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Anticipatory Action Evidence Generation Report (March - May 2024)

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Contents

List of Acronyms and Abbreviations

AA	Anticipatory Action
AAP	Anticipatory Action Plan
CG	Control Group
CP	Cooperating Partner
CSS	Climate Services Score
EWMs	Early Warning Messages
EWI	Early Warning Information
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FR	Flood response
HH	Household
HHH	Household Head
IPC	Integrated Phase Classification
LCS-FS	Livelihood Coping Strategy for Food Security
KII	Key Informant Interview
FGD	Focus Group Discussion
MAM	March-April-May
OND	October-November-December
rCSI	Consumption-Based Coping Strategy Index
SODMA	Somalia Disaster Management Agency
UN	United Nations
UNICEF	United Nations Children's Fund
WFP	World Food Programme

Executive Summary

Climate change is among the causative factors for food security in most countries. Somalia, among the countries experiencing extreme effects of climate change manifesting as prolonged droughts or floods, has faced acute food insecurity in the last two decades. The most recent statistics, according to IPC (2024), show that 2.9 million Somalis were in IPC Acute Food Insecurity (AFI) Phase 3 (Crisis) and 740,000 in IPC AFI Phase 4 (Emergency) between July and September 2024. With flood forecasts in the October – December rainy season (*Deyr*), WFP, working collaboratively with the Somalia Disaster Management Agency (SoDMA), implemented the first round of anticipatory action (AA). After successfully implementing the October-November-December (OND) 2023 AA, WFP drew learnings that informed the second round of anticipatory action in the March-April-May (MAM), i.e., the *Gu* rainy season. The OND and MAM Anticipatory Action Plans (AAPs) delivered three interventions: sharing early warning messages (EWMs), prepositioning boats, and cash transfers. In line with the AA plan, cash transfers were activated in two phases: the anticipatory action (AA) group received transfers before the floods, while the flood response (FR) group received them afterward.

WFP conducted an evidence-generation exercise to assess the impact on beneficiaries and identify the most effective approach to mitigating the adverse effects of flooding on vulnerable households. The MAM AAP evidence-generation employed a quasi-experimental research design, comparing three groups of people: those who had received assistance, particularly cash transfers before the floods group (AA), those who received it after the floods occurred, the flood response group (FR), and the residents of the same localities who had not received cash transfers, control group (CG). It is important to note that sharing early warning messages and prepositioning boats was intended for everyone.

Across the indicators assessed, the AA group had better scores than the FR and CG groups, while the FR group scored better than the CG for most indicators. For instance, the group targeted with AA had a higher proportion (46%) of households with acceptable food consumption scores (FCS) than the FR group (42%) and the CG (18%). The average consumption-based coping strategies (rCSI) were lower for the AA group (13.7) than for the FR group (15.0) and CG (15.9). On the other hand, the AA group had the lowest percentage of households (22%) applying livelihood coping strategies for food security (LCS-FS), compared to the FR group (29%) and CG (27%). Regarding early warning messages channels, most people (78%) reported receiving early warning messages through phone ringback tones. Community structures such as community elders/leaders, religious leaders, community meetings, gatekeepers, friends/neighbours, and family members were mentioned by 59% of the households, while 43% noted receiving messages via radio. The study also measured climate services score (CSS) using five standardized questions on access to timely, easy-to-understand climate information tailored to household needs and usage. Results showed that the AA group had the highest proportion of households with high CSS (87%), followed by the FR group (83%) and the CG (65%). The high CSS indicated that households accessed and used timely, easy-to-understand climate information to inform their response plans. These findings show that the AA approach was more effective than flood response in mitigating the adverse impacts of flooding on vulnerable households. The study's additional recommendations for future AA plans include:

- **Future planning for climate change interventions** should recognize that these

efforts are not one-time activities. With human activities contributing increasingly to climate change, extreme weather conditions are likely to persist. Learning from the current and previous projects and analyzing Somalia's weather trends is crucial for effective mitigation planning. WFP and partners should seek support to invest in delivering anticipatory action interventions that have shown to be more effective than post-shock responses.

- **Collaborate with other agencies and government structures** - Partnerships with SODMA to monitor and relay trigger information activation have proven effective, highlighting the importance of continued collaboration with the SODMA, Federal, and State governments. Exploring additional partnerships and leveraging each party's strengths is essential for enhancing future interventions.
- **Conduct extensive mapping of actors in WFP project sites** - WFP and partners should thoroughly assess the actors in the selected project areas. This mapping will helps identify organizations implementing similar interventions, avoid duplication, and identify opportunities for complementary assistance.
- **Implement activities that enhance communal participation beyond receiving assistance to involving them in decision-making.** The lack in sharing project information indicated that most beneficiaries were only aware that WFP would provide assistance without understanding the project details. Community engagement strategies should be reassessed and adjusted to improve participation, foster ownership, enhance decision-making, and ensure the sustainability of project benefits.
- **Emphasize the intensity of disasters in early warning messages** - Many people reported being unable to gauge the severity of the floods from the early warning messages. Future interventions should aim to design messages that include projected disaster intensity, where possible, to support guidance on response decision-making more effectively.
- **Continue using phone ringback and radio for early warning messages (EWMs), integrating these channels with community structures.** Given phone ringback's popularity, it should remain a key EWM channel. Although community structures were the second most mentioned radio remains vital for message dissemination. EWMs should be designed to encourage recipients to share information with others in their community such as neighbours, families, and friends, ensuring the effective use of ringbacks and radios while integrating community structures to expand the reach of EWMs.
- **Share early warning messages (EWMs) at least four months in advance of an anticipated disaster.** AA plan designs should consider timing that aligns with community needs to enable those likely to be affected to take the appropriate mitigation actions and prepare an effective response.
- **Maintain flexible anticipatory action project designs** to adapt to changing climate conditions. These designs should also include adaptability that accounts for and supports different gender needs and roles, addressing gender-related challenges as they arise. For example, women often have unique needs and responsibilities during extreme weather events. Adaptive measures should include safe spaces for women in shelters and resources to support their caregiving roles during emergencies.
- **Ensure safe access to AA services** for women and girls by designing interventions that prioritize safety and privacy. This includes establishing gender-segregated spaces during cash distributions, providing secure and private water and sanitation facilities and involving female staff and volunteers in AA activities to create a more secure environment for women and girls.

1. INTRODUCTION

Climate change refers to the long-term shifts in temperatures and weather patterns.[1] According to the UN, climate change can result from natural factors such as the sun's activity or large volcanic eruptions. However, it's crucial to recognize that human activities significantly contribute to climate change, particularly burning fossil fuels like coal, oil, and gas. These activities release greenhouse gases, primarily carbon dioxide and methane, which act as a blanket around the earth, trapping the sun's heat and leading to rising temperatures. While the emissions are not uniform across all countries, the impacts are global, with some countries bearing a disproportionate burden despite contributing fewer emissions. Somalia, for instance, contributes minimal greenhouse gases but faces severe effects like floods during the *Gu* and *Deyr* seasons and prolonged droughts. This underscores the urgent need for global cooperation in addressing climate change. [2]

Since 2010, levels of acute food insecurity in Somalia have fluctuated, with a record low of just over half a million people recorded in February 2015 and reaching a peak of seven million people in 2022. The Food Security Integrated Phase Classification (IPC) assessment results released in September 2023 indicated that 4.3 million people were facing crisis-level or worse food insecurity between October and December 2023, with a million facing emergency-level hunger. This is mainly attributable to climate change, with El Niño and above-average rainfall predicted during the 2023 Deyr season causing significant impacts

1 UN, *What is Climate Change?* Retrieved from What Is Climate Change? | United Nations

2 ICE (2023), *Climate Change Explained!* Retrieved from Climate Change in Somalia Explained! – ICE (simad.edu.so)

on livelihoods, food security, and nutrition. The number of children under five years estimated to suffer from acute malnutrition in 2023 was 1.5 million—with 331,000 children likely to be facing life-threatening severe malnutrition. The March-May erratic rains reduced crop production in agropastoral livelihoods. Even though the rains replenished pasturelands, localized floods affected people in Hiraan, Gedo, Middle Shabelle, and Lower Shabelle. Coupled with insecurity and conflicts, these floods led to displacement and disrupted agricultural activities and market access. The ripple effects of the latter translated into food insecurity, with 2.9 million Somalis in IPC Acute Food Insecurity (AFI) Phase 3 (Crisis) and 740,000 in IPC AFI Phase 4 (Emergency) between July and September 2024. [3]

The surge in food insecurity is primarily a result of the heightened severity of climatic shocks, including droughts, floods, and desert locusts, as well as conflict and insecurity. The additional burden of increased costs due to the COVID-19 pandemic and the Ukraine crisis further compounds the situation. These factors collectively escalate humanitarian needs and erode household and community resilience, underscoring the urgent need to address climate change. The severity of the problem cannot be overstated, and immediate action is imperative.

