



Until we are all equal



A Gathering Storm

A study on the gendered impact of climate change on the rights of adolescent girls and young women in the Sahel

Full report

This research was initiated, sponsored and supported by Plan International and their active staff, and co-developed with 30 Plan International young women co-researchers and mentors. We extend our sincere gratitude to Plan International for their support and commitment to advancing children's rights and gender equality.

We acknowledge the invaluable contributions of the research consultants whose expertise and dedication were instrumental in the implementation and completion of this research and report, namely:

Nastasia Thebaud-Bouillon-Njenga (research coordinator)

Lucille Akelo Onyango

Allison Cantor

Aboubakar Kamagaté

The research efforts were managed by hera - right to health.

Citation of the report:

Thebaud-Bouillon-Njenga, N. & Onyango, L. A. & Cantor, A. & Kamagaté, A. (2024) "Study on the gendered impact of climate change on adolescent girls and young women in the Sahel: multi-country analysis in Burkina Faso, Guinea, Mali, Niger and Nigeria" Plan International and hera.

“[...] It pleases me to know that people care about us.”

Young woman participant (18-24 years old), Ouallam, Niger

Acknowledgements

This report is sponsored by Plan International, who initiated and funded this important study. We extend our sincere gratitude to Plan International for their unwavering support and commitment to advancing children’s rights and gender equality.

The consultancy services for this report were fully contracted to hera, whose team of dedicated researchers played a crucial role in this research and authorship of this report. The hera team of consultants who undertook this study was led by Nastasia Thebaud-Bouillon-Njenga and comprised of Lucille Akelo Onyango, Allison Cantor, and Aboubakar Kamagaté with incredible support from Marieke Deville, Alice Schmidt, Eleonore Deboutte, Audrey Diaw, Xitlali Sandino, and Fatou Diop Sall.

The study was conducted together with an incredible team of young women co-researchers and their mentors. Their time, efforts, contributions, hard work, and commitment throughout the research pathway made this study possible and worthwhile. This report is a result of this meaningful and necessary collaboration. We sincerely acknowledge the twenty-five committed young women co-researchers and five fantastic mentors whose names are listed in the following table.

	CO-RESEARCHERS	MENTORS
BURKINA FASO	<ul style="list-style-type: none"> • Nadège Nitiema • Barkissa Zouon • Patindnimba Micheline Nikiema • Aïda Sako • Aïchatou Touré 	Pengd-wendé Adèle Zoungrana Sawadogo
GUINEA	<ul style="list-style-type: none"> • Aminata Guillaume Camara • Aminata Traore • Macire Fadiga • Fatoumata Yarie Bangoura • Bountouraby Bangoura 	Eugenie Loua
MALI	<ul style="list-style-type: none"> • Mariam Dara • Mariam Mounkoro • Fatoumata Diarra • Kamissa Kane • Fatoumata FOFANA 	Babera Mariam Gogo
NIGER	<ul style="list-style-type: none"> • Ibrahim Bello Asmaou • Mariama Amadou Sadou • Moussa Bana Samsiya • Moussa Hama Rakia • Nafissatou Hamadou Hamidou 	Salou Harouna Salou
NIGERIA	<ul style="list-style-type: none"> • Fatima Muhammad Mafi • Halima Yerima Muhammad • Adama Ibrahim • Safiya Mallum Izge • Lydia Barnabas 	Rifkatu Lalai

We would like to meaningfully acknowledge the invaluable contributions of the nearly 1,000 adolescent girls and young women who participated in the data collection efforts. Despite facing

deep daily challenges, they shared their lived experiences, hopes, challenges, expectations, and recommendations.

Their participation is deeply appreciated, and we sincerely hope that this multi-country study, which employed an innovative and empowering Feminist Participatory Action Research methodology, will lead to visible long-term policy changes and action-oriented impacts in their lives and those of their families and communities.

At the level of Plan International, the study was actively supported by Plan International West and Central Africa regional hub, with special recognition of the substantive efforts of Juli-Collette Nsah-Bongsiisy and Amevi Djadou.

The focal points of Plan International, who tirelessly supported the process by ensuring all logistical and technical arrangements were in place are Belem Fousseni (Burkina Faso), Louis Bendou (Guinea), Mohamed Agaly Ag Yehia (Mali), Nafissa Amidou (Niger), Soulé Maman (Niger), Lumba Auwal (Nigeria) and James Lamba Yusuf (Nigeria). We would also like to thank all the technical, admin, and support teams at country level who made this work possible, spending time and efforts making logistical arrangements and planning the details of this major study endeavour. These included the following colleagues:

- **Burkina Faso:** Paul Fagnon, Abdou Aziz Compaore, Cyrille Kere, Patrice Zongo and Claude Kane;
- **Guinea:** Evariste Sindayigaya, Finda Iffono, Maimouna Barry, Mamadou Oury Diallo, Aminata Diallo, Tamba Michel Kamano, Albert Faya Kamano, Antoinette Guilavogui, Leonie Sogoni Beavogui, Fatoumata Amadou Bah and Albert Mamy;
- **Mali:** Jackson Acha Atam, Amadou Guindo, Modibo Doumbia, Gaoussou Coulibaly, Baboye Bocoum;
- **Niger:** Innocent Mumararungu, Moussa Abdou, Maman Nourou, Sani Issa;
- **Nigeria:** Charles Emmamuzou Usie, Helen Mfon-Obong Idiong, Comfort Runyi Effiom, Chinelo Amaechina, Tunde Aremu, Annie Jubemi, Onaji Joshua and Adedolapo Adebogun.

Plan International funded the study, including through the five Country Offices involved (Burkina Faso, Guinea, Mali, Niger and Nigeria) as well as WACAH, and National Offices (CNO, DNO, BNO, NNO). We thank the steering committee for their support throughout the process.

This research piece is a testament to the meaningful and necessary collaboration between Plan International, here, the young women co-researchers and adolescent girls and young women participants. We hope it will contribute to significant and lasting improvements in the lives of girls and young women.

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Abbreviations

AGYW	Adolescent Girls and Young Women
ACERWC	African Committee on the Rights and Welfare of the Child
ACRWC	African Charter on the Rights and Welfare of the Child
ASS	Alliance of Sahel States
AOGD	Areas of Global Distinctiveness
CEFM	Child, Early and Forced Marriage
CO	Country office
CSO	Civil Society Organisation
ECCAS	The Economic Community of Central African States
ECOWAS	The Economic Community of West African States
EU	European Union
FAO	Food and Agriculture Organization
FGD	Focus Group Discussions
FGM/C	Female Genital Mutilation/Cutting
FPAR	Feminist Participatory Action Research
GBV	Gender Based Violence
GCCA	Global Climate Change Alliance
GIZ	German development agency
IUCN	The International Union for the Conservation of Nature
KII	Key Informant Interviews
MRC	The Medical Research Council (MRC) Unit in the Gambia
N	Number of responses
NAP	National Adaptation Plan
NAPA	National Adaptation Program of Action
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
PI	Plan international
QA	Quality Assurance
SDG	Sustainable Development Goals
SGBV	Sexual and Gender Based Violence
SIGI	OECD's Social Institutions and Gender Index
SRHR	Sexual and Reproductive Health and Rights
UNDP	United Nations Development Programme
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
WACA	West and Central Africa
WEP	Women Environment Programme

1 Executive Summary

Introduction

This report summarises the findings of a multi-country study conducted by a team of Hera consultants on behalf of Plan International (PI). The specific objective of this study is to put an emphasis on the lived experiences of adolescent girls and young women (AGYW), and how their rights are affected by the effects of climate change in the Sahel region. The overarching goal of the study is to “inform a gender transformative programming and influencing response” by PI and its partners.

This study was carried out in two phases. During phase I, 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. Phase I was conducted between mid-May and end July 2022 and included ten countries of the Sahel (as geographically defined) (Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mauritania, Mali, Niger, Nigeria, and Senegal). Phase II, **which is the central focus of this report**, was conducted between April 2023 and October 2024 and included Nigeria, Niger, Mali, Burkina Faso, and Guinea. The research aimed to answer the following research questions:

1. How do adolescent girls experience and perceive the gendered impacts of climate change in their lives and the lived realities of their peers?
2. What do girls and young women expect from authorities at international, regional, national, and local levels?
3. How have the co-researchers experienced and perceived the FPAR methods used as part of this research?

FPAR Methodology

During phase II of the research (presented here), a Feminist Participatory Action Research (FPAR) approach was employed. An FPAR methodology aims to breakdown the power dynamics that reinforce hierarchical structures in research. Thus this research was characterised by a collaborative approach between the Hera team and 25 young co-researchers, 5 mentors, and Plan International (PI) country and regional teams. This resulted in the co-creation of the methodology, as well as active collaborative engagement to carry out data collection, data analysis and interpretation.

Co-researchers participated in a series of participatory workshops with the purpose of training them on research methods and analysis and preparing them to conduct the in-country research. Data was collected from the co-researchers throughout this process to better understand how FPAR approaches may influence aspects of empowerment among collaborators. Co-researchers, with the support of the mentors and the PI country offices, conducted a peer-to-peer survey with 472 AGYW participants in total. They also facilitated a series of participatory focus group discussions (PFGD), and engaged AGYW in a modified photovoice activity with 391 other AGYW participants. In total, 863 AGYW participants were involved in the study. Data was analysed using MAXQDA and Excel.

Findings

RQ1: How do adolescent girls and young women experience and perceive the gendered impacts of climate change in their lives and the lived realities of their peers?

Overall, the challenges faced by AGYW in the study countries in the Sahel were exacerbated by climate change. The most frequent issues related to climate change identified or discussed by

AGYW were exposure to extreme climate events, particularly flooding, heavy rain, extreme heat, and drought. AGYW directly linked food insecurity with climate change, as a direct consequence of climate **change** in the form of excessive rainfall or long periods of droughts which caused inconsistent agricultural seasons and decreased crop and livestock yields. **The lack of food, coupled with the inability to generate income from agriculture and purchase other food items, increased food insecurity and forced many AGYW to adopt unhealthy strategies to cope with this reality.** This included, reducing the number of meals per day, engaging in informal/casual labour to earn money for food, borrowing food or money from others and, unfortunately, many AGYW described resorting to transactional sex for food or money.

This study found that socio-cultural gender norms shaped the ways that climate change affected the lives of AGYW. In addition to forcing AGYW into transactional sex for resources, early and forced marriage were reported, due to the lack of resources and unmet needs that were directly related to extreme climate events. Other aspects of SGBV and SRHR were mentioned by AGYW participants, notably that water insecurity poses security risks for AGYW as they walk much further to fetch water and they face increased risks of violence and physical, emotional and sexual harassment.

The study also found AGYW face challenges in maintaining menstrual hygiene.

Some AGYW participants also associated climate change with pollution outside of their homes and explained that environmental degradation, such as garbage-filled rivers, made the effects of climate change worse, such as during floods. AGYW also linked climate change with other aspects of health associated with heat, such as headaches, skin infections, faintness and increased death in the community. Increased incidence of malaria cases was also a concern, due to flooding and stagnant water. **AGYW participants** further highlighted that extreme climate events such as flooding and erosion incidences due to climate change have washed away access roads into communities, damaged infrastructures like bridges and created power outages. The AGYW respondents observed that extreme climate incidences hinder accessibility to already inadequate and overwhelmed healthcare facilities. Some AGYW participants also associated climate change with enhancing spread of multiple waste materials outside of their homes. The AGYW respondents also observed that poor waste management practices such as dumping of garbage into rivers increased the negative impact climate change hazards such as flooding disasters.

For AGYW, there was a disproportionate burden of household/caregiving duties, which limited their access to education in the context of decreased resources related to climate change. Gender norms rooted in inequality resulted in decreased access to education due to the lack of resources to support education costs, the need for AGYW to increase household/caregiving duties in the context of scarce resources (e.g., water and firewood) and early and forced marriage.

RQ2: What do adolescent girls and young women expect from authorities at international, regional, national, and local levels?

AGYW participants discussed existing gaps in policies or programmes and several of them expressed concerns about the lack of government support and policy implementation to address climate change impacts and related socioeconomic challenges as well as environmental degradation. AGYW participants also expressed criticism over ineffective government policies and lack of enforcement, including failure to prevent deforestation, inadequate regulation of pollution, as well as lack of follow-through on announced initiatives and programs, including after extreme climate events affect communities. AGYW noted that communities have basic unmet needs, such as food and water that authorities should address. They also indicated that authorities should create employment and income-generating opportunities, especially for women and youth, as well as construct infrastructure like boreholes, wells, and drainage systems. Further, they recommended

that authorities should increase awareness and sensitization on climate change, environmental protection, and hygiene, strengthen security and reduce crime/exploitation in the community and collaborate with the community and involve them in decision-making.

RQ3: How have the young women co-researchers experienced and perceived the FPAR methods used as part of this research?

The collaborative nature of the FPAR approach was frequently highlighted as a strength. Co-researchers appreciated the opportunity to work closely with their peers, mentors, and the research team. This inclusive and participatory environment fostered mutual learning and support throughout the research process. The co-researchers indicated that the research process was a valuable opportunity to grow in experience, knowledge and potential for action. The co-researchers highlighted the strengths of the research methods and tools as well as their ability to properly gather evidence from AGYW as peer-to-peer mechanisms. They appreciated feeling valued and appreciated for their work and experience. Additionally, the research team also integrated feedback from AGYW participants on the FPAR methodology. The participants noted the importance of such methodology and the learning that was enabled by such participatory method. A few challenges were highlighted and recommendations for further research provided.

Overall, the contributions from adolescent girls and young women who participated in this study highlight the multifaceted and devastating impact of climate change on the food and water security, health, future prospects and wellbeing of adolescent girls and young women in the community, underscoring the urgent need for comprehensive and targeted policy and programmatic interventions to address this pressing issue exacerbating existing rights violations. AGYW who participated in this survey shared their expectations and recommendations. Their recommendations to governments and local authorities included implementation of climate change adaptation measures, revision and enforcement of climate, environmental and gender related policies and legislative frameworks, implementing socio-economic rights (food, water, education, health, ...), creating awareness around pollution, effective waste management practices, environmental degradation and climate change adaptation, and collaborating with AGYW and communities in order to create programmes that address the gendered impact of climate change. To I/NGOs, they made a set of recommendations around financial and technical support, awareness, and education as well as collaboration. They also reinforced the need to be integrated into decision making and designing of programmes and activities by actors at multiple levels. They recommended that women's groups and youth organisations advocate for adolescent girls and young women's involvement in decision-making processes and set up AGYW's environmental protection associations. While they urged the media to disseminate accurate and accessible information on climate change causes, consequences, and mitigation strategies, especially towards youth, they advised to communities that they set up tree planting, waste management, soil restoration, agroecology and anti-deforestation efforts as well as to set up watchdog committees on climate change and raise awareness of climate change prevention and effects.

The research team also provided a set of recommendations towards Plan International, national governments as well as CSOs and development partners including I/NGOs, around policy making and programming, intersectional and participatory research and knowledge co-creation, community informed programming, advocacy, influencing, service delivery and partnerships as well as meaning of participation and at internal organizational recommendations. We urged actors to use inclusive and collaborative approaches to engage AGYW in the development of these programs to ensure success. Given the exacerbation by climate change of pre-existing issues stemming from gender and socioeconomic inequalities, efforts to reduce gender inequity and promote human rights for AGYW should be continued and reinforced. In addition, our team urged governments of high-income countries to

pay their fair share for climate adaptation and to ensure that the backsliding and backtracking from climate commitments is halted and reversed.

The study called for greater collaboration between AGYW, governments, I/NGOs, and communities to address the multifaceted suffering posed by climate change as well as gender and socioeconomic inequalities. Specific recommendations were made on finding concrete solutions to ensure the realisation of the rights to food, water, education, and a clean environment as well as enhance SRHR delivery and. Recommendations on waste management including recycling were also put forward.

2 Background and Introduction

The multifaceted effects of the climate crisis disproportionately impact the rights and lives of children, especially adolescent girls, by reinforcing pre-existing violations of human rights.¹ Climate change amplifies gender and social inequalities by hampering sustainable access to natural resources, exacerbating humanitarian crises and putting at risk critical human rights such as the right to food, water, health, and protection against violence.² Gender-blind approaches to climate change reinforce gender inequalities.³

West and Central African countries, especially in the Sahel region, are excessively affected by the climate crisis, which amplifies existing crises and injustices.⁴ The Sahel crisis is multidimensional and complex: a combination of conflict, multifaceted violence (including high levels of sexual and gender-based violence), chronic food insecurity, displacement and poverty, with serious gender-related consequences, that are exacerbated by climate shocks.⁵

At the same time, climate justice holds the potential of redefining gender norms, roles, responsibilities and promoting gender equality, as well as facilitating a more equal approach to development, ultimately facilitating progress towards the Sustainable Development Goals (SDGs).⁶

This report summarises the findings of a multi-country study conducted by a team of herA consultants on behalf of Plan International (PI). The objective of this study is to put an emphasis on the lived experiences of adolescent girls and young women (AGYW), and how their rights are affected by the effects of climate change in the Sahel. The ultimate objective of the study is to “inform a gender transformative programming and influencing response” by Plan International and its partners.

The process of the research project was two-fold:

- The first phase, conducted between mid-May and end July 2022, included a literature review,⁷ as well as a limited number of key informant interviews (KIIs).⁸ The research team looked at ten countries of the Sahel (as geographically defined): Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mauritania, Mali, Niger, Nigeria and Senegal. The study was submitted to PI in November 2022 under the following title: “Climate Change and Girls’ Rights in the Sahel: A Gender Analysis in 10 Sahelian Countries”

¹ Plan International, International Position Paper “Climate Change: Focus on Girls and Young Women (2019).

² Awiti, A., O. “Climate change and gender in Africa: a review of Impact and Gender-Responsive Solutions” (2022): <https://www.frontiersin.org/articles/10.3389/fclim.2022.895950/full>.

³ ECOWAS Disaster Risk Reduction Gender Strategy and Action Plan (2020-2030) adopted in 2019: https://www.gfdr.org/sites/default/files/publication/ECOWAS%20GSAP_EN_Final.pdf.

⁴ ECOWAS Disaster Risk Reduction Gender Strategy and Action Plan (2020-2030) adopted in 2019: https://www.gfdr.org/sites/default/files/publication/ECOWAS%20GSAP_EN_Final.pdf.

⁵ UNHCR “Climate Risk Profile: Sahel” (2021): <https://www.unhcr.org/publications/brochures/61a49df44/representative-concentration-pathways-climate-risk-profile-sahel-region.html>

⁶ UN Women “Leveraging co-benefits between gender equality and climate action for sustainable development” (2016): https://unfccc.int/files/gender_and_climate_change/application/pdf/leveraging_cobenefits.pdf.

⁷ Thebaud-Bouillon-Njenga, Nastasia & Diop Sall, Fatou, & Schmidt, Alice. (2022). *Climate Change and Girls’ Rights in the Sahel: A Gender Analysis in 10 Sahelian Countries. Final Report*. HerA for Plan International.

The literature review was carried out by a team of three consultants using a feminist approach, emphasising the gendered impact of climate change in the Sahel, as well as the role of girls and women in decision-making on climate mitigation and adaptation, and their resilience.

The literature review provided the overall framework for the research and focused on secondary data sources: published and grey literature on the impact of climate change on girls and young women; related policies and commitments; as well as actors in this space. Emphasis was placed on qualitative data, though quantitative data was considered where possible and relevant.

⁸ REFERENCE OF PHASE I

Following the literature review, seven semi-structured interviews were conducted with key informants. An interview guide was used, though it was adapted to each key informant’s expertise and the findings of the literature review conducted in each country.

- The second phase, conducted between April 2023 and October 2024 and whose findings are compiled in the present report, consisted in a Feminist Participatory Action Research (FPAR) in which the hera team worked collaboratively with 25 young women co-researchers, 5 mentors, and Plan International country and regional teams to co-create the methodology, collect data, and conduct analysis and interpretation of data. Further details on the methodology can be found in the documentation of the process (separate document).

The present report provides a quantitative and qualitative analysis of Phase II findings, building on summarised results from Phase I.

3 Methodology and Approach

3.1 Scope & Approach

Phase II was based on the findings from Phase I, with a focus on five countries: Burkina Faso, Mali, Niger, Nigeria, and Guinea. The countries represent different sub-regions of the Sahel region overall, with Burkina Faso, Mali and Niger from the Central Sahel, Nigeria from the Lake Chad-Sahel sub region and Guinea, located in the part of the geographical Sahel having the particularity of being affected by coastal erosion and sea level rise as an impact of climate change.

Phase II consisted of the creation and implementation of a FPAR methodology. FPAR is a research methodology that aims at structural and empowering change and starts with the rationale that adolescent girls and young women hold expertise and lived experiences relevant to the research topic and that their voices and experiences must form the heart of research and policy action. It stems from the idea that there exists a data gender bias and that data can reflect power structures in society which are deeply gendered.⁹ Research, when following traditional methods, can reinforce gender norms and girls and women's oppression by creating rather than elucidating hierarchical divisions.¹⁰

These quotes from co-researchers in this study best describe the spirit and approach at the core of FPAR methodologies:

"One of the core principles of FPAR is the direct participation of affected people. By including adolescent girls and young women in the research process, the methodology allows them to ensure that their experiences, needs and perspectives are at the center of discussions." - Young woman co-researcher, Mali

"The main strengths of the FPAR methodology in addressing the gendered impact of climate change on AGYW include advocating for their voices, empowering them with knowledge, and creating context-specific solutions." - Young woman co-researcher, Nigeria

⁹ 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/>.

¹⁰ APWLD, "Feminist Participatory Action Research" <https://apwld.org/feminist-participatory-action-research-fpar/>.

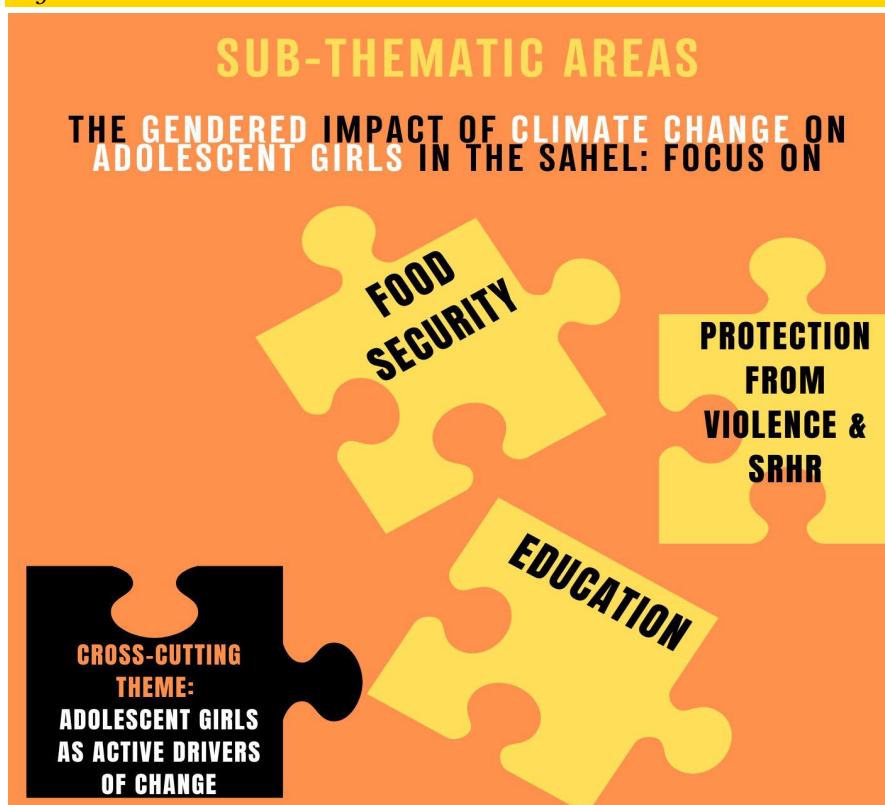
Results from Phase I indicated that the rights of girls and young women are further impacted by climate change, and that their experiences and voices are not integrated into policy making and programmes. From this starting point, Plan International decided to focus this FPAR study on the voices and experiences of AGYW by selecting young women as co-researchers and AGYW as AGYW participants. The FPAR methodology we put in place entailed selecting young women as co-researchers in each country based on a list of criteria, coming up with a research protocol through collaborative efforts with multiple stakeholders, co-designing research tools with young women co-researchers during participatory workshops, training them on data collection and analysis. After young women co-researchers conducted data collection in two locations per country and data was pre-analysed by the consultant team, the young women co-researchers were supported to interpret the data they collected during collaborative workshops designed by the consultant team in partnership with Plan International. The analysis of quantitative and qualitative data by the hera consultancy team as well as interpretation by the young women co-researchers is the basis of the findings of this report.

As agreed with Plan International in the inception phase, the research questions, detailed in Annex 1, were outlined as follows:

1. How do adolescent girls experience and perceive the gendered impacts of climate change in their lives and the lived realities of their peers?
2. What do girls and young women expect from authorities at international, regional, national, and local levels?
3. How have the young women co-researchers experienced and perceived the FPAR methods used as part of this research?

Based on Phase I findings, the sub-thematic areas that were chosen included food security, education, and protection from SGBV which was compiled with SRHR. Recognizing AGYW as active drivers of change was identified as a cross-cutting issue.

Figure 1. Sub-thematic areas



3.2 Co-Design, Data Collection and analysis

3.2.1 Co-Design

Five young women co-researchers and one research mentor per country were selected and contracted following an inclusive process. The protocol was designed and revised based on multi-stakeholder engagements. Young women co-researchers then participated in co-design workshops, contributing to the development of the methodologies described in the protocol. As part of the FPAR approach, the aim of these country workshops was to engage young women co-researchers and mentors in the adaptation and modification of the methodology (especially Protocol) through a collaborative process. Data collection methods were determined through a co-design process and adapted to country contexts as part of the research process through a collaborative process involving inception meetings, dedicated data collection meetings and the in-country co-design workshops. Tools such as the survey questionnaire and the Photovoice guide were the result of a collaborative process between young women co-researchers, mentors, and the hera team, with support from Plan International. For instance, in order to create the survey questionnaire (peer-to-peer digital methodology) the young women co-researchers were trained by the hera team on how to create survey questions as part of the first workshops. The young women co-researchers were able to create a set of questions. All questions from countries were then merged by the hera team and reworked in order to come up with the final tool. In order to create the Photovoice guide, the hera team worked on the structure of the guide and gave room for the young women co-researchers to propose the activities they wanted to organise during their focus group discussions. All key elements of the full methodology (methods, timeline, number of AGYW participants, approaches, ...) were the result of participatory approaches coordinated by the hera team, which resulted in a truly collaborative research protocol. Prior to all workshops, safeguarding risk assessments were conducted and ethical approval was requested from Plan International in order to identify and mitigate potential threats to the young women's safety and wellbeing. Throughout their journey, young women co-researchers were requested to complete surveys in order for the hera team to collect anonymous data on how the FPAR process impacted the young women co-researchers' and mentors' research experience.

3.2.2 Data Collection

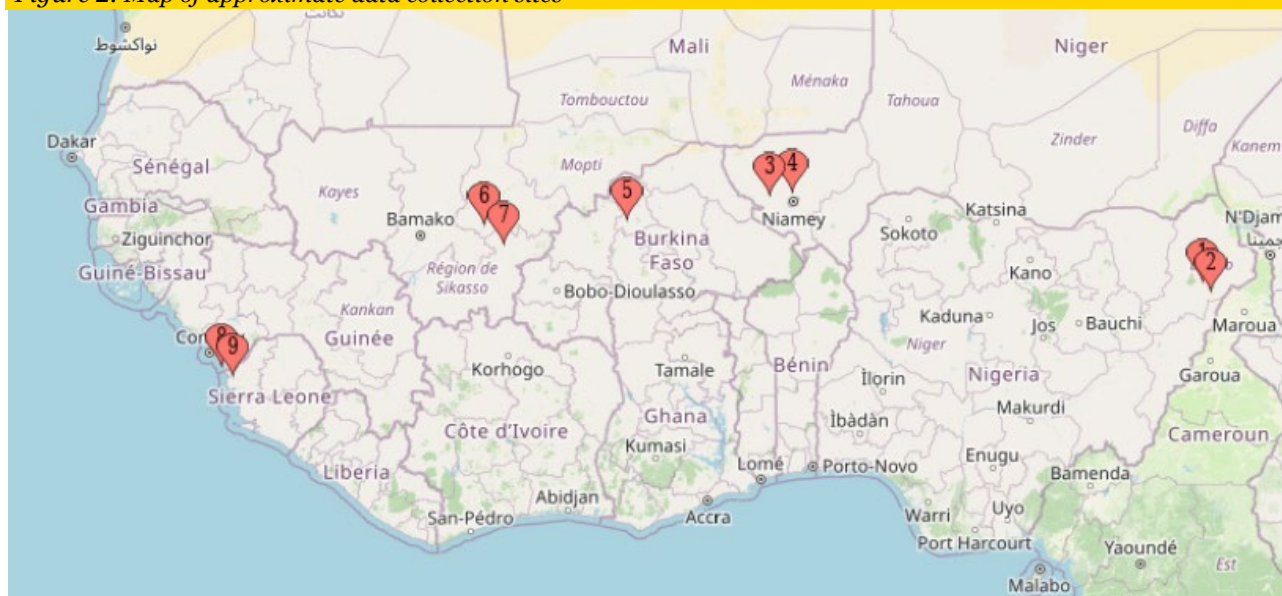
Once the research protocol was finalised, it was submitted to ethical authorities in each country as well as to PI. Once ethical approval was granted, the team organised pre-data collection sessions with young women co-researchers and mentors, and data collection began in each country.

Data collection was conducted in safe spaces chosen by PI in two locations per country for a period of approximately five (5) days in each locality (see table 1).

Table 1. Data collection sites AGYW participants

	REGION	LOCALITIES
BURKINA FASO	North	Ouahigouya
GUINEA	Kindia & Conakry	Coyah & Forécariah
MALI	Segou	Segou & Bla
NIGER	Tillabéry	Tillabéry & Ouallam
NIGERIA	Borno	Jere & Konduga LGA

Figure 2. Map of approximate data collection sites⁸



1- Jere, Nigeria / 2- Konduga, Nigeria / 3- Tillabéri, Niger / 4- Ouallam, Niger / 5- Ouahigouya, Burkina Faso / 6- Ségou, Mali / 7- Bla, Mali / 8- Coyah, Guinée / 9- Forécariah, Guinée

To address the research questions, data collection included two complementary dimensions:

A peer-to-peer survey: Young women co-researchers used a peer-to-peer survey to explore the gendered impacts and lived experiences of climate change among adolescent girls. Surveys were administered using mobile devices equipped with a secure data collection application called KoBo Toolbox.¹⁰ The survey can be found in the compiled documentation of the process.

A modified Photovoice methodology: The modified Photovoice methodology proposed in this study was a combination of two methodologies: Photovoice as a visual digital tool, and Participatory Focus Group Discussions (PFGDs) as a participatory and dynamic methodology. Our research team's Photovoice methodology involved four steps over a three-day period:

- **1st step:** participatory focus group discussions (PFGDs) were led by the young women co-researchers supported by the mentor with a set of activities created by the young women co-researchers and her team.
- **2nd step:** Between 5 and 10 AGYW participants were pre-selected among the maximum 50 AGYW participants to engage in the second, third and fourth parts of the Photovoice methodology as follows. Prior to going to the community for the photo taking session, a briefing was organized with the young women co-researchers, the mentor, and the selected AGYW participants.
- **3rd step:** The Photovoice/visual digital methodology was then carried out by the young women co-researchers with the selected number of AGYW participants on the study topic. This Photovoice entailed going to take photos with tablets provided by Plan International.
- **4th step:** Once such AGYW participants had engaged in the photovoice session in the community, the same group of 5-10 AGYW participants participated in a Photo-based Focus Group Discussion facilitated by the young women co-researchers in order to enable discussions based on the photos taken in the community.

