requires integrating gender-sensitive approaches into climate adaptation and mitigation strategies."

Young woman co-researcher, Nigeria



→ FIGURE 1 Interconnected impacts of climate change

The whole community suffers but it is often adolescent girls and young women whose current lives and future prospects are most affected by climate change. They leave school, they marry too early, they are subject to increased sexual and gender-based violence and harassment: their voices, rights and needs tend to be lost as everyone struggles, which leads us to the question of what they think should be done about it?

2. Seeking support

It is clear from the research that adolescent girls and young women are not looking just to the authorities to help tackle the impacts of climate change, many are actively involved themselves.

Their activities include:

- environmental sanitation efforts, such as cleaning streets and public spaces, clearing drainage systems, and properly disposing of waste to prevent flooding and stagnant water;
- tree planting and reforestation initiatives in their households, schools, and community settings to combat deforestation and desertification, to mitigate climate change, and to create shade;
- trying to sensitise their communities about the importance of climate change adaptation, as well as encouraging and supporting others to maintain cleanliness and avoid littering or polluting the environment.

Girls and young women everywhere reported formidable challenges when attempting to engage in these activities—including lack of funding, and resources: they cited a shortage of materials, equipment, seedlings, and transportation, lack of access to water for activities like tree planting and cleaning, and lack of community support and cooperation.

change but we don't have any support." Adolescent girl participant (15-17 years old), 16 Bla, Mali



Findings

"Men underestimate us..."

Many research participants call for assistance from governments, local authorities, NGOs, and other organisations to provide information, funding, supplies, education and training to enhance their resilience and their activism.

They report not being listened to just because they are young and female and thought to be incapable of working effectively at community level.

"Men underestimate us in the fight against climate change." Adolescent girl participant (15-17 years old), Bla, Mali

It is obvious to them that so many communities have basic unmet needs that the authorities should address, by:

- creating employment and income-generating opportunities, especially for women and youth;
- constructing infrastructure like boreholes, wells, and drainage systems;
- increasing awareness about climate change, environmental protection, and hygiene;
- strengthening security and reducing crime/ exploitation in the community;
- properly collaborating with the community, including girls and young women, and involving them in decision-making.

"...adolescent girls and young women are not only the victims of climate change but they can play a key role in finding solutions: their education, their empowerment and their participation in decisions are essential aspects to effectively combat the effects of climate change." Young woman coresearcher, Mali



! Overall, adolescent girls and young women are demonstrating agency and initiative in responding to the climate crisis within their communities. They are looking to the authorities, at all levels, for support. Their suggestions are practical and stem from what they see around them. They are also keen to play their part.

3. Added value: the research process

The research team were keen to evaluate the impact of the research methodology on the coresearchers and on the quality of the research itself. It was clear that removing some of the barriers between researchers and research participants fostered mutual learning and support throughout the entire process.

"The findings are more likely to be relevant and actionable, as they are grounded in the lived experiences of the community." Young woman co-researcher, Nigeria

Co-researchers indicated that the research process was a valuable opportunity to grow in experience, knowledge, and potential for action. Many reported substantial gains in their understanding of gender, climate change and research methodologies.

especially the fact that they involved us in all the stages of the study. This is also a training for us and will be very useful for future experiences." Young woman co-researcher, Burkina Faso

The Photovoice method was frequently mentioned as a valuable tool that both coresearchers and participants had not previously encountered. It further grounds the research in the experiences of the adolescent girls and young women taking part, provokes discussion and provides clear visual proof of the impact climate change is having on lives and livelihoods.

groups we gave the beneficiaries the freedom to express themselves and through this they brought out their experiences with regard to climate change without being influenced or directed in their responses." Young woman co-researcher, Burkina Faso

Praised the participatory nature of the Feminist Participatory Action Research approach, which allowed for deeper insights and more authentic data collection.

Across all five countries, the participatory approach proved to be a transformative experience for the co-researchers involved in the study: significantly enhancing their understanding of climate change while also building their research and advocacy skills, and their confidence.

Participatory Action Research methodology... include advocating their voices, empowering them with knowledge, and creating context-specific solutions." Young woman co-researcher, Nigeria.



Conclusion

The contributions from the adolescent girls and young women who participated in this study highlight the multidimensional and devastating impact of climate change on their food and water security, health, safety, future prospects and general wellbeing.

It highlights also their capabilities, their resilience and their willingness to work for and with their communities. The participatory nature of the research methodology leaves a lasting legacy: extending knowledge, building confidence, and embedding the resilience and the activism of adolescent girls and young women into their communities.

In areas of often subsistence farming and ongoing poverty the floods, drought, extreme heat, and sheer inconsistency which climate change brings make life even more precarious.