1.1 Climate Change-induced Losses in Somalia

Over the years, floods have caused considerable losses in livelihoods and lives and massive internal displacement. The Federal Government of Somalia (2020) quantified the losses experienced as a result of 2019 floods to more than **US$ 260 million** and the approximate recovery needs of **US$ 350 million**. Addressing economic losses iteratively in five years required US$ 72 million immediately after the floods, US$ 39 million in the second year, US$ 35.1 million in the third year, US$ 31.6 million in the fourth year, and 28.4 million in the fifth year. Sector-specific recovery needs were as follows: agriculture US$ 28 million, housing US$ 33.7 million, following US$ 26.5 million losses (20,250 houses destroyed – 4,640 fully damaged and 15,613 partly damaged), road/transport infrastructure US$ 115 million following a US$ 94.8 million losses with estimated 321 kilometers of road and 23 bridges and 5% road embarkments destroyed, WASH US$ 24.8 million following US$ 8.8 million losses with 64 boreholes, 272 shallow wells, and 58 water pans destroyed, education US$ 34.8 million following US$ 29 million losses, health US$ 46 million following US$ 42 million losses, disaster risk management, and floods risk management US$ 42 million following US$ 15 million losses as a result of impacting relief supplies, warehousing, monitoring and expenses-related to coordination of emergency relief delivery, and finally displacement US$ 25 million following the damages caused to IDP camps and their support infrastructure of an equal amount.[4] The 2023 March-May rains (Gu) left a trail of destruction, especially in Beletweyne district, Hirshabelle State, and Baardheere in Jubaland State, inundating homes and farmland, washing away livestock, temporarily leading to closing of schools and health facilities, and damaging roads.[5] In the same year, the October-December floods were amongst the worst-ever floods experienced in Somalia. Their effects were felt far and wide across all sectors, leading to human life losses that cannot be quantified in financial terms.

3 IPC (2024), Somalia: IPC Food Security & Nutrition Snapshot | July - December 2024 (Published on September 23, 2024) - Somalia | ReliefWeb

4 Federal Government of Somalia, 2020, *Somalia 2019 Floods Impact and Needs Assessment.*

5 OCHA, 2023, *Somalia: 2023 Flash and Riverine Floods, Situation Report No.1.*

The costs of responding to hazards are enormous and have an equal effect on funds available to deliver other humanitarian services to the people. As such, humanitarian agencies have redefined their response to climate-change-induced hazards by blending the typical approach of responding during a disaster with anticipatory action — acting ahead of the predicted hazard to prevent or reduce acute humanitarian impacts before fully unfolding.[6] Working collaboratively with the Government, World Food Programme (WFP) Somalia had the first Anticipatory Action activation in October – December (OND) 2023 rainy season and the second in the March to May (MAM) 2024 season. The MAM 2024 implementation was funded with support from Germany and Denmark.

1.1.1 MAM 2024 ANTICIPATORY ACTION PLAN

WFP, in consultation with the Somalia Disaster Management Agency (SoDMA), Ministry of Energy and Water Resources, Food and Agriculture Organization (FAO), United Nations Children's Fund (UNICEF), World Vision, and other humanitarian actors, developed the SOCO Anticipatory Action Plan for floods in 2023 for the OND period, to be operational until 2025. The AA plan was designed to ensure timely and effective interventions for vulnerable communities threatened by flooding. The MAM framework was revised to incorporate emerging evidence and lessons from previous activations (OND 2023). This adaptation aimed to minimize the loss of human lives, livelihoods, shelter, household food stocks, and displacement of people and livestock. The anticipatory actions included disseminating early warning messages and advisories, unconditional cash assistance to the targeted population, and the prepositioning of boats through the support of the logistics cluster. Based on the seasonal forecast, a moderate flood scenario was selected for the MAM 2024 activation. A moderate scenario implied a less severe season than the 2023 OND, with fewer people affected.

The MAM Anticipatory Action Plan was initially designed to cover seven districts, Beletweyne, Bulo Burto, Jalalaqsi, Jowhar, Balcad, Baardhere, and Luuq.[7] However, due to changing weather patterns and forecasts that became more accurate closer to activation days, the coverage was narrowed to four districts: Baardhere, Johwar, Luuq, and Beletweyne. Of the four districts, two (Beletweyne and Johwar) received both Anticipatory Action (AA) and Flood Response (FR) assistance, while the other two received only anticipatory action assistance.

1.1.1.1 Overview of AAP Implementation

Under the anticipatory action (AA) intervention, 80,000 people received anticipatory cash transfers. This support was provided between 8 and 10 days prior to the anticipated floods, allowing people to prepare and mitigate potential impacts. The post-shock flood response (FR) intervention supported 936 people under the AA plan who were registered for WFP's regular General Food Assistance (GFA). This support was delivered three to four weeks after the floods occurred, following a traditional response approach to address the immediate needs of affected populations. This difference in timing highlights the AA intervention's proactive nature compared to the FR's reactive strategies.

1.1.2 EVIDENCE GENERATION

Following the successful implementation of AA, WFP Somalia conducted a comprehensive assessment at the household level for three groups of people: (1) people who benefitted from anticipatory action, (AA), (2) people who received post-shock assistance/Flood Response (FR), and (3) those who did not receive any assistance, the control group (CG). The

6 UNOCHA, *What is Anticipatory Action?* Retrieved from Anticipatory action | OCHA (unocha.org)

7 *WFP Anticipatory Action Plan*, 2024, Retrieved from MAM AAP for Somalia - Final.docx (sharepoint.com)

objective of the assessment was **to compare anticipatory action, regular post-shock response, and a non-assisted control group to determine which approach was more effective in reducing the impact of floods on vulnerable households.** This study explored the effectiveness of the three AAs: Unconditional Cash Assistance, Dissemination of Early Warning Messages, and Prepositioning of boats.

The assessment collected data on food security, early warning messages, climate capacity score, and crosscutting indicators. The assessment was conducted four weeks after the AA and FR interventions, allowing sufficient time for households to utilize the assistance provided. The control group, consisting of people who did not receive assistance from either the AA or FR interventions, was interviewed at the same time as the FR participants.

2. METHODOLOGY

The MAM 2024 evidence generation adopted a quasi-experimental research design. The study compared the three groups of people to showcase the effects of AA (treatment) relative to FR (treatment – a conventional/traditional approach) and the Control Group (CG) (non-treatment). This design was used to assess the impact of AA on reducing the long-term need for humanitarian assistance.

A three-pronged data collection approach comprising quantitative household surveys, qualitative focus group discussions (FGDs), key informant interviews (KIIs), and desk review was used in this study. Desk review was ongoing throughout the evidence-generation period: at the planning stage to get the relevant contextual information to inform the most appropriate study design and reporting for triangulation. With the AA plan adopting a moderate flood scenario, the number of people reached through the intervention fell short of the initial projections. This was due to several factors: the floods were less severe than anticipated, three districts were not activated, and there were fewer registered people than planned, partly because of other ongoing World Food Programme (WFP) initiatives as well as the presence of other development partners. As a result of these changes, the evidence-generation plan was adapted accordingly.

2.1 Quantitative Data Collection

Household (HH) surveys were conducted with the people supported in the AA (*2024 Gu season*) interventions, post-shock, and the control populace in the target locations. The sampling of the study locations was pegged to the three groups' availability. In other words, districts with AA intervention and no flood response, such as Baardhere district, were dropped while determining the study sample. Therefore, the sampling frame for the evidence-generation activity was an extract of the 6,791 target households meeting the above criterion in the two districts.

The study sample was computed using the Cochran formula,[8] illustrated hereunder:

$$n = \frac{Z^2 Np(1-p)}{(d^2 N) + (Z^2 p[1-p])}$$

Where:

n = sample

Z = is the mathematical constant defined by the Confidence Interval chosen (how sure we need to be of the result)

N = population

p = expected incidence

d = precision

The resultant sample was distributed proportionately to the size of households supported with cash in the selected districts. As per the confirmed transfers on the 15th of May, the AA sample for the districts that met the criteria for the roll-out of data collection in the week commencing 20th May was as illustrated below:

$$n = \frac{1.96^2 . 6791 . 0.5(1-0.5)}{0.05^2(6791) + (0.05^2 .\ 0.5[1-0.5])} = 364$$

Distributing the sample proportionately to the size of the households reached with AA interventions in each district yielded the results in the AA sample column in the table below. On the contrary, the households who participated in the WFP flood response program were only 156. Subjecting N to the above formula yielded 112 households distributed equally for representativeness in the two districts owing to the low number. The operational challenges of enrolling people into the FR intervention informed the decision to have an equal sample for the control group (CG). Table 1 below shows the quantitative sample breakdown:

Table 1: Evidence generation quantitative sample

District	AA interventions HHs	PPS	AA Sample	FR Sample	Control	Grand Total
Johwar	3247	48%	174	56	56	**286**
Beletweyne	3544	52%	190	56	56	**302**
Total	**6791**	**100%**	**364**	**112**	**112**	**588**

8 Naing L., Winn T., & Rusli BN. (2006). *Practical Issues in Calculating the Sample Size for Prevalence Studies. Archieves of Orofacial Sciences (1)*, 9-14.