Research participants were pre-selected by PI from two separate sampling frames in each country. In total, the study involved 472 AGYW participants in the quantitative methodology (KoboCollect) and 391 AGYW participants in the qualitative methodology (Photovoice including FGDs), with a total of 863 AGYW participants. In detail, in the quantitative methodology, 279 participants were adolescent girls aged 15-17 and 191 participants were young women aged 18-24, with a total of 472 AGYW participants (See table 2). In the qualitative methodology, 200 participants were adolescent girls aged 15-17 and 191 participants were young women aged 18-24, with a total of 391 AGYW participants (See table 3). In total, 863 AGYW participated in this multi-country study.

Table 2. Number of AGYW participants in peer-to-peer survey methodology (Kobo Toolbox)

	LOCALITIES	Number of AGYW participants aged 15-17	Number of AGYW participants aged 18-24	Prefer not to say	TOTAL per location	TOTAL per country
BURKINA FASO	Ouahigouya	29	23	0	52	52
GUINEA	Coyah	31	18	1	50	100
	Forécariah	31	19	0	50	
MALI	Segou	30	20	0	50	100
	Bla	29	20	1	50	
NIGER	Tillabéry	29	21	0	50	112
	Ouallam	41	21	0	62	
NIGERIA	Jere	31	24	0	55	108
	Konduga LGA	28	25	0	53	
ALL COUNTRIES		279	191	2	472 ¹¹	

In terms of intersectionality, the AGYW who participated in the peer-to-peer survey methodology answered questions specific to their lived experiences of disability, chronic disease, marriage and displacement/migration. Nearly 12 per cent of AGYW survey respondents identified as having a lived experience of disability (56/471 survey responses) while around 24 per cent of AGYW survey respondents declared having a lived experience of chronic disease (115/470 survey responses). Around 35 per cent of AGYW survey respondents declared having a lived experience of displacement or migration (168/468 survey responses) while 20 per cent of AGYW survey respondents declared having a lived experience of past or current marriage (96/471), some of them being married as a child, therefore having a lived experience of child, early and forced marriage (CEFM).

¹¹ Out of 473 sampled AGYW participants, one person from Tillabéry (Niger) did not consent to take the survey, and therefore did not participate in the survey, and therefore was not asked any question, including age. The number of AGYW participants in the quantitative (Kobo) methodology is therefore 472.

Table 3. Number of AGYW participants in Photovoice methodology ¹²

	Localities	Number of participants aged 15-17	Number of participants aged 18-24	Total per location	Including number of participants in photo session & photo based FGD	Total per country
Burkina Faso	Ouahigouya	20	20	40	5	40
Guinea	Coyah (Fily)	25	25	50	5	100
	Forécariah	25	25	50	5	
Mali	Segou	24	20	44	11	83
	Bla	22	17	39	9	
Niger	Tillabéry	20	20	40	5	80
	Ouallam	20	20	40	5	
Nigeria	Jere	24	24	48	7	88
	Konduga LGA	20	20	40	6	
All Countries		200	191	391		

3.2.3 Data Analysis

Data was collected, stored, and managed in accordance with PI’s global policy on data management, storage, and deletion, which considered confidentiality and safety of AGYW participants. The analysis consisted of an iterative approach which was also aligned with the FPAR methodology. While the hera team conducted pre-analysis, the adolescent girls and young women co-researchers and mentors engaged in in-country data interpretation workshops which served a dual-purpose. First, the aim of this workshop was to interpret data with the young women co-researchers through participatory methodologies and to train them on data analysis tools and methodologies so that they know all steps of a research process. Second, the young women co-researchers conducted quantitative and qualitative data interpretation, triangulated findings and worked on the dissemination of the study findings, including through key advocacy deliverables. After the workshops, the hera team carried out the final analysis, while considering the data interpretation and triangulation conducted by the young women co-researchers and mentors.

Qualitative analysis was conducted using MAXQDA¹³ mixed methods analysis software. Qualitative coding was completed using the codebook, which was created based on the research questions and key thematic areas defined in the research protocol. The codebook was refined by the research team after an initial round of coding and completion of the data interpretation workshops. To ensure

¹² Due to the collective nature of the methodology, the participants in the modified Photovoice methodology did not provide details on their lived experiences of displacement/migration, marriage, chronic disease and disability. However, it is possible to mention some details in Guinea: In Coyah(Fily), out of the twenty-five young women participants (18-24), four identified as a person with disability, and three had experience of migration. Out of the twenty-five adolescent girls participants (15-17) in the same location, six identified as a person with disability, ten were out of school but in vocational training, and eight had experience of migration. In Forecariah, Guinea, out of the twenty-five young women participants (18-24), three identified as a person with disability, twelve had a lived experience of migration and eight were out of school but in vocational training (soap making and sewing). Out of the twenty-five adolescent girls participants (15-17), ten had a lived experience of migration while 15 were out of school but in vocational training (soap making and sewing).

¹³ <https://www.maxqda.com/>

reliability of the results, the research team tested the coded documents for inter-coder reliability, which compares the same document coded by different people. This was done through a process in which all researchers coded the same document separately, which were then all entered into MAXQDA for an automated inter-coder reliability. This was done a second time with an amended codebook in order to ensure a good reliability score. Once an appropriate level of agreement was reached between how each member of the team coded the documents, the codebook was finalised and the final round of coding was completed. The final codebook was used to code qualitative data from the PFGD, Photovoice discussions and open-ended responses from the survey. Overall, 58 documents were coded during data analysis. Various MAXQDA features were used to explore trends across thematic areas. This included the code matrix browser, the code relations browser, and the code map. These analysis functions provided data on how codes and themes intersect across all the documents in the sample, as well as between countries.

Quantitative analysis was conducted using Excel Pivot tables and descriptive statistics were generated for peer-to-peer survey variables. Data visualisation techniques were used to create charts and graphs for relevant variables. Prior to analysis the data were cleaned and anonymised.

The report was then written by the hera team, and submitted for review to young women co-researchers, mentors, and Plan International teams at multiple levels. This report is the fruit of this collaborative and participatory methodology.

3.3 Limitations and Challenges

While the decision to engage five countries in the Sahel region for Phase II of this study was well-founded and determined based on the results of Phase I, working in countries with fragile political contexts has inherent limitations. Due to the level of effort and coordination required to ensure that safeguarding and safety were assessed and adequately addressed for AGYW, data collection was limited to an accessible sample of AGYW participants who could be present in specific locations over a short period of time. . . Respondent bias is also a potential limitation of any study undertaken, especially on an issue such as climate change that intersects with a wide range of inequalities. The fact that climate change does not have a starting point, it is possible that it was difficult for the AGYW participants to distinguish the consequences of climate change or those created by other socio-political issues (e.g., gender inequalities, social norms, corruption, humanitarian situation, conflict and poverty). This respondent bias is not specific to this research but is worth mentioning in order to understand potential biases. Yet, this report is seeking to approach the topic from a nuanced perspective centering on the voices of AGYW.

The FPAR approach inherently requires more time than traditional research approaches. While this is a strength of the methodology, as it breaks down power hierarchies by engaging in collaboration with various types of stakeholders, it can also be a challenge when time and resources are limited, as these processes take time in order to be truly participatory. For this multi-country study, the team used a modified FPAR approach to adapt to the time and resources available. For example, while the young women co-researchers engaged in various participatory workshops to train on the FPAR methods, as well as to collaborate on study design and data interpretation, the research team systematically provided support and guidance to the young women co-researchers by providing targeted content for these sessions. Ideally, the research team would have more time to work alongside young women co-researchers (for instance to fully co-write the Protocol), but engagement was framed by the timeline for the study and the context-specific limitations related to safeguarding, safety and working with AGYW, especially in fragile settings. A number of delays also occurred in obtaining ethical approvals from national authorities as well as designing tailor-made budget and admin processes for this study. The level of adaptation that all stakeholders demonstrated in this

two-year process is both a lesson learned and a recommendation for actors wanting to engaged in similar participatory initiatives.

4 Policy Architecture

4.1 Climate Change Policy Architecture¹⁴

Over the past few decades, global climate change governance has evolved, with questions of universal participation and differentiation between countries' responsibilities for emission reductions being at the centre. In 1988, the World Meteorological Organization and the United Nations Environment Programme established the Intergovernmental Panel on Climate Change (IPCC), charged with providing policymakers with regular scientific assessments on the current state of knowledge about climate change.¹⁵ Its First Assessment Report in 1990 provided the scientific basis for the negotiation of the UN Framework Convention on Climate Change (UNFCCC).¹⁶

Today, the principle of “common but differentiated responsibilities” is the backbone of the UNFCCC, acknowledging that all states have a shared obligation to address climate change but are not equally responsible. While the 1997 Kyoto Protocol was a mitigation-centric “top-down” instrument with an absolute emissions cap divided up among developed countries, the 2015 Paris Agreement is a “bottom-up” agreement, where all parties are required to submit their nationally determined contributions (NDCs) with a mitigation contribution. These NDCs must be updated every five years, and each successive NDC must be more ambitious. National Adaptation Programmes of Action are created voluntarily by least developed countries given their particular vulnerability to climate change. National Adaptation Communications under the Paris Agreement provide an opportunity to discover the status of adaptation actions implemented by countries.¹⁷

4.2 Regional Human Rights Mechanisms and their Gender Dimensions

As part of a human rights-based approach to gender and climate justice that our research seeks to adopt,¹⁸ the following Figure provides an overview of the regional human rights framework that recognizes girls' rights, gender equality and climate justice at continental and regional level.

¹⁴ The climate change policy architecture section was taken from the Phase I report: Thebaud-Bouillon-Njenga, Nastasia & Diop Sall, Fatou, & Schmidt, Alice. (2022). *Climate Change and Girls' Rights in the Sahel: A Gender Analysis in 10 Sahelian Countries. Final Report*. Hera for Plan International.

¹⁵ “History of the IPCC”, available online:

[https://www.ipcc.ch/about/history/#:~:text=The%20Intergovernmental%20Panel%20on%20Climate%20Change%20\(IPCC\)%20was%20established%20by,UN%20General%20Assembly%20in%201988.](https://www.ipcc.ch/about/history/#:~:text=The%20Intergovernmental%20Panel%20on%20Climate%20Change%20(IPCC)%20was%20established%20by,UN%20General%20Assembly%20in%201988.)

¹⁶ “History of the IPCC”, available online:

[https://www.ipcc.ch/about/history/#:~:text=The%20Intergovernmental%20Panel%20on%20Climate%20Change%20\(IPCC\)%20was%20established%20by,UN%20General%20Assembly%20in%201988.](https://www.ipcc.ch/about/history/#:~:text=The%20Intergovernmental%20Panel%20on%20Climate%20Change%20(IPCC)%20was%20established%20by,UN%20General%20Assembly%20in%201988.)

¹⁷ IISD “Global Climate Change Governance: The search for effectiveness and universality” (2020) :

<https://www.iisd.org/articles/deep-dive/global-climate-change-governance-search-effectiveness-and-universality.>

¹⁸ OHCHR “Human Rights, Climate Change and Migration in the Sahel” (2021): <https://www.ohchr.org/sites/default/files/2021-11/HR-climate-change-migration-Sahel.pdf>.

African Charter on Human and Peoples' Rights (ACHPR):

- Art 2: Principle of non-discrimination
- Art 9: Right to information, and
- Art 16: Right to health (indirectly includes right to food)
- Art 17: Right to education
- Art 24: Right to a satisfactory environment

African Charter on the Rights and Welfare of the Child (ACRWC) and African Committee of Experts on the Rights and Welfare of the Child (ACERWC)

- Art 3: Principle of non-discrimination
- Art 5: Right to life (survival and development)
- Art 11: Right to education (including environmental education)
- Art 14: Right to health (including adequate nutrition and safe drinking water)
- Art 16,21,27: Right to protection
- Working group on climate change & children's rights currently finalising a study on the impact of climate change on children's rights in Africa including: African Youth Charter, 2009:
- Article 11: youth participation
- Article 13: Right to education and skills development
- Article 16: Right to health
- Article 19: Sustainable development and protection of the environment
- Article 23: Elimination of discrimination against girls and young women

Maputo Protocol on the rights of women in Africa

- Article 2(1): Non-discrimination
 - Article 4: Right to life, integrity, security
 - Article 12: Right to education
 - Article 14: Right to health and reproductive rights
 - Article 15: Right to food security and water
 - Article 18: Right to a healthy and sustainable environment, including right to participation of women in planning, management, preservation of the environment and sustainable use of natural resources at all levels
 - Article 19: Right to a sustainable development, which implies States' obligation to include gender perspective in the national development planning procedures; to ensure women's decision making into planning; to enhance women's access to and control over natural/productive resources; and a to strengthen women's access to credit, training, skills development, and extension services
- + Intersectional lens (girls, women with disabilities, widow women)

Figure 4. Regional and sub-regional frameworks (ECOWAS and ECCAS)

ECOWAS

Beyond general climate change policies such as the **West Africa Water Resources Policy (2008)**, and **ECOWAS Environment Policy and Climate Strategy (2022)**, ECOWAS has a specific strategy to address the effects of climate change entitled the “**ECOWAS Disaster Risk Reduction Gender Strategy and Action Plan**” (2020-2030) adopted in 2019, which specifically mentions girls both when analysing the gender inequalities reinforced by the climate crisis, and when providing gender-sensitive solutions. Following the CSW66 in 2022, ECOWAS, in partnership with UN Women in West and Central Africa and UNDP regional office, organized a regional consultation of experts and Ministers in charge of gender and women’s rights of the member states. A roadmap on gender, climate change and risk reduction was then drafted in order to adopt concrete actions at regional and national levels (KII). The Roadmap showcases seven key objectives (KII):

- *Integrating gender into climate policies, strategies, and programmes;*
- *Placing women at the heart of the transition towards green economy;*
- *Reinforcing the role of women into the conservation of biodiversity, and sustainable food and agricultural systems*
- *Recognizing unpaid work into the sectors of healthcare, domestic and community work, and social protection of women;*
- *Taking into account the gender dimension into climate change induced migration and displacement;*
- *Eliminating SGBV and develop a gender and climate sensitive approach to conflict prevention and peace consolidation;*
- *Supporting women’s voice, participation, action, and leadership in climate change forums and disaster reduction and prevention.*

Other ECOWAS meetings and workshops have been organised on climate change over the years, but the level of policy implementation could not be assessed within the scope of this study.

ECCAS

ECCAS has a policy framework that showcases the interlinkages between gender and climate change and provides a full roadmap on how to address them through the “Action Plan for Implementation of the Central Africa Gender Responsive Regional Strategy for Risk Prevention, Disaster Management and Climate Change Adaptation” (adopted in 2012 and revised until 2020). It includes a clear link between climate change and gender, and the differential impact on girls and boys. It also clearly aims to reinforce the decision making of girls in climate change adaptation.

The sub-region also has a Central Africa Climate Change Application and Forecasting Centre and a Regional Monitoring Committee for Risk Reduction and Disaster Management in Central Africa (including one focal point per country).

G5 SAHEL

The final draft of the G5 Sahel Gender Policy was discussed in June 2022 in Chad. It specifically mentioned climate change in the Resilience section of the document. The final version was due to be released in July 2022

4.3 Key Climate Change and Gender Indicators

The table below provides an overview of vulnerability to climate change as well as gender equality in policies and practice for the five focus countries of this study, using a set of internationally recognised indicators. These include:

- The **INFORM Climate Change Risk Index of the European Commission’s Disaster Risk Management Knowledge Centre (Updated in 2024)**:¹⁹ this quantitative analysis, relevant to humanitarian crises and disasters, is developed by a multi-stakeholder forum including organisations from the humanitarian and development sector, donors, and technical partners. It maps current and future climate change conditions and risks under optimistic and pessimistic climate scenarios.
- The **Notre Dame University Global Adaptation Initiative (ND-GAIN Country Index updated in May 2023)**:²⁰ It provides a summary of a country's vulnerability to climate change combined with its readiness to tackle climate change effects. This leads to a score (between 0-100) that shows the level of adaptation of the country on a matrix.
- The **Organisation for Economic Co-operation and Development’s (OECD) Social Institutions and Gender Index (SIGI) (updated in 2023)**:²¹ This Index measures discrimination against women in social institutions through an assessment of laws, social norms and practices, and the underlying drivers of gender inequality.

Table 4. Key indicators and statistics

Country	Disaster Risk, Climate Vulnerability and Fragility Indexes		Gender Indicator			
	INFORM Climate Change Current Risk (0-10)	ND-GAIN Climate Change Adaptation ²² (0-100)	Social Institutions and Gender Index (SIGI Index), 2023 Low [20-30] Medium [30-40] High [40-50] Very high [50-100]			
	0 = no risk 10 = highest risk	0 = no adaptation 100 = maximum adaptation	Discrimination in the family (ie family law, norms on marriage, divorce...)	Restricted physical integrity (ie SGBV)	Access to productive and financial assets (ie economic rights)	Restricted civil liberties (ie freedoms and rights of women)
Burkina Faso	7 Very high	37.6 High level of vulnerability and low level of readiness	29.2 Low	23 Low	29.8 Low	19.1 Low
Guinea	4.9	38.1	56	28.6	33.6	13.1

¹⁹ INFORM Climate change tool (2024), accessible online: <https://drmkc.jrc.ec.europa.eu/inform-index>.

²⁰ ND-GAIN Country Index (2020, updated in May 2023), Matrix available here: <https://gain.nd.edu/our-work/country-index/matrix/>.

²¹ SIGI Index (2023), accessible online: <https://www.genderindex.org>. Data explorer available here: [https://data-explorer.oecd.org/vis?tm=DF_SIGI_2023&pg=0&snb=1&vw=tb&df\[ds\]=dsDisseminateFinalDMZ&df\[id\]=DSD_SIGI%40DF_SIGI_2023&df\[ag\]=OECD.DEV.NPG&df\[vs\]=&lo=5&lom=LASTNPERIODS&dq=..&ly\[cl\]=MEASURE&ly\[rw\]=REF_AREA&to\[TIME_PERIOD\]=false](https://data-explorer.oecd.org/vis?tm=DF_SIGI_2023&pg=0&snb=1&vw=tb&df[ds]=dsDisseminateFinalDMZ&df[id]=DSD_SIGI%40DF_SIGI_2023&df[ag]=OECD.DEV.NPG&df[vs]=&lo=5&lom=LASTNPERIODS&dq=..&ly[cl]=MEASURE&ly[rw]=REF_AREA&to[TIME_PERIOD]=false)

²² <https://gain.nd.edu/our-work/country-index/matrix/>

Country	Disaster Risk, Climate Vulnerability and Fragility Indexes		Gender Indicator			
	INFORM Climate Change Current Risk (0-10)	ND-GAIN Climate Change Adaptation ²² (0-100)	Social Institutions and Gender Index (SIGI Index), 2023 Low [20-30] Medium [30-40] High [40-50] Very high [50-100]			
	<i>0 = no risk 10 = highest risk</i>	<i>0 = no adaptation 100 = maximum adaptation</i>	<i>Discrimination in the family (ie family law, norms on marriage, divorce...)</i>	<i>Restricted physical integrity (ie SGBV)</i>	<i>Access to productive and financial assets (ie economic rights)</i>	<i>Restricted civil liberties (ie freedoms and rights of women)</i>
	High	High level of vulnerability and low level of readiness	Very high	Low	Medium	Very low
Mali	6.7 High	34.6 High level of vulnerability and low level of readiness	69.4 Very high	55.6 Very high	38.8 Medium	44.9 High
Niger	6.7 High	35.5 High level of vulnerability and low level of readiness	84.1 Very high	33.8 Medium	84.1 Very high	22.9 Low
Nigeria	6.6 High	38.5 High level of vulnerability and low level of readiness	56.5 Very high	28.5 Low	35.4 Medium	46.9 High

Table developed with guidance from International Federation of Red Cross and Red Crescent Societies (IFRC) “World Disasters Report 2020: Come heat or high water. Tackling the humanitarian impacts of the climate crisis together” (2020). P.362-363. The highest indicators are highlighted.

Key highlights from table 4 on key indicators and statistics:

- According to the INFORM Climate Change data, four of our focus countries are at high risk due to climate change (Guinea, Mali, Niger, Nigeria), and one at very high risk (Burkina Faso) as a result of a comparison between vulnerability and adaptation abilities and efforts.
- According to the ND GAIN Index, all our focus countries 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.
- According to the latest SIGI Index which primarily measures gender discriminations in the social and legal frameworks (table 4), in the five countries, gender inequalities levels differ depending on the country as well as the type of rights that are considered. Gender discriminations in family laws and practices (including for instance legislation on child, early and forced marriage legislation) are very high in four countries out of five (Guinea, Mali, Niger

and Nigeria). Access to productive and financial assets is restricted, especially in Niger (very high), Guinea (medium), Mali (medium) and Nigeria (medium). There are less restrictions on civil liberties depending on gender (except in Mali and Nigeria where there are high) and less restrictions to physical integrity (except in Mali where there are very high). The SIGI mostly looks into legislation and less into actual implementation of policies and standards. The issue in all five countries remains with implementation of gender-related legislation.

5 Multi-Country Literature Review: Summarised Phase I Findings

The Phase I report summarised the findings of the first phase of the research project on the gendered impact of the climate crisis in the Sahel, with a particular emphasis on the lived experiences of girls and young women, and on how their rights are affected by the effects of climate change. The ten focus countries for the first phase of the research were Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mauritania, Mali, Niger, Nigeria, and Senegal. While this first research phase centred on a review of published literature, one KII was conducted in several countries to complement and validate the findings. The results of the literature review give a strong basis upon which our team built the methodology and structure of Phase II which consists in a FPAR Phase designed to dive more deeply into the lived experiences of girls and young women and the ways in which they are impacted by, and resilient to, climate change.

5.1 Impacts

The Sahel crisis is multidimensional and has serious gender-related causes and consequences. The available literature suggested that women and girls are the first to be negatively impacted by the multifaceted crisis in the sub-region, due to gender inequalities and norms. However, the specific impacts of climate change on girls and young women, or even on gender or on women, were not well documented, or remained hypothetical or vague, without a solid evidence base in the literature specific to the countries in scope. Disaggregated data was generally lacking, which made it difficult to deepen intersectional analysis. In the literature reviewed, climate change impacts were generally discussed but not necessarily with a focus on women and girls, and even less when looking specifically at the Sahel.

Access to resources: Women's access to resources such as land, water, energy, and food were most frequently discussed in the literature. Declining soil fertility, resource scarcity, and water scarcity were identified as the main issues increasing women's economic hardship.

Security and protection: Climate change and the crisis of insecurity in the region are mutually reinforcing. The link between the climate crisis and the growing security crisis, particularly in Burkina Faso, Chad, Mali, and Niger, were established. It was also reported that sexual and gender-based violence (SGBV), and child, early and forced marriage were exacerbated by conflicts and climate change induced displacement.

Migration: The available sources highlighted a link between climate change, conflict, population movements and migration of girls and young women in the Sahel. Extreme climate incidences, the frequency and intensity of which are increasing due to climate change, are reported to lead to temporary and permanent internal and cross border displacement and push populations, women as well as men, to move due to environmental degradation and related conflict over resources.

Education: The link between girls' education and climate change lacks evidence base, especially in the context of the Sahel. However, the barriers to girls' education in humanitarian crises are well documented.

The objective of the second phase of the study was to fill the research gaps by emphasising on the rights and lives of adolescent girls and young women.

5.2 Policy Frameworks

In most countries, the leading government actor is the Ministry of Environment and Sustainable Development, or a variation thereof. In some countries, an inter-ministerial council or committee exists. Information on specific focal points responsible for the climate and gender nexus was scarce.

The most recent climate policies of most countries have a gender component in the sense that women's vulnerabilities, rights, and/or responsibilities were considered to some extent. This ranged from dedicated gender sections in Nationally Determined Contributions (NDC) documents to gender being mainstreamed throughout the policy documents. Country policies also differed in the extent to which women's vulnerability was emphasised, vis-à-vis their resilience, agency, and necessary role in decision-making.

However, in most countries' policy frameworks, the rights of girls and young women in the context of climate change were not explicitly addressed. Where girls and young women were mentioned, focus remained on their vulnerability, rather than their resilience, or their agency in climate change mitigation and adaptation. Nigeria and Chad were notable exceptions.

While gender issues were addressed in most countries' climate policies, at least to an extent, many national gender policies appeared to be climate-blind even where they discussed environmental protection. In most gender policies the Phase I team was able to review, the term "climate change" was not even mentioned. For example, Nigeria's gender policy, despite including a sub-section on "Gender, Environment and Natural Resources," did not mention climate change at all. The same applied to The Gambia. In Guinea, too, references to climate change were largely absent from gender policies.

In many of the focus countries, the development of NAP and NDC documents was reported to have involved civil society representatives, including women's groups. However, little information was available about the extent and quality of their involvement by State actors. Another issue lied in the implementation of such policy frameworks, even when they did integrate a gender approach.

In many countries, the policy frameworks left considerable room for improvement when it comes to integrating the links between climate change and gender equality, as well as specific rights and resilience of girls and young women in all their diversity. Some of the policy frameworks were being reviewed and research have been conducted or commissioned by States such as Burkina Faso and Guinea in order to better analyse how gender should be integrated into policy documents such as NDCs and NAPs. Moreover, specific budget information was largely missing.

5.3 Mapping of Stakeholders and Programmes

Our review of PI's country strategies and programmes identified that in addition to PI's strategies taking into account climate change, a few programmes exist at country office level, mainly addressing the consequences of climate change as well as working towards climate adaptation. Beyond PI, a wide range of stakeholders -international organizations such as UN Women, continental organizations such as the African Union, regional blocks such as ECOWAS and national stakeholders- play a role in researching on, advocating for and taking action against climate change,

with varying levels of gender integration, some going beyond women's rights and tackling gender from a more intersectional perspective, but almost none addressing the impact of climate change on girls. Youth-led initiatives have been found and many more probably exist but lack visibility. Specific projects have been identified by the first phase of this study.

Based on the Areas Of Global Distinctiveness of Plan International, further analysis along key themes (education, health, protection, YEE, SRHR, agency) was then provided in the Phase I report in order to complement the analysis and identify key thematic areas to focus on as part of Phase II. A detailed stakeholders mapping produced in Phase I, enriched by findings from Phase II, is available in Annexe 2 of this report.

5.4 Recommendations From Phase I

The first phase of this study found that girls' rights are largely absent from climate change policies and programmes and are not considered in their diversity. This called for PI paving the way towards further research, advocacy, and programming for a better integration of girls' rights into the climate change discourse and actions. The analysis also highlighted the lack of consideration for girls' and women's agency and resilience as a key element and recommended to place more attention on girls and women as active drivers of climate action. The study identified several stakeholders and programmes in the field of climate and environment as well as gender, women, or girls' rights, which could lead to further partnership, coalition building, joint advocacy, and programming efforts.

Phase I then provided recommendations for the Phase II of this study, especially the selection of key thematic areas (food security, education, SRHR, and SGBV), focusing on agency and resilience of AGYW and not only impacts, as well as intersectionality.

The multi-country findings of the second phase of this research are found in this report. Country vignettes are embedded into the analysis in order to highlight selected country findings.

6 The Gendered Impact of Climate Change on Adolescent Girls and Young WOMEN IN the Sahel: Multi-Country Findings From FPAR (Phase ii)

Research Question 1: How do adolescent girls and young women experience and perceive the gendered impacts of climate change in their lives and the lived realities of their peers?

6.1 Adolescent Girls and Young Women in the Climate Crisis: Knowledge, Experiences, Impacted Rights and Unmet Needs

Prior to exploring research topics in-depth with AGYW participants, young women co-researchers inquired about their level of knowledge of climate change and the meaning that the AGYW participants themselves brought to this understanding. When asked, "what does climate change mean to you?", survey AGYW participants across the five countries (see table x for sample size) noted that climate change includes climate-related phenomena, such as irregular rainfall patterns (increased rainfall and decreased rainfall leading to flooding), disruption of seasons, excessive heat, rising sea levels, desertification and environmental degradation (e.g., pollution, deforestation).

They also noted consequences of climate change, such as impacts on agriculture and food insecurity, increased costs of living and poverty, increased health problems (e.g., chronic disease,

pollution-related diseases, waterborne diseases) and increased challenges for AGYW. In contrast, some AGYW participants expressed a general lack of understanding of the scope of climate change causes and implications, as well as uncertainty about climate change and its consequences. This situation highlights that while they are experiencing the effects of climate change, their limited climate education prevents them from recognizing that these challenges are climate-related. When asked where they get information about climate change, 20% (n=95) of survey AGYW participants responded that they do not have information about climate change and almost half (49%, n=229) of AGYW participants indicated that they want more information about climate change. They indicated they get information from diverse sources. Young women co-researchers attributed this lack of knowledge to factors pertaining to the lack of climate change awareness, especially as part of education in schools (with notable exception in Burkina Faso where it was reportedly embedded in the curriculum), as well as difficulties in making a link between climate change as a global issue and particular sectoral challenges in their lives (i.e. on food, water, health, protection...).

Across the sample, qualitative analysis shows the most frequent issues related to climate change identified or discussed by AGYW were extreme climate change related incidences, particularly excessive rain, increase in temperature, and longer periods of drought (see table 3). The survey results show a similar trend in the frequencies of climate-related events that AGYW identified as “problems” within their communities (see figure 4).

The research team expected sea level rise and coastal erosion to be more prominent in the findings due to the inclusion of Guinea in the sample. AGYW participants from Guinea and Nigeria indicated that sea level rise (n=17 and n=11, respectively) and coastal erosion were concerns within their communities (n=4 and n=28 respectively). Coastal erosion and sea level rise were reported at lower frequencies (0.4 % and 2.0 %, respectively). The explanation lies in the fact that AGYW participants did not live exactly near the coastal areas. Additionally, young women co-researchers noted that these concepts were complex for AGYW to understand, which may have affected the results in Guinea. While a coastal line area was previously identified for data collection, for safeguarding reasons for the young women co-researchers, two other locations were preferred, which were slightly more distant from the coast despite being in the coastal line.

It is noteworthy that the perception of climate-related problems showed some variation between the two age groups. For instance, the 15-17 age group reported higher concerns about flooding and heavy rain than the 18-24 age group. This discrepancy reflected the differences in risk perception or exposure between adolescent girls and young women, warranting further investigation.