There is also, in most cases, pre-existing gender discrimination and inequality which heightens the risk for adolescent girls and young women in times of crisis and disruption. All this, as research participants have indicated, underscores the urgent need for comprehensive and targeted policy and programmatic interventions.

! The recommendations that follow are based on the expectations expressed by the many adolescent girl and young women respondents and co-researchers who took part in this study.

Recommendations

Key to promoting both climate change mitigation and gender equality is to involve adolescent girls in planning and implementation, ensuring their rights are respected, their needs met and their ideas listened to.

engaged us adolescent girls and young women, it means you value us and show us that there is no difference between us girls and boys."

Adolescent girl participant (15-17)18 Jere, Nigeria

Photo taken by young woman co-researcher in Ouallam, Niger © Plan International

National and local governments



National and local governments must:

- Acknowledge the gendered impacts of climate change and, working alongside
 adolescent girls and young women, fund and implement gender transformative programmes
 and policies. Authorities need to work together on grass roots initiatives around information,
 preparedness, and rebuilding: including tree planting, waste management, soil restoration,
 and anti-deforestation efforts as well as to set up watchdog committees and raise overall
 awareness of climate change.
- Revise and enforce legal frameworks and environmental policies that protect socioeconomic rights to food, water, education, and health and create awareness around pollution, environmental degradation, and climate change adaptation.
- Support household incomes so that families can adapt and find alternative income streams
 and adolescent girls and young women are not forced into risky coping strategies as their
 families struggle.

International NGOs and nation CSOs



International NGOs and nation CSOs must:

- Collaborate with adolescent girls and young women to design and implement
 comprehensive climate programmes that integrate gender equality and intersectionality. At the
 same time, they must amplify the voices of adolescent girls and young women in climate
 advocacy so that policies and programmes are centred on their experiences and observations.
- Support the acquisition of information and relevant skills and establish adolescent
 girls and young women led knowledge hubs: Develop these to facilitate transformative and
 participatory research providing comprehensive training in advocacy skills, climate science,
 and policy processes: including establishing a "Climate Resilience Innovation Hub" involving
 adolescent girls and young women to capture, expand, and advance local adaptation and
 mitigation strategies.

Donors



Donors must:

- Advocate for adolescent girls' and young women's participation in climate policymaking:
 provide and push for dedicated climate adaptation funding for initiative, and ensuring
 adolescent girls and young women from diverse backgrounds have equal opportunities to
 shape climate agendas at local, national, and international levels.
- Provide long-term, flexible funding and capacity strengthening to local organisations
 working at the intersection of climate, gender, and youth, prioritising adolescent girl and young
 women led groups, and those with feminist approaches.



Endnotes

- 1 INFORM Climate change tool (2024), accessible online: https://drmkc.jrc.ec.europa.eu/inform-index/.
- ND-GAIN Country Index (2020, updated in May 2023),
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- 5 UNHCR "Climate Risk Profile: Sahel" (2021): https://www.unhcr.org/publications/brochures/61a49df44/ representative-concentration-pathways-climate-risk-profile-sahel-region.html.

- 6 International Labour Organisation "Breaking the bias for better gender data" (2022), available online: https://ilostat.ilo.org/blog/breaking-the-bias-for-better-gender-data/.
- 7 Peer-to-peer survey participant.
- 8 Peer-to-peer survey participant.
- 9 Peer-to-peer survey participant.
- 10 Peer-to-peer survey participant.
- 11 Focus group discussion participant.
- **12** Peer-to-peer survey participant.
- 13 Peer-to-peer survey participant.
- 14 Peer-to-peer survey participant.
- **15** Peer-to-peer survey participant.
- 16 Focus group discussion participant.17 Focus group discussion participant.
- **18** This participant took part in the photo-based focus group discussion as part of the Photovoice methodology.

Acknowledgements

Particular thanks go to:

The many adolescent girls and young women—the co-researchers and research participants—who gave of their time, energy, and insight to make this study possible.

Plan International would also like to thank:

The hera team who guided the research in all its stages, and wrote the report on which this summary is based. Thanks also to Plan International staff, globally and particularly in the Sahel region, for all their dedication and support.

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Until we are all equal

About Plan International

Plan International is an independent development and humanitarian organization that advances children's rights and equality for girls. We believe in the power and potential of every child but know this is often suppressed by poverty, violence, exclusion and discrimination. And it is girls who are most affected.

Working together with children, young people, supporters and partners, we strive for a just world, tackling the root causes of the challenges girls and vulnerable children face. We support children's rights from birth until they reach adulthood and we enable children to prepare for and respond to crises and adversity. We drive changes in practice and policy at local, national and global levels using our reach, experience and knowledge. For over 85 years, we have rallied other determined optimists to transform the lives of all children in more than 80 countries.

We won't stop until we are all equal.

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