2.2 Qualitative Data Collection

The study sampled and achieved 6 (3 male and 3 female) FGDs in the two districts. Identifying people for the treatment (AA and FR) was random from the list of those who had received assistance. Similarly, the CG Participants were first enrolled, guided by their characteristics that were almost congruent to those of the AA group. The FGDs comprised 6 – 12 participants and were distributed as follows:

Table 2: FGDs Sample

District	AA		FR		Control		Total
	Women	Men	Women	Men	Women	Men	
Johwar	1			1	1		**3**
Beletweyne		1	1			1	**3**
Grand Total	**1**	**1**	**1**	**1**	**1**	**1**	**6**

2.3 Data Processing and Analysis

Quantitative data was analyzed using Stata 18. First, it was investigated for duplicates, outliers, and other errors. Then, the samples were weighted accordingly to adjust them for comparison. This was done by calculating an inverse of the sample size of each group relative to the total sample achieved by applying the formula below:

$$Weight = \frac{Total\ sample}{Sample\ size\ for\ each\ group}$$

Frequency tables with column percentages were run, and the Chi-square (Chi2) tests for statistical significance were performed where necessary.[9] On the other hand, thematic coding was performed for qualitative data.

9 The chi-square test is a statistical method for calculating whether data variations are due to one of the tested variables or to chance.

3. FINDINGS AND DISCUSSIONS

The chapter presents the study findings and discussions by interpreting primary data findings, triangulating quantitative and qualitative data, and, where necessary, triangulating the findings with secondary data.

3.1 Sociodemographic Characteristics

Response Rate

The study's household survey response rate was 98% which surpassed the AA participants' sample, while the CG and FR samples were not. The difference between the latter samples and achieved interviews was minimal (<30) and thus statistically insignificant to affect the dependent variables.[10] As a result, the data was weighted to boost the statistical power for comparison and generalization. It is worth noting that the responses were not uniform across all the questions due to the questionnaire's logic and skip patterns. Table 3 below shows the sampled interviews vis-à-vis the achieved and the study's response rate.

10 According to the central limit theorem, taking a sufficiently large random samples with replacement from a population with mean μ and standard deviation σ, the distribution of the sample means will be approximately normally distributed. This assertion holds true regardless of whether the source population is normal or skewed, provided the sample size is sufficiently large (usually n > 30). As such, a difference of less than 30 is insignificant to affect inferences.

Table 3: Sampled vis-a-vis the achieved surveys

District	AA (Before floods)		FR (After floods)		CG (Counter-factual)		Total		Response Rate (%)
	Sample	Achieved	Sample	Achieved	Sample	Achieved	Sample	Achieved	
Beletweyne	190	189	56	45	56	44	302	278	**92%**
Johwar	174	187	56	48	56	64	286	299	**105%**
Grand Total	**364**	**376**	**112**	**93**	**112**	**108**	**588**	**577**	**98%**

Cognizant of the study design, no major differences were observed in the sociodemographic characteristics across the three groups. Such slight differences had no substantial influence on the results of these groups. Table 4 below provides a summary of the demographic characteristics of the households.

Table 4: Sociodemographic characteristics of respondents

Characteristic	Category	AA (%)	CG (%)	FR (%)	Total (%)
HHH Sex	Male	71.3	57.4	69.9	63.2
	Female	28.7	42.6	30.1	36.8
Highest level of education of the HHH	No education	34.3	28.7	37.6	31.9
	Madrasa/Koran	46.3	50.9	40.9	47.7
	Primary	11.4	13.0	14.0	12.8
	Secondary	7.4	5.6	6.5	6.2
	Tertiary	0.3	1.9	1.1	1.3
	University	0.3	0.0	0.0	0.1
Household's work/job	No job	33.5	37.0	26.9	34.1
	Salaried (private sector)	1.6	9.3	0.0	5.6
	Salaried (public sector)	0.8	0.0	1.1	0.4
	Casual laborer	48.7	48.2	68.8	52.5
	Self-employed (with no employees)	14.9	5.6	3.2	7.3
	Employer (business owner with 1 or more employees)	0.5	0.0	0.0	0.1
Household's main income source	Farming/agriculture (crops)	24.0	36.1	11.8	28.3
	Agriculture (livestock)	8.8	11.1	0.0	8.3

Characteristic	Category	AA (%)	CG (%)	FR (%)	Total (%)
Household's main income source	Day labour-agriculture based	18.1	29.6	49.5	31.0
	Day labour- Non agriculture based	29.9	12.0	24.7	18.8
	Business/small business (informal)	10.7	1.9	7.5	5.1
	Service (informal)	1.6	3.7	1.1	2.7
	Formal employment	1.3	1.9	2.2	1.8
	Social security/government transfers	0.0	0.9	0.0	0.5
	Remittances	5.3	2.8	0.0	2.8
	None	0.3	0.0	3.2	0.7
Household's main income source	Returnee	0.3	5.6	0.0	3.2
	Internally Displaced Persons (IDPs)	15.7	31.5	18.3	25.1
	Host (resident)	84.0	63.0	81.7	71.8
Highest level of education of the HHH	Own/spouse property	28.7	46.3	58.2	44.6
	Father/mother-in-law home	1.6	10.2	1.1	6.3
	Rented	34.3	29.6	14.3	27.6
	Inherited property	7.7	6.5	11.0	7.7
	Father/mother/relative's home	10.6	2.8	5.5	5.2
	Others' land (without rent)	17.0	4.6	9.9	8.6
House structure	Mud house (Wall made of mud/ straw/bamboo/roof made of tin, straw)	62.1	75.7	67.7	70.9
	Tin-made house (both wall and roof)	21.3	17.8	23.7	19.8
	Tin roof/mud walls (ceiling is tin, rest is misc. materials)	12.0	6.5	8.6	8.3
	Brick house	4.5	0.0	0.0	1.1
Household with a person with disability	No	82.7	89.8	88.2	87.8
	Yes	17.3	10.2	11.8	12.2
Household head with disability	No	72.31	36.36	72.73	55.59
	Yes	27.69	63.64	27.27	44.41
Mean Household Size		8	7	7	8

3.2 Communities' perception of floods

Understanding communities' perceptions of floods is crucial in the context of anticipatory action. The floods' understanding was consistent in all six FGDs. A feeling of anxiety and fear was evident, and the floods' destructive nature was emphasized. The adverse effects of floods were expressed in all the FGDs. Here are some of the FGDs' excerpts edited for length and clarity.

> *...In our community, a flood means abandoning our homes and relocating to higher ground in Ceeljaale. While safer from flooding, this area lacks essential resources such as water and presents harsh living conditions with high temperatures. The sudden displacement forces us to leave behind most household items, as we can only carry a limited amount. This disrupts our daily lives and puts us at risk of further hardship and suffering due to the inadequate facilities and extreme environment in Ceeljaale. The recurring floods severely affect our sense of stability and security, making it difficult to maintain a semblance of normalcy and comfort for our families...*
>
> **AA Men FGD**

> *...Flooding in our community is a significant and dangerous event. When the river rises after heavy rainfall, it creates severe problems for us ...*
>
> **FR Women FGD**

> *...The recent floods were particularly severe, with water levels rising rapidly due to heavy rainfall. Streets became unpassable, and many homes were submerged, leading to widespread destruction....*
>
> **CG Male FGD**

> *...Floods are dangerous, sometimes occurring within minutes of heavy rain - intense thunderstorms or overflowing streams can cause them...*
>
> **CG Women FGD & AA Women FGD**

> *...Floods are catastrophic events that result in water overflowing from rivers and streams, submerging homes and fields...*
>
> **FR Male FGD**

3.2.1 LOSSES CAUSED BY MAM FLOODS

Despite the *Gu* season's floods being less intense than *Deyr*, it still caused losses. FGD discussants in Jowhar expressed their concerns about the consistent floods they experienced throughout all the rainy seasons. This was true even during the MAM rainy season. Floods disrupted their day-to-day activities, livelihoods, and education, besides causing waterborne diseases. Below are some verbatims edited for length and clarity.

> *...Education for our children has been disrupted. The schools in our area are damaged or completely inaccessible due to the flooding. My kids missed last week's end-of-school exams, and I worry about their future. The lack of stability and this very routine affects their ability to learn and develop...*
>
> **AA Men FGD**

> *...This recent flood (MAM) came before we had a chance to fully recover from the one in November last year. Although the magnitude of the flood last month was less than the previous two floods last year, the impact on our lives and livelihoods remains severe...*
>
> **AA Men FGD**

> *...Loss of crops washed away by floodwaters...*
>
> **AA Men FGD**

> *...first and foremost, many of us in Jowhar depend on farming to survive. The floods have affected our fields. Destroying crops and wiping out our source of income. The stagnant floodwaters created an ideal breeding ground for mosquitoes, leading to a surge in malaria cases. This is especially worrisome because, like many others, we likely lack mosquito nets...*
>
> **AA Men FGD**

> *...Significant water damage to home, especially flooring and furniture...*
>
> **AA Men FGD**

> *...Flooding of home, leading to loss of personal items including clothing...*
>
> **AA Men FGD**

3.3 Cash transfers and voucher assistance

The project reached 80,936 people with AA and FR assistance, translating to 13,489 households with unconditional cash transfers. FGDs with the people revealed that they used the cash for their most pressing needs, which included the purchase of foodstuffs, clean water, clothing, emergency supplies, and materials for constructing makeshift shelters. Below are some of the opinions shared by discussants during FGDs:

> *...I used the food voucher to redeem essential food supplies before the market system collapsed and prices increased. By doing this, I could secure enough food to sustain my family during the difficult times when access to food became more challenging. I consulted my wife to determine the priority items to buy...*
>
> **AA Men FGD**