Table 5. Qualitative data frequencies table across the sample - number of FGD and qualitative survey data documents in which the code appears²³

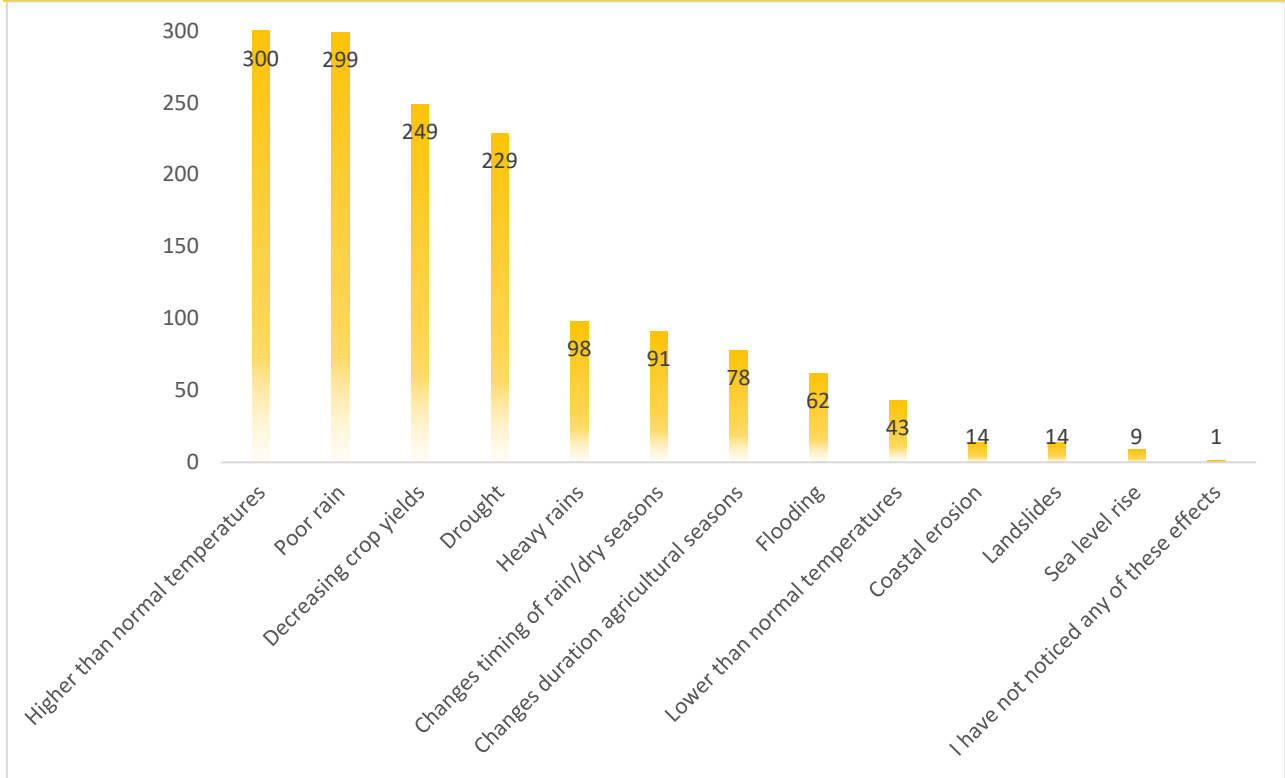
	Mali	Guinea	Niger	Burkina Faso	Nigeria	Total
Number of Coded Documents per Country (n)	11	18	11	6	12	58²⁴
Extreme Climate Events	100% (n=11)	100% (n=18)	100% (n=11)	100% (n=6)	100% (n=11)	98% (n=57)
Excessive Rain	100% (n=11)	78% (n=14)	100% (n=11)	100% (n=6)	91% (n=10)	90% (n=52)
Heat	82% (n=9)	56% (n=10)	100% (n=11)	100% (n=6)	73% (n=8)	76% (n=44)
Drought	91% (n=10)	61% (n=11)	73% (n=8)	100% (n=6)	64% (n=7)	72% (n=42)
Flooding	55% (n=6)	61% (n=11)	18% (n=2)	17% (n=1)	100% (n=11)	53% (n=31)
Wind	82% (n=9)	28% (n=5)	18% (n=2)	0	0	28% (n=16)
Sandstorm	9% (n=1)	0	9% (n=1)	0	55% (n=6)	14% (n=8)
Food Security Impact	82% (n=9)	100% (n=18)	100% (n=11)	100% (n=6)	100% (n=11)	95% (n=55)
Health Impacts	91% (n=10)	100% (n=18)	91% (n=10)	100% (n=6)	100% (n=11)	95% (n=55)
Water	100% (n=11)	100% (n=18)	45% (n=5)	100% (n=6)	100% (n=11)	88% (n=51)
Education Impact	82% (n=9)	78% (n=14)	91% (n=10)	100% (n=6)	100% (n=11)	86% (n=50)

²³ Detailed codebook and definitions of the codes is found in Annexe to this report.

²⁴ While 58 documents were analysed using MAXQDA, it is important to note that data from multiple AGYW participants are presented in each transcript. Due to the complexity of the multi-country study and the time allocated for the assignment, it was not possible to analyse the qualitative data using absolute sample size frequencies. However, as is standard practice in qualitative analysis, the overall themes are best represented by trends observed across the sample and not by absolute sample sizes.

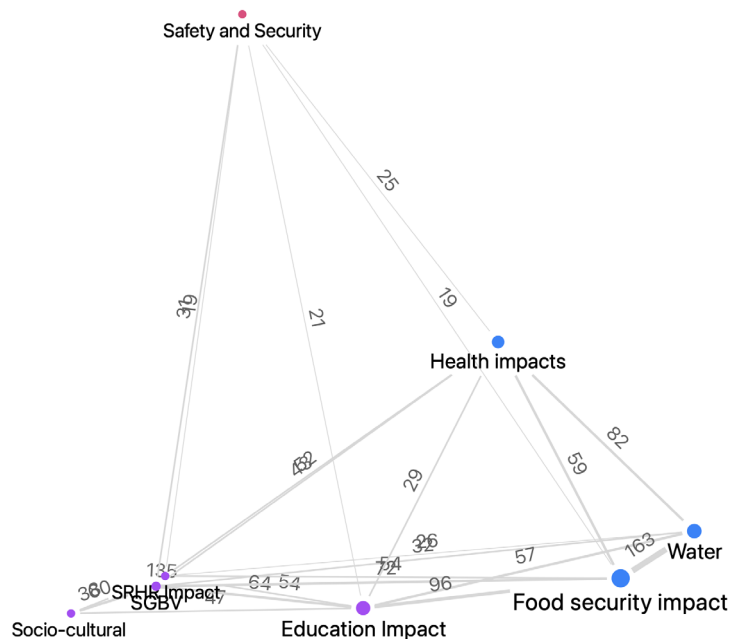
	Mali	Guinea	Niger	Burkina Faso	Nigeria	Total
Number of Coded Documents per Country (n)	11	18	11	6	12	58²⁴
Environmental Degradation & Destruction of Property	100% (n=11)	100% (n=18)	27% (n=3)	100% (n=6)	82% (n=9)	81% (n=47)
Safety and Security	82% (n=9)	67% (n=12)	82% (n=9)	83% (n=5)	100% (n=11)	79% (n=46)
Socioeconomic Consequences	64% (n=7)	61% (n=11)	100% (n=11)	67% (n=4)	82% (n=9)	72% (n=42)
SGBV	36% (n=4)	67% (n=12)	91% (n=10)	100% (n=6)	82% (n=9)	71% (n=41)
Socio-Cultural / Gender/ Community Norms	45% (n=5)	50% (n=9)	64% (n=7)	100% (n=6)	82% (n=9)	62% (n=36)
SRHR Impact	18% (n=2)	44% (n=8)	91% (n=10)	83% (n=5)	27% (n=3)	48% (n=28)

Figure 5. Survey results on extreme climate events affecting communities of AGYW (n=472)



Code mapping analysis was conducted to explore how codes intersect within documents. The closer the codes are on the map, the more frequently they were discussed together by AGYW participants. The coding illustrated that the most impacted rights related to these aspects of climate change are food and water security, health, and education. Additionally, for AGYW, these consequences of climate change exacerbate SGBV and SRHR through child, early and forced marriage (CEFM) or sexual exploitation, as these actions are the direct result of increased poverty and food insecurity linked with decreased agricultural yields, impact on access to food and gender inequality and social norms in this region. Two issues that were also commonly discussed among AGYW in the study were environmental degradation mainly through improper solid waste management, air pollution, as well as destruction of property as a result of extreme climate events such as flooding. This theme emerged from the data organically, as no questions were included regarding environmental degradation. AGYW participants associated climate change with the spread of multiple waste materials outside of their homes which inadvertently pollutes the surrounding environment. This is due to environmental degradation, such as garbage-filled rivers, made the effects of climate change worse, specifically during flood incidences. This was particularly true in Guinea.

Figure 6. Analysis of key thematic areas



Survey results also show that AGYW participants felt some of their needs are not being met due to climate change (see figure 6). Most AGYW participants (n=376) indicated that food, water, or education needs were not being met, followed by financial support to adapt to climate change (n=212), psychosocial support (n=110) and information (n=102). While trends were similar across country contexts (see figure 7), there were notable differences when data on lived experiences was considered (see figure 8). AGYW participants who were displaced or experienced migration reported the highest unmet needs due to climate change (see figure 9).

Figure 7. Survey result-Unmet needs due to climate change

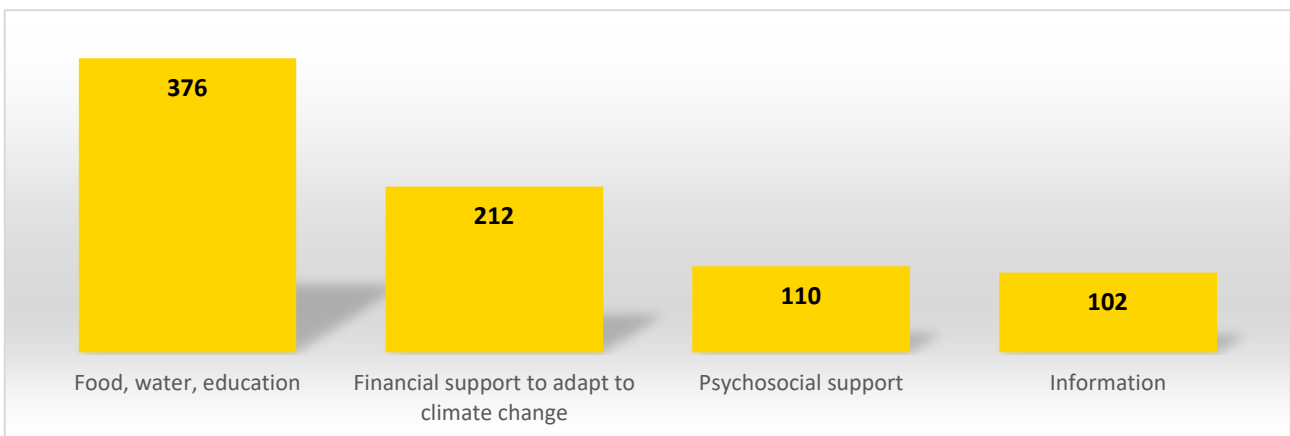


Figure 8. Survey results-Unmet needs due to climate change by country (n=472)

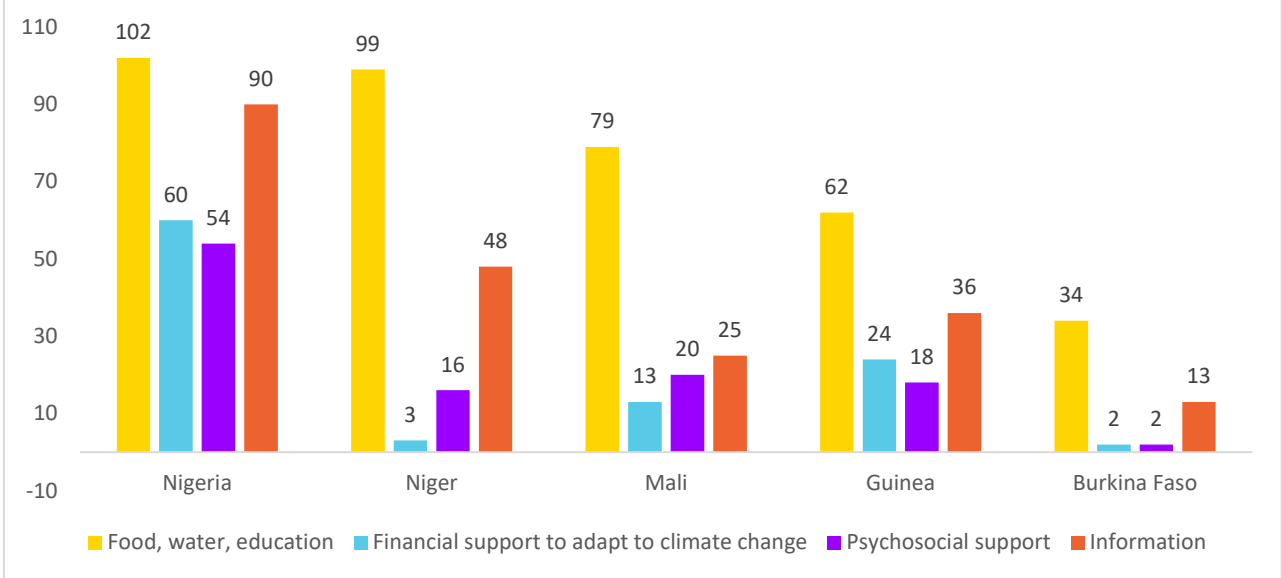


Figure 9. Survey results-Unmet needs due to climate change by lived experiences

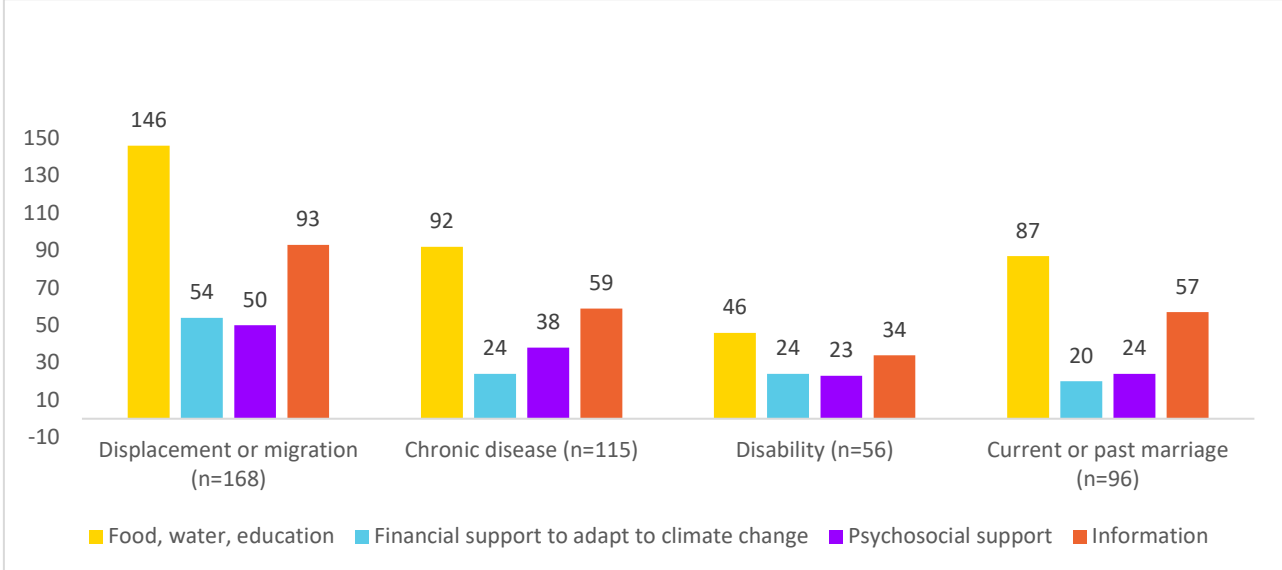
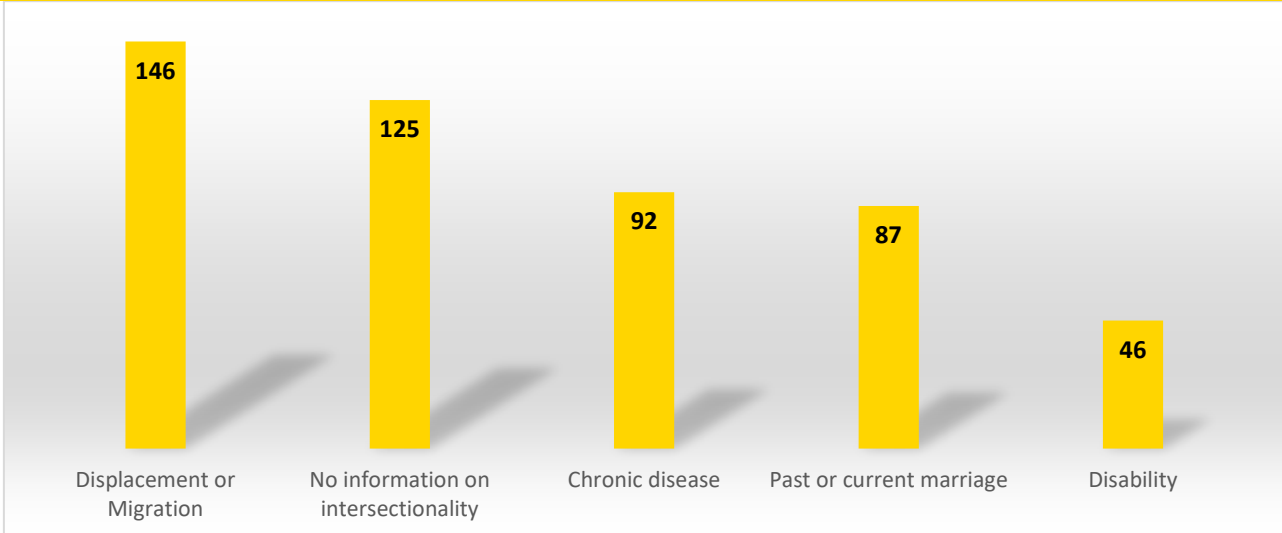


Figure 10. Survey results regarding unmet needs (food, water, education) due to climate change by characteristics of lived experiences (n=472)



When asked about specific activities that they participated in, most survey respondents participated in household chores, followed by water collection and the preparation of food (see figure 10). Many AGYW participants (59%) also agreed that climate change has affected these activities, as extreme climate phenomena was associated with a disruption in agricultural activities and increased economic hardship. These consequences, coupled with decreased access to water and firewood, directly affected AGYW participation in household chores, as their responsibilities were often to fetch water and collect firewood. Activities were further disrupted by safety concerns regarding SGBV, which posed increased risks for AGYW when traveling further in search of household resources.

When considering the intersectionality of lived experiences, 70% of AGYW participants experiencing displacement or migration reported that climate change has affected their activities, compared to 66% living with a disability, 60% of those living with a chronic disease, 58% in a current or past marriage and 54% of individuals who do not have any of these lived experiences (see figure 11).

In Guinea, the most prevalent activity among AGYW was household chores, with 60 respondents aged 15-17 and 31 respondents aged 18-24 reporting participation (about 90 per cent). This high engagement in domestic responsibilities was particularly noteworthy in the context of climate change, as it increased the time and energy burden on AGYW as a result of social and gender norms, limiting their ability to adapt to environmental stressors or pursue educational and economic opportunities.

Figure 11. Survey results-Activities that AGYW participate in (n=472)

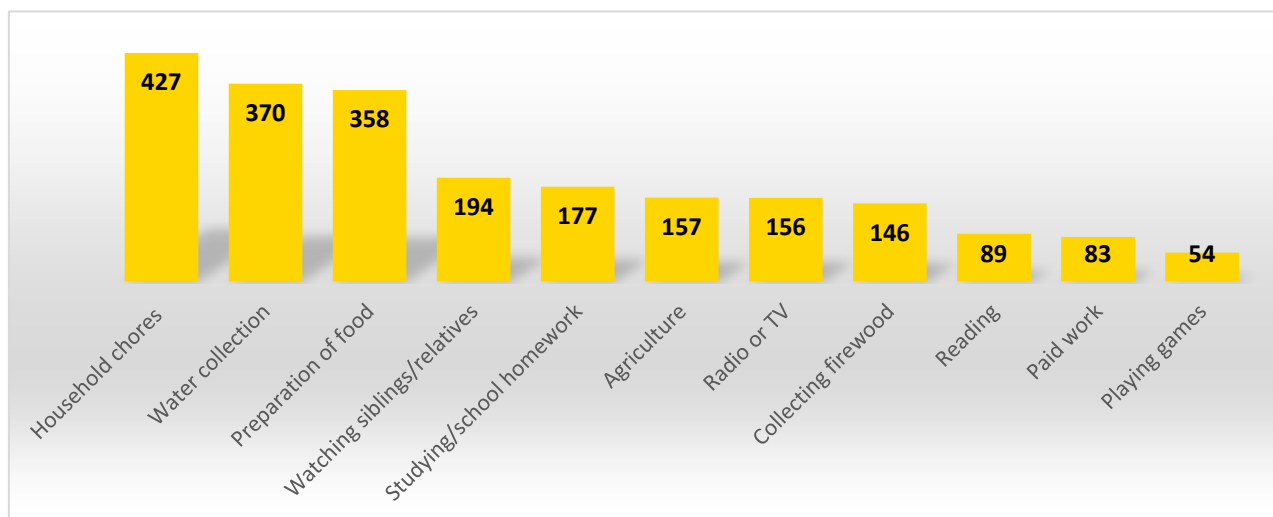
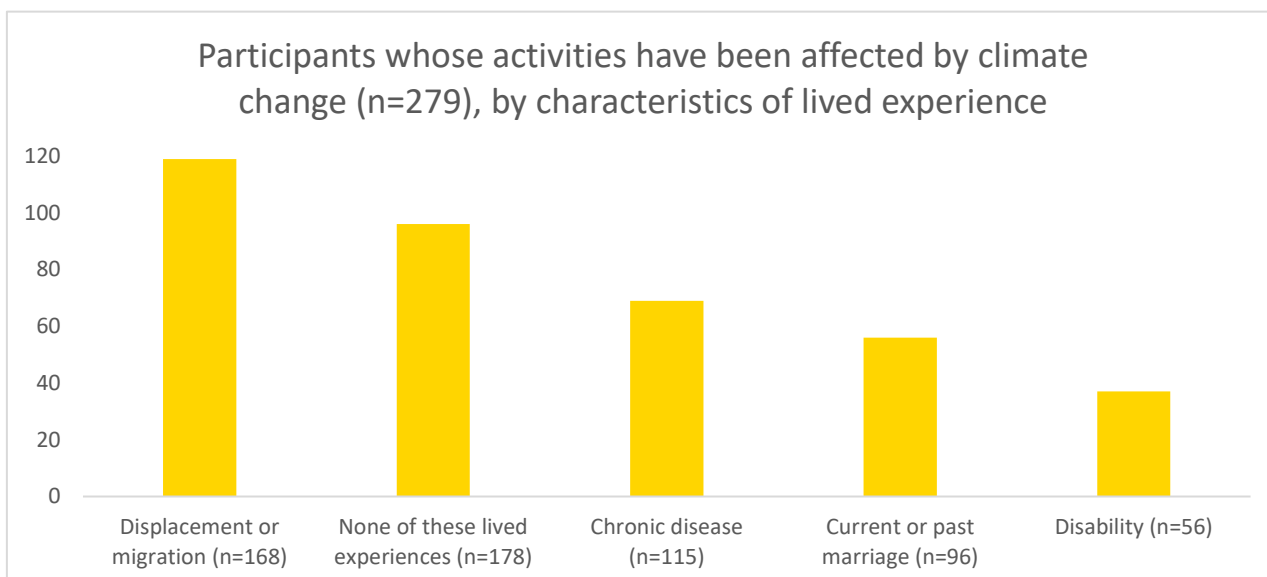


Figure 12. AGYW participants whose activities have been affected by climate change by characteristics of lived experience



Summary

- There are varying levels of knowledge and understanding of “climate change” among AGYW participants.
- Extreme climate-related incidences were reported across the sample.
- The food, water and education rights and needs of AGYW participants were unmet due to climate change, regardless of country.
- Many who reported unmet needs also reported experiences of displacement or migration, chronic disease, current or past marriage or disability.

6.2 The Impact of Climate Change on Adolescent Girls and Young Women’s Right to Food in the Sahel

Based on the data analysed, one of the most affected areas is food security, in violation of the human right to food.

In the questionnaire that was administered to AGYW participants through the KoboCollect application, a simple definition of food security was provided to the AGYW participants: according to the United Nations, “A person is food insecure when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of resources to obtain food.”²⁵ The definition went on to provide the three main components of the right to food : “availability (there is enough food), accessibility (everyone can reach this food) and adequacy/quality (the food can be eaten and is nutritious).”²⁶ In addition, sustainability is now also recognized in the literature as an important component of the

²⁵ United Nations definition.

²⁶ Research Protocol.

right to food, putting an emphasis on the need to ensure the right to food of current and future generations through resilient, sustainable and ecological food systems.

In the Kobo collect questionnaire, specific questions were asked to participants regarding food security. The co-researchers asked whether participants had noticed any effects on food security with a list of potential effects.²⁷ The participants were also asked whether these issues regarding food or water particularly impact adolescent girls and young women in their community. They were also given the opportunity to explain whether or not they felt that these issues regarding food and water were related to climate change in their community. During the FGDs, participants were also asked questions regarding the impacts of climate change on their food security.

In the original questionnaire and FGD protocol, the choice was to include water into food security in order to avoid multiplication of questions. However, when looking at the large number of responses and explanations regarding water related issues, the research team decided to split the two issues in the analysis and report writing. Therefore, while the current section will synthesise analysis of responses on the impacts of climate change on adolescent girls and young women's right to food, the next section will look at their right to water specifically.

6.2.1 Adolescent Girls and Young Women Experience and Witness High Levels of Food Insecurity in the Region

Across the sample, according to adolescent girls and young women (AGYW), food security is related to climate change. In Mali, interpretation of data by young women co-researchers indicate that 91 % of survey respondents in Bla and Segou responded that food and water related issues are linked with climate change in the communities where they collected data in Bla and Segou, because people feel the direct effects in their daily lives, particularly when it comes to finding drinking water and food.²⁸ In Burkina Faso, 86% of survey respondents responded that food and water related issues are linked with climate change.²⁹ The young women co-researchers interpreted the quantitative and qualitative data around food security in Ouahigouyah by explaining that the drying up of rivers and reservoirs, poor rainfall distribution and consequential low agricultural yields are seen as consequences of climate change in Burkina Faso.³⁰

Adolescent girls and young women identified in this study that, among the areas impacted by climate change, food security was most affected, both for themselves, for other adolescent girls and young women, and for their communities at large.

²⁷ The proposed responses were the following:

Food prices have significantly increased

- a. Less food is produced locally
- b. It is more difficult to access food
- c. Farmers have had to change their practices to produce food
- d. It is harder for me to get food of good quality
- e. There is less water available in my household
- f. The water in my household is of poorer quality than before
- g. Other (specify)
- h. I have not noticed any of these effects.

²⁸ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Mali. 91 out of 99 survey respondents responded that food and water related issues are linked with climate change. In Quantitative data from Kobo Collect in Mali.

²⁹ Quantitative data from Kobo Collect in Burkina Faso.

³⁰ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso.

“We're not fulfilled, we have to suffer to eat and drink”

Adolescent girl participant (15–17 years old),³¹ Ouahigouya, Burkina Faso

When looking at code frequencies across documents, “food security impact” was the most frequent code used in our analysis, ranging at around 95% of all the qualitative data analysed. For instance, according to the young women co-researchers in Guinea when analysing the data, the code cloud from MAXQDA analysis suggests that water and food security are priority issues in the lives of adolescent girls and young women, with a strong link to climate change.³² 55 out of 58 analysed documents (FGD notes, Kobo responses, Photo based FGD notes) showcased segments where food security was identified as an issue. For instance, in Burkina Faso, Niger and Guinea, all documents mentioned food security as an issue. When looking at all segments coded by our team, 10 per cent relate to food security, malnutrition or decreased agricultural yields.

Nearly 86% of survey respondents in Mali, 78 % of survey respondents in Burkina Faso and 77% of survey respondents in Niger indicated that food and water related issues particularly impact adolescent girls and young women.³³ In Burkina Faso, the co-researchers interpreted the quantitative and qualitative data around food security by explaining that adolescent girls are affected by climate change effects on food and water because they do most of the household chores (including food and water related chores), and this in turn also influences their study (attendance, concentration, etc.) and their development, which necessarily reduces their chances of success.³⁴ It emerged from the discussions with participants in Mali that hunger and chronic illnesses particularly affect adolescent girls and young women.³⁵

“A lot of children no longer go to school, because they to go look for food and water every day and when they are back, school hours are over.”

- Adolescent girl participant (15–17 years old),³⁶ Konduga, Nigeria

In addition, as described in the previous section, adolescent girls and young women who participated in this study identified extreme climate related events, particularly rain, heat, and drought as direct frequent issues they experienced as a result of or linked with climate change. These climate change related impacts are directly and indirectly linked with the right to food and food security. Indeed, these extreme climate related events directly impact food availability, accessibility, adequacy, and sustainability as a result of decreased, destroyed or poorly qualitative agricultural yields. These extreme events also impact sources of livelihood and forces AGYW to turn to alternative means of survival such as life-threatening mining.

“Yes, many young women go to the mines in search of a living.”

- Adolescent girl participant (15–17 years old),³⁷ Bla, Mali

³¹ Peer-to-peer survey participant.

³² Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

³³ Quantitative data from Kobo Collect in Niger, Burkina Faso, and Mali. In Niger 85 out of 110 survey respondents in Niger indicated that food and water related issues particularly impact adolescent girls and young women. In Mali, 86 out of 99 survey respondents in Niger indicated that food and water related issues particularly impact adolescent girls and young women.

³⁴ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso.

³⁵ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Mali.

³⁶ Peer-to-peer survey participant.

³⁷ Peer-to-peer survey participant.

Combined with gender inequalities, exacerbate SGBV and a lack of SRHR experienced by adolescent girls and young women through CEFM and sexual exploitation.

“Climate change has led girls and women to exchange their bodies for food.”

- Young woman participant (18–24 years old),³⁸ Konduga, Nigeria

Figure 13. Photovoice photo showing a spoiled field

CAPTION: Photo taken by young woman co-researcher 2 in Forecariah, Guinea

Description by young women co-researchers “It used to be a field used for agriculture. Because of the (excessive) rain, the field is spoiled. Even if people would cultivate there, it would not bear fruit. The land is completely abandoned.”



6.2.2 All Components of the Right to Food of AGYW and Their Families Are Affected by Climate Change

Food availability

When looking at food availability, AGYW identified a decrease in agricultural productivity and crop yields due to two main climate related factors: on the one hand irregular and insufficient rainfall and droughts; and on the other hand, excessive rainfall, and flooding. These erratic rainfall patterns, prolonged droughts, and extreme temperatures have led to a substantial decline in agricultural yields in the Sahel areas where the AGYW participated.

“They (adolescent girls and young women) are financially unstable, and their families are poor because the economy of our community is based on agriculture, and unfortunately agricultural yields are getting lower and lower due to lack of rain.”

- Young woman participant (18–24 years old),³⁹ Bla, Mali

³⁸ Peer-to-peer survey participant.

³⁹ Peer-to-peer survey participant.

Figure 14. Photovoice photo showing a partly dry tree

CAPTION: Photo taken by young woman co-researcher in Segou, Mali

Description by AGYW participants and young women co-researchers “this image shows the consequences of climate change on trees in the dry season, with one part of the tree in bloom and the other withered off.”



Figure 15. Photovoice photo showing a dry tree

CAPTION: Photo taken by young woman co-researcher in Ouallam, Niger

Description by the young women co-researchers ‘This tree reflects the reality of this area and the effect of climate change on these trees, as its leaves used to benefit both the community and the animals. But today, the tree is changing rapidly and excessively, having a negative impact on the life of the community.’