> *...The cash enabled me to buy food and plastic sheeting to create a makeshift shelter in the evacuation area. This provided my family with some protection from the elements and a place to stay while we were displaced from our home. In addition to transport, I used some cash to purchase medicine for my elderly parents. This was essential because I was worried about their health deteriorating during the evacuation and the flood's aftermath...*
>
> **AA Men FGD**

> *...The cash provided essential flexibility, allowing families to prioritize urgent needs...*
>
> **FR Men FGD**

> *...The cash helped me secure temporary schooling materials for my children. Even though they were displaced, I wanted to ensure they could continue their education and have some sense of normalcy...*
>
> **AA Men FGD**

> *...I invested part of the money in tools and materials needed to repair some of the damage to our home after the floodwaters receded...*
>
> **AA Men FGD**

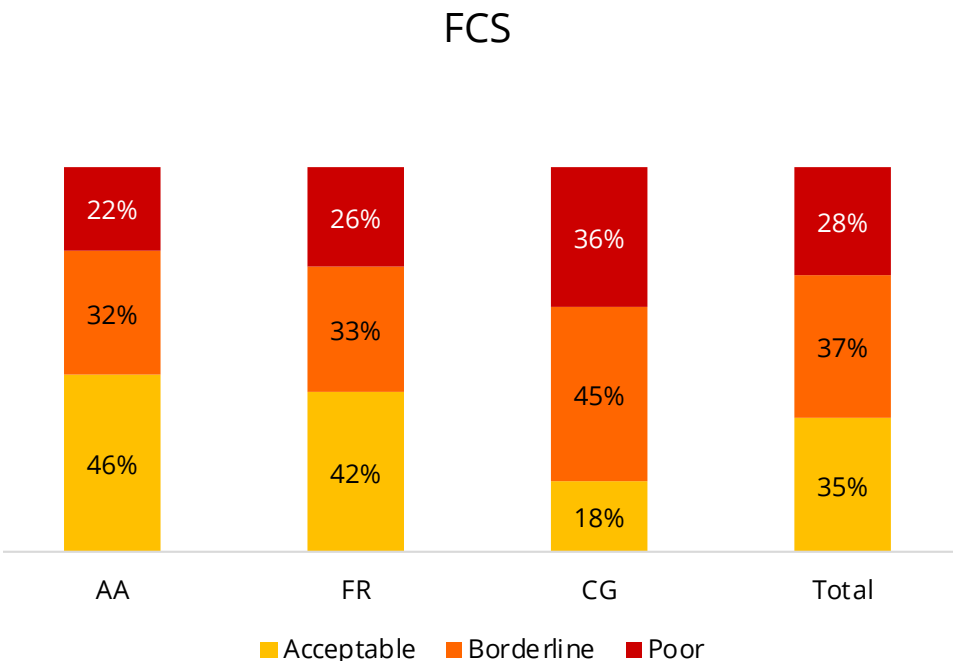
3.4 Food Security Outcomes

The food security and essential needs outcome indicators assessed in this study include the Food Consumption Score (FCS),[11] Consumption-based Coping Strategy Index (rCSI),[12] and Livelihood Coping Strategies for Food Security (LCS-FS).[13] The three are proxy indicators for assessing whether the people supported used part of the assistance to meet their immediate food needs, as the assistance was unconditional, thus not restricting the households to a particular use. The flood response assistance was also unconditional, providing people with the flexibility and autonomy to use the cash according to their needs.

3.4.1 FOOD CONSUMPTION SCORE

The proportion of households with acceptable levels of FCS was higher in the AA group (46%) than in FR group (42%) and CG (18%). The CG had more people who had poor FCS (36%) compared to FR (26%) and AA (22%). Pearson Chi-square was performed to check statistical differences in FCS (acceptable, borderline, and poor) among the three groups — a p-value (P=0.0047) indicated that there was a statistically significant difference between the groups, implying that the three groups' FCS distribution differences were highly unlikely to have occurred due to a random chance. Therefore, anticipatory action assistance contributed to the improved FCS among intervention participants. Figure 1 below illustrates the FCS of the three groups.

Figure 1: Food Consumption Score (FCS)



Pearson:

Uncorrected chi²(4) = 34.0474

Design-based F (3.21, 1590.05) = 4.1856 P = 0.0047

11 **FCS** is a composite score based on households' dietary diversity, food consumption frequency, and relative nutritional value of different food groups. The FCS aggregates household-level food consumption data, in terms of frequency over the previous seven days and weights the data according to the relative nutritional value of the consumed food groups.

12 **rCSI** assesses the level of stress/hardship faced by a given household, translating into specific behavioral responses when confronted with food shortages using a 7-day recall period. It is measured by combining the frequency and severity of the reduced strategies that households engaged in to cope with a lack of food or money to buy food.

13 **LCS-FS** measures the extent of livelihood coping mechanisms that households needed to utilize to respond to a lack of food or money to purchase food 30 days before the survey.

The cash transfers and voucher assistance enabled households to access food. Below are some sentiments shared by discussants about the two assistance modalities during FGDs.

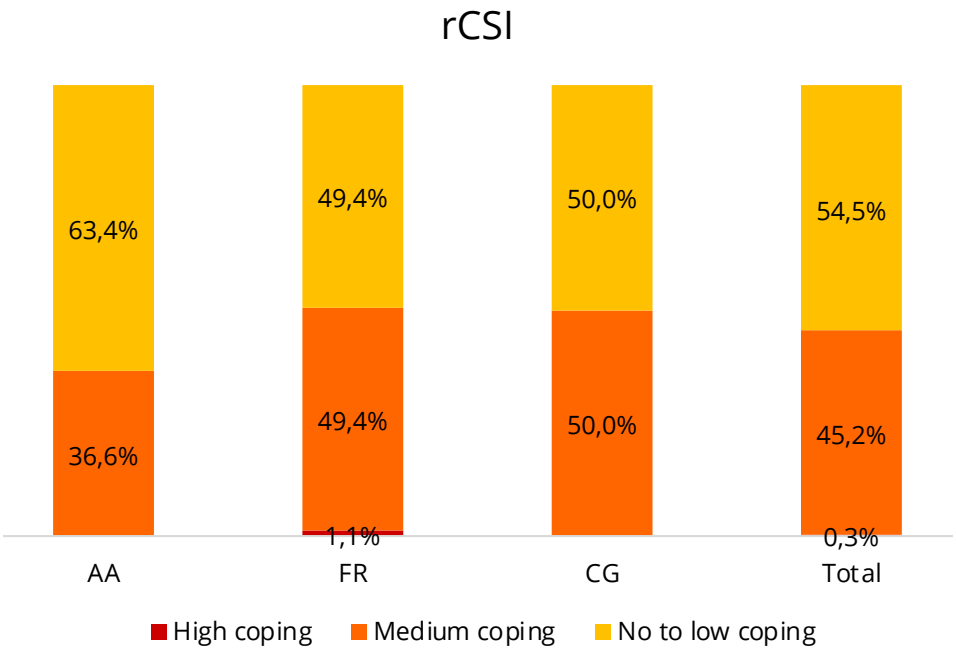
> *...With food vouchers I received before the floods, I redeemed my entitlements before the shops ran out of stock. I redeemed the vouchers the same week it was topped up...*
>
> **AA Men FGD**

> *...The cash transfer from WFP saved my life during the floods. Thanks to it, we could buy food, rent a boat to get more supplies across the river, and support my family and others in our community. It made a huge difference in getting everyone the food they needed during such a difficult time....*
>
> **AA Women FGD**

3.4.2 CONSUMPTION-BASED COPING STRATEGY INDEX (rCSI)

Most (63.4%) households participating in AA interventions utilized *no to low coping* strategies. [14] Likewise, 50% and 49.4% of CG and FR applied *no to low coping.* Only 1.1% of the people in FR applied *high coping* strategies. Figure 2 illustrates that the households who received AA assistance had better rCSI outcomes than FR and CG. The households under AA were thus less likely to engage in demeaning practices when faced with a lack of food or money to buy food. Lastly, there were slight variations in the percentages between the FR and CG.