For instance, in Guinea, AGYW noted the reduction of food availability, leading to food insecurity. AGYW participants indicated that less food is produced, that farmers have changed their production methods, and they encounter more difficulties in accessing quality food.⁴⁰ In Burkina Faso, AGYW described a decrease in agricultural yields due to lack of rainfall and droughts, leading to food insecurity. In Nigeria, they explained that food production was affected by poor rain and droughts as well the inability to plant crops due to flooding. In Niger, AGYW revealed declining agricultural productivity due to climate change impacts such as erratic rainfall, drought, and high temperatures leading to crop failures and reduced crop yields. In Mali, irregular rainfall patterns affect the quantity of crop yields: while insufficient rainfall leads to decreasing/poor agricultural yields, difficulty in

⁴⁰ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

harvesting, and lack of crop growth, abundant rainfall also cause crop losses. The data in Burkina Faso and Niger also suggested the scarcity of food products.⁴¹ From the qualitative data they interpreted, the young women co-researchers indicated that food security in Burkina Faso was impacted by flooding, upheaval of seasons and the disappearance of certain animal species as a result of extreme climate events.⁴² The data in Burkina Faso and Niger also suggested a difficult access to land for women (which can be farmed) and credit.⁴³

“The lack of rain causes drought, which makes it difficult to grow crops and leads to a lot of fatigue.”

- Adolescent girl participant (15–17 years old), 44 Ouahigouya, Burkina Faso

Adolescent girls and young women also described changes in the duration of agricultural seasons. For instance, in Burkina Faso, AGYW described the modification of agricultural seasons, making it increasingly difficult to cultivate and harvest crops. AGYW in Guinea noticed a decrease in agricultural yields due to changes in rainfall patterns, temperature, and agricultural seasons. In Nigeria, they also noted the loss of fish and other aquatic resources necessary for food security. While in Niger, they mentioned the drying up of water sources like the Niger River, in Burkina Faso, they highlighted challenges in maintaining livestock due to lack of grazing land and water. Animals are also victims of extreme climate conditions such as heat and flooding.

“My animals were swept away during last year's flooding.”

- Young woman participant (18–24 years old),⁴⁵ Bla, Mali

Figure 16. Photovoice photo showing cow with no fresh grass

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

Description by young women co-researchers “Increased drought is also having a serious impact on animals. They are also suffering due to the difficulty of obtaining fresh grass, which is their main source of food.”



⁴¹ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso.

⁴² Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso.

⁴³ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso and Niger.

⁴⁴ Peer-to-peer survey participant.

⁴⁵ Focus Group Discussion Participant.

Figure 17. Photovoice photo showing degraded soil as a result of drought

CAPTION: Photo taken by young woman co-researcher and participant in Tillabery, Niger

Description by AGYW participants and young women co-researchers “Degraded soil: the soil used to be fertile, but due to low rainfall, a drought has set in, reducing crop yields.”



Figure 18. Photovoice photo showing plastic waste creating soil degradation

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

Description by the AGYW participants and young women co-researchers “This image was taken to show the imprint left by human beings on climate change through the poor management of waste, especially plastic waste. They in turn prevent water penetrating the soil and kill less resistant plants over time, so the soil degrades.”



Food accessibility

Food accessibility encompasses physical access (possibility of reaching food), and economic access (means to produce directly or to afford food). This study found that both physical access and economic access to food is impeded by a combination of climate change effects and related compounded crises (economic, humanitarian, displacement). For instance, in Niger, 76% of survey respondents expressed that it was more difficult to access food in the past three years.⁴⁶

“We also can’t get enough to eat. Before, when we planted seeds, we could hope to harvest and cook food for the family, but now it’s hard to get any food.”

– Adolescent girl participant (15–17 years old),⁴⁷ Ouahigouya, Burkina Faso

⁴⁶ 86 out of 112 survey respondents in Niger. Quantitative data from Kobo Collect in Niger.

⁴⁷ Focus Group Discussion participant.

The previously highlighted challenges in maintaining food availability/production among dire climate conditions have resulted in food scarcity and rising food prices, making it increasingly difficult for households to economically access nutritious and affordable food. For instance, 96% of survey respondents in Guinea, 92% of survey respondents in Niger and 86% of survey respondents in Mali indicated that food prices had drastically increased in the past three years.⁴⁸ In Mali and Burkina Faso, AGYW highlighted that declining agricultural yields have caused food prices to rise due to the scarcity of certain food items, making quality food economically inaccessible. In Burkina Faso, the young women co-researchers interpreted the quantitative and qualitative data around food security by explaining that low rainfall results in poor harvests which in turn leads to higher prices.⁴⁹

“Because of low yields due to climate change, it is difficult to get enough to eat, food is scarce and everything has become expensive in the market.”

- Young woman participant (18–24 years old),⁵⁰ Coyah, Guinea

“The price of food has risen and our plantations are failing, making it difficult to feed ourselves.” - Young woman participant (18–24 years old),⁵¹ Forecariah, Guinea

In Guinea, AGYW put an emphasis on the high cost of food and increases in prices as a result of climate change effects such as floods, making it increasingly difficult for families to afford nutritious meals. In Nigeria, AGYW observe an increase in food insecurity in the community with a rising lack of access to adequate and nutritious food combined with the inability to afford and access food, leading to food insecurity and malnutrition. AGYW in Niger describe the inability to afford basic needs such as sufficient food, and therefore having to resort in reducing the number of meals per day. In Niger, they also described the negative impacts of climate change on livelihoods and income in their families and wider communities, especially for farmers, women, and people depending on the sale of food including fish. The loss income impacts the livelihood and financial means of the families of AGYW, including their basic needs and rights, which are strongly affected. AGYW in Guinea depicted a reality in which climate change disrupts the livelihoods and incomes of women farmers and food vendors, including their mothers, therefore impacting the ability of their families and themselves to afford food.

In terms of physical accessibility, it was identified that floods and heavy rains were a major source of food insecurity impeding not only production (food availability) but also the ability to physically access food due to impractical roads, flooded paths, the inability of food vendors to work in the rain, transport disruptions... Extreme heat was also identified as an obstacle to food accessibility given the difficulty in walking under hot weather to get food without putting health at risk.

“When it rains, the water comes into our houses and onto the roads, making it impossible for us to walk.”

- Adolescent girl participant (15–17 years old),⁵² Coyah, Guinea

When looking at food adequacy and sustainability, in Burkina Faso, AGYW witnessed an increase in the use of pesticides to protect crops, leading to health issues. In Nigeria and Niger, they explained that food production was affected by a degradation of soil fertility due to climate change

⁴⁸ Quantitative data from Kobo Collect in Guinea, Niger, and Mali. 104 out of 112 survey respondents in Niger.

⁴⁹ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso.

⁵⁰ Focus Group Discussion participant.

⁵¹ Focus Group Discussion participant.

⁵² Peer-to-peer survey participant.

impacts. In Guinea, AGYW noted the reduction of food quality, leading to food insecurity and malnutrition.

“Nowadays we use pesticides to protect our crops, which we didn't do before, so we've noticed that there are too many diseases nowadays. Even though we (AGYW) are still young, we have adult diseases, which are very complex to treat.”

- Young woman participant (18–24 years old),⁵³ Ouahigouya, Burkina Faso

The high temperatures also cause rapid spoilage of food, further exacerbating the challenges in food preparation and storage. In Burkina Faso, AGYW participants described difficulties in preserving food without chemical preservatives because of extreme heat, unlike in the past. In Mali, AGYW participants also described such difficulties in storing and preserving food because of extreme heat, which spoil quickly.

“Sometimes you don't have an appetite and you don't eat quality food, the food rots quickly because of the heat.”

- Adolescent girl participant (15–17 years old),⁵⁴ Segou, Mali

In Mali, AGYW participants described the lack of dietary diversity with vegetables being expensive and sometimes inaccessible, as well as the lack of appetite due to heat, all of this affecting health. In Guinea, the AGYW participants put an emphasis on the negative health impacts from consuming contaminated or poor-quality foods. In Niger, the link between malnutrition, reliance on less nutritious foods and health issues was highlighted.

“Of course it has made my life worse, fresh vegetables are hard to find and expensive.” - Young woman participant (18–24 years old),⁵⁵ Segou, Mali

Reduced crop yields exacerbate food insecurity, leading to nutritional deficits that affected adolescent girls and pregnant women. Nutritional deficits resulting from reduced crop yields can have long-lasting effects on the health and development of adolescent girls and young women.

“Access to quality food is difficult, the wells are drying up, and some of the adolescent girls are suffering from malnutrition.”

- Adolescent girl participant (15–17 years old),⁵⁶ Bla, Mali

Young women co-researchers in Guinea said that AGYW participants in the focus group discussions explained that they had to harvest unripe food so that they could sell it more quickly to meet their needs, and these unripe products are not of good quality.⁵⁷ They also explained that many products are imported in Guinea.⁴² In Guinea, the young women co-researchers recall responses from AGYW participants who said that some women grow or sell produce close to polluted or rubbish-infested ponds and streams, which raises questions about hygiene and food safety.⁵⁸ In addition, the co-researchers recall that an adolescent girl said in an FGD that during the rainy season, the food sold

⁵³ Focus Group Discussion participant.

⁵⁴ Focus Group Discussion participant.

⁵⁵ Focus Group Discussion participant.

⁵⁶ Peer-to-peer survey participant.

⁵⁷ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁵⁸ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

is not of good quality: food vendors (mostly women) cannot sell because of the heavy rains, so they keep their food until the next day, which leads to poor quality food and disease (e.g. rotten fish unfit for consumption).⁵⁹ The data in Burkina Faso also suggested a reduction in the quality of food products.⁶⁰

“It affects us so much; food is almost impossible to find and very expensive (and poor) in terms of quality.”

- Young woman participant (18–24 years old),⁶¹ Segou, Mali

Figure 19. Photovoice photo showing the effect of increasing temperatures on storage and quality of mangoes due to climate change

CAPTION: Photo taken by young woman co-researcher and AGYW participant in Ouallam, Niger

Description by AGYW participants and young women co-researchers
“Rotten mangoes reflect the intense heat caused by climate change. This leads to loss of food due to the lack of preservation systems and can have consequences for food security because they can be sold to the community in their current state, causing health impacts.



⁵⁹ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁶⁰ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Burkina Faso.

⁶¹ Focus Group Discussion participant.

Figure 20. Photovoice photo showing the effect of increasing temperature on banana trees due to climate change

CAPTION: Photo taken by young woman co-researcher and participant in Tillabery, Niger

Description by AGYW participants and young women co-researchers 'This banana plantation used to produce good ripe bananas. But now we're seeing a radical change because of the poor distribution of rain and the intense heat.'



6.2.3 Adolescent Girls and Young Women Use Strategies to Survive and Cope with Food Insecurity

In the face of these challenges, community members, particularly women and girls, have had to adopt various coping strategies. AGYW described that they put in place measures in their daily lives in order to cope with food insecurity on a daily basis.

They describe the need to reduce the number of meals per day (i.e. not taking the recommended three meals a day) or even eating food normally reserved for cattle, such as in Niger.

“We don't cook on daily basis because we don't have enough food.”

- Young woman participant (18-24 years old),⁶² Jere, Nigeria

Interpretation of data by young women co-researchers in Niger put an emphasis on adaptation and resilience strategies in the food and security sector including the practice of pledging or selling upcoming harvests before the end of the season; creating cereal banks in certain communities; off-season cultivation in areas suitable for cultivation; and use of adapted crops.⁶³

These forced coping strategies also include relying on less nutritious foods, engaging in alternative income-generating activities, and engaging in casual labour. For instance, many explained they helped their mothers to sell produce in the market. One strategy is also to borrow food or money from neighbours/local shopkeepers, or to sell assets in order to afford food in the context of increased prices of food. **In Burkina Faso**, AGYW described efforts to adapt through small-scale gardening and water harvesting.

“They (AGYW) are obliged to help out around the house with the work and to sell a few products to support the family when the harvests are not favourable.”

- Young woman participant (18-24 years old),⁶⁴ Ouahigouya, Burkina Faso

⁶² Peer-to-peer survey participant.

⁶³ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Niger.

⁶⁴ Peer-to-peer survey participant.

The AGYW participants and young women co-researchers highlighted a number of gender⁶⁵ Young women co-researchers in Niger used the word “food discrimination” to describe food security issues faced by girls and women in the communities in the study areas of Tillabery and Ouallam.⁶⁶

“As the price of food has risen at home, we don't prepare much (food), and to get access to water we have to travel many kilometres.”

- Adolescent girl participant (15–17 years old),⁶⁷ Ouahigouya, Burkina Faso

GUINEA

In Guinea, 56 out of 96 AGYW respondents (58%) indicated that AGYW are involved in agricultural and economic activities.⁶⁸ Also, the lack of means on the part of parents pushes some girls to leave their household in search for food.⁶⁹ For example, a young woman co-researcher highlighted raw data from Kobo in which one of the AGYW participants explained that she was the only one working in her family selling condiments/vegetables, even in the rain, exposing her to illness.⁷⁰ Young women co-researcher⁷¹ The young women co-researchers in Guinea also highlighted the problems of early pregnancies and CEFM as alternative coping mechanisms to poor livelihoods, as poor harvests and low agricultural yields and families no longer being able to meet their needs.⁷²

“Life is hard for us (AGYW) because we must go begging for food and money in order to survive.” - Young woman participant (18–24 years old),⁷³ Konduga, Nigeria

NIGER

In Niger, the co-researchers highlighted the practice of CEFM is also used as a means of survival for young girls and for their parents.⁷⁴ Co-researchers in Niger also highlighted “survival sex” as a source of income to alleviate the suffering of poverty.⁷⁵

“With low farm incomes, we are plunged into poverty. Some families are forced to give their children away in early marriages to free them from the burden of dropping out of school.” - Adolescent girl participant (15–17 years old),⁷⁶ Coyah, Guinea

These strategies, while necessary for survival, often come at a significant personal and social cost.

⁶⁵ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁶⁶ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Niger.

⁶⁷ Peer-to-peer survey participant.

⁶⁸ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁶⁹ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁷⁰ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁷¹ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁷² Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Guinea.

⁷³ Peer-to-peer survey participant.

⁷⁴ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Niger.

⁷⁵ Interpretation of quantitative and qualitative data by the team of co-researchers and mentor from Niger.

⁷⁶ Focus Group Discussion participant.

6.2.4 Linkages Between the Right to Food of Adolescent Girls and Young Women and Other Key Human Rights

The right to food, which is impacted by the climate crisis, has linkages with the realization of other rights of AGYW such as water, health, protection, and education, as well as existing gender inequalities and additional difficulties due to migration status for instance.

“At the moment, everything has become complicated [...]. There's no food anymore, so our first priority is to feed ourselves and our families. We are forced to put our children's schooling on hold because resources are limited, and as displaced people it is not easy.” - Young woman participant (18-24 years old),⁷⁷ Ouahigouya, Burkina Faso

The lack of nutritious food has also led to health issues, including malnutrition and increased susceptibility to diseases. In Burkina Faso, AGYW participants highlighted climate change-induced health problems due to changes in diet and food preparation. For instance, AGYW in Burkina Faso explained that they had to cook using old plastic sachets because of not having any other sources to cook, which particularly affects AGYW who are in charge of preparing meals.

“We (AGYW) no longer have enough to eat; there are no more trees, so we cannot even get wood to cook our meals. The fact that we only make fire with collected bags causes us a lot of illness and discomfort. Sometimes we eat raw meals and often meals that are totally perfumed by the smell of the (plastic) sachets.”
- Adolescent girl participant (15-17 years old),⁷⁸ Ouahigouya, Burkina Faso

The lack of reliable water sources, both for irrigation and domestic use, has compounded the food security crisis. The drying up of wells and ponds has made it arduous for adolescent girls and young women, primarily responsible for food and water related activities due to gender norms, to obtain water for cooking and other household needs. Some AGYW described they had to eat raw food because of a lack of heating source (gas, electricity).

“Climate change is having a huge impact on us, especially with the scarcity of rainfall. These days, it's very difficult to get enough to eat – land is becoming scarce, not to mention water from wells, no more firewood or gas, which still requires financial resources we can't afford.”
Young woman participant (18-24 years old),

⁷⁷ Focus Group Discussion participant.

⁷⁸ Focus Group Discussion participant.

Ouahigouya, Burkina Faso

The food insecurity has had a detrimental impact on the education and overall wellbeing of adolescent girls and young women. Many are forced to drop out of school or miss classes due to hunger, as they are unable to concentrate or afford school fees and supplies.

“My father is dead and my mother 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),⁷⁹ Coyah, Guinea

In Burkina Faso, the AGYW participants describe that girls are often forced to drop out of school to help with household chores and income generation when harvests are poor. Also, the lack of access to sufficient food forces families to prioritize food needs over children's education, especially girls' education. In Niger and Guinea, AGYW describe the detrimental effects of hunger on their education due to the inability to concentrate and learn as well as school dropout (including due to CEFM). In Niger, AGYW participants explained that some girls drop out of school and end up being sexually exploited to meet basic needs including food.

“We find it hard to feed ourselves and it also disrupts the children's education and makes them sick.” - Young woman participant (18–24 years old),⁸⁰ Coyah, Guinea

SGBV is linked with food insecurity and the economic impacts of climate change, including, poverty, food insecurity, and lack of resources driving risky coping strategies. Droughts, erratic rainfall, and high temperatures negatively impact agricultural productivity, leading to food insecurity and economic hardship. This often results in increased sexual exploitation and transactional sex, begging, and theft due to loss of assets and livestock. Some AGYW participants noted that these problems are not new, but that climate change exacerbates SGBV due to the ways that extreme climate related events increase poverty by influencing agricultural yields and food and water security.

“With the increase in forced 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),⁸¹ Bla, Mali

In Nigeria, AGYW participants observed adolescent girls and young women forced into sexual exploitation, stealing, due to poverty and lack of resources caused by climate change. In Mali, AGYW indicated that food insecurity forced some women to resort to transactional sex to support their families, leading to the spread of contagious diseases.

BURKINA FASO

In Burkina Faso, AGYW highlighted an increased risk of exploitation, such as sexual exploitation, among young women and girls to meet food and water needs. In Burkina Faso, the changing climate, with decreased rainfall and environmental degradation, is contributing

⁷⁹ Focus Group Discussion participant.

⁸⁰ Peer-to-peer survey participant.

⁸¹ Peer-to-peer survey participant.

to food insecurity, water scarcity, and economic hardship. This is forcing some adolescent girls to engage in transactional sex or leave their homes, further exposing them to sexual exploitation and violence. Some families are marrying their young daughters, often at a very young age, due to poverty, lack of opportunities, and the belief that it is the best solution for the girls. However, this leads to early pregnancies, abandonment, and the destruction of the girls' futures.

In Niger, key drivers of SGBV and CEFM that were highlighted include poverty, food insecurity, and lack of livelihood opportunities as a result of drought, erratic rainfall, and environmental degradation. **In Guinea**, poverty and lack of resources exacerbate SGBV, leading parents to marry their daughters early or neglect their needs. In Mali, climate change has led to increased poverty, food insecurity, and lack of access to basic resources, forcing some women and girls to engage in transactional sex or CEFM to support their families.

Summary

- Adolescent Girls and Young Women (AGYW) experience and witness high levels of food insecurity in the region, in what can be described as a food crisis.
- AGYW identified food preparation as one of the main activities they are engaged in.
- Most AGYW participants indicated that food insecurity was related to climate change, and that these issues particularly affect AGYW.
- Extreme climate-related incidences directly impact all components of the right to food, namely food availability, accessibility, adequacy, stability and sustainability due to drought, excess rains, floods, and shifts in the seasons.
- Increased levels of food insecurity have a direct impact on the rights to food, water and education as well as protection from violence. The food, water and education needs of AGYW participants were unmet due to climate change and the intersection of socio-economic and humanitarian factors, regardless of country.
- Increased food insecurity exacerbates SGBV and SRHR as well as violations of the right to education experienced by AGYW through CEFM and sexual exploitation and school drop outs as a direct result of decreased resources and extreme climate related incidences.
- AGYW have been forced to adopt various strategies to survive and cope with increased food insecurity, such as reducing the number of meals per day, eating less nutritious foods, off-season cultivation, small-scale gardening, water harvesting, and finding alternative sources of income. These increase the incidences of sexual exploitation and CEFM.

6.3 The Impact of Climate Change on Adolescent Girls and Young Women's Right to water in the Sahel

Across the sample, AGYW's rights to water (availability, accessibility, quality) are impacted by climate change. The survey results show that most AGYW participants (72%, n=342) who noted concerns about water quality and water availability in recent years indicated that these issues particularly impact AGYW in their communities as a result of gender norms and responsibilities for data collection, storage and usage.

“Of course, it affects young girls and adolescent girls. Because of climate change there is no drinking water or good quality food and pregnant women often fall ill (vomiting, malaria ...).” - AGYW Participant (age range not communicated),⁸² Bla, Mali

6.3.1 Impacts of Climate Change on the Right to Water of Adolescent Girls and Young Women

Across most country contexts, AGYW participants expressed more concern over water availability than water quality (see figure 20), although both are a concern. Qualitative data show that AGYW participants most frequently discussed concerns about water during PFGD and Photovoice discussions in Guinea, Mali, and Nigeria, followed by Burkina Faso and Niger. Overall, AGYW participants experienced water scarcity and lack of access to clean water as a major source of suffering.

“Before, our marigots⁸³ were clean and we could do everything, but now the women are suffering because we can no longer draw water to wash ourselves”

Young woman participant (18–24 years old),⁸⁴ Coyah, Guinea

This was due to 1) the drying up of water sources due to drought and decreased rainfall; 2) the need to walk long distances to fetch water, which was time-consuming and tiring, especially for girls who are primarily responsible to collect water; 3) the inability to meet basic water needs for drinking, cooking, and hygiene; and 4) the consumption of unsafe water sources leading to waterborne diseases.

“The water is not of good quality because when there is a drought, the wells dry up and are filled with nothing but sand.”

- Young woman participant (18–24 years old),⁸⁵ Segou, Mali

While AGYW did not link unclean water directly with climate change, this finding is included here because there was some discussion about concerns related to flood run-off and environmental degradation and subsequent pollution. For example, young women co-researchers in Guinea noted that AGYW participants described the consequences of increased flooding on water quality and availability. They explained for instance that following floods in an area called Fily, many wells had not been treated, which represented a health danger because the water was used despite not being drinkable. The study shows that problems associated with access to water (distance, quality, distance from the collection point) directly affect adolescent girls given the gender norms associated with water collection.

“Wells are not protected and many people here use well water for drinking, especially when there is a public shower next to a well, because dirty shower water can mix with well water and if you use it, it's not good for your health.”

- Adolescent girl participant (15–17 years old),⁸⁶ Forecariah, Guinea

⁸² This peer-to-peer survey AGYW participant responded “prefer not to say” when asked her age range.

⁸³ A side-stream in West Africa.

⁸⁴ Participant in the photo-based focus group discussion conducted after the photo-taking session at community level as part of Photovoice.

⁸⁵ Focus Group Discussion participant.

⁸⁶ Focus Group Discussion participant.

For instance, in Guinea, water collection emerged as the second most common activity, after household chores, with 87% of respondents aged 15-17 and 86% of respondents aged 18-24, respectively. This task was critically linked to climate change impacts because water scarcity and altered precipitation patterns significantly increase the time required for water collection and therefore the consequences on their lives.

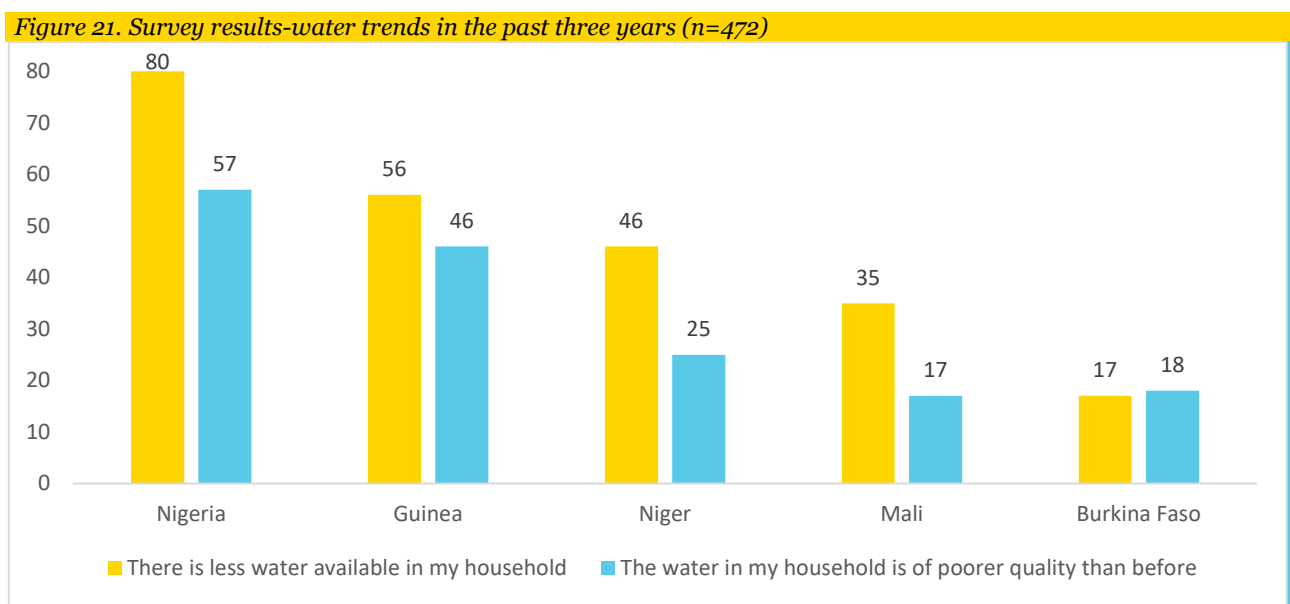
According to the multi-country survey results, poor rainfall, reported as the most frequent problem (20 % of responses), and drought (16 % of responses), had severe implications for adolescent girls and young women. Across the targeted countries, as a result of gender norms, AGYW are majorly responsible for water collection and management within households. This was confirmed by our study in which AGYW participants responded that they highly participate in water collection activities. The scarcity of water resources implied by these results led to an increased time and labour burden on AGYW, thus impacting their educational opportunities and overall well-being.

“ A lot of girls have to work hard, like fetching water over long distances.”

- Young woman participant (18-24 years old),⁸⁷ Ouahigouya, Burkina Faso

At the same time, while climate change affects water availability and therefore increases water scarcity, AGYW participants also reported high incidences of floods and their devastating consequences on all aspects of their life, with major disruption of basic services. The high prevalence of heavy rain (6 % of responses) and flooding (7 % of responses) presents additional gender risks. These extreme climate related events disproportionately affect AGYW through increased vulnerability to waterborne diseases, compromised sanitation facilities, and heightened personal safety risks, particularly in displacement scenarios.

“The children can no longer go to school. In case it rains after lessons, my children are at school, they sometimes go out to return home and get diseases such as malaria, fever, etc. ” - Young woman participant (18-24 years old),⁸⁸ Coyah, Guinea



Some of these concerns were highlighted among Photovoice AGYW participants (see figures 21 to 26), who documented dried up stream beds as well as social injustices related to the impacts of

⁸⁷ Peer-to-peer survey participant.

⁸⁸ Peer-to-peer survey participant.

climate change on water, including images that represent challenges women face when travelling long distances to fetch water, as well as water scarcity.

“With the water drying up, our wells are empty. We have to travel a long way to get good quality water, and sometimes my daughter misses her lessons just for that.”

- Young woman participant (18-24 years old),⁸⁹ Coyah, Guinea

Figure 22. Photovoice photo showing a dried stream bed (marigot) in Mali

CAPTION: Photo taken by young woman co-researcher and participant in Segou, Mali

“This image is a landscape of a marigot that was full of water in the 2000s. But now its half dried up due to climate change. This whole area was filled with water”



⁸⁹ Focus Group Discussion participant.

Figure 23. Photovoice photo showing a completely dry stream bed (river) in the Konduga area.

CAPTION: Photo taken by young woman co-researcher and participant in Konduga, Nigeria
Description by mentor: “This used to be a river, where we used to buy fish. It's a source of irrigation for our farm, but now it's dried up. Today, climate change has dried up this river and this has systematically led to a reduction in rice cultivation in the surrounding area and a drop in rainfall.

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.”



Figure 24. Photovoice photo showing a dried stream bed in Burkina Faso

CAPTION: Photo taken by young woman co-researcher and participant in Ouahigouya, Burkina Faso
Description by young woman co-researcher 2: “Presence of dried bottom, Presence of dirty water, Soil wrong by water flow, trees far away & dried out, Lack of rain”



Figure 25. Photovoice photo showing overcrowded public tap water point due to water scarcity in Nigeria

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

Description by young woman co-researcher 1:
“Children are washing and bathing and this makes them prone to diseases e.g. cholera mostly dirt is poured in the water. The people in the rural areas are using the river water to drink since they do not have other source of water the 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”



Figure 26. Photovoice photo showing cramped water collection point due to water scarcity in Guinea

CAPTION: Photo taken by young woman co-researcher 1 and participant in Forecariah, Guinea

Description by young women co-researchers and AGYW participants: “the cans lined up show that this population has water related problems.” They explained that given the number of cans and buckets, an adolescent girl would likely be late to attend class.



Figure 27. Photovoice photo showing a woman carrying water in Burkina Faso

CAPTION: Photo taken by young woman co-researcher and participant in Ouahigouya, Burkina Faso

Description by AGYW participants and young women co-researchers “This image once again highlights the crucial role of women in our societies. The climate crisis (water scarcity) makes women even more vulnerable. In order to ensure better living conditions for her family, she travels long distances in search of this vital source, risking the dangers she may face. Gender inequality is a phenomenon that needs to be taken into account in these times of climate change in our societies.”



Figure 28. Photovoice photo showing the long term effect of erosion incidences

CAPTION: Photo taken by young woman co-researcher and participant in Bla, Mali

Description by young woman co-researcher: “This image shows the erosion of the soil caused by flooding over a long period, according to the AGYW participants. This was flat land in the 2000s and is now low-lying due to flooding.”



6.3.2 Linkages Between the Right to Water of Adolescent Girls and Young Women and Other Key Human Rights

Overall, AGYW expressed the ways in which access to water infringes on other rights, such as food security, health, education and safety and security. The lack of water has a direct impact on **food security**, as it affects the communities’ ability to raise livestock and yield crops. Lack of water leads to poor crop yields, harvest failures and livestock deaths. This results in an increase in food prices due to food scarcity.

Health is affected, as there are challenges in maintaining personal and menstrual hygiene and increased risk dehydration and heat-related illnesses. There is also risk and spread of waterborne diseases due to use of contaminated water. **Education** can also be affected as sometimes girls

must miss school to help fetch water or due to lack of water in school. Some AGYW participants noted that this also leads to difficulty concentrating due to thirst and fatigue from water collection.

Young women co-researchers in Guinea highlighted a direct link between power outages and water scarcity, as the local water supply system depended on electricity to function.⁹⁰ These frequent outages, particularly during daylight hours, force girls and young women to collect water late in the evening when power is restored.⁹¹ This late-night water collection task was physically demanding and time-consuming, leading to increased fatigue among the AGYW.⁹² Consequently, their ability to focus on schoolwork and attending classes was negatively affected, further compromising educational outcomes.⁹³

“Because of these climate changes, for example the drying up of water, as a student in an examination level, I have to travel a long distance to fetch water, which causes me to be late for class.” – Young woman participant (18–24 years old),⁹⁴ Coyah, Guinea

“Because there are times when you arrive late at school and you're punished simply because you didn't get the water quickly.” – AGYW Participant, Burkina Faso

Safety and security are also compromised due to inadequate water access. AGYW participants noted that there is risk of harassment, assault, and violence faced by AGYM while fetching water, especially as they must walk longer distances to fetch water. Tensions also exist within communities over scarce water resources. These findings were also prominent in the Photovoice photos.

“Young girls travel long distances to draw water from a place like this, which is far from home, and may encounter problems such as rape and harassment.”

– Young woman participant (18–24 years old),⁹⁵ Coyah, Guinea

“We don't have access to good health care facility, girls are raped on their way to collect water.” – Adolescent girl participant (15–17 years old),⁹⁶ Konduga, Nigeria

AGYW take action against climate change consequences. In Burkina Faso, this includes collecting and storing rainwater to meet household water needs and reduce vulnerability; establishing household water reserves to avoid daily water collection; constructing accessible wells and boreholes for the community; coordinating water collection responsibilities within the household every few days; stocking up on water containers and barrels for water transportation; storing water and practicing hygiene to prevent diseases; and prioritising water conservation within one's own means.

In Nigeria, this includes maintaining solar-powered water systems to reduce water shortages; creating drainage systems to manage excess water; engaging in sanitation efforts to facilitate water flow; participating in community activities like collecting water for their families and communities; and collecting water for their parents.

⁹⁰ Interpretation of quantitative and qualitative data by co-researchers in Guinea.

⁹¹ Interpretation of quantitative and qualitative data by co-researchers in Guinea.

⁹² Interpretation of quantitative and qualitative data by co-researchers in Guinea.

⁹³ Interpretation of quantitative and qualitative data by co-researchers in Guinea.

⁹⁴ Focus Group Discussion participant.

⁹⁵ Participant in the photo-based focus group discussion conducted after the photo-taking session at community level as part of Photovoice.

⁹⁶ Peer-to-peer survey participant.

Summary

- AGYW's rights to water (availability, accessibility, quality) are highly impacted by climate change.
- AGYW identified water collection as one of the main activities they are engaged in as a result of gender norms.
- Water scarcity and lack of access to clean water were identified as a major source of suffering.
- AGYW attributed concerns over water to the following:
 - Drying up of water sources due to drought and decreased rainfall
 - Need to walk long distances to fetch water, which was time-consuming and tiring, especially for girls who are primarily responsible to collect water
 - Inability to meet basic water needs for drinking, cooking, and hygiene
 - Consumption of unsafe water sources leading to waterborne diseases.
- AGYW expressed unease regarding flood run-off, environmental degradation, and subsequent pollution.
- Concerns about water are inextricably linked with food insecurity, education and health.
- AGYW adopt strategies to the constraints they face in accessing sustainable sources of water.

6.4 The Impact of Climate Change on Adolescent Girls and Young Women's Right to Education in the Sahel

In the Kobo collect questionnaire, specific questions were asked to AGYW participants regarding education and climate change. The young women co-researchers asked whether AGYW participants had noticed any effects on education with a list of potential effects. The AGYW participants were also asked whether these issues regarding education particularly impact adolescent girls and young women in their community. They were also given the opportunity to explain whether or not they felt that these issues regarding education were related to climate change in their community. During the FGDs, participants were also asked questions regarding the impacts of climate change on their education.

The study revealed that climate change has significant and multifaceted impacts on education, with disproportionate effects on AGYW. Results show that 75% of survey AGYW participants (n=352) agreed that recent concerns about education particularly affect AGYW. Additionally, 43% of AGYW participants (n=203) associated recent issues around education with climate change. This substantial proportion suggests the widespread recognition of the interconnectedness between environmental factors and educational challenges within the community. This perception is crucial when considering the potential disproportionate effects on vulnerable demographics, particularly AGYW. The most reported observed issues over the last three years were, 1) increased school dropouts (n=285); 2) a decrease in the quality of education (n=183); and 3) the observation that are

less girls in school (n=134) (see figure 28). Qualitative data supports these survey findings and provides proposed explanations for these changes in relation to the climate change.

Extreme climate-related events, primarily intense heat, and flooding, disrupt the education process in multiple ways. Disruptions in educational schedules were discussed by AGYW participants, and some noted that schools adjusted their hours because of extreme heat. Most institutions started earlier, ended sooner, or eliminated afternoon classes entirely in response to excessive temperatures. These changes led to incomplete curriculum coverage, compromised learning outcomes, and delays in overall educational progress.

“Our classrooms are not adapted to the intense heat, which means we cannot concentrate and follow the lessons normally.”

- Adolescent girl participant (15-17 years old),⁹⁷ Bla, Mali

Changes in timetables and reduced class hours significantly disrupted the academic year's curriculum. For instance, young women co-researchers in Mali reported that high temperatures had led to reduced learning time in recent years. School hours were now limited to 8 a.m. to 1 p.m., eliminating afternoon classes. Additionally, the school year was disrupted by the occupation of school buildings by disaster victims, which typically lasted for about a month after the start of the new academic year. These evacuees, having no other refuge, remained in the schools even as the new term begins. By the time the situation normalised, students had lost significant learning time from their curriculum. This loss of instructional time due to both climate-related schedule changes and displacement has a substantial impact on students' educational progress.

“With the increase in heat, the school timetable has been changed so that we can stay at home and for our safety, but our education is delayed because of this, so it affects us.” - Adolescent girl participant (15-17 years old),⁹⁸ Bla, Mali

In Mali and Nigeria (Jere), intense heat during the dry season emerged as a significant barrier to school attendance, particularly among adolescent girls. High temperatures physically created uncomfortable learning environments and impaired students' concentration and cognitive functions. High temperatures hindered learning abilities, further compromising girls' school attendance and academic performance. The combination of these heat-related challenges with inadequate resources and teaching materials contributed to a perceived decline in overall educational quality, as students struggled to focus on and effectively engage with lessons in these adverse conditions.

“Because the schools do not function normally due to the sun, afternoon classes are stopped.” - Young woman participant (18-24 years old),⁹⁹ Segou, Mali

Heavy rainfall and flooding in Nigeria, Guinea, and Mali compounded disrupted school attendance, especially for AGYW, blocked access to roads to schools, making it difficult or impossible for students to reach their schools safely and forcing them to temporarily or permanently close, resulting in increased absenteeism.

⁹⁷ Focus Group Discussion participant.

⁹⁸ Peer-to-peer survey participant.

⁹⁹ Focus Group Discussion participant.

“Yes, it is impossible to go to school, our parents do not let us go out when there is flooding, the roads are flooded.” Adolescent girl participant (15–17 years old),¹⁰⁰ Coyah, Guinea

In Nigeria, Guinea, and Mali, severe climate-related events, such as violent winds, heavy rains, and flooding, have destroyed school infrastructure and directly disrupted the educational process. Climate-related events and their consequences led to increased school dropouts and difficulties accessing education. Some respondents mentioned increased transportation costs to reach distant schools, indicating that infrastructural challenges were exacerbated by climatic events. This was supported by Photovoice AGYW participants (see figure x). The study also found that retaining qualified teachers became more challenging under these adverse climate-related events, further impacting quality of instruction.

“The schools in our locality have been flooded at least once every rainy season for the last three years, and this prevents children from going to school.”

Young woman participant (18–24 years old),¹⁰¹ Forecariah, Guinea

Figure 29. Photovoice photo showing a locally made bridge on a road that was recently washed away in Guinea

CAPTION: Photo taken by young woman co-researcher and participant in Coyah, Guinea

Description by young women co-researchers and AGYW participants: “The bridge was damaged by heavy rains and adolescent girls can no longer cross to get to school (when it rains).”



The findings also show how climate-related extreme events and economic hardships contributed to an increase in CEFM and forced labour for girls, completely removing them from the education system. In severe cases, families resorted to CEFM as a coping mechanism amidst economic strain, which further limited girls' educational opportunities.

This economic strain makes it challenging for households to afford school fees and supplies, leading to increased dropout rates, especially among the AGYW in Burkina Faso, Guinea, Nigeria, Niger, and Mali. As a result, girls are withdrawn from school due to cultural preferences for educating boys when resources (especially food) are scarce. In Burkina Faso and Nigeria climate change induced economic pressures which in turn led families to prioritise boys' education. Beliefs by some parents that girls' education have limited value were compounded by climate-related economic hardship. This exacerbated existing gender disparities in educational access. This highlights a critical nexus among climate change, food insecurity, and educational outcomes.

¹⁰⁰ Focus Group Discussion participant.

¹⁰¹ Focus Group Discussion participant.

“Girls are less likely to be enrolled in school than boys, reducing their chances of becoming independent, educated, and fulfilled women.” AGYW Participant, Burkina Faso

Climate change-induced crop failures and economic hardships precipitated widespread food insecurity and malnutrition, which significantly impaired the students' cognitive functions and learning capacities. Respondents in Guinea and Niger consistently cited hunger and malnutrition as major impediments to their learning and school attendance. Malnourished students struggled to concentrate in class, comprehend material, and maintain consistent attendance, leading to diminished academic performance and increased dropout rates, as highlighted in the findings. This cycle of climate-induced food insecurity, poverty, and educational disruption has perpetuated a broader cycle of disadvantage. Driven by these interconnected factors, early school dropouts limited future economic opportunities for affected individuals and communities, thereby reinforcing patterns of poverty and vulnerability to climate change. In Nigeria, co-researchers highlighted that shortage of harvested crops was due to excessive rain and spoilage of harvested crops due to excessive rain, which in turn impacted the ability of families to pay for education-related fees.

“My father used to give us money for school and pay our school fees before, but due to lack of his job at the farm and insecurity we are not going to school.”

- Young woman participant (18-24 years old),¹⁰² Jere, Nigeria

An adolescent living with a disability also highlighted the difficulties in accessing school in a food insecurity context where there is no other source of income than climate-dependent agriculture, or social protection mechanism.

“My parents are farmers but due to decreasing in crop yields, my parents cannot afford to send me to school because I am a person living with disability, my wheelchair is broken and my parents cannot afford another one so I had to stay at home.” - Adolescent girl participant (15-17 years old),¹⁰³ Konduga, Nigeria

An adolescent girl living without parental support also explained further difficulties in accessing school in the context of food insecurity and the need to pay for multiple basic needs (food, school fees).

“Due to climate change we don't have enough food and I'm an orphan and the person helping us don't have good job now so we have no one to pay our school fees”

- Adolescent girl participant (15-17 years old),¹⁰⁴ Jere, Nigeria

Water scarcity was also raised as a concern for education, as it forced students, particularly girls, to spend considerable time fetching water over long distances, which interfered with their studies and caused physical fatigue. Furthermore, across all study countries, most girls were forced to prioritise tasks such as water collection over school attendance, which significantly impacted their educational participation and performance.

This gender-specific decrease in attendance is also a critical issue, potentially exacerbated by climate-related factors such as increased domestic responsibilities during environmental crises or safety concerns during extreme climate-related events. Overall, 28% of respondents (n=134) noted

¹⁰² Peer-to-peer survey participant.

¹⁰³ Peer-to-peer survey participant.

¹⁰⁴ Focus Group Discussion participant.

that there were less girls in school over the last three years. In Burkina Faso, young women co-researchers noted girls drop out of school to take up income-generating activities to meet their needs and look after their parents. Young women co-researchers in Mali posited that, this school drop-out was due to the lack of resources in the communities to continue to look after the children (schooling, food, and many other costs) because of the effects of climate change on their main source of income, the land. The heat was also a determining factor in school drop-out, as with increasing temperatures, children were no longer able to assimilate the syllabus, forcing some to stop their education.

Another concerning trend is the reported increase in school violence, which was reported by 23% (n=110) of the survey sample. Young women co-researchers in Niger, Mali, and Guinea also noted that safety and security concerns affected educational access and retention, particularly for girls. They noted heightened incidences of violence and insecurity within educational institutions, although their direct correlation with climate change remained ambiguous. These security issues disproportionately affected female students, with findings from Niger and Guinea highlighting incidents of harassment and perceived lack of safety in schools leading to increased absenteeism and school drop-out among girls. A nuanced approach entails recognising that violence in school is not only the result of climate change, but that climate change exacerbates existing education challenges.

This study also revealed a complex interplay between climate change, gender norms, and educational access, with marginalised students, particularly girls from economically disadvantaged backgrounds, facing compounded challenges. In Mali, respondents highlighted that poorer students were forced to transfer from private to public schools or withdraw them entirely because of financial strain, further illustrating the disproportionate impact on marginalised students. Girls were particularly at risk of dropping out, as they were often required to assist with household chores or engage in income-generating activities to support their families during climate-related hardships.

“Due to high temperatures, lack 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),¹⁰⁵ Konduga, Nigeria

Closely related to dropout rates was the perceived decrease in educational quality by 38% of the sample (n=183). In Mali, this decline in quality was attributed to various factors, including climate-induced disruptions, resource allocation challenges, or shifts in educational priorities.

**“It is hard to study when the power goes out, and staying in the house to learn is torture, because of the high heat. And school lessons diminish in time and quality.”
- Adolescent girl participant (15-17 years old),¹⁰⁶ Bla, Mali**

Respondents in Niger and Nigeria reported that girls who left school faced a higher risk of engaging in transactional sex because of the limited alternative opportunities. For boys, the research indicated a higher propensity towards substance abuse and theft following school dropout. This gender-specific impact underscores the complex ways in which climate change and educational disruption intersect existing social norms and vulnerabilities. The link between school dropout, poverty, and subsequent health issues due to high-risk behaviours, particularly transactional sex and exploitation and early pregnancies, has been emphasised. This chain of events illustrates the long-term

¹⁰⁵ Peer-to-peer survey participant.

¹⁰⁶ Peer-to-peer survey participant.

multifaceted impacts of climate-induced educational disruption on individual and community well-being.

"Young people dropping out of school increases the likelihood of banditry - they become thieves." - Young woman participant (18-24 years old),¹⁰⁷Forecariah, Guinea

School closures, reported by 22% of AGYW participants (n=105) were attributed to various factors, including climate-related events such as flooding or extreme temperatures. The higher reporting among the younger age group suggested that adolescent girls were more affected by, or more aware of, these closures. Finally, while school evacuations were reportedly observed less frequent than other issues (9%, n=43), these evacuations indicated acute climate-related risks to educational infrastructure and student safety, with potential long-term impacts on educational continuity, particularly for girls, who faced additional barriers in returning to school post-evacuation.

"Our schools have been closed due to the effect of climate change translated in heavy rainfall and flooding, and if there is more of these occurrences, even our teachers will send us back home."

- Adolescent girl participant (15-17 years old),¹⁰⁸Konduga, Nigeria

A very small minority (2%, n=12) of the respondents explicitly denied any connection between the observed educational issues and climate change, whereas 3% (n=14) indicated uncertainty by selecting "I do not know."

Young women co-researchers in Nigeria highlighted several key findings regarding the impact of climate change on educational opportunities of adolescent girls and young women. Water collection took priority over education, often forcing girls to walk or trek long distances at the expense of school. Food access and preparation being primarily done by girls further reduce the time available for study. They further noted that household chores were generally distributed based on the number of boys and girls in the household, with a tendency to assign more responsibility to girls. In some households, it became the norm for girls to miss educational opportunities because of their traditional gender roles. The unequal distribution of domestic tasks and resource-related responsibilities, exacerbated by the scarcity of resources, had a significant impact on AGYW in communities affected by climate change.

Summary

- Extreme climate-related events, primarily intense heat, and flooding, as well as consequential food insecurity and water scarcity disrupt education.
- In the last three years, AGYW have noticed:
 - Increased school dropouts
 - Decrease in the quality of education
 - Less girls in school
- AGYW are more likely to miss school when resources are scarce, as they are responsible for many household chores, such as travelling long distances to fetch water or search for food.

¹⁰⁷ Peer-to-peer survey participant.

¹⁰⁸ Focus Group Discussion participant.

- Respondents in Guinea and Niger consistently cited hunger and malnutrition as major impediments to their learning and school attendance.
- It was reported that girls withdrawn from school due to cultural preferences for educating boys when resources were scarce.
- Respondents in Niger and Nigeria reported that girls who left school faced a higher risk of sexual exploitation because of the limited alternative opportunities.

6.5 The Impact of Climate Change on Adolescent Girls and Young Women's Right to Health in the Sahel

This research highlights the complex interplay between climate change, socioeconomic factors, and health outcomes, emphasising the challenges faced by AGYW.

AGYW participants in Niger faced several significant barriers to healthcare access and, particularly affecting AGYW. Key issues included the high prevalence of hypertension and an increased number of deaths among the elderly, which were exacerbated by the unavailability of nearby health centres due to distance. The difficulty in accessing healthcare was further compounded by long waiting times at health centres, the unavailability of qualified health personnel, and poor quality of reception and services at these centres. For adolescent girls and young women, access to health centres was particularly challenging due to the closure of some facilities and the influence of religious and customary practices. These factors often make it difficult for them to discuss their health issues, even when they do reach a centre.

“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),¹⁰⁹ Segou, Mali

Climate-related health impacts are multifaceted and interconnected. Direct health consequences include an increased incidence of diseases, particularly malaria, during rainy seasons and waterborne illnesses such as cholera and dysentery exacerbated by flooding and contaminated water sources. Respiratory issues including asthma attacks and breathing difficulties are associated with increased heat, dust, and air pollution. Skin infections, rashes, and wounds are frequently reported as consequences of extreme climate related events and hygiene issues owing to water scarcity. Due to gender norms, temperature anomalies, higher (16 % of responses) than normal, can also have gender effects. Extreme temperatures may increase the care burden on young women for their children, the elderly, and sick family members. Additionally, temperature extremes can exacerbate health issues, with pregnant AGYW being particularly at risk.

“Climate change has impacted our health, and majorly community people do not care much about their health, and the lack of a functional hospital makes matters worst.” - Adolescent girl participant (15-17 years old),¹¹⁰ Konduga, Nigeria

¹⁰⁹ Peer-to-peer survey participant.

¹¹⁰ Focus Group Discussion participant.

Changing climate patterns significantly affect maternal and reproductive health, and CEFM, often driven by climate-induced economic hardship, were associated with complications, such as fistulas, anaemia, difficulties in childbirth including death of young women during childbirth.

Mental health impacts, although not extensively discussed, include increased stress, anxiety, and general unease, often linked to food insecurity, displacement, and loss of livelihood due to climate change. Extreme heat causes discomfort, fatigue, and difficulty sleeping, affecting overall well-being and productivity.

“Here in my community, girls and women need conducive weather to live but due to high temperature it is unbearable for girls and women, it makes girls to go out to steal or exchange their bodies because of lack of food. Lack of food leads girls to depression and it leads girls to abuse drugs to feel relief.”

- Young woman participant (18–24 years old),¹¹¹ Jere, Nigeria

Access to health care is significantly impeded by climate-related factors, and extreme climate related events make it difficult to reach health facilities, especially in rural areas and in a context of decreasing resources. Some health centres have been reported to be nonfunctional owing to power outages caused by extreme weather. Financial constraints exacerbated by climate-induced economic challenges further limit access to medical treatment, potentially worsening health conditions. Disruptions in healthcare services due to climate change-related impacts disproportionately affect adolescent girls and young women who have specific healthcare needs related to reproductive health, pregnancy, and childbirth.

“Sometimes people cannot get to the health centre, especially when it is raining.”

- Adolescent girl participant (15–17 years old),¹¹² Segou, Mali

“We don't get access to healthcare and menstrual hygiene products because we don't have money.” - Young woman participant (18–24 years old),¹¹³ Jere, Nigeria

Water scarcity, intensified by climate change, poses significant challenges to hygiene and sanitation, particularly in menstrual hygiene management. Girls and women struggle to maintain proper hygiene during menstruation because of limited access to water, leading to potential health risks. Climate change exacerbates existing barriers to menstrual hygiene management, such as a lack of access to water, sanitation, and hygiene (WASH) facilities, posing significant risks to the dignity, health, and education of adolescent girls and young women.

“Menstrual products are very costly and young girls find it difficult to take care of themselves.” - Adolescent girl participant (15–17 years old),¹¹⁴ Jere, Nigeria

“If, as a girl, you cannot properly wash the cloth you use for your period, it creates other (health) problems.”

- Adolescent girl participant (15–17 years old),¹¹⁵ Ouahigouya, Burkina Faso

¹¹¹ Peer-to-peer survey participant.

¹¹² Peer-to-peer survey participant.

¹¹³ Peer-to-peer survey participant.

¹¹⁴ Peer-to-peer survey participant.

¹¹⁵ Peer-to-peer survey participant.

This research underscores the intersectionality of climate change impacts on existing socioeconomic difficulties. Poverty, exacerbated by climate-induced challenges, is frequently mentioned as a barrier to access, and maintain good health.

Summary

- Access to health care is affected by climate-related factors, making it difficult to reach health facilities, especially in rural areas and in a context of decreasing resources. Some health centres have been reported to be nonfunctional owing to power outages caused by extreme weather.
- Direct health consequences of climate change included:
 - Increased incidence of malaria during rainy seasons
 - Increase waterborne illnesses, such as cholera and dysentery exacerbated by flooding and contaminated water sources
 - Respiratory issues, such as asthma attacks and breathing difficulties were associated with increased heat, dust, and air pollution.
 - Skin infections, rashes, and wounds were frequently reported as consequences of extreme climate related events
 - Poor hygiene owing to water scarcity
- Menstrual hygiene among AGYW is affected by lack of access to water, related to climate change.

6.6 The Impact of Climate Change on Sexual and Gender Based Violence (SGBV) and Sexual and Reproductive Health and Rights (SRHR)

In the Kobo collect questionnaire, specific questions were asked to AGYW participants regarding SRHR and SGBV in the context of climate change. The survey provided a short definition of both concepts: “Sexual and reproductive rights mean that every person must be able to make decisions about their health and their bodies.” and “Gender based violence may include sexual violence; intimate partner violence; psychological violence, economic violence, trafficking; child, early and forced marriage; and harmful traditional practices.” A warning about the sensitivity of the topics was also read out loud. During the survey, the young women co-researchers asked whether AGYW participants had noticed any effects on SGBV and SRHR with a list of potential effects. The AGYW participants were also asked whether these issues regarding SGBV and SRHR particularly impact adolescent girls and young women in their community. They were also given the opportunity to explain whether or not they felt that these issues were related to climate change in their community or not. During the FGDs, participants were also asked questions regarding the experienced impacts of climate change on SRHR and SGBV.

6.6.1 Lack of Responses Due to Social Norms, Taboo and Shame

The subject of SGBV and SRHR is shrouded in silence, and the young women co-researchers' analysis in Nigeria and Guinea revealed significant barriers to open discussions on such topics among AGYW participants. In Niger, talking about Sexual and Reproductive Health (SRH) is considered taboo, which can explain the low level of responses on these issues. These barriers are rooted in the complex interplay between societal factors, fear of and reluctance to engage with

sensitive subjects stemming from family upbringing, cultural norms, and social pressure. Many topics were considered taboo, further inhibiting frank conversations. When these sensitive subjects broached, young women co-researchers in Guinea observed notable changes in the participants' behaviours. Responses ranged from complete silence to marked shifts in attitude, highlighting the depth of the discomfort surrounding these issues, even though questions were made vaguer and more accessible to avoid stress and shame. This reluctance to engage with SRH topics presented a significant challenge to comprehensive data collection and analysis and underscored the deeply ingrained nature of these societal constraints.

Additionally, data shows that AGYW participants noted several SRHR and SGBV issues in their communities but did not necessarily link them with climate change. For instance, in Guinea, the data revealed that a significant majority (Around 66 %) of the Kobo AGYW respondents reported that they did not know whether such a connection existed between climate change and SRHR and SGBV issues. Notably, around 25 % of Kobo AGYW respondents did not perceive a connection between climate change and SRHR or SGBV issues in their community in Guinea. A notable number of AGYW respondents in Niger did not perceive a connection between SGBV/SRH and climate change, or expressed uncertainty about it, and a substantial number of them indicated that they did not know whether such a connection existed. This is not surprising as the impacts of climate change on SRHR and SGBV are often not directly perceived. SRHR and SGBV issues are the result of intersecting factors.

However, in the qualitative responses received, we were able to assess that AGYW participants identified specific issues in their communities pertaining to SGBV and SRHR, linked or not to climate change.

6.6.2 Sexual and Gender Based Violence and Their Consequences on Adolescent Girls and Young Women in the Context of Climate Change

Additionally, the study noted an increase in CEFM rates, which further complicates the sexual and reproductive health landscapes of young women. Increased prevalence of CEFM has been frequently reported because of climate change in Niger, Burkina Faso, and Guinea.

Co-researchers in Nigeria identified a correlation between climate change-induced hardships and the increased risks faced by girls to go through harmful practices, such as CEFM, early pregnancy, child labour, and sexual violence or exploitation.

“Sometimes we are forced to give our children away in marriage so that the future husbands can give something (financial support).”

- AGYW Participant (unknown age range),¹¹⁶ Coyah, Guinea

In Mali, 20% of respondents (n=20/100) reported an increase in CEFM. The data in Nigeria show a significant prevalence of increased CEFM, with 36 respondents aged 15-17 and 25 of those aged 18-24 reporting this issue.

CEFM is a violation of human rights and a significant barrier to empowerment for AGYW; its prevalence is often increased by factors exacerbated by climate change, such as poverty, economic pressures, food insecurity, and displacement, which can drive families to marry off their daughters at a young age. Some respondents noted that this practice predated climate change but was

¹¹⁶ This peer-to-peer AGYW participant preferred not to provide her age range.

worsened by environmental stressors. Young women co-researchers in Nigeria highlighted that insufficient rainfall leads to a significant decline in crop yields, triggering a chain of socioeconomic consequences.¹¹⁷

“With low agricultural incomes, we are plunged into poverty. Some families are forced to give their children away in early marriages to free them from the burden and from dropping out of school.”

- Adolescent girl participant (15-17 years old),¹¹⁸ Coyah, Guinea

“If you have not eaten anything, you are forced to give your daughter in marriage.”

- Young woman participant (18-24 years old),¹¹⁹ Coyah, Guinea

Moreover, school closures or inaccessibility due to extreme climate events also contributed to girls being withdrawn from education and married early, consequently exposing them to numerous SGBV risks, including marital rape, domestic violence, and early pregnancy, with potentially life-threatening consequences.

This finding underscores the urgent need for targeted interventions to address the root causes of CEFM and to protect the rights and well-being of adolescent girls, particularly in the context of climate change adaptation efforts.

“You can see some parents give their children in marriage without the girl's consent, once at home there will be no love and some girls will also be forced to kill their husbands.” - Young woman participant (18-24 years old),¹²⁰ Coyah, Guinea

Findings revealed that sexual violence, including rape and harassment increased as girls travelled longer distances to collect water or firewood due to resource scarcity, displacement, and sleeping arrangements altered by extreme heat or flooding. In addition, the closure of schools due to climate-related factors has been linked to increased vulnerability to CEFM and other forms of exploitation.

Extreme climate-related events, including flooding, often led to increased domestic responsibilities for girls, forcing them to stay home to assist with household chores, instead of attending school.

“Because of the flooding, the parents had to keep the girls at home and eventually gave them in marriage.” - Young woman participant (18-24 years old),¹²³ Coyah, Guinea

Additionally, the data revealed that 10 per cent of Kobo respondents in Mali (n=10/100) reported an increase in sexual exploitation, which disproportionately affects adolescent girls and young women. For instance, 31 respondents aged 15-17 and 16 aged 18-24 in Nigeria reported an increase in sexual exploitation. Climate change-induced factors such as displacement, poverty, and disruptions in social support systems increase the risks for AGYW to face trafficking, exploitation, and gender-based violence.

Furthermore, the data in Nigeria highlight the issue of worsening child exploitation or child labour, with 28 respondents aged 15-17 and 25 aged 18-24 reporting this violation. Child labour, particularly in mining, was mentioned by AGYW participants because of climate-induced economic stress.

¹¹⁷ Interpretation of quantitative and qualitative data by co-researchers in Nigeria during data interpretation workshop.

¹¹⁸ Focus Group Discussion participant.

¹¹⁹ Peer-to-peer survey participant.

¹²⁰ Peer-to-peer survey participant.

Climate change can exacerbate existing socioeconomic hardship, leading to an increased reliance on child labour, which has detrimental effects on the education, health, and overall well-being of adolescent girls and young women.

Moreover, the destruction of homes and displacement caused by extreme climate related events heightens the risk of physical and sexual assault. The lack of safe and private spaces coupled with increased vulnerability during displacement made girls and young women more susceptible to violence. Furthermore, the study underscored the psychological trauma and mental health implications of climate change, and SGBV was noted in various contexts, including domestic settings and sites where girls engaged in economic activities, such as processing agricultural products. The data show prevalence of intimate partner violence in Mali, with 6 respondents in Bla and 12 in Segou reporting this issue.

“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.”

- AGYW Participant, Mali

Climate change can intensify existing gender inequalities and power imbalances, leading to an increased risk of domestic violence and exploitation among adolescent girls and young women, particularly in times of resource scarcity, food insecurity and economic stress.

“Women are subjected to violence in their homes, and sometimes simply for asking for money to spend or to send their children to school.” - AGYW Participant, Guinea

Intimate partner violence and domestic abuse have been reported to worsen in some households experiencing climate-related economic stress. Women faced increased violence when requesting money for household needs in the context of climate-related stress on households. Additionally, trauma and loss of self-confidence were identified as long-term effects on survivors of sexual violence.

For instance, an adolescent girl who was married as a child (CEFM) explained clearly the fact that SGBV is not entirely due to climate change, but the scarcity of resources as a result of climate change exacerbates SGBV, especially intimate partner violence.

“Even before climate change, I was already experiencing violence in my home, but it has worsened, because when my husband goes out to get something to eat and he doesn't find enough, once he gets home, he takes out his anger on me.”

- Adolescent girl participant (15-17 years old),¹²¹ Coyah, Guinea

6.7 The Impact of Climate Change on Adolescent Girls and Young Women's Sexual and Reproductive Health and Rights

Co-researchers in Nigeria identified a correlation between climate change-induced hardships and reduced access to contraception, healthcare, and menstrual health management.

The data in Nigeria also reveal a concerning prevalence of impeded access to healthcare, with 36 respondents aged 15-17 and 30 aged 18-24 reporting this challenge. Disruptions in healthcare services due to climate change-related impacts, such as infrastructure damage and resource

¹²¹ Focus Group Discussion Participant.

constraints, disproportionately affect adolescent girls and young women who have specific healthcare needs related to reproductive health.

In Niger, the young women co-researchers highlighted significant barriers to healthcare access and sexual health discussions for adolescent girls and young women. They highlighted that AGYW had trouble expressing themselves to male health workers, which potentially limited their ability to receive appropriate care and support. Cultural considerations surrounding adolescent and youth sexuality created an environment in which girls could not speak openly about their sexual health concerns. This lack of open dialogue poses potential risks to their overall well-being and access to necessary information and services.

Eight respondents in both regions in Mali reported improper access to contraception, which could have severe consequences for the sexual and reproductive health and rights of adolescent girls and young women. Limited access to family planning services can increase the risk of unintended pregnancies, unsafe abortions, and maternal health complications, further exacerbating the vulnerabilities of this population.

Notably, a significant percentage of Kobo AGYW respondents reported impeded access to contraception, with 34 aged 15-17 and 24 aged 18-24 indicating this issue in Nigeria. Restricted access to contraception services can have severe implications for the sexual and reproductive health and rights of adolescent girls and young women, thereby increasing the risk of unintended pregnancies, unsafe abortions, and maternal health complications. This cannot be considered a sole consequence of climate change but rather of intersecting factors such as social norms, gender roles, improper access to health services.

“Girls can't access contraceptive due the cultural norms.”