Figure 2: Consumption-based coping strategy Index (rCSI)



Pearson:

Uncorrected chi²(4) = 12.0054

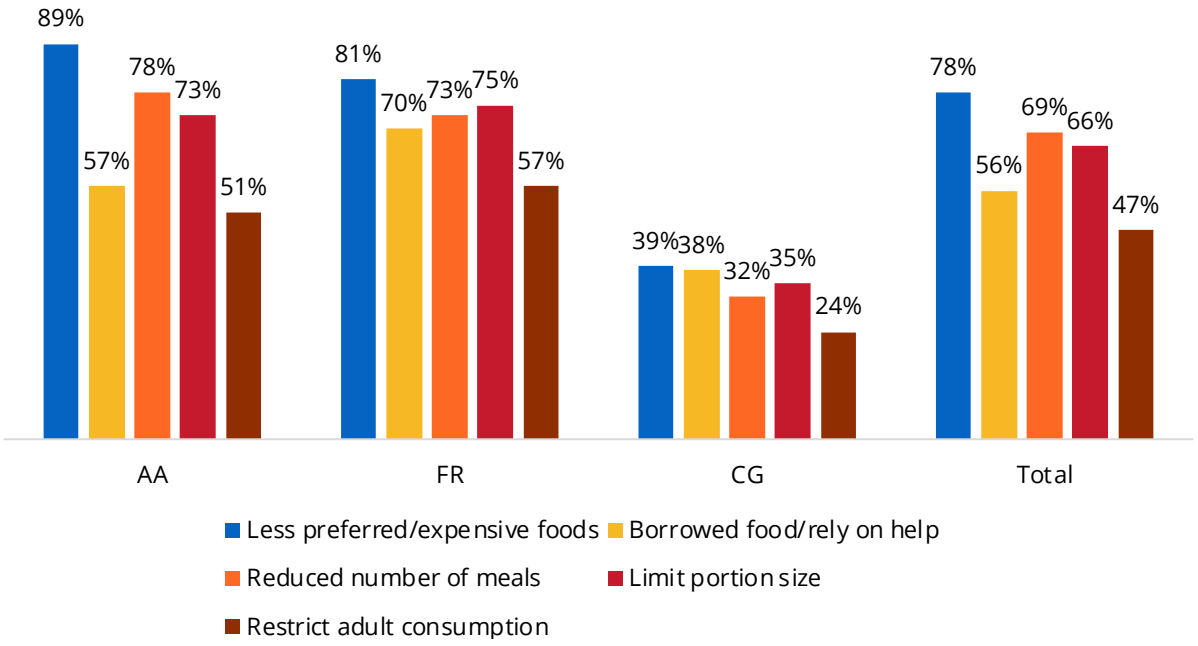
Design-based F (3.53, 1746.32) = 1.5185 P = 0.2007

14 The classification of the rCSI is computed using the weighted sum of coping strategies, and it assumes three categories, i.e., *no to low, medium, and high coping,* where rCSI≤15 is *no to low coping*, 15<rCSI≤40 *medium coping*, and rCSI>40 *high coping*.

Statistically, a p-value (P=0.2007) implies that the differences between the groups are not significant. However, considering the differences between the AA and the other two groups (FR and CG) and intervention activities, for instance, cash transfers that were transferred before the floods likely contributed to the use of the *no-to-low coping* strategies.

Further analysis of each component comprising the rCSI showed varying percentages of the coping strategies used by households. Figure 3 below illustrates the proportions of the five coping strategies across the three groups.

Figure 3: Coping strategies applied due to lack of food or money to buy food



In summary, at 13.7, AA had a better rCSI index than FR (15.0) and CG (15.9). This implies that CG had a higher chance of applying consumption-based coping strategies than FR and AA. Based on these index computations, it is important to note that the AA and FR households utilized *no to low coping* strategies (rCSI≤15), while the CG applied *medium coping* strategies (15<rCSI≤40). Table 5 below illustrates the rCSI index of the three groups.

Table 5: rCSI index of the three groups

Group	rCSI
AA	13.7
FR	15.0
CG	15.9
Total	14.1

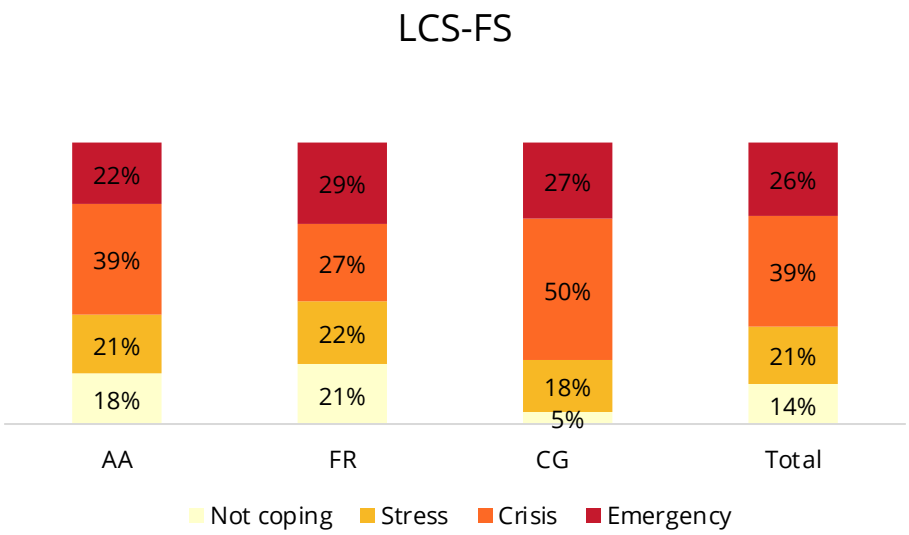
3.4.3 LIVELIHOOD COPING STRATEGY FOR FOOD SECURITY (LCS-FS)

The AA group had the fewest households (22%) applying emergency coping strategies (these include mortgaging a house or land, begging, and engaging in socially degrading, high-risk, exploitive, or life-threatening jobs) in the last 30 days in response to a lack of food or money compared to FR (29%) and CG (27%). While the CG had fewer people utilizing emergency coping than FR, it had the highest proportion of those who applied crisis coping strategies (50%).[15]

Owing to the vulnerability of the CG group, which is tantamount to that of all other groups, the slightest change, for instance, a disaster, could move most households utilizing crisis into emergency coping.

The FR had the most people who were not coping (21%), followed by AA (18%), while CG had the least (5%). These findings pinpoint the benefits of the two approaches and the weight each is likely to have in reducing the coping strategies. Figure 4 below summarizes the percentages of households that utilized the various coping strategies.

Figure 4: Livelihood coping strategy for food security



Pearson:

Uncorrected $chi^2(6)$ = 31.7852

Design-based F (4.75, 2352.55) = 2.5085 P = 0.0309

A p-value of 0.0309 from the design-based F-test indicates a statistically significant association between the LCS-FS and the corresponding group at a 5% significance level. The differences between the treatment and non-treatment groups can be explained by the fact that WFP and partners had implemented AA and FR interventions with the households. Thus, the interventions likely caused the differences.

15 Crisis strategies include withdrawing children from school, reducing health expenses, selling productive assets, and sending household members elsewhere to eat. On the other hand, stress strategies include spending savings, borrowing money, and selling household assets.

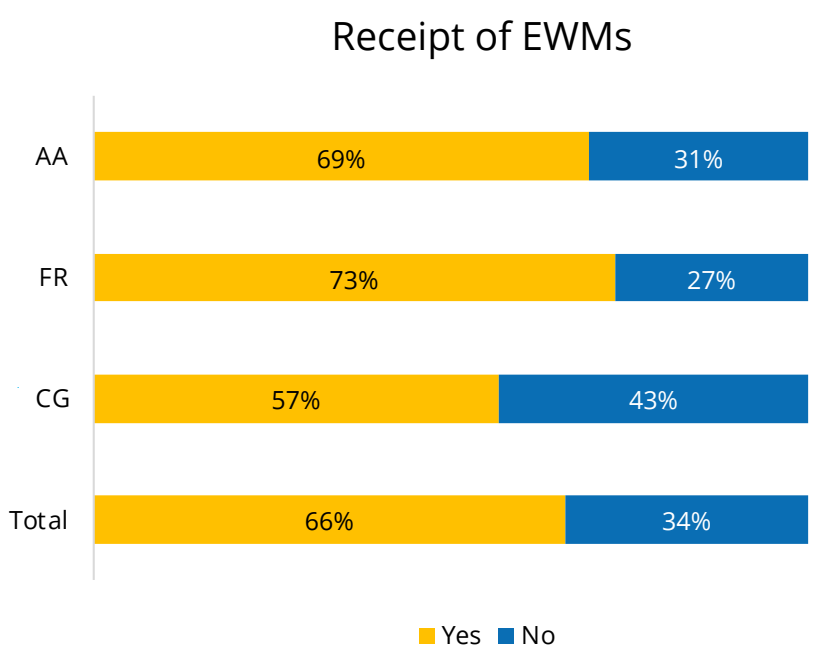
3.5 Climate Information Access and Utilization

Access to information is essential to empowering people and providing a reference when making decisions or pursuing actions. Access to climate information through timely early warning messages was among the intervention activities. The intervention did not control the information to only those enrolled for cash transfers in either AA or FR; instead, it was dispensed to all through phone ringtones, gatherings, and mass media, particularly radio. AA reached 1,896,921 people with climate-related information packaged as early warning messages via Hormuud (406,241) and radio (1,490,680). This subsection presents findings on access to early warning messages, information packaging/tailor-making, timeliness, channels of relaying climate information, and using such information to guide households' decisions and actions.

3.5.1 ACCESS TO EARLY WARNING MESSAGES

Approximately two-thirds (66%) of the households reported receiving early warning messages (EWMs). More FR (73%) than AA (69%) and CG (57%) confirmed that they had received EWMs. There was a marginal difference [*p-value of 0.0771*] between the groups and the receipt of information, pinpointing a generalized circulation of EWMs. Figure 5 below shows the percentage of people with access to EWMs.

Figure 5: Access to EWMs



As illustrated in Table 5 below, the respondents received EWMs from various channels - phone (ringtone, gatherings, or calls) fetched the most mentions at 78%, and radio came second with 43% mentions. More (47%) of AA households confirmed accessing EWMs via radio than FR (34%) and CG (28%). Likewise, 81% of AA recipient households accessed the EWMs via radio compared to FR (78%) and CG (44%).