- Adolescent girl participant (15-17 years old),¹²² Jere, Nigeria

Furthermore, the data underscored the concern of limited access to perinatal care services in both the Bla and Segou regions of Mali. Inadequate access to quality perinatal care services can have severe and potentially life-threatening consequences on the health and well-being of adolescent girls and young women during pregnancy and childbirth. It increases the risk of maternal and infant mortality and morbidity, jeopardizing the lives of both mothers and newborns. The data also highlight the issue of lack of access to perinatal care. Limited access to quality perinatal care services can have severe consequences for the health and well-being of adolescent girls and young women during pregnancy and childbirth, thereby increasing the risk of maternal and infant mortality and morbidity.

One of the most alarming findings in Nigeria is the high number of respondents reporting an inability to manage menstrual health, with 47 aged 15-17 and 35 aged 18-24 indicating this challenge. Inadequate access to menstrual hygiene management resources and facilities has severe consequences for the health, dignity, and educational attainment of adolescent girls and young women, particularly in the context of climate change-induced disruptions to the water, sanitation, and hygiene (WASH) infrastructure.

Summary

¹²² Peer-to-peer survey participant.

- There was a reluctance to discuss issues related to SRHR and SGBV due to cultural and social taboos.
- A high number of participants did not see a direct correlation between climate change and SRHR or SGBV issues, but qualitative responses describe rising levels of SGBV and severe lack of access to SRHR.
- AGYW participants reported increased CEFM and sexual exploitation related to resource scarcity (especially food and water insecurity), driven by climate change.
- Increased intimate partner violence was reported, as an indirect result of the climate change-related economic hardship fueled by gender norms.
- AGYW participants reported the inability to manage menstrual health and access to healthcare as linked with climate change and its extreme incidences such as floods and extreme temperatures.

6.8 Reinforcing Factors: Environmental Degradation and Insecurity

6.8.1 Intersections with Environmental Degradation and Destruction of Property

As part of the data collected, AGYW described intense environmental degradation as a result of water pollution, littering, air pollution, deforestation and charcoal burning, as well as a multiplier effect of the climate crisis. For instance, during periods of heavy rains in Guinea, waste is reported to impede the proper drainage of water, consequently worsening the consequences of flooding. They also described the destruction of property by extreme climate such as intense wind, heavy rains, flooding, and drought. This is particularly important to note given the fact that data collection tools did not specifically ask questions regarding environmental degradation or destruction of property, which means these issues were identified by AGYW themselves. This may be because they are quite visible in their daily lives and were highly showcased in the photos taken as part of the Photovoice methodology.

Environmental degradation takes different shapes for AGYW: air and water pollution; poor waste management resulting in open landfills and polluted water streams; deforestation and coal burning; as well as destruction of property by extreme climate events such as floods or extreme temperatures.

GUINEA

Co-researchers in Guinea highlighted that the respondents highlighted that they see environmental pollution. Waste has invaded the marshes and water streams (marigots), causing flooding and disease during heavy rains as well as impeding food quality. Young women co-researchers in Guinea noted that climate change had negatively impacted AGYW's lives especially as a result of heavy rains provoking floods due to congestion of water streams by waste. The destruction of property with floods destroying houses, roofs, bridges is significant, and AGYW described instances in which children were swept away by floods and died.

Figure 30. Photo voice photo depicting a waste-filled water stream

CAPTION: Photo taken by young woman co-researcher 4 and participant in Coyah, Guinea

Description by young women co-researchers: “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.”



The data highlight the significant impact of environmental degradation and destruction of property due to climate change and human impact on nature. Key themes emerged including the devastating effects of extreme climate events like storms, floods, and droughts that have destroyed homes and displaced communities, including AGYW in the study who auto-defined as “displaced persons.” AGYW participants described how heavy rains, strong winds, and sandstorms have damaged or completely destroyed their houses, disrupting their lives and education.

“Sometimes, with the heavy rains, our houses are destroyed and we have to move, which leads to the disappearance of our customs.”

- Young woman participant (18-24 years old),¹²³ Segou, Mali

¹²³ Focus Group Discussion participant.

Figure 31. Photovoice photo showing a house demolished by water currents and heavy rains but still inhabited in Guinea

CAPTION: Photos taken by young woman co-researcher 5 and participant in Forecariah, Guinea

“The roof has fallen in and the rest of the house is standing on one side, and people are still living in it. Bricks are stacked on top of each other to keep them out. The parents say it's very dangerous for them and their children to live in this house, but they have no choice, it's very difficult. The house was destroyed and the water washed away their provisions and seeds.”



Figure 32. Photovoice photo showing a house destroyed by heavy rain and storms

CAPTION: Photo taken by co-researcher and participant in Bla, Mali

Description by young woman co-researcher: “This image shows a house destroyed by heavy rain and storms. This area used to be home to houses made of banco. But in the heavy rains and storms of recent years, everything has been destroyed and it is no longer possible to build with banco.”



The findings also emphasise the detrimental role of deforestation, which has exacerbated climate change through the loss of trees and vegetation. Deforestation is linked to various issues, such as the spread of diseases, loss of livelihoods, and the disappearance of wildlife and natural resources.

A few AGYW participants also mentioned the beneficial role of trees and how they miss them once they are destroyed as a result of deforestation or consequences of extreme climate events. This can be described as “solastalgia” i.e. the feeling one gets when losing certain landscape and natural environment that used to give someone solace.

“There are no more trees under which I can read peacefully.”
- Young woman participant (18-24 years old),¹²⁴ Ouahigouya, Burkina Faso

¹²⁴ Peer-to-peer survey participant.

“I used to read in the bush with the smell of trees, connected to nature, but now I don't have any bush. This doesn't motivate me to read.”

- Adolescent girl participant (15–17 years old),¹²⁵ Ouahigouya, Burkina Faso

This environmental degradation was described not as a deliberate choice but more as a result of lack of alternative options (especially for deforestation as a result of charcoal production, for agricultural pollution and for littering as a result of insufficient or unaffordable waste management options).

Figure 33. Photovoice photo representing cutting down of trees for charcoal production in Konduga, Nigeria

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



Description by young woman co-researcher 1

“Cutting down of trees causes erosion. Men mostly cut down trees. It reduces soil fertility, and cause decrease in crop yield. Most girls are not going to school due to cutting down of trees i.e. leading to no shade. Mostly girls work in the charcoal processing for empowerment or to carter for themselves, to pay for their school fees and buy food. Most men and women are paid different amount. Women are sexually harassed. They work to be paid so that they can pay their school fees.”

Description by the mentor: “[...] Cutting down of trees to making charcoal decreases in crop yield. Soil fertility can affect the planting of agricultural produce. It contributes to poor rainfall that affect poor crop yield that causes lack of food. Sometimes in school we sneak out to work on the farm to get paid but the payment is not well. [...]”

“For me, the real challenge facing women is the lack of income-generating activities. They contribute to climate change because selling charcoal is a key source of their livelihood, which leads to deforestation. If they had alternative livelihoods, they would be able to help combat climate change”

- Young woman participant (18–24 years old),¹²⁶ Segou, Mali

BURKINA FASO

The young women co-researchers in Burkina Faso explained a vicious circle in which, in order to cope with soil poverty due to the effects of climate change (drying out and impoverishment of the soil), farmers have changed their farming techniques by introducing pesticides, and are polluting water sources (including the water table) to a greater extent, which is reducing the quality of water for households, for growing crops and feeding animals, as well as eliminating aquatic species.

¹²⁵ Peer-to-peer survey participant.

¹²⁶ Focus Group Discussion participant.

Figure 34. Photovoice photo showing a cultivable surface that has become very arid and unsuitable for farming.

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

Description by the young women co-researchers 'This is a farmers' field, where they cultivate during the rainy season. The soil has become arid due to climate change and the drop in rainfall. The agricultural production will fall considerably, with a negative impact on their family's food security and on the income at the end of the season too.



Summary

- Environmental degradation came out as a finding of this research despite the fact that there was no question in the tools specifically that specifically asked about it.
- AGYW described intense environmental degradation because of water pollution, littering, air pollution, deforestation and charcoal burning.
- Environmental degradation can also be considered a risk multiplier as it negatively impacts adaptation capacities (for instance during flooding, waste impedes proper water evacuation)
- The devastating effects of extreme climate events were reported, including storms, floods, and droughts that have destroyed homes and displaced communities. Some AGYW in the study self-identified as “displaced persons”.
- AGYW participants emphasised the detrimental role of deforestation, which has exacerbated climate change through the loss of trees and vegetation. Deforestation is linked to various issues, such as the spread of diseases, loss of livelihoods, and the disappearance of wildlife and natural resources.
- Environmental degradation was described not as a deliberate choice but more as a result of lack of alternative options (charcoal production as a source of income, and littering as a result of insufficient or unaffordable waste management options).

6.8.2 Intersections with Conflict, Displacement, and Insecurity

Climate stressors have forced some families to relocate, disrupting education and social networks. This displacement sometimes leads to increased exposure to unfamiliar environments and other potential dangers. Some girls and young women are compelled to migrate in search of economic opportunities, potentially exposing them to exploitation.

The intersection of climate change with conflict and terrorism was a recurring theme, particularly in regions affected by groups, such as Boko Haram. This compounded the challenges faced by girls and women, limiting their movement and economic activities, while increasing their exposure to violence. The increased vulnerability to violence and exploitation is a major concern. AGYW participants reported heightened risks of sexual assault, kidnapping, and harassment, particularly when traveling to collect resources such as water and firewood or when working on farms. In Nigeria, conflict increased in Guinea and Mali, and social instability was noted as an indirect consequence of climate change. Economic pressure and resource scarcity have led to heightened community tensions, theft, and other forms of violence.

NIGERIA

Co researchers in Nigeria highlighted how insecurity and the Boko haram crisis had stopped community people from going to their farms, and how over the years, heavy rainfall affected their farm produce, while in the same manner poor rainfall also affected farming, resulting in decreased and poor yields.

Economic insecurity and its cascading effects were frequently mentioned, and the inability to farm due to climate change and insecurity led to food scarcity and poverty, which, in turn, increased the risk of CEFM, transactional sex, and other forms of exploitation for girls and young women. Furthermore, the analysis reveals a vicious cycle of poverty and insecurity. Climate change-induced hardship pushed some girls into exploitative situations, such as CEFM or transactional sex work, to support themselves and their families. These further compromises safety and well-being, highlighting the interconnected nature of climate change, poverty, and gender inequality.

NIGERIA

In Nigeria (Borno region), an intersection was clearly mentioned between the climate and the humanitarian crises as adolescent girls and young women noticed a disruption of farming activities due to insecurity and conflict. The AGYW in Nigeria also described an increase in theft, drug abuse, and other social problems due to food scarcity. In Burkina Faso, the AGYW described displacement of communities due to lack of productive land and water sources

“Climate change has forced girls and women to exchange their bodies for food.”

- Young woman participant (18–24 years old),¹²⁷ Konduga, Nigeria

Restricted mobility and access to resources were commonly reported; insecurity linked to both climate change and conflict limited girls' and women's abilities to access farmlands, schools, and other essential services. This restriction not only impacted their economic opportunities but also their education and overall well-being.

¹²⁷ Peer-to-peer survey participant.

Summary

- The intersection of climate change with conflict and terrorism was a recurring theme, particularly in regions affected by terrorist groups such as Boko Haram.
- Economic insecurity and its cascading effects were frequently mentioned.
- The inability to farm due to climate change and insecurity led to food scarcity and poverty, which, in turn, increased the risk of CEFM, transactional sex, and other forms of exploitation for AGYW.
- Restricted mobility and access to resources were commonly reported.

Research Question 2: What do girls and young women expect from authorities at international, regional, national, and local levels?

7 Adolescent Girls and Young Women as Active Drivers of Adaptation and Resilience in the Sahel

7.1 Current Adaptation and Mitigation Actions By Adolescent Girls and Young Women in the Sahel

As described in Section 1.1 of this report, a large number of AGYW feel affected by climate change and their lives threatened by its impacts. Not all AGYW from the sample took action against climate change and its effects. However, the study was able to identify key actions AGYW and their communities are taking in the focus areas in order to mitigate climate change (environmental actions) and to adapt to climate change consequences. In some cases, it was difficult to determine if AGYW are engaging in these activities or if these are actions being taken in their communities. Either way, these are perceptions of the actions being taken and the roles (as indicated in some places) that AGYW take in supporting these actions.

Many AGYW, partly due to gender roles, are engaging in environmental sanitation efforts, such as cleaning streets and public spaces, clearing drainage systems, and properly disposing of waste to prevent flooding and stagnant water.

<p>Example from NIGERIA</p> <p>AGYW are involved in clearing and cleaning of gutters, drains, and canals to prevent water stagnation and flooding during the rainy season. AGYW take part in proper waste collection and disposal, including burning or dumping in designated areas, as well as regular community efforts in</p>	<p>Example from MALI and BURKINA FASO</p> <p>AGYW also explained they burn plastic waste to prevent it from blocking drainage channels. Even if it also impacts health and has environmental impacts, it is considered by AGYW to be a better option than littering in a context of inefficient waste collection and disposal services.</p>	<p>AGYW also mentioned that they undertake various income-generating activities as adaptation strategies (helping parents especially mothers to sell agricultural goods, sewing, engaging in small business) to support their families, meet their basic needs, and adapt to the impacts of climate change.</p>
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<p>cleaning and clearing pollution and dirt. In Nigeria, AGYW mentioned that they actively encourage and support each other in these cleanup and sanitation efforts as they recognize the importance of maintaining a clean and healthy environment for the community.</p>		
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Some AGYW are also actively participating in tree planting and reforestation initiatives in their households, schools, and community settings to combat deforestation, desertification, to mitigate climate change and to create shade.

Water-related coping strategies noted by AGYW participants included collecting and safely storing rainwater and/or reserves from underground water into containers and barrels in order to meet household water needs and avoid daily water collection. They are also involved in creating drainage systems to manage excess water as well as blocking entry points in their places in order to prevent water from entering homes during floods.

To cope with extreme heat, the adolescent girls and young women who took part in this research are adopting self-care strategies like staying hydrated, wearing adapted clothing, and seeking shade. Many respondents also explained they would sleep outdoors to cope with extreme heat. This latest strategy was said to come with increased risks of theft or violence as a result of staying outdoors during the night. AGYW participants also reported repairing their houses, especially roofs, in order to avoid suffering from heavy rains, sandstorms and winds.

“During hot season, we sleep outdoors, in the rainy season we buy mosquito nets, and when it is windy, we wear masks and put shea butter in our nostrils.”

- Young woman participant (18-24 years old),¹²⁸ Bla, Mali

AGYW are also trying to sensitize 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.

7.2 Challenges that AGYW Face in Taking Action Against Climate Change Impacts

Across the sample, AGYM face many challenges when attempting to engage in these activities, including lack of funding and resources (materials, equipment, seedlings, transportation, etc.) to undertake climate action activities, lack of access to water for activities like tree planting and cleaning, and lack of community support and cooperation.

“We want to combat climate change but we don’t have any support”

- Adolescent girl participant (15-17 years old),¹²⁹ Bla, Mali

¹²⁸ Peer-to-peer survey participant.

¹²⁹ Focus Group Discussion participant.

The main barriers the girls and women face include lack of financial resources, tools, and support to undertake more substantial climate action. Many express a need for assistance from authorities, NGOs, and other organizations to provide funding, supplies, and training to enhance their resilience. They also desire more information and education on the causes of climate change and effective adaptation strategies. Overall, the adolescent girls and young women are demonstrating agency and initiative in responding to the climate crisis within their communities, despite significant constraints linked with their gender and age.

AGYW described gender inequality and discrimination against women and girls that affect their decision-making power and the way they are perceived by community members and authorities. AGYW in this study explained that there are some cultural norms and beliefs that undermine women's participation in activities, and they face a general lack of support from parents, community leaders, and other stakeholders. They mentioned they face challenges with lack of understanding and cooperation from community members as well as gender norms that see them less capable of mobilizing and advocating at community level. They reported not being listened to because of being adolescent girls or young women.

" Men underestimate us in the fight against climate change."

- Adolescent girl participant (15-17 years old),¹³⁰ Bla, Mali

They also described instances in which community members do not comply with regulations (such as "no littering" or deforestation), often by lack of means and/or awareness. Some AGYW also indicated the lack of unity and collective action among AGYW that affect their actions. This can be counterbalanced with the fact that, for instance, the young women co-researchers are involved in many activities at community level. So, the landscape on youth engagement cannot be summarised to a lack of ability to collectively take action. Indeed, AGYW also reported support mechanisms among AGYW.

"Girls and women, sometimes we help each other especially when we lack food"

- Young woman participant (18-24 years old),¹³¹ Jere, Nigeria

AGYW importantly highlighted safety and security concerns, including risk of violence and harassment when performing actions as AGYW. They also expressed that some climate action activities also posed risks of illness and injury.

The impacts of climate change on water, education, food, health, and basic services as highlighted before, also affect the ability of AGYW to take part in activities. Indeed, climate conditions (extreme heat, floods, heavy rains, drought) have effects on their ability to take action in their communities. They also described emotional and psychological impacts (stress, anxiety) which impact their wellbeing and ability to get involved in climate actions.

Summary

- AGYW engage in various adaptation and mitigation activities despite a number of challenges and the lack of recognition of their actions.

¹³⁰ Focus Group Discussion participant.

¹³¹ Peer-to-peer survey participant.

- Many AGYW, partly due to gender roles, are engaging in environmental sanitation efforts, such as cleaning streets and public spaces, clearing drainage systems, and properly disposing of waste to prevent flooding and stagnant water.
- AGYW also mentioned that they undertake various income-generating activities as adaptation strategies to support their families and meet their basic needs, as well as water-related coping strategies such as storing rainwater.
- Some AGYW are also actively participating in tree planting, reforestation and climate awareness initiatives in their households, schools, and community settings to combat deforestation, desertification, and climate change effects.
- AGYW face many challenges when attempting to engage in these activities, including lack of funding and resources (materials, equipment, seedlings, transportation, etc.) to undertake climate action activities, lack of access to water for activities like tree planting and cleaning, and lack of community support and cooperation as a result of gender norms and social perceptions.

Research Question 3: How have the young women co-researchers and AGYW participants experienced and perceived the FPAR methods used as part of this research?

8 FPAR Methodology: A Necessary Step Towards Further Representation of Adolescent Girls and Young Women in Research and Policy Making

Our third research question specifically addressed how young women co-researchers experienced and perceived the FPAR methods used as part of this research. On the side of the young women co-researchers, surveys were undertaken by young women co-researchers throughout the study in order to cater for their needs and expectations and assess their research process and experience of the methodology. As part of the data interpretation workshops in each country, a session was also organised in order to capture the young women co-researchers' perceptions of the FPAR methodology.

While co-drafting the survey and FGD questions, the research team also decided to include questions around the FPAR methodology in order to gain insights from the AGYW participants as well and have a broader perspective on how FPAR methodologies are experienced and perceived by both young women co-researchers and AGYW participants. Therefore, in both the Kobo collect survey and the FGDs, some qualitative questions were asked by young women co-researchers to AGYW participants about their feelings after undertaking the activities.

8.1 Experience of FPAR By AGYW Participants

Having their voices heard

Across the sample in all countries, AGYW participants expressed appreciation for this opportunity to participate in this FPAR study, for the selection of their communities as part of this study, and for

being able to share¹³² their lived experiences, concerns, worries, struggles and current actions. The AGYW participants appreciated that the young women co-researchers came to their community to understand their concerns.

“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

AGYW participants felt, often for the first time, that their voices were heard and people cared about them (AGYW). AGYW participants felt comfortable, useful, involved, empowered, and interested in the discussions. AGYW participants felt “content,” “relieved,” and “happy” after participating in the activities with young women co-researchers (both surveys and FGDs).

“The questions were interesting and I felt really considered.”

- Adolescent girl participant (15-17 years old),¹³³ Tillabery, Niger

“I feel reassured because I was able to express myself on many things that were bothering me” - Adolescent girl participant (15-17 years old),¹³⁴ Segou, Mali

“I feel useful.” - Adolescent girl participant (15-17 years old),¹³⁵ Ouahigouya, Burkina Faso

Overall, the AGYW participants found the questionnaire and discussions to be interesting, important, and informative, though a few expressed that the survey was a bit long and complicated for them. A few AGYW participants expressed that they were tired and stressed and felt pressed by their daily obligations including on the day of the survey. It is worth noting for future endeavours.

“I am a little tired, but I am happy because we have talked a lot about the important things in our community.” - Young woman participant (18-24 years old),¹³⁶ Segou, Mali

“I am feeling good but a bit rushed as I have to go and cook.”

- Young woman participant (18-24 years old),¹³⁷ Segou, Mali

Overall, the AGYW participants shared a deep sense of appreciation for being listened to. The data collection methodology, conducted by the young women co-researchers enabled constructive and honest discussions and sharing, which made the AGYW participants feel included, valued, and empowered to share their perspectives and experiences.

“We are happy that you 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.”

- AGYW Participant,¹³⁸ Jere, Nigeria

¹³² Focus Group Discussion participant.

¹³³ Peer-to-peer survey participant.

¹³⁴ Peer-to-peer survey participant.

¹³⁵ Peer-to-peer survey participant.

¹³⁶ Focus Group Discussion participant.

¹³⁷ Peer-to-peer survey participant.

¹³⁸ This AGYW participant took part in the photo-based Focus Group Discussion as part of the Photovoice methodology.

Gaining knowledge by participating in the study activities

Interestingly, a great majority emphasized that they gained significant new knowledge and ideas about climate change and gender equality, which they were eager to share with their peers and communities for further action.

“I feel better and I gain more knowledge on climate change and also I will educate others” - Adolescent girl participant (15–17 years old),¹³⁹ Konduga, Nigeria

Through inclusive and participatory facilitation techniques, the young women co-researchers enabled not only information sharing by AGYW participants but also empowering discussions in which AGYW participants gained knowledge about climate change and gender equality. With practical exercises such as “problem tree” and modified “risk mapping,” the AGYW participants in the FGDs were fully engaged in expressing themselves and also learning about the links between climate change and gender equality.

“Honestly, I am so pleased with this activity because I have gained a deeper understanding of climate change and gender inequality.”

- Young woman participant (18–24 years old),¹⁴⁰ Bla, Mali

“I have gotten some information about climate change, and it is very important because that is what we are experiencing.”

- Adolescent girl participant (15–17 years old),¹⁴¹ Segou, Mali

“We feel happy because our capacity is built and we understand more about climate change now.” - Adolescent girl participant (15–17 years old),¹⁴² Konduga, Nigeria

Interestingly, the AGYW participants who followed the young women co-researchers in the photo session also highlighted that they gained knowledge about their own community and how it is affected by climate change with a focus on the lived realities of AGYW.

Hoping for tangible actions and support

Respondents also carried hope that the particular issues they raised will be addressed and lead to positive changes and solutions in their community. Overall, the AGYW participants shared a deep sense of appreciation for the chance to contribute by their responses and participation in addressing the climate-related issues AGYW faced together with their communities.

AGYW participants committed to taking action, such as planting trees and being more environmentally conscious. They also explained that participation in this research enabled them to feel a sense of unity and joint action. Several AGYW participants mentioned feeling hopeful that this initiative would lead to further support in their community.

“Am happy because I have hope that this organisation will provide support for me to go to school and to be educated and looking forward for your support because I don't

¹³⁹ Peer-to-peer survey participant.

¹⁴⁰ Focus Group Discussion participant.

¹⁴¹ Peer-to-peer survey participant.

¹⁴² Focus Group Discussion participant.

have any dreams as a young lady than to go to school and to be educated.”

- Adolescent girl participant (15-17 years old),¹⁴³ Konduga, Nigeria

They expressed the desire for their suffering to be translated into tangible solutions, not simply discussions. For instance, the AGYW participants, especially in Guinea and Burkina Faso, suggested that the photos, data, and awareness messages be widely disseminated through various media to raise consciousness and action (including billboards, photo exhibitions, TV, community engagements sessions, and social media). This call for action should be heard by policy makers and institutions.

8.2 Experience of FPAR By Young Women Co-Researchers

Figure 35. Short story from co-researcher in Mali on FPAR methodology experience

The study of climate change allowed me to understand that adolescent girls and young women are often more at risk of experiencing the effects of climate change, due to their social and economic situation, they often play a crucial role in the management of resources such as water and food. I was also able to understand that adolescent girls and young women are not only the victims of climate change but that 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.

In order to assess the level of learning, as well as expectations and needs from co-researchers throughout the research process, the hera team created three online surveys that co-researchers were invited to fill at different steps of the process: at the beginning before the first workshops kickstarting the research process (pre-study assessment); after second workshops in order to identify key learnings from data collection and analysis steps; and at the end of the process in order to capture learnings throughout the research study. This provided grounds for comparison between the beginning and the end of the research process and the level to which the FPAR methodology responded to expectations. In summary, the FPAR methodology proved to be a powerful approach for engaging adolescent girls and young women in research on the gendered impacts of climate change in the Sahel. Despite some challenges, the process was overwhelmingly viewed as empowering and transformative by the co-researchers involved.

8.2.1 Assessing Knowledge and Expectations Prior to Undertaking the Study: Findings from Pre-Study Online Survey Filled by Co-Researchers

The online pre-assessment survey that was filled by co-researchers prior to the first workshop yielded valuable insights into co-researchers' knowledge, expectations, and areas of interest. The survey revealed varying levels of familiarity with key concepts related to the study. While a majority of co-researchers demonstrated high familiarity with gender and gender equality (56%), as well as Sexual and Gender-Based Violence (SGBV) (85.7%), there were notable gaps in knowledge regarding other crucial areas. For instance, only 28.6% of co-researchers who responded to the survey reported high familiarity with the concept of food security and gender, while 23.8% indicated low familiarity with participatory research methods. Co-researchers expressed keen interest in several key areas, including SGBV and response strategies, the intersections of feminism, food security, and human rights, Sexual and Reproductive Health and Rights (SRHR), participatory research methods, and the gendered impacts of climate change.

¹⁴³ Peer-to-peer survey participant.

The survey also shed light on co-researchers' current understanding of the challenges facing adolescent girls in relation to climate change, SRHR, education, and food security. Half of the co-researchers acknowledged the adverse effects of climate change, citing issues such as floods, droughts, food insecurity, inadequate housing, increased instances of gender-based violence, and harmful cultural practices. However, it's noteworthy that 12.5% of co-researchers admitted to having limited understanding of the gendered impacts of climate change.

Co-researchers identified several key challenges facing adolescent girls in the region. These include forced marriages, female genital mutilation, SGBV, increased risk of school dropouts, poverty stemming from limited economic opportunities, food insecurity, water scarcity, displacement, vulnerability to water-borne diseases, and difficulties in accessing essential sexual and reproductive health services.

Interestingly, the group was evenly split between those who had previously participated in feminist participatory action research (FPAR) workshops and those who had not. This diversity in experience levels presented both a challenge and an opportunity for the workshop organizers to cater to different needs and facilitate peer learning.

Co-researchers' expectations from the workshop were primarily focused on enhancing their understanding of climate change impacts on adolescent girls and improving their advocacy skills (64.2%). A significant portion also aimed to acquire proficiency in the use of research tools (35.7%). These expectations align well with co-researchers' plans to apply the knowledge gained, with the majority (64.3%) intending to use it for awareness-raising and advocacy efforts, while others planned to apply it directly in their field research.

To meet these expectations and address the identified needs, the first series of workshops incorporated practical skills training in participatory research methods, data methods, and use of research tools. Additionally, the workshop touched on definitions of key concepts and specific challenges identified for adolescent girls, including SGBV, CEFM, FGM, school dropouts, and access to SRHR services in the context of climate change.

In conclusion, the pre-assessment survey provided valuable insights that guided the development of the methodology, including workshops. By addressing the varying levels of familiarity with key concepts, incorporating practical skills training, and focusing on the specific challenges facing adolescent girls in the Sahel region, the workshops enhanced co-researchers' capacity to contribute to the study on the gendered impact of climate change.

8.2.2 Assessing Key Learnings from First and Second Workshops: Findings from Mid-Study Online Survey Filled by Co-Researchers

The two series of workshops conducted across the five Sahel countries demonstrated significant success in enhancing co-researchers' understanding of climate change impacts on adolescent girls and young women, while also building their research and analytical skills. This mid-point assessment revealed overwhelmingly positive feedback from co-researchers, with the workshops meeting or exceeding expectations across all countries.

A key strength of the workshops was their comprehensive and participatory nature.

"The workshops met my expectations because the study was well organized and well-led. We learned a lot, including new approach and analysis techniques."

- Young woman co-researcher, Burkina Faso

This sentiment was echoed by co-researchers from other countries, highlighting the workshops' effectiveness in combining theoretical knowledge with practical skills.

The workshops significantly improved co-researchers' familiarity with key concepts related to gender, climate change, and research methodologies. Many reported substantial gains in their understanding of these topics.

Particularly noteworthy was the acquisition of new research skills and methodologies. The Photovoice method was frequently mentioned as a valuable tool that both co-researchers and participants had not previously encountered. This method, along with focus group discussions and data analysis techniques, provided co-researchers with a robust toolkit for conducting participatory research. The workshops also deepened co-researchers' understanding of the multifaceted impacts of climate change on adolescent girls and young women.

"We now understand the impact of climate change on adolescent girls; the adverse effects that this change has on education (school dropouts due to delays and multiple absences to fetch food), food security (food insufficiency due to the depletion of land resources), sexual and gender-based violence (sexual assaults during the long journey to fetch water in remote areas) and sexual and reproductive health (lack of water to ensure good hygiene during menstruation) on young girls."

- Young woman co-researcher, Burkina Faso

This enhanced understanding was consistently reported across countries, with co-researchers noting the interconnected nature of climate change impacts on various aspects of girls' lives.

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

- Young woman co-researcher, Nigeria

The workshops also fostered a sense of empowerment and responsibility among co-researchers. Many expressed a newfound commitment to advocacy and awareness-raising in their communities.

While the overall feedback was overwhelmingly positive, some areas for improvement were identified. Some co-researchers suggested increasing the duration of the workshops to allow for more in-depth analysis and reflection. Others recommended expanding the research to cover more geographical areas within each country to capture a broader range of experiences.

In conclusion, the FPAR workshops have proven to be a powerful tool for building capacity, generating knowledge, and empowering co-researchers to address the gendered impacts of climate change.

"I really enjoyed the workshops and 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

8.2.3 Assessing Key Learnings of FPAR Methodology: Findings from End-Point Assessment Survey Filled by Co-Researchers and Reflection Sessions DURING Second Workshops

The Feminist Participatory Action Research (FPAR) study conducted across five Sahel countries has significantly enhanced co-researchers' understanding of research methods and process, as well as the gendered impacts of climate change on AGYW. The endpoint assessment revealed a profound transformation in co-researchers' perspectives and knowledge, highlighting the effectiveness of the FPAR methodology in both research and capacity co-building. During the second series of workshops, co-researchers and mentors were invited to provide insights on their experiences. This enables the research team to assess the FPAR methodology based on co-researchers and mentors' experiences.

Evolution of Understanding

Across all countries, co-researchers reported a substantial evolution in their understanding of climate change's gendered impacts. Many began the study with limited knowledge and emerged with a nuanced comprehension of the complex interplay between climate change and gender issues, coming from direct experience of the lived realities of AGYW in their communities. In Guinea for instance, co-researchers and mentor explained that they had difficulty accessing Photovoice areas pointed by the AGYW participants who accompanied them because there were impacted by the effects of recent extreme climate events. They also explained seeing first-hand the effects of climate change on the destruction of houses in one of the study areas.

"The study of climate change allowed me to understand that adolescent girls and young women are often more vulnerable to the effects of climate change, due to their social and economic situation... I was also able to understand that adolescent girls and young women are not only the victims of climate change but that they can play a key role in finding solutions." - Young woman co-researcher, Mali

The FPAR workshops represented an innovative approach to understanding climate change impacts through a gender-sensitive lens. As one co-researcher from Guinea noted, "At first, some of the co-researchers didn't see the link between climate change and teenage girls, but the training they received during the co-design workshop really helped them to understand." This observation encapsulates the transformative nature of the research process, which went beyond mere data collection to build capacity and understanding among co-researchers.

Participatory methods and tools

The research design incorporated multiple participatory methods, creating a comprehensive approach to data collection and analysis.

The cornerstone of this methodology was the Photovoice technique, which empowered co-researchers and participants to document their experiences through photography. This visual approach proved particularly effective, as noted by a Burkina Faso team member: "The involvement of the participants in producing and interpreting the photos provided reliable, high-quality data and reflected the reality of the phenomenon."

The Photovoice technique emerged as a particularly valuable tool across all countries. A co-researcher from Guinea noted, "Photo-voice [is] one of the methods that I was completely unaware of but which collects even more information clearly for me." This method allowed participants and co-researchers to visually document the impacts of climate change, providing rich, context-specific

data that might have been missed through traditional research methods. Co-researchers appreciated how Photovoice enabled participants and co-researchers to visually document climate change impacts, providing concrete evidence and stimulating deeper discussions. As one co-researcher from Mali noted, "It uses images to get people talking and to provide a concrete analysis of the damaging effects of climate change."

Focus groups formed another crucial component of the methodology, facilitating deep discussions and collaborative problem analysis. The sessions were particularly effective in creating safe spaces for gender-specific dialogue. A Mali co-researcher emphasized the value of this approach: "This method makes it possible to discuss things together and to go into depth in the discussions with the participants. Participants are free to express themselves."

The peer-to-peer survey component added another fundamental layer of data collection, creating opportunities for more intimate and in-depth conversations that brought both quantitative and qualitative data forward. As one Mali co-researcher enthusiastically reported, "The peer-to-peer method was really fantastic, as there was no barrier between the participants and the researchers." This approach helped overcome traditional power dynamics that often exist in research settings.

Uncovering AGYW's lived experiences

The FPAR methodology proved particularly effective in uncovering the lived experiences of AGYW affected by climate change. Co-researchers consistently praised the participatory nature of the approach, which allowed for deeper insights and more authentic data collection. A co-researcher from Mali emphasised, "With the FPAR methodology I have seen that adolescent girls and young women play a key role in community resilience. Their active participation in decision-making, resource management and local initiatives against climate change strengthens their power of action and leads to more inclusive responses."

Co-researchers identified several strengths of the FPAR methodology, including its participatory nature, ability to capture nuanced data, and empowerment of AGYW. A co-researcher from Nigeria stated, "The main strengths of the Feminist Participatory Action Research (FPAR) methodology... include advocating their voices, empowering them with knowledge, and creating context-specific solutions."

The FPAR approach proved to be a transformative experience for the co-researchers involved in this study, significantly enhancing their understanding of climate change impacts while also building their research and advocacy skills. Across all countries, co-researchers reported feeling empowered by the process and gaining valuable new knowledge and capabilities.

A key strength of the FPAR methodology was its participatory and inclusive nature. As one co-researcher from Nigeria noted, "FPAR ensures the active participation of marginalized communities, giving them a voice in the research process." This approach allowed for the collection of rich, context-specific data grounded in the lived experiences of adolescent girls and young women. A co-researcher from Mali emphasized that "By including adolescent girls and young women in the research process, the methodology allows them to ensure that their experiences, needs and perspectives are at the center of discussions."

Enhancing knowledge

Co-researchers reported gaining valuable skills and experiences beyond the immediate scope of the research. These included research skills, data analysis techniques, and a deeper understanding of community dynamics.

"I learned how to do a survey from start to finish. With the pre-survey development of questionnaires and the work strategy, during the survey I learned data collection and data analysis using quantitative and qualitative methods, triangulation to create advocacy to be able to make the voices of these women heard."

- Young woman co-researcher, Guinea

The research process also built significant capacity among the co-researchers. Many reported gaining new skills in data collection, analysis, and interpretation. A co-researcher from Guinea shared, "I learned how to do a survey from start to finish. With the pre-survey development of questionnaires and the work strategy, during the survey I learned data collection and data analysis using quantitative and qualitative methods, triangulation to create advocacy to be able to make the voices of these women heard." This skill development was seen as empowering, with many co-researchers expressing pride in their newfound abilities and confidence.

The study significantly improved co-researchers' views on the importance of addressing climate change's impact on AGYW. Many reported a shift from seeing climate change as a general issue to understanding its specific and disproportionate effects on young women and girls.

This awareness extended to the intersectionality of climate change impacts. A co-researcher from Nigeria explained, "Climate change worsens gender inequalities... Intersectional factors (poverty, location, economic) increase vulnerability... Climate justice demands gender equality."

Challenges and Limitations

Despite the overall success, co-researchers highlighted several challenges. Language barriers and translation issues were common across all countries, particularly when translating technical terms into local languages during data collection and during data transcription. A co-researcher from Niger mentioned, "Translation from the local language (Zarma) into French (although all the co-researchers understand and speak Zarma, they encountered difficulties in translating key words and even transcribing the data)." This underscores the importance of careful attention to language and communication in participatory research approaches.

Time constraints and long waiting periods between activities posed additional challenges. The time-intensive nature of the approach was frequently mentioned as a limitation. As one co-researcher from Nigeria stated, "The participatory nature of FPAR requires significant time investment for building relationships, training, and iterative feedback." Some co-researchers also noted difficulties in managing group dynamics and ensuring all voices were heard equally.

However, some weaknesses were also noted in ensuring balanced representation of all AGYW subgroups. A co-researcher from Mali observed, "Although FPAR places emphasis on the participation of young women it can be difficult to ensure balanced representation of all subgroups of AGYW (e.g. girls with disabilities, ethnic minorities or refugees)."

Based on the experiences across all countries, several key recommendations emerged. This included streamlining questionnaire length, enhancing translation support, reducing waiting periods between activities, and strengthening communication channels. There was also strong support for expanding the methodology to other regions and gender while maintaining existing research teams. As noted in the collective recommendations, there was a need to "adapt the questionnaire to the target audience, especially a short, clear and precise questionnaire." However, it's worth noting that it's also through this comprehensive survey that the entire research team was able to provide in-depth and nuanced analysis.

Moving forward, there is strong potential to build on this foundation, expanding the reach and depth of the research while continuing to center the voices and experiences of adolescent girls and young women in the Sahel region.

The research process, including series of workshops, demonstrated remarkable success in engaging young women in climate change research while building their capacity as researchers and community leaders. Despite various challenges, the approach proved effective in gathering valuable data while empowering participants and co-researchers and creating sustainable change in their communities. The research process went beyond traditional data collection, creating transformative experiences for participants and generating meaningful insights into the gendered impacts of climate change in the Sahel region.

“Through Photovoice and focus 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

The methodology's strengths in capturing nuanced, context-specific data and empowering participants and co-researchers suggest its potential for broader application in climate change research and policy development. Moving forward, the insights gained from this study provide a strong foundation for targeted interventions and policy initiatives to address the unique challenges faced by AGYW in the context of climate change in the Sahel region.

“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

“The FPAR methodology will enable them to be excellent researchers in the field of change. They say they have acquired new skills and expertise in qualitative analysis.” Young woman co-researcher, Mali

This suggests that FPAR approaches have significant potential not only for generating valuable research insights but also for building capacity and fostering empowerment among marginalized communities affected by climate change. “It has highlighted the nature of their vulnerabilities, by factors like age, socio-economic status, and location, while exposing how existing gender inequalities increase during climate crises. FPAR also build the resilience and leadership skills of girls, allowing them to create possible solutions to issues affecting them around climate change.” Young woman co-researcher, Nigeria

Recommendations for future FPAR studies emerged from the co-researchers' feedback. These included:

- Providing longer timeframes for the research process to allow for deeper engagement and learning
- Simplifying the questionnaires and research tools
- Strengthening support for language translation and interpretation

- Expanding the geographical scope of studies to capture a wider range of experiences and extending to adolescent boys and young men
- Creating opportunities for co-researchers from different countries to share experiences and learnings

Summary

- Overall, both AGYW participants and young women co-researchers found the research process to be a valuable participatory and co-learning experience, beyond just data collection and analysis.
- The great majority of responses from participants (surveys and FGDs) and co-researchers (through periodic surveys) highlighted the dual success of the project in both research outcomes and personal empowerment.
- AGYW participants felt, often for the first time, that their voices were heard and people cared about them (AGYW). They expressed that their knowledge of climate change issues was enhanced thanks to this research and they expressed the desire for their suffering to be translated into tangible solutions, not simply discussions.
- The FPAR study has proven to be a transformative experience for co-researchers, significantly enhancing their understanding of the issue and equipping them with valuable research and advocacy skills. The co-researchers appreciated the collaborative and empowering aspects of the methodology, with a focus on learning, sharing experiences, and working towards change.

9 Conclusions and Policy Gaps

The findings of this research highlight the multifaceted and devastating impact of climate change on the food and water security, health, future prospects, safety and wellbeing of adolescent girls and young women in the community, underscoring the urgent need for comprehensive and targeted policy and programmatic interventions to address this pressing issue exacerbating existing violations of their human rights.

The study shows that AGYW are concerned about the disproportionate impacts of climate change, which call for both assistance and systemic changes. The study provides a deep analysis into the gendered impact of climate change on AGYW in the Sahel as well as the actions they engage in order to adapt to climate change and mitigate its effects in their life.

Overall, few AGYW participants discussed existing gaps in policies or programmes. Those who talked about policy gaps expressed concerns about the lack of government support and policy implementation to address climate change impacts and related socioeconomic challenges.

Some AGYW participants, aware of the existence of policies around climate, environmental and gender issues, also expressed criticism over ineffective government policies and lack of enforcement, including failure to prevent deforestation, inadequate regulation of pollution, as well as lack of follow-through on announced initiatives and programs, including after extreme climate events strike communities.

In Guinea, AGYW participants expressed fatigue over the lack of support from government and requested further support for the community to overcome direct and indirect consequences of climate change. In Burkina Faso, young women co-researchers deplored the lack of support and follow up from government authorities, despite community representatives' efforts to propose solutions. A similar point was raised by AGYW participants in Guinea who expressed the lack of follow-up and enforcement of existing policies and regulations as well as the lack of long-term support from authorities following extreme climate related events such as floods.

As we speak, the effects on the lives of AGYW as showcased in this study call for a revision of terminology, from *climate change* to *multidimensional climate crisis* at the intersection of food, water, health and protection crises. This study provides a rationale for human rights-based approaches to climate justice that truly take into account the rights, needs and diverse voices of intersectional groups such as AGYW.

10 Recommendations

The following summarised recommendations are based on the expectations expressed by the AGYW participants and young women co-researchers who participated in this study in the five countries as well as analysis from Phase I and Phase II of this study. [Detailed recommendations are found in Annex 2.](#)

Cognisant of the level of time, efforts and investment in the two phases of this research undertaking by the young women co-researchers, the adolescent girls and young women who took part in this study as well as Plan International and her teams, the research team is enthusiastic about the transformative and social justice potential of these research findings. Based on the voices, experiences, recommendations and rights of adolescent girls and young women distinctly put forward in this report as well as literature review conducted previously, the research team recommends for all actors cited below to sincerely acknowledge the findings of this research, to take time to learn further about the lived realities of AGYW and their communities, and to take the following urgent actions:

10.1 To State Authorities

Before providing recommendations to national governments and CSO actors, our research urges State Authorities of wealthy nations to pay their fair share for climate adaptation and to ensure that the backsliding and backtracking from climate commitments are halted and reversed in order to ensure long-term climate change mitigation.

The study recommends that the State Authorities:

1. Recognise the multidimensional and intersectional nature of climate change and develop, implement and finance gender-transformative national climate change policies and action plans with dedicated focus on AGYW, including allocating budget for climate adaptation initiatives targeting and led by them.
2. Guarantee the realisation of socio-economic rights through gender-transformative climate-resilient public services in food, education, health, water, and sanitation, with attention to the rights and needs of adolescent girls and young women (AGYW).

3. Position AGYW as key actors in building gender-just climate-resilient communities guaranteeing AGYW's meaningful participation in policy making, program design and implementation while building on their existing efforts and capacities as climate action leaders.

10.2 To Civil Society Actors, Development Partners Including I/NGOS as well as Regional and Continental Organisations such as ECOWAS and The African Union

The study recommends that the Civil Society actors, development partners including I/NGOs as well as regional and continental organisations such as ECOWAS and the African Union:

4. Co-create and implement holistic, gender-transformative and intersectional climate programs with AGYW that address the interconnected impacts of climate change on AGYW's lives centering their leadership and diverse experiences throughout the project cycle.
5. Centre AGYW's diverse voices and lived experiences in all climate advocacy efforts, amplifying their demands through collaborative campaigns that challenge power structures and gender norms and supporting AGYW-led initiatives to document climate impacts on their communities in order to present solutions and advocacy points directly to policymakers.
6. Establish AGYW-led knowledge hubs that facilitate transformative and participatory research and learning exchanges between diverse stakeholders.
7. Re-design simplified, decolonial, participatory and long-term approaches to partnerships, funding and research in order to prioritise AGYW-led and feminist organisations driving climate justice initiatives.

10.3 TO PLAN INTERNATIONAL

Based on Phase I findings on Plan International's strategies and programmes structures, as well as regular interactions with the five countries involved as part of this research, the study recommends that Plan International:

Programming

- Supports AGYW to develop joint action plans that leverage their diverse experiences to drive systemic change in climate policy and gender norms. This means spearheading transformative initiatives that redefine the nexus of gender and climate justice, positioning AGYW as primary decision-makers and change agents.
- Implements an innovative "Climate Justice Leadership Learning and Exchange Program" for AGYW across countries and regions. This includes designing immersive study trips for AGYW that go beyond knowledge sharing in order to build solidarity and collective power. Trips should aim to challenge colonial dynamics by prioritising South-South exchanges and valuing indigenous knowledge. These can incorporate modules on feminist movement building and intersectional climate advocacy.
- Establishes AGYW-led steering committees with voting power in all climate-related programs and coalitions while implementing feminist leadership models that challenge traditional hierarchies and cultivate AGYW's collective power to drive systemic change in climate policy and gender norms.
- Establishes a "Climate Resilience Innovation Hub" involving AGYW to capture, expand, and advance local adaptation and mitigation strategies. This should include providing resources

and platforms for AGYW to conduct participatory action research in their communities, elevating indigenous knowledge and grassroots solutions. This should enable AGYW to have ownership over the knowledge produced and lead its dissemination to influence policy and practice.

- Incorporates comprehensive gender-transformative and climate risk assessments in all programming areas including food security, education, livelihoods, SRHR, and child protection initiatives to explicitly challenge gender norms while building climate resilience. This should include dedicated funding for integrated activities that address root causes of gender inequality in the context of climate change.
- Develops holistic, rights-based programs that address the interconnected impacts of climate change on AGYW's lives, challenging siloed approaches. Examples could include integrating climate adaptation with food security, WASH, comprehensive sexuality education, menstrual health, SGBV prevention, and youth economic empowerment projects.
- Supports AGYW to lead multi-sectoral initiatives that build community resilience while transforming gender relations. This involves investing in long-term, flexible funding models that allow for iterative learning and sustained efforts to dismantle patriarchal structures exacerbated by climate change.
- Transforms community-based early warning systems by elevating AGYW's leadership and incorporating traditional knowledge. This includes involving AGYW to design, implement, and manage gender-responsive preparedness strategies for extreme climate events. Plan International should ensure these systems challenge traditional gender roles in disaster response and create opportunities for AGYW to lead community resilience efforts. These initiatives should be integrated with existing local structures, amplifying and scaling successful AGYW-led approaches rather than imposing external models.
- Takes the lead of new and existing initiatives (programmes, coalitions...) in order to integrate the link between gender and climate justice, with a focus on bringing the voices, resilience, decision-making and rights of adolescent girls and young women forward.

Advocacy and Influencing

- Takes a leadership role in integrating gender justice and climate justice in International, regional and national platforms and initiatives, with a focus on the rights and voices of adolescent girls and young women.
- Advocates for increased participation of AGYW in climate policymaking and action at all levels. This includes pushing for dedicated climate adaptation funding for initiatives supporting AGYW.
- As part of advocacy efforts to governments, places more attention on adolescent girls' and young women's resilience and strengths, and the need for them to be involved in decision-making, as opposed to emphasizing on girls' and women's vulnerabilities.
- Focuses on making grassroots youth-led initiatives more visible and listened to in the climate change and gender advocacy space at national, regional and international levels by including adolescent girls and young women in climate change related advocacy at country and regional level, beyond main world-renowned activism.
- Creates AGYW-led climate justice task forces with decision-making authority in each country office: empowering these groups to conduct feminist participatory analyses of how gender norms, power structures, and climate change intersect in their contexts.

Partnerships and Research

- Conducts transformative, AGYW-led stakeholder mapping across Plan International Country Offices. This should include training, involving and compensating diverse groups of AGYW to

design and implement comprehensive mapping exercises that challenge traditional power structures.

- Initiates a transformative stakeholder engagement process led by AGYW, challenging traditional power dynamics in partnership development. This includes:
- Training, involving and compensating diverse AGYW to design and implement a comprehensive mapping of potential partners, prioritizing grassroots feminist and youth-led organizations often overlooked by mainstream actors.
- Empowering AGYW to define partnership criteria based on commitment to gender justice and climate action.
- Using this process to build a feminist climate justice coalition that amplifies AGYW's voices and advances their rights through collective advocacy and programming.
- Forges strategic, equitable partnerships with women's rights organizations and youth-led climate groups, ensuring AGYW are at the forefront of decision-making. Establish a "Feminist Climate Action Incubator" that provides long-term, flexible funding and capacity strengthening to these partners, particularly supporting emerging AGYW-led initiatives.
- Creates spaces for cross-movement learning and collaboration, fostering innovative approaches that integrate gender transformation with climate resilience. This should include accountability mechanisms where AGYW evaluate the effectiveness and equity of partnerships.
- Establishes an AGYW-led advisory board with decision-making authority over research priorities, funding allocations, and how evidence is used to influence practice.
- Co-creates a groundbreaking research agenda on gender-transformative climate action, in collaboration with research institutions, meaningfully engaging Adolescent girls and boys, young women and young women in order to enhance knowledge of gender roles, perceptions, and experiences in the context of climate change. This should include:
- prioritising participatory methodologies that position AGYW as researchers rather than subjects, challenging traditional academic hierarchies;
- investigating how climate interventions can catalyse broader shifts in gender norms and power relations involving adolescent girls and boys in their diversity;
- Ensuring research design, implementation, and dissemination actively redistribute power, amplify marginalised voices, and drive systemic change in climate and gender policy.

Organisational Capacity

- Transforms organizational culture and capacity by implementing a comprehensive, feminist climate justice training including this in new staff induction programmes, and offering trainings for existing staff on climate change and feminist approaches.
- Develops an AGYW-led "Climate Justice Leadership Academy" for staff at all levels, challenging traditional hierarchies of knowledge and expertise, integrating modules on intersectionality, power analysis, and decolonial approaches to climate action.
- Establishes mentorship programs and creates pathways for AGYW to advance into leadership roles, fundamentally shifting power dynamics within the organization.
- Includes climate justice in the Country Offices' country strategies while transforming country strategy development processes by prioritising AGYW's voices and lived experiences of climate impacts. This should guarantee that strategies explicitly address root causes of gender inequality exacerbated by climate change.
- Develops accountability mechanisms where AGYW evaluate the gender-transformative impact of climate-informed programming.

- Establishes a dedicated "Gender-Transformative Climate Resilience Fund" and implements participatory grant-making processes where AGYW define funding priorities and allocation criteria prioritising long-term, flexible funding for initiatives that challenge patriarchal norms while building climate resilience. This could include creating specific funding streams for AGYW-led climate innovations and advocacy efforts.
- Develops new, feminist metrics for measuring the impact of climate adaptation work on gender equality and AGYW empowerment.
- Mitigates the climate impact and footprints of Plan International's work by ensuring their activities are sustainable and minimise its carbon footprints (travel, water and electricity consumption, sustainability efforts, waste management).

The study calls for greater collaboration between AGYW, continental organisations, governments, I/NGOs, and communities to address the multifaceted suffering posed by climate change as well as gender and socioeconomic inequalities.

SHORT STORY from young woman co-researcher, Mali

“With the FPAR methodology I have seen that adolescent girls and young women play a key role in community resilience. Their active participation in decision-making, resource management and local initiatives against climate change strengthens their power of action and leads to more inclusive responses. I can say that it is thanks to FPAR, I have seen that young women are not just victims of climate change, but also agents of change.”

ANNEX I: Stakeholders Mapping

Stakeholders mapping (from Phase I)

Table 6. Actors involved in initiatives, projects, programmes at the intersection of climate change and women's rights/gender¹⁴⁴

COUNTRY	ACTORS WORKING ON CLIMATE CHANGE & WOMEN'S RIGHTS/ GENDER
BURKINA FASO	Oxfam, WEP, IFAD, Helen Keller International, UNFPA (integrating SRHR into emergency preparedness plans), UNESCO (Climate Frontlines Initiative), UNICEF, UNDP (conducted a study that led to the NAP including gender dynamics) and several women's organisations based in BF (especially in relation to women in agriculture).
GUINEA	Renaissance de l'Africaine des femmes de l'Afrique de l'Ouest (RAFAO Guinea); NAP Global Network support programme for Guinea; Green Climate Fund (GCF); Partenariat - Recherches - Environnement – Médias (PREM); Enfants du Globe Guinée; Humanium Guinea; Local conflict management committees.
MALI	German Cooperation (GIZ), Oxfam, UN Women.
NIGER	World Bank, USAID, Oxfam, WEP-Niger.
NIGERIA	Climate and Sustainable Development Network (CSDeVNet); Women Environmental Programme (WEP); Girl Up Nigeria SLCA campaign; Center for Girls' Education (CGE); Smallholder Women Farmers Organization in Nigeria (SWOFON); Partnership for Economic Policy (PEP); Women's Consortium of Nigeria (WOCON); Solar Sister; Save the Children; Oxfam Nigeria; UN Women.

Perspectives of AGYW on actions and organisations active on gender and climate change (from Phase II)

When asked which authorities are active on gender and climate change, the AGYW participants gave some examples of community-based organizations (CBOs), international/non-governmental organizations (I/NGOs), and the United Nations (UN) who have played a role in providing various forms of assistance to communities, including:

- Distribution of food, non-food items (e.g., blankets, mosquito nets), and school supplies
- Construction of water infrastructure (e.g., boreholes, wells, taps) to address water scarcity
- Provision of healthcare services and vaccination campaigns
- Support for education, such as paying school fees and providing learning materials
- Livelihood support, including distribution of livestock and cash assistance
- Shelter construction and camp management for displaced populations
- Awareness-raising and capacity-building activities on topics like gender equality, sanitation, and climate change adaptation

Key organisations mentioned include the Red Cross/Red Crescent, UNHCR, UNICEF, Plan International, Save the Children, IRC, and local NGOs. There is a recognition of the need for

¹⁴⁴ As identified as part of this research.

continued and enhanced support from these organisations, as well as the government and other organisations to address the diverse needs of the communities, particularly in the face of climate change impacts.

However, in light with data they collected in Coyah and Forecariah, young women co-researchers in Guinea deplored that the majority of AGYW participants have not received any help from organisations when faced with climatic related events. The young women co-researchers report that this was also mentioned in the FGDs. Some AGYW participants in Guinea also said that even when help was available in the community, they did not receive it. It was described that in the event of flooding, the authorities would come to assess the situation but would not come back afterwards. Food and basic items would be distributed but the aid would either be blocked or there would not be any follow-up. Also, for example, with regard to the treatment of wells following the floods, the wells had not been treated in Fily, leading to a high risk of disease because the well water is not fit for consumption or use.

In **Nigeria**, AGYW participants indicated that various organisations have supported by providing assistance such as food items and medical supplies. AGYW participants also mentioned organisations have provided support to build houses, and drill boreholes. They also organise life skills training to promote self-reliance, cleanliness, and decision-making.

In **Burkina Faso**, AGYW participants deplored that community-based organizations (CBOs) and non-governmental organizations (NGOs) often try to make proposals to government members through their neighbourhood representatives, but these efforts are usually without any follow-up. AGYW participants in Burkina Faso noted that the World Food Programme (WFP) has provided food aid to the community. The AGYW participants request that authorities help raise awareness about the impacts of climate change.

In **Niger**, community-based organizations (CBOs), international/non-governmental organizations (I/NGOs), and the United Nations (UN) have provided various forms of assistance to local communities, including through distribution of livestock (e.g., small ruminants), food aid and other supplies (e.g., clothing, basic necessities, school kits, mosquito nets). They have supported through cash transfers and financial support for community activities (e.g., recreation) and support for access to food, water, and shelter.

In **Mali**, community-based organizations (CBOs), international/non-governmental organizations (I/NGOs), and the United Nations (UN) have played a role in providing various forms of assistance to communities, including distribution of food and non-food items (e.g., blankets, mosquito nets and school supplies), construction of water infrastructure (e.g., boreholes, wells, water taps) to address water scarcity, provision of healthcare services, such as vaccination campaigns as well as support for education, including paying school fees and providing learning materials. The AGYW participants also indicated that they support awareness-raising and training on topics like gender equality, sanitation, and climate change adaptation as well as establishing temporary shelters and other forms of humanitarian aid.

In **Guinea**, an NGO (AJAFF) raising awareness about cleaning the environment was mentioned as well as Plan International.

We recommend complementing this stakeholders' mapping by further research at country level in order to identify potential partners and avoid duplication of efforts.

ANNEX 2: Detailed RECOMMENDATIONS

Before providing recommendations to national governments and CSO actors, our research urges governments of wealthy nations to pay their fair share for climate adaptation and to ensure that the backsliding and backtracking from climate commitments are halted and reversed in order to ensure long-term climate change mitigation.

To State Authorities

The study recommends that the State Authorities:

1 - Recognise the multidimensional and intersectional nature of climate change and develop, implement and finance gender-transformative national climate change policies and action plans with dedicated focus on AGYW, including allocating budget for climate adaptation initiatives targeting and led by them.

This includes:

- Recognising that vulnerabilities of adolescent girls and young women (AGYW) are not inherent but rather acquired based on societal norms, economic opportunities, socialization, education, and discrimination; while addressing the intersectional needs of communities, with a particular focus on AGYW and their families.
- Ensuring that intersectionality and climate-gender linkages are recognized in all key policy documents. This means guaranteeing that Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), and other climate policies are gender-transformative, updated and sufficiently ambitious, especially in terms of gender and climate justice.
- Integrating climate considerations into all policies and action plans ensuring that funding, policies, and programs for gender equality, food security, water, education, health, SRHR and SGBV (among other sectors) account for climate change impacts, adaptation and mitigation.
- Recognising, respecting, and protecting local and traditional knowledge, while supporting community-based actors and initiatives, including opportunities for intergenerational knowledge transmission on climate action.

2 - Guarantee the realisation of socio-economic rights through gender-transformative climate-resilient public services in food, education, health, water, and sanitation, with attention to the rights and needs of adolescent girls and young women (AGYW).

This includes:

Food security	Education	Health and social protection
- Strengthening and developing climate-resilient and ecological food	- Integrating comprehensive gender-transformative climate	- Improving access to sexual and reproductive health services for

<p>production and distribution systems, with a focus on agroecological and environmentally sustainable approaches that respect human rights, biodiversity and the environment.</p> <ul style="list-style-type: none"> - Providing financial and technical support for climate-resilient livelihoods, with a focus on empowering young women in sustainable agriculture (such as agroecology), ensuring equal access to resources, funding, training, and opportunities. - Ensuring equal land and resource rights for women and girls. - Supporting communities with fuel-efficient stoves and solar systems to reduce deforestation and carbon emissions. 	<p>change education into national curricula</p> <ul style="list-style-type: none"> - Enhancing awareness-raising and mobilization actions in communities particularly with and for AGYW. - Implementing the GADRRRES's Comprehensive School Safety Framework 2022-2030 - Addressing barriers to AGYW education and women's employment. - Setting up and funding gender-transformative sustainable vocational/skills training programs that lead to green jobs, accessible to AGYW. 	<p>AGYW, recognizing increased risks of child, early, and forced marriage, unintended pregnancies, and (sexual) exploitation due to climate change and gender norms.</p> <ul style="list-style-type: none"> - Expanding and transforming social protection and cash transfer programs to build resilience of at-risk households
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3 - Position AGYW as key actors in building gender-just climate-resilient communities guaranteeing AGYW's meaningful participation in policy making, program design and implementation while building on their existing efforts and capacities as climate action leaders.

This includes:

- Supporting youth-led and women-led climate initiatives, platforms and spaces for AGYW participation and leadership in climate decision-making while enabling intergenerational cross-learning.
- Ensuring policies and programs challenge gender norms by involving men and boys, promoting women's decision-making power, and providing AGYW with resources, skills, and opportunities to lead community adaptation efforts.

Conducting further research and collecting intersectional gender-disaggregated data to measure progress on gender equality and AGYW's enhanced capacity to address climate challenges. This may also include conducting further research (on SRHR and SGBV, food security, water...).

To Civil Society Actors, Development Partners Including I/NGOs As Well As Continental Organisations Such As The African Union

The study recommends that the Civil Society actors, development partners including I/NGOs as well as regional and continental organisations such as ECOWAS and the African Union:

1- Co-create and implement holistic, gender-transformative and intersectional climate programs with AGYW that address the interconnected impacts of climate change on AGYW's lives centering their leadership and diverse experiences throughout the project cycle.

This includes:

- Integrating climate adaptation with education, sexual and reproductive health and rights, economic empowerment, and GBV prevention programs.

- Investing in long-term, flexible funding models that support AGYW to lead cross-sectoral initiatives that build community resilience and transform gender norms and power dynamics in the face of climate change.
- Integrating comprehensive gender and power analyses to address root causes of diverse inequalities, to challenge harmful norms, promote AGYW's rights, and build their capacities as climate leaders.
- Scaling up and adapting community-based adaptation models that explicitly advance gender equality and youth empowerment, prioritising initiatives that enhance AGYW's access to and control over resources, promote their leadership in climate-resilient livelihoods, and challenge traditional gender roles.
- Establishing youth-led steering committees with decision-making power and fair compensation.
- Fostering intergenerational partnerships to blend indigenous knowledge with youth innovation in building resilience.
- Mandating intersectional gender and youth analysis in all climate programs, with specific targets for AGYW's meaningful participation and leadership.
- Developing comprehensive frameworks to assess how initiatives transform gender relations and empower AGYW.
- Allocating dedicated funding for gender-transformative activities and AGYW-led climate solutions.

2- Centre AGYW's diverse voices and lived experiences in all climate advocacy efforts, amplifying their demands through collaborative campaigns that challenge power structures and gender norms and supporting AGYW-led initiatives to document climate impacts on their communities in order to present solutions and advocacy points directly to policymakers.