This implies that the channels used in the intervention to relay EWMs were relevant and accessible to communities. Besides, the findings also showcase the need for anticipatory action interventions to leverage multiple ways of relaying information to the people to help them make decisions that can avert/reduce losses in the event of a disaster. For instance, community structures (community elders, religious leaders,

community meetings, gatekeepers, friends/ neighbors, and family members) combined garnered 63% mentions; playing a pivotal role in delivering early warning

Table 6: Channels used to share EWMs

Channel	AA (%)	FR (%)	CG (%)	Total (%)
Community Elders/Leaders	18	22	20	19
Religious leader	2	6	32	5
Community meeting	2	17	36	7
Gatekeepers	1	8	28	4
Cooperating Partners (CP)	8	9	36	11
Friend/neighbor	12	6	32	12
Family member	14	14	40	16
Radio	**47**	**34**	**28**	**43**
Television	3	2	12	4
Phone (ringback tone, SMS, or calls)	**81**	**78**	**44**	**78**
Public Address/Loud Speakers	0	0	4	1
Social Media/Online/Internet	2	2	0	1

The FGDs findings were consistent with the household surveys in that discussants confirmed the receipt of EWMs from the two channels opened by a vast majority of households, i.e., phone ringback and radio. Below are some of the discussants' sentiments edited for length and clarity.

> *...We got the information that the most useful communication channels were Hormuud and radio...*
>
> **AA Women FGD**

> *...Before the floods, we received early warning information through various channels, including local radio broadcasts, community meetings, and Hormuud...*
>
> **CG Men FGD**

> *...We received these crucial updates through various channels, including radio broadcasts and ringback tones from Hormuud Telecom. Additionally, my son keeps us informed through social media, following a resident of Imey Town in Ethiopia who regularly updates us on the rising levels of the Shabelle River and the speed at which water is moving toward Beledweyne town...*
>
> **AA Men FGD**

> *...We received the early warning about the flood through phone messages from Harmuud...*
>
> **FR Women FGD**

> *...We got the information via Hormuud and radio...*
>
> **CG Women FGD**

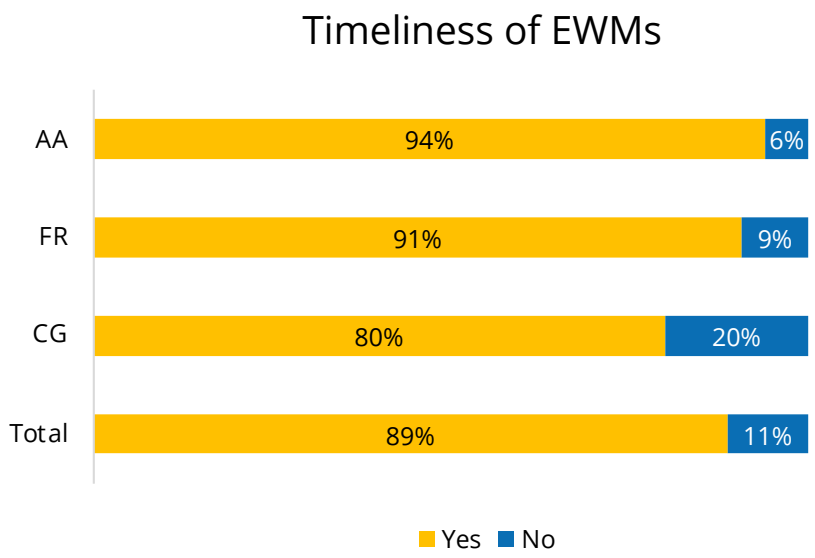
> *...Before the floods, we received warnings through a mix of local broadcasts, Hormuud, and community announcements...*
>
> **FR Men FGD**

3.5.1 TIMELINESS OF EWMs

The EWMs started to be aired on 18th April 2024, while the first floods were reported on 26th April 2024. This gave the people a week and two days to prepare for the looming floods.

This notwithstanding, an overwhelming majority (89%) reported that EWMs were timely. The treatment groups had higher percentages of households reporting timely EWMs at AA – 94% and FR – 91% compared to 80% households in the CG group, as shown in Fig 6 below.

Figure 6: Timeliness of EWMs



FGDs with men and women revealed that the EWMs were shared on time. Below is what the participants had to say about timeliness:

> *...We received early warning information before the floods from the Radio...*
>
> **AA Women FGD**

> *...We would like to receive EWI/Ms four months before floods. This would be ideal and allow us to prepare in advance, which is crucial because finding temporary housing can be challenging and requires planning...*
>
> **AA Women FGD**

> *...Yes, we received early warning information before the floods came...*
>
> **CG Women FGD**

> *...Ideally, we would have wanted at least three months before floods to allow us to prepare accordingly...*
>
> **FR Male FGD**

The discussants expressed some ways of improving climate information sharing, especially regarding the ideal timing of the conveyance of information, in addition to sensitizing the public on the importance of EWMs.

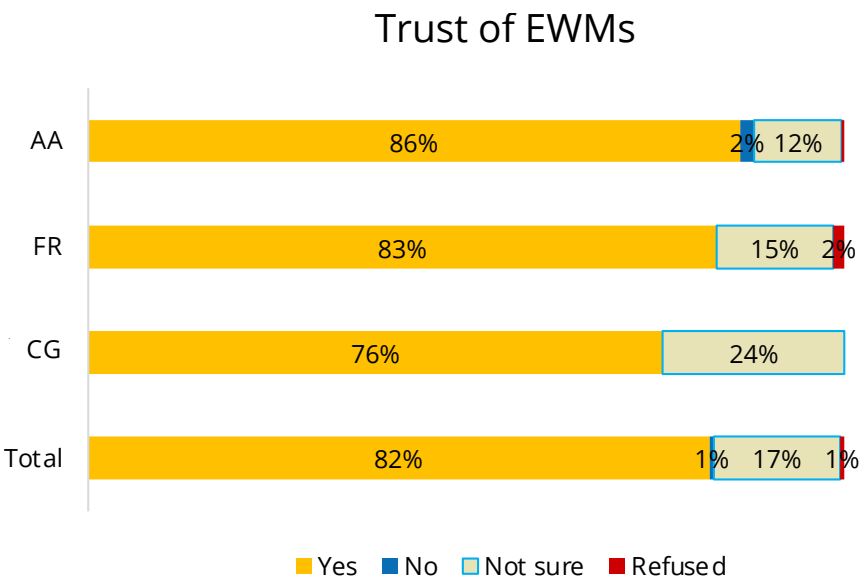
> *...There still may be room for improvement. For instance, considering the potential literacy barriers, community engagement sessions could be organized to address any misunderstandings or questions regarding the early warning messages, ensuring that everyone in the community is well-informed and prepared...*
>
> **AA Men FGD**

> *...Improve Public Education and Awareness: Educating the public on the importance of heeding early warnings and what to do when they receive an alert can improve response rates. Regular drills and public awareness campaigns can help prepare communities...*
>
> **AA Men FGD**

3.5.3 USE OF EARLY WARNING MESSAGES IN GUIDING HOUSEHOLD ADAPTIVE DECISIONS

The credibility of information is an essential attribute that people consider when deciding their course of action. In this regard, the study investigated whether the households trusted the EWMs received. Overall, 82% trusted the EWMs, with only 1% stating they did not trust the information due to their past years' drought experiences. The treatment groups AA and FR had the highest proportion of households, reporting that they trusted EWMs at 86% and 83%, respectively, while the CG group had 76%, which was also high. Though those who did not trust the EWMs were insignificant, when asked why they did not trust EWMs, they opined that they thought the floods would never happen during the 2024 *Gu* season. Figure 7 below shows how the three groups varied in their trust of EWMs.

Figure 7: Trust of EWMs



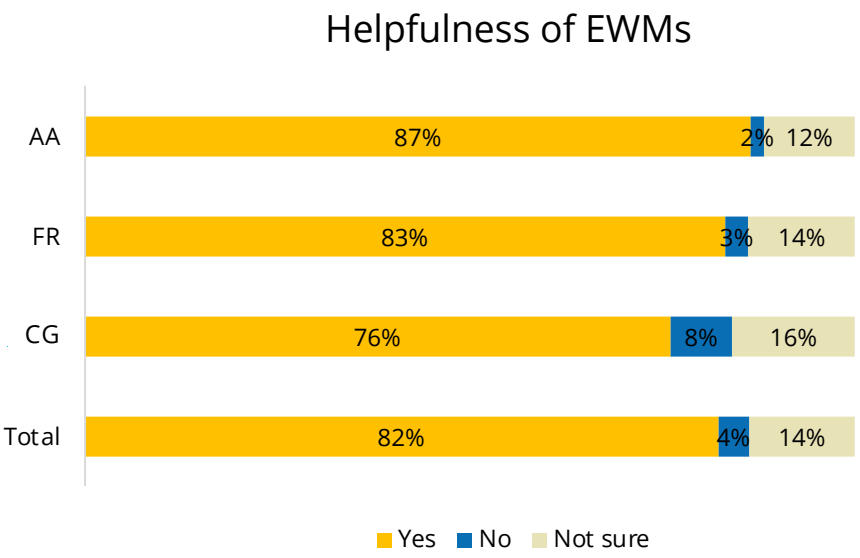
FGDs with CG showed that the people did not comprehend the severity of the forecasted floods, which influenced their actions in response to the early warning information.

> *...The early warning information was perceived as somewhat accurate; however, many of us felt that the urgency was not adequately conveyed...*
>
> **CG Male FGD**

> *...The early warnings seemed somewhat accurate, but many felt the seriousness wasn't emphasized. Past experiences led some to doubt the severity...*
>
> **AA Men FGD**

A vast majority (82%) of households reported that EWMs were helpful in the preparation and coping with floods. There were no significant differences between the three groups, albeit the treatment groups had slightly higher percentages confirming the helpfulness of early warning information (i.e., AA>FR>CG). Those who opined otherwise shared various reasons, for example, having no finances to protect their property, including the little amount for making sandbags to block water from their houses and evacuating to safe raised grounds. Figure 8 illustrates the percentages of surveyed households' views on the helpfulness of EWMs.

Figure 8: Helpfulness of EWMs

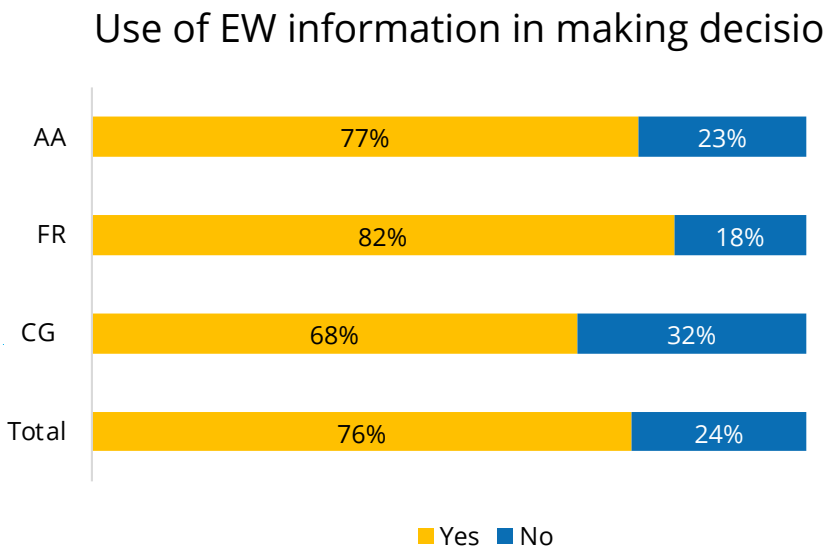


The FGDs revealed that early warning messages were integral in informing people about floods and the need to take precautionary measures. Here is an FGD verbatim showcasing the people-supported perception:

> *...The early warning systems seemed to work better this time, giving us more time to prepare. However, despite better warnings, the lack of resources and the sheer frequency of these events have made it increasingly difficult to protect ourselves and our homes effectively...*
>
> **AA Men FGD**

Most (76%) of the households used early warning information in making decisions. The variation between the groups was very small, i.e., FR (82%)> AA (77%)> CG (68%). The decisions made included making necessary preparations in anticipation of floods, evacuating to safe areas, making sandbags to block flowing water from houses, and purchasing food items in readiness for floods. Some of those who stated that they were not using the early warning information reported that floods had slightly affected their homesteads, thus making it unnecessary to take any action, while other households reported that they did not have financial support to act.

Figure 9: Use of early warning information in making decisions



In all the AA FGDs, the people confirmed using the EWMs. Here are some of the FGD excerpts edited for length and clarity.

> *...We swiftly evacuated to safe, elevated lands where the flooding had little impact on us. This strategic decision provided us with a secure refuge away from the dangers posed by the floodwaters. Additionally, recognizing the potential for disruption in food supplies, I took proactive measures to gather enough food to sustain my family for a couple of weeks...*
>
> **AA Women FGD**

> *...I decided to evacuate my family to a relative's house on higher ground. We also moved some of our valuables and essential documents with us. I did this because I wanted to ensure the safety of my family and protect important items from being destroyed. I took these actions a couple of days before the floods were expected to hit our area...*
>
> **AA Men FGD**

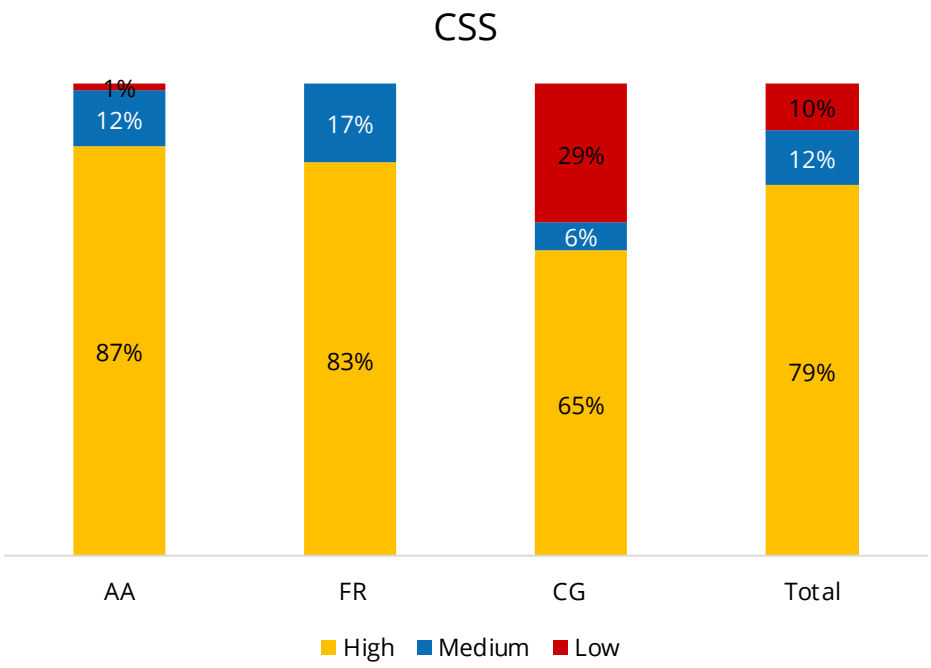
3.6 Climate Services Score

Climate Services Score (CSS) measures households' use of climate information provided by climate services to protect or adapt their livelihoods to climatic shocks and stressors. WFP implemented anticipatory action collaboratively with the Somali Disaster Management Agency (SoDMA)—the Somali Federal Government organization responsible for responding to disasters. WFP supported the activation of AA by SoDMA by providing real-time forecasts of river levels to guide the intervention. The intervention also had a component of climate information in the form of early warning messages transmitted through community structures, radio and phone ringtones.

The study asked a set of five questions to compose the CSS. The five questions measured access to climate information, adaptation of information to household needs, timeliness of delivery, ease of understanding of the information, and usage of information. Overall, the CSS was at 79%, implying that eight out of ten surveyed households accessed timely, easy-to-understand climate information adapted to their needs and used it to inform their response plans. AA had the highest proportion of households with *high* CSS (87%), followed closely by FR (83%), while CG had 65%. The CG had the highest percentage of households that had *low* CSS.

A p-value of 0.0017 is less than 0.05, indicating a statistically significant association between CSS and Group. In other words, the distribution of CSS categories significantly differed among the groups AA, CG, and FR. Figure 10 shows the CSS of the three groups.

Figure 10: CSS



Pearson:

Uncorrected $chi^2(4)$ = 42.9746

Design-based F (2.75, 552.42) = 5.3480 P = 0.0017

On some of the CSS components, such as ease of understanding climate information, the FGDs revealed that people found the message easy to understand due to the use of local dialects. Below are sentiments from FGDs edited for clarity.

> *...I found the early warning messages' content remarkably easy to understand. One key factor that contributed to this clarity was the delivery of the messages in the local dialect, both on the local radio and through the Hormuud ringback tone. This ensured that the information was relatable and comprehensible to our community...*
>
> **AA Men FGD**

> *...The content of the early warning messages was generally understandable because they were communicated in our local language. However, the lack of clarity regarding the expected impact of the floods made it difficult for some of us to grasp the urgency of the situation...*
>
> **CG Men FGD**

> *...We understood the content easily since the language was our mother tongue...*
>
> **AA Women FGD**

3.7 Prepositioning of Boats

The study revealed that boats were prepositioned on time to help the households that were in flooded areas. However, in all the FGDs, the discussants confirmed that they had not used them. For the AA group, they asserted that they had already moved to high ground and thus did not need the services. This shows that AA assistance successfully reduced costs associated with post-response activities. Below is what some discussants mentioned during FGDs.

> *...I have seen the boats managed by the local flood committee in the town. That has been providing rescue services for households in flooded areas..*
>
> **AA Men FGD**

> *...I did not use the boats. I had already moved to high grounds before the floods started...*
>
> **AA Men FGD**

As a proxy measure of the accuracy of triggers and all the processes put in place for relaying projections - a comparison between the *Deyr* and *Gu* floods showed that the intensity of the *Gu* floods was low. This, in one way, demonstrates the accuracy of the forecasts in guiding the selection of the flood severity scenario for AAP. The FGDs' participants underlined the intensity of *Deyr* by showcasing how the boats were appropriate compared to *Gu* season. Below are some opinions they shared on the boats' effectiveness in the two seasons.