This includes :

- Funding dedicated platforms for their meaningful participation in high-level decision-making spaces.
- Creating platforms where AGYW educate communities and authorities on climate impacts and innovative solutions, while also learning from indigenous and local knowledge. Ensure these exchanges challenge power dynamics and position AGYW as experts, compensating them fairly for their contributions.
- Ensuring AGYW from diverse backgrounds, including marginalised communities, have equal opportunities to shape climate agendas at local, national, and international levels.
- Creating multimedia dissemination strategies that amplify AGYW's voices and reach diverse audiences, including policy makers.
- Advocating for gender-transformative climate finance mechanisms that directly reach AGYW and women-led organizations at the local level, and pushing for dedicated funding streams that support AGYW's climate innovations, entrepreneurship, and leadership development.
- Demanding transparency and accountability in how climate funds address gender equality and youth empowerment.

- Establishing AGYW-led monitoring and accountability systems to track government progress on climate and gender equality commitments.
- Train and support networks of young women to conduct gender audits of climate policies and programs, providing them with tools to hold decision-makers accountable.

3- Establish AGYW-led knowledge hubs that facilitate transformative and participatory research and learning exchanges between diverse stakeholders.

This includes:

- Assessing knowledge of AGYW on climate action advocacy, supporting additional capacity building of AGYW as climate justice leaders by providing comprehensive training in advocacy skills, climate science, and policy processes.
- Developing comprehensive, AGYW-designed leadership programs that build climate advocacy skills while fostering critical consciousness about gender and power. This should combine technical training with mentorship, peer support networks, and opportunities for AGYW to lead climate initiatives. This should Integrate feminist popular education methodologies that value AGYW's lived experiences and challenge traditional hierarchies of knowledge.
- Implementing further participatory action research projects led by AGYW to document and analyse gender-transformative climate interventions.
- Supporting AGYW to develop their own criteria for "best practices" that prioritise shifting power relations and advancing gender equality.
- Providing long-term, flexible funding and capacity strengthening to local organizations working at the intersection of climate, gender, and youth while prioritising AGYW-led groups and those with feminist approaches
- Fostering partnerships that position such locally led organisations as leaders in climate action, valuing their expertise equally to international actors and amplifying their strategies.
- Funding and co-designing with AGYW a research agenda on gender-transformative climate interventions. This will prioritise participatory methodologies that position AGYW as researchers rather than subjects and ensure research outputs challenge dominant narratives, amplifying AGYW's perspectives.

4 – Re-design simplified, decolonial, participatory and long-term approaches to partnerships, funding and research in order to prioritise AGYW-led and feminist organisations driving climate justice initiatives.

This includes:

- Establishing dedicated funding streams with simplified access for grassroots groups.
- Implementing participatory grant-making processes where AGYW decide funding allocations.
- Providing long-term, flexible core funding that allows organizations to address the root causes of gender inequality alongside climate action.
- Catalysing transformative cross-sectoral collaborations that challenge traditional power dynamics.

- Establishing accountability mechanisms led by feminist organizations to track how funds challenge power imbalances and shift social norms alongside climate goals.
- Contributing to re-design climate finance architecture to ensure resources directly reach and benefit AGYW at the local level. This could be promoted through the creation of decentralised funding mechanisms managed by AGYW collectives.
- Simplifying reporting and monitoring requirements and providing capacity strengthening on financial management that challenges gender biases.
- Funding AGYW-led participatory action research that centres Indigenous knowledge and challenges Western scientific dominance.
- Supporting the development of new, gender-transformative metrics for measuring climate resilience.
- Ensuring research processes and outputs actively redistribute power, amplify marginalised voices, and drive systemic change in how climate solutions are conceptualised and implemented.

To PLAN International

Based on Phase I findings on Plan International's strategies and programmes structures, as well as regular interactions with the five countries involved as part of this research, the study recommends that Plan International:

Programming

- Supports AGYW to develop joint action plans that leverage their diverse experiences to drive systemic change in climate policy and gender norms. This means spearheading transformative initiatives that redefine the nexus of gender and climate justice, positioning AGYW as primary decision-makers and change agents.
- Implements an innovative "Climate Justice Leadership Learning and Exchange Program" for AGYW across countries and regions. This includes designing immersive study trips for AGYW that go beyond knowledge sharing in order to build solidarity and collective power. Trips should aim to challenge colonial dynamics by prioritising South-South exchanges and valuing indigenous knowledge. These can incorporate modules on feminist movement building and intersectional climate advocacy.
- Establishes AGYW-led steering committees with voting power in all climate-related programs and coalitions while implementing feminist leadership models that challenge traditional hierarchies and cultivate AGYW's collective power to drive systemic change in climate policy and gender norms.
- Establishes a "Climate Resilience Innovation Hub" involving AGYW to capture, expand, and advance local adaptation and mitigation strategies. This should include providing resources and platforms for AGYW to conduct participatory action research in their communities, elevating indigenous knowledge and grassroots solutions. This should enable AGYW to have ownership over the knowledge produced and lead its dissemination to influence policy and practice.
- Incorporates comprehensive gender-transformative and climate risk assessments in all programming areas including food security, education, livelihoods, SRHR, and child protection initiatives to explicitly challenge gender norms while building climate resilience. This should

include dedicated funding for integrated activities that address root causes of gender inequality in the context of climate change.

- Develops holistic, rights-based programs that address the interconnected impacts of climate change on AGYW's lives, challenging siloed approaches. Examples could include integrating climate adaptation with food security, WASH, comprehensive sexuality education, menstrual health, SGBV prevention, and youth economic empowerment projects.
- Supports AGYW to lead multi-sectoral initiatives that build community resilience while transforming gender relations. This involves investing in long-term, flexible funding models that allow for iterative learning and sustained efforts to dismantle patriarchal structures exacerbated by climate change.
- Transforms community-based early warning systems by elevating AGYW's leadership and incorporating traditional knowledge. This includes involving AGYW to design, implement, and manage gender-responsive preparedness strategies for extreme climate events. Plan International should ensure these systems challenge traditional gender roles in disaster response and create opportunities for AGYW to lead community resilience efforts. These initiatives should be integrated with existing local structures, amplifying and scaling successful AGYW-led approaches rather than imposing external models.
- Takes the lead of new and existing initiatives (programmes, coalitions...) in order to integrate the link between gender and climate justice, with a focus on bringing the voices, resilience, decision-making and rights of adolescent girls and young women forward.

Advocacy and Influencing

- Takes a leadership role in integrating gender justice and climate justice in International, regional and national platforms and initiatives, with a focus on the rights and voices of adolescent girls and young women.
- Advocates for increased participation of AGYW in climate policymaking and action at all levels. This includes pushing for dedicated climate adaptation funding for initiatives supporting AGYW.
- As part of advocacy efforts to governments, places more attention on adolescent girls' and young women's resilience and strengths, and the need for them to be involved in decision-making, as opposed to emphasizing on girls' and women's vulnerabilities.
- Focuses on making grassroots youth-led initiatives more visible and listened to in the climate change and gender advocacy space at national, regional and international levels by including adolescent girls and young women in climate change related advocacy at country and regional level, beyond main world-renowned activism.
- Creates AGYW-led climate justice task forces with decision-making authority in each country office: empowering these groups to conduct feminist participatory analyses of how gender norms, power structures, and climate change intersect in their contexts.

Partnerships and Research

- Conducts transformative, AGYW-led stakeholder mapping across Plan International Country Offices. This should include training, involving and compensating diverse groups of AGYW to design and implement comprehensive mapping exercises that challenge traditional power structures.
- Initiates a transformative stakeholder engagement process led by AGYW, challenging traditional power dynamics in partnership development. This includes:
- Training, involving and compensating diverse AGYW to design and implement a comprehensive mapping of potential partners, prioritizing grassroots feminist and youth-led organizations often overlooked by mainstream actors.

- Empowering AGYW to define partnership criteria based on commitment to gender justice and climate action.
- Using this process to build a feminist climate justice coalition that amplifies AGYW's voices and advances their rights through collective advocacy and programming.
- Forges strategic, equitable partnerships with women's rights organizations and youth-led climate groups, ensuring AGYW are at the forefront of decision-making. Establish a "Feminist Climate Action Incubator" that provides long-term, flexible funding and capacity strengthening to these partners, particularly supporting emerging AGYW-led initiatives.
- Creates spaces for cross-movement learning and collaboration, fostering innovative approaches that integrate gender transformation with climate resilience. This should include accountability mechanisms where AGYW evaluate the effectiveness and equity of partnerships.
- Establishes an AGYW-led advisory board with decision-making authority over research priorities, funding allocations, and how evidence is used to influence practice.
- Co-creates a groundbreaking research agenda on gender-transformative climate action, in collaboration with research institutions, meaningfully engaging Adolescent girls and boys, young women and young women in order to enhance knowledge of gender roles, perceptions, and experiences in the context of climate change. This should include:
 - prioritising participatory methodologies that position AGYW as researchers rather than subjects, challenging traditional academic hierarchies;
 - investigating how climate interventions can catalyse broader shifts in gender norms and power relations involving adolescent girls and boys in their diversity;
 - Ensuring research design, implementation, and dissemination actively redistribute power, amplify marginalised voices, and drive systemic change in climate and gender policy.

Organisational Capacity

- Transforms organizational culture and capacity by implementing a comprehensive, feminist climate justice training including this in new staff induction programmes, and offering trainings for existing staff on climate change and feminist approaches.
- Develops an AGYW-led "Climate Justice Leadership Academy" for staff at all levels, challenging traditional hierarchies of knowledge and expertise, integrating modules on intersectionality, power analysis, and decolonial approaches to climate action.
- Establishes mentorship programs and creates pathways for AGYW to advance into leadership roles, fundamentally shifting power dynamics within the organization.
- Includes climate justice in the Country Offices' country strategies while transforming country strategy development processes by prioritising AGYW's voices and lived experiences of climate impacts. This should guarantee that strategies explicitly address root causes of gender inequality exacerbated by climate change.
- Develops accountability mechanisms where AGYW evaluate the gender-transformative impact of climate-informed programming.
- Establishes a dedicated "Gender-Transformative Climate Resilience Fund" and implements participatory grant-making processes where AGYW define funding priorities and allocation criteria prioritising long-term, flexible funding for initiatives that challenge patriarchal norms while building climate resilience. This could include creating specific funding streams for AGYW-led climate innovations and advocacy efforts.
- Develops new, feminist metrics for measuring the impact of climate adaptation work on gender equality and AGYW empowerment.

- Mitigates the climate impact and footprints of Plan International's work by ensuring their activities are sustainable and minimise its carbon footprints (travel, water and electricity consumption, sustainability efforts, waste management).

RECOMMENDATIONS FROM CO-RESEARCHERS AND PARTICIPANTS

Recommendations made by the young women co-researchers

The co-researchers identified several key areas requiring further research and action:

- **Policy:** Co-researchers highlighted the need for gender-inclusive policymaking addressing root causes of marginalisation/discriminations through gender-transformative policies. Integrating climate change considerations into national education, health, and social protection systems. Encouraging girls' leadership and include them in the development, implementation and monitoring of Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs).
- **Education and awareness:** Many co-researchers emphasised the need for more climate change education, awareness-raising and mobilization actions in communities particularly with and for AGYW. They indicated the need of developing gender-responsive climate education and skills training programs
- **Economic empowerment:** Recognising the link between economic vulnerability and climate change impacts, co-researchers called for vocational training and empowerment programs.
- **Extensive research:** the need for further research on climate change's impacts on reproductive health and gender-based violence was frequently mentioned.
- **Advocacy:** supporting platforms and initiatives for AGYW participation and leadership in climate decision-making.

A co-researcher from Mali provided comprehensive recommendations: **"Encourage governments, NGOs and researchers to integrate the gender dimension into climate surveys by collecting disaggregated data... Create participatory platforms for adolescent girls and young women in decision-making spaces such as climate conferences, local resilience forums or consultation with governments... Develop vocational training and economic empowerment programs specifically for young women in vulnerable communities."**

The research process also sparked a desire for further action among many co-researchers. This indicates the potential for FPAR approaches to not only generate knowledge but also to catalyse community-level action and advocacy.

Recommendations for future FPAR studies emerged from the co-researchers' feedback. These included:

- Providing longer timeframes for the research process to allow for deeper engagement and learning
- Simplifying the questionnaires and research tools
- Strengthening support for language translation and interpretation
- Expanding the geographical scope of studies to capture a wider range of experiences and extending to adolescent boys and young men

- Creating opportunities for co-researchers from different countries to share experiences and learnings

The table below provides a detailed set of recommendations that the AGYW participants suggested as part of this research.

Recommendations made by the AGYW participants who took part in this research

The AGYW who participated in this study recommended that the governments of the five countries effectively engage in:

Food security	Education	SGBV/SRHR
<ul style="list-style-type: none"> • Enabling effective access to food, water, and other basic necessities • Supporting access to food by reducing and regulating food prices and subsidising essential goods, as well as supporting sustainable farming • Improving access to clean and affordable water through construction of wells, boreholes, and dams and improving water supply for agriculture, including rice farming • Subsidising environmentally-friendly cooking energy to reduce wood cutting and enable food cooking and encouraging the use of electric vehicles and renewable energy • Educating communities about ecological issues and train them in sustainable farming techniques such as agroecology • Creating awareness around littering and ensuring water streams 	<ul style="list-style-type: none"> • Integrating climate change education into curricula • Ensuring access to education by providing food, books, bags, and other school supplies • Implementing girls' education and preventing CEFM • Building more schools and ensuring effective and resilient access • Ensuring safe, inclusive and accessible facilities for girls, including by building more schools and ensuring proper and safe sanitation/WASH facilities for (adolescent) girls • Building infrastructure like drainage systems, schools, and waste management systems. 	<ul style="list-style-type: none"> • Improving healthcare services (availability of medicines, sensitization of health workers), including SRHR services. • Addressing exploitation including sexual exploitation and child labour • Addressing CEFM and sexual and gender-based violence • Increasing and strengthening mechanisms for sexual and gender-based violence management cases • Increasing access to electricity and healthcare services.

<p>and land remain free from waste</p> <ul style="list-style-type: none"> • Supporting eco-friendly business and agricultural practices including off-season crops based on local practices and knowledge. • Implementing climate change adaptation measures (e.g., solar panels, irrigation systems, sustainable food systems...). 		
<p>The AGYW who participated in this study recommended that NGOs and International organisations working in the five countries effectively engage in:</p>		
<p>Financial and technical support</p> <ul style="list-style-type: none"> • Providing financial and technical support for climate change adaptation projects • Supporting income-generating activities and entrepreneurship • Improving access to agricultural inputs and techniques • Equipping communities with motorbike pumps to evacuate rainwater in the event of flooding. • Creating employment and income-generating opportunities, especially for women and youth • Supporting entrepreneurship through cash-for-work programs and financing • Providing financial and material support (e.g., food, shelter, school 	<p>Awareness and education:</p> <ul style="list-style-type: none"> • Empowering young people, especially young women, with skills acquisition for economic opportunities • Building capacity of health, education, and community workers • Coaching farmers on climate change mitigation measures • Implementing awareness campaigns on climate change impacts and mitigation strategies • Educating communities, especially in schools, about climate change • Increasing awareness and sensitisation on climate change, environmental protection, deforestation, littering and hygiene 	<p>Collaboration:</p> <ul style="list-style-type: none"> • Collaborating with local authorities and communities to design and implement targeted programs that respond to the needs and rights of AGYW • Seeking funding and partnerships to address community needs. • Involving AGYW in decision-making • Collaborating with the community and supporting their actions (including financially), especially AGYW, and involving them in decision-making • Encouraging community participation in adapting and mitigation climate change effects.

<p>supplies, agricultural practices).</p> <ul style="list-style-type: none"> • Addressing the needs of widows, women with disabilities and female-headed households 	<ul style="list-style-type: none"> • Providing practical skills training for climate change adaptation 	
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The AGYW who participated in this study recommended that community members in the areas they conducted research and beyond in the five countries effectively engage in:

<p>Environmental Protection</p> <ul style="list-style-type: none"> • Participating in tree planting, waste management, and prevent deforestation • Encourage crops and farming practices that regenerate the soil including agroecology • Setting up watchdog committees on climate change • Practicing good hygiene and sanitation, including not littering or participating to pollution of water streams • Participating in community clean-up days. 	<p>Awareness and Action</p> <ul style="list-style-type: none"> • Raising awareness of climate change prevention and harmful effects • Establishing youth-led organizations to address climate change challenges • Advocating for adolescent girls and young women's involvement in decision-making processes • Setting up AGYW's environmental protection associations. 	<p>Social Support</p> <ul style="list-style-type: none"> • Supporting each other and work together to address community challenges • Encouraging girls' education and preventing early marriage • Supporting women and girls' empowerment and development.
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The AGYW who participated in this study recommended that the media in the five countries effectively engage in disseminating accurate and accessible information on climate change causes, consequences, and mitigation strategies, especially towards youth.

The study calls for greater collaboration between AGYW, regional and continental organisations (such as ECOWAS and the African Union), governments, I/NGOs, and communities to address the multifaceted suffering posed by climate change as well as gender and socioeconomic inequalities.

ANNEX 3: Research Questions

AREA OF RESEARCH	RESEARCH QUESTIONS	METHODOLOGY
Feminist Participatory Action Research		
IMPACTS AND EXPERIENCES Map out the gendered effects of climate change through Adolescent girls' lived realities and voices	4. How do adolescent girls experience and perceive the gendered impacts of climate change in their lives and the lived realities of their peers? 1.1. How do they experience the gendered effects of climate change in terms of food security, SGBV, SRHR, and education? 1.2. How do they take action against climate change consequences?	FPAR data collection and analysis
EXPECTATIONS AND RECOMMENDATIONS Key interventions needed from Plan International for the designing of a gender transformative climate action.	2. What do girls and young women expect from authorities at international, regional, national, and local levels? 2.1. Which authorities are active on these issues and why are they important? 2.2. How do the existing gaps in policies, actors, and programmes impact on adolescent girls and young women's rights? 2.3. How can Plan International contribute to filling the existing gaps, building on strong alliances with girls and young women?	FPAR data collection and analysis Co-creation of recommendations with adolescent girls and Plan I.
IMPACT OF FPAR Methods	3. How have the young women co-researchers experienced and perceived the FPAR methods used as part of this research? 3.1. Do FPAR methods impact empowerment and learning among young women co-researchers and mentors?	FPAR data collection and analysis Pre- and post-research surveys

ANNEX 4: CODEBOOK (Used for Data Analysis)

Access & control over Resources	Identification of disparities in access & control over resources. This includes instances where disparities in resource access and control, such as land, water, or financial resources, are discussed in the context of climate change impacts.																												
Intersectionality	Intersections of gender with other identity factors (e.g., ethnicity, socioeconomic status) influencing vulnerability and resilience. Analyse how multiple identity factors intersect to shape unique experiences. EXAMPLES Varied impacts on girls from different socioeconomic backgrounds during climate-induced events. Intersectional challenges in accessing SRHR services for specific ethnic groups during environmental crises.																												
What is climate Change & signs	Definition of climate change according to AGYW																												
General Impact	General impacts of climate change in the community Any changes observed by adolescent girls and young women as a result of climate change, that will inform their perception of climate change effects in their community.																												
Socioeconomic consequences																													
	<table border="1"> <thead> <tr> <th>Economic Impact</th> <th>Economic impacts of CC</th> </tr> </thead> <tbody> <tr> <td>Source of Livelihood</td> <td>forced to seek alternative means of livelihood as a result of climate change</td> </tr> <tr> <td>Sexual exploitation, transactional sex</td> <td>Mention of transactional sex, sexual exploitation in relation to economic struggles related to CC.</td> </tr> <tr> <td>Extreme weather</td> <td>Mention of extreme weather events</td> </tr> <tr> <td>Sandstorm</td> <td>Mention of sandstorm or harmattan.</td> </tr> <tr> <td>Flooding</td> <td>Mention of flooding.</td> </tr> <tr> <td>Drought</td> <td>Mention of drought</td> </tr> <tr> <td>Heat</td> <td>Mention of heat</td> </tr> <tr> <td>Rain</td> <td>Mention of rain</td> </tr> <tr> <td>Wind</td> <td>Mention of wind.</td> </tr> <tr> <td>Environmental Degradation & Destruction of property</td> <td>Description of how climate change leads to environmental degradation and destruction of property.</td> </tr> <tr> <td>Destruction of property</td> <td>Specific mention of the ways that property was/is destroyed due to climate change.</td> </tr> <tr> <td>Deforestation</td> <td>Mention of deforestation in the context of environmental degradation.</td> </tr> <tr> <td>Decreased agricultural yields</td> <td>Mention of decreased agricultural yields due to climate change related events.</td> </tr> </tbody> </table>	Economic Impact	Economic impacts of CC	Source of Livelihood	forced to seek alternative means of livelihood as a result of climate change	Sexual exploitation, transactional sex	Mention of transactional sex, sexual exploitation in relation to economic struggles related to CC.	Extreme weather	Mention of extreme weather events	Sandstorm	Mention of sandstorm or harmattan.	Flooding	Mention of flooding.	Drought	Mention of drought	Heat	Mention of heat	Rain	Mention of rain	Wind	Mention of wind.	Environmental Degradation & Destruction of property	Description of how climate change leads to environmental degradation and destruction of property.	Destruction of property	Specific mention of the ways that property was/is destroyed due to climate change.	Deforestation	Mention of deforestation in the context of environmental degradation.	Decreased agricultural yields	Mention of decreased agricultural yields due to climate change related events.
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Heat	Mention of heat																												
Rain	Mention of rain																												
Wind	Mention of wind.																												
Environmental Degradation & Destruction of property	Description of how climate change leads to environmental degradation and destruction of property.																												
Destruction of property	Specific mention of the ways that property was/is destroyed due to climate change.																												
Deforestation	Mention of deforestation in the context of environmental degradation.																												
Decreased agricultural yields	Mention of decreased agricultural yields due to climate change related events.																												
Socio-cultural	Sociocultural norms influencing the gendered impact of climate change on adolescent girls and young																												

	women. Examine how social, cultural and gender norms contribute to differential vulnerabilities and resilience. Examine changes in power, reversed roles (women and girls taking on male roles).
Chores	Mention of chores in the context of AGYW experiences.
Forced or early marriage	Mention of forced or early marriage.
Gender inequality	If participants specifically mention differences in gender or gender inequality
Food security impact	Influence of climate change on access to and availability of food resources, including nutritional challenges. Address changes in food availability and drinking water, access, utilization, and nutritional status.
Water	Mention of water issues related to CC (lack of water, walking far to fetch water, contaminated water, etc.). This could be an impact or a consequence of climate change.
SRHR Impact	Identification of impacts on Sexual and Reproductive Health and Rights (SRHR). Include changes in access to reproductive health services, family planning, and the prevalence of reproductive health issues. It will also look at (perceived) increased sexually transmitted infections or (unwanted) pregnancies. EXAMPLES Decreased access to contraceptives due to climate-induced disruptions. Increased vulnerability to reproductive health challenges in the aftermath of extreme weather events
Menstruation	Mention of menstruation, especially in the context of decreased financial resources due to CC or difficulties managing hygiene related to water shortages or contaminated water as a result of CC.
Pregnancy	This code summarizes text on how pregnancy is affected (directly or indirectly) by issues related to CC. This code IS NOT applied to text that discusses pregnancy as a concern for AGYW in general, but only text that links this with issues related to climate change (e.g., dropping out of school, violence due to poverty related to shifting/low agricultural yields related to poor rains, etc.).
SGBV	Identification of impacts on Sexual and Gender Based Violence. This includes impact on Sexual and Gender Based Violence. EXAMPLES

	Increased violence as a result of climate related events.
Education Impact	<p>Situations where climate change is observed to affect educational opportunities and outcomes for adolescent girls and young women.</p> <p>Capture disruptions in education, changes in school attendance, and barriers to access educational resources. This includes, capturing school closures and teachers not attending due to disruptions.</p> <p>EXAMPLES</p> <p>Increased school dropout rates due to climate-induced events affecting families. Limited access to educational materials and facilities during extreme weather conditions</p>
Safety and Security	How has climate change impacted their safety and security?
Migration, displacement	Mention of migration or displacement.
Health impacts	This includes impacts and consequences of climate change on health.
Dehydration	Mention of dehydration.
Malnutrition	Mention of malnutrition.
Death	Mention of loss of life or death.
Blood pressure	Mention of blood pressure.
Accidents	Mention of accidents.
UTI	Mention of urinary tract infections.
Digestive	Mention of digestive or stomach issues.
Diarrheal disease	Mention of diarrheal disease.
Mental health	Mention of mental health.
Headaches	Mention of headaches.
Chronic disease	Mention of chronic disease.
Respiratory infections	Mention of respiratory infections.
Health care challenges	Mention of health care access.
Infectious disease	Mention of infectious disease. This can include typhoid and cholera.
Skin infections	Mention of skin infections.
Malaria	Mention of Malaria.
Lack hygiene	Mention of hygiene.
Drug use	Mention of drug use.
Pollution and contamination	Mention of pollution and contamination in the context of health.
Actions by adolescent girls and young women	Actions outline by AGYW related to climate change.
Water strategies	Strategies employed related to water access, controlling water or water flow or other ways AGYW focus on water.

Home care	The ways in which AGYW protect their homes or prepare their homes from extreme weather events.
Plant trees	Mention of planting trees.
Work	Mention of attempting to find additional work due to the poverty related to decreased crop yield and high food prices (which is linked with CC in the study overall).
Help each other	Mention of AGYW helping each other through difficult times.
challenges	All challenges mentioned that are related to actions in response to CC.
Self-care	Mention of the care AGYM take for themselves to alleviate the effects of climate change.
Awareness and advocacy	Mention of awareness and advocacy activities.
Change harmful practices	Mention of trying to change harmful practices to alleviate CC.
Cleaning and sanitation	Mention of cleaning and sanitation efforts.
Existing state actions and policy gaps	Identify potential areas for policy intervention and improvement. EXAMPLES Recommendations for inclusive climate adaptation policies addressing the specific needs of adolescent girls and young women. Suggestions for integrating gender-responsive strategies into education and food security policies in the context of climate change.
Current role of CBOs, I/NGOs, UN	Role of community based or non-governmental organizations, including Plan International Identification of projects or initiatives that have supported the community. This includes instances where initiatives from NGOs, community-based organizations are discussed or referred to. EXAMPLES Community beliefs about the role of women in disaster response and recovery. Perceived barriers to girls' education during climate-related challenges.
Recommendations/expectations	What do adolescent girls and young women expect from Plan or other civil society organizations?
FPAR	Third research question on documenting research process from participants' view

ANNEX 5. Selection of Co-Researchers, Mentors and Study Participants

Selection of Co-Researchers and Mentors

The co-researchers were selected following a transparent and inclusive approach: the TORs were sent through different communication channels. Applications were reviewed and Plan International proceeded to a first selection. The selected individuals were requested to send a 2-min video or recording with a set of questions on their motivation and background. The selection was then finalised by Plan International and hera focal points based on recordings/videos. The criteria for selection were as follows:

Criteria for selection of co-researchers:

Female candidates in all their diversity / Age range: 18-24 / Based in the data collection region

Minimum level of education: Baccalaureate (end of high school) for 3 co-researchers; and Baccalaureate + 3 years for 2 co-researchers (according to availability of profiles in the research area)

At least 2 languages spoken (English and language of the data collection zone)

Active member of the community in the selected data collection region

Active on gender equality at community level

Motivation and interest to take part in a participatory, innovative and interactive research

Ability to facilitate group discussions

Ability to use digital and communication tools (ie tablets, phones, cameras)

Available throughout the process (around 20 working days)

Knowledge of climate change would be an asset

Analysis skills (of data, documents, images) would be an added advantage

Diversity of profiles is encouraged. Diversity of locations (urban, rural, refugee camps, and others) is sought.

Young women with disabilities, young women from marginalised groups, young women living in displacement settings, young women working on seasonal mining areas, are encouraged to apply.

Accesssibility will be ensured.

Criteria for selection of research mentors:

Woman (>18) ; Minimum BAC+3; based in the data collection region

Minimum 2 year experience working with young people, especially young women, and working on gender equality at community or national level

Languages spoken: English and minimum one language spoken in the data collection region

Ability to adapt data collection tools

Experience accompanying researchers in a data collection exercise

Knowledge and strict respect of safeguarding principles

Experience in the research sector and on youth participation

Availability throughout the process (around 20 working days)

Knowledge of climate change issues would be an added advantage

Communication skills, including digital skills

Selection of Study Participants

Research participants were selected by Plan International from individuals who already participate in Plan International activities/programs. Individuals/families were contacted and asked if they would like to participate in this research. Plan International identified adolescent girls and young women who met the following inclusion criteria, with particular emphasis on diversity and inclusion elements to ensure intersectionality of analysis. The list was split in two age ranges: 15-17 (adolescent girls) / 18-24 (young women).

Inclusion criteria for study participants was as follows:

PARTICIPANTS IN THE SURVEY, FOCUS GROUPS AND PHOTOVOICE METHODOLOGIES

Adolescent girls and young women aged 15-24

Participants must be from the data collection regions noted above

Participants must be available on the day(s) where the data collection methodology for which they were sampled for will be conducted.

Plan International was particularly encouraged to be mindful of intersectionality, diversity and inclusion when selecting participants to enable further intersectionality, for instance encouraging participation of individuals with lived experience of:

- **Known disability or chronic disease (or who participate in programming for people with disabilities)**
 - **Child, early or forced marriage**
 - **Being a refugee or internally displaced person**
- Being out of school**

ANNEX 6. Key Workshop Insights from Co-Researchers

The last country workshops dedicated a session in which co-researchers were provided a space to reflect on the methodology. Some of the key insights from this session can be found in the table below.

Table 7. Key insights from workshops

BURKINA FASO	GUINEA	MALI	NIGER	NIGERIA
<p>In Burkina Faso, the research process was marked by strong community engagement and effective collaboration between co-researchers. The team successfully integrated environmental departments into their work, creating valuable institutional connections. They highlighted the importance of pre-collection community agreements and the diligent provision of mission expenses as crucial factors in their success. A co-researcher from Burkina Faso noted the "collaboration and interpersonal solidarity" as a key positive aspect of the experience.</p>	<p>Guinea's experience was characterized by strong peer awareness-raising and effective mentoring support. One co-researcher described the experience as "magical and inexplicable," highlighting the transformative nature of the process. The team particularly praised their selection process, which included innovative video/audio components, as well as FPAR workshops. Many of them had already been involved in some research initiatives before, but they indicated that this research did not look like their previous experiences: they particularly felt included and valued for their experiences, and they appreciated the fact that they were fully integrated in the creation of the</p>	<p>The Mali team achieved comprehensive method integration and demonstrated strong target determination. Their use of problem tree analysis proved particularly effective in helping participants understand climate change impacts. As one Mali co-researcher noted, "This research has enabled me to get to know, study and understand several themes, especially Photovoice and the interpretation workshop."</p>	<p>The Niger team reported significant personal growth throughout the process. Co-researchers noted enhanced self-confidence, improved public speaking abilities, and stronger team collaboration skills. One memorable observation came from a wrap-up session: "The wrap-up session gave us a better understanding of the process and enabled us to do some remarkable work."</p>	<p>The Nigerian experience emphasized tool development and ownership, with significant attention paid to capacity building in data analysis. A Nigerian co-researcher reflected, "Developing the research tools and data collection process was a very positive experience, allowing the young researchers to take ownership and give voice to the issues faced by young women and girls." The team particularly appreciated the use of MAXQDA software for data analysis, viewing it as a valuable learning opportunity.</p>

	<p>questionnaire and photovoice methodology. They enjoyed participating in participatory data analysis, a step they had never been involved in before.</p>			
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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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Plan International

Global Hub
Dukes Court, Duke Street, Woking,
Surrey GU21 5BH, United Kingdom

Tel: +44 (0) 1483 755155

Fax: +44 (0) 1483 756505

E-mail: info@plan-international.org



plan-international.org



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