> *...In comparing the current season's provision of boats with the Deyr season, I would say the Deyr season's response worked better for us and our community. During the Deyr season, the floods affected more villages, and the water levels were much higher, necessitating the rescue of households stranded in marooned villages. The boats provided were essential not just for rescue operations but also for transporting supplies...*
>
> **AA Men FGD**

> *...The Deyr season's provision of boats was more effective because the floodwaters took a long time to recede, making boats the main mode of transport for a prolonged period. WFP partners provided high-energy biscuits, which were crucial in sustaining us during those difficult times. The boats enabled us to access these supplies regularly...*
>
> **CG Men FGD**

> *...During the Deyr season, the boats were a lifeline for many of us. With more villages affected and higher water levels, the boats facilitated the rescue of stranded families and the distribution of essential supplies. This season, while the provision of boats was helpful, the impact wasn't as severe as during the Deyr season, so the need wasn't as critical...*
>
> **AA Men FGD**

3.8 Cross-cutting Indicators

The cross-cutting themes investigated in this study include accountability to the affected population, gender, protection, and, by extension, safety and unhindered access to interventions, as well as people's feedback. The feedback from these thematic areas was crucial in gauging whether the AA interventions were accessible, delivered safely, accountable, and provisioned for people's participation.

3.8.1 SHARING OF PROJECT INFORMATION WITH THE PEOPLE

The study revealed that slightly over a quarter (26%) of the project participants were informed about the AA interventions, and 27% were informed of how the people were selected to participate, as illustrated in Fig 11 and 12, respectively. Contrastingly, those aware of their entitlement comprised 59% of the households, as shown in Figure 13 below.

The FGDs revealed a mixed reaction about sharing the project information and targeting criteria with the people, consistent with the household survey findings. Below are some discussants' views edited for length and clarity.

> *...No, we were not told...*
>
> **AA Women FGD**

> *...After receiving the cash transfer, a staff member from WFP's partner organization contacted me. They explained why I was selected to receive this assistance, emphasizing that it was a one-time aid meant to help me prepare for the anticipated floods. This information was helpful because it clarified the purpose of the funds and how I should use them effectively...*
>
> **AA Men FGD**

> *...For me, I wasn't aware of any specific targeting criteria. I simply received the cash through my SCOPE card. It wasn't until Coopi, the WFP partner, called me for a top-up and explained the redemption process that I understood more about the assistance...*
>
> **AA Men FGD**

> *...The WFP partner staff contacted me after I received the cash transfer. They explained that I was targeted for this assistance due to my household's vulnerability to the floods. They stressed that this was a one-time support intended to help us manage during the emergency period. I wasn't aware of the targeting criteria before I got the cash. It was a surprise when the money appeared on my SCOPE card. Coopi's call about the top-up and redemption process clarified things for me and made the situation less confusing...*
>
> **AA Men FGD**

> *...I didn't have any knowledge of the criteria used for selecting intervention's participants. The first indication I had of the assistance was when the cash appeared on my phone, followed by a call from you calling for this interview...*
>
> **AA Men FGD**

Figure 11: Informed about AA intervention

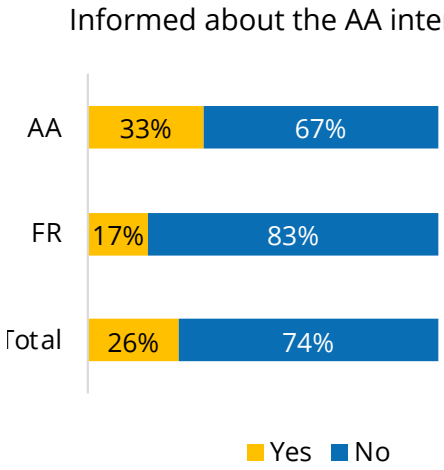


Figure 12: Informed how people were chosen

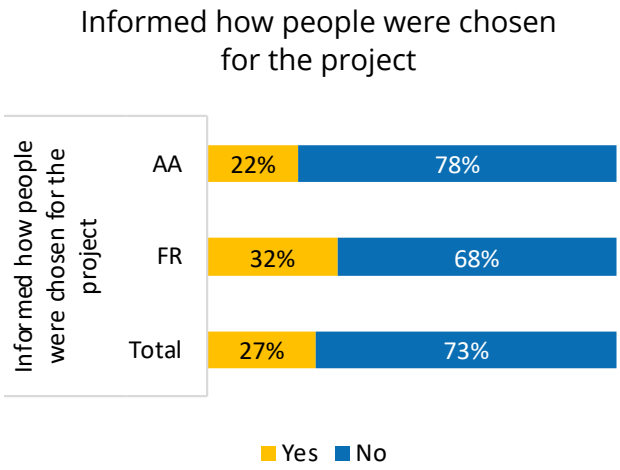
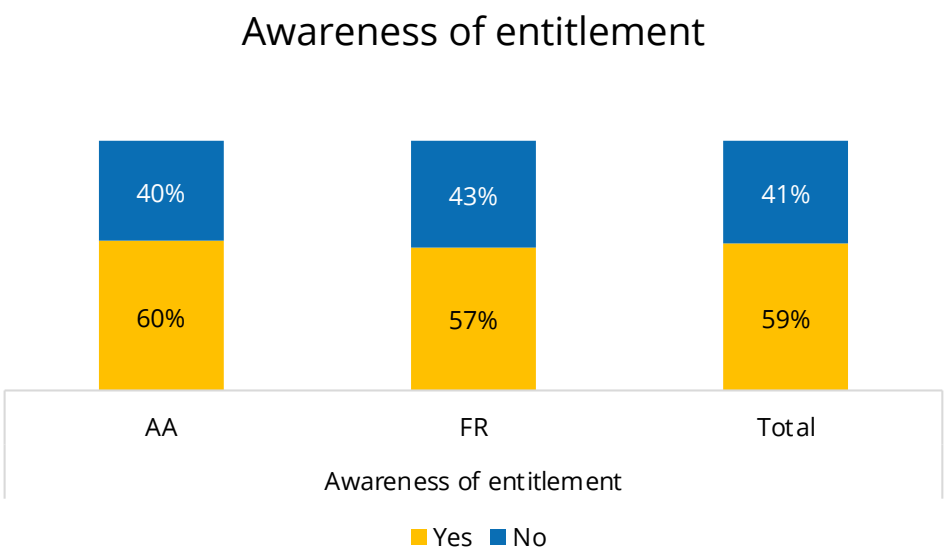


Figure 13: Awareness of entitlement

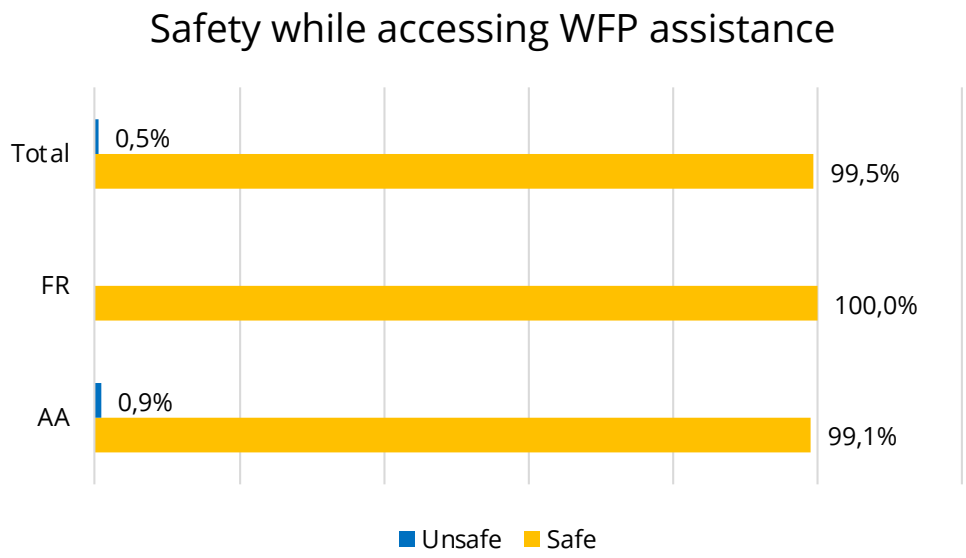


These findings emphasize the need to implement extensive project awareness activities with the community members to inform them of project-related information. Divulging information empowers people to actively participate, question, and follow up with project activities. Thus, it improves downward accountability (participant level).

3.8.2 PERCEPTION OF ANTICIPATORY ACTION INTERVENTIONS SAFETY

All the households felt safe while accessing WFP assistance, as shown in the figure below:

Figure 14: Project Safety



3.8.3 TREATMENT OF PROJECT PARTICIPANTS AND EASE OF ACCESSING ASSISTANCE

As shown in Fig 15, almost all (99%) surveyed households confirmed that WFP and partners treated them respectfully. Notwithstanding this still, 1% felt that they were not treated respectfully, indicating the need for WFP and partners to continue cultivating positive behaviors amongst staff. Ninety-five (95%) people perceived the project to have included all vulnerable households, while 5% felt that the project had excluded some vulnerable community members (see Fig 16). Though a 5% error is statistically permissible, the targeting criteria need to be relooked at and, where necessary, adjustments made. Almost all (98%) confirmed accessing WFP assistance was easy. Only 4% of AA households confirmed that access was difficult. This pinpoints to the need of exploring the identification and selection of people who will participate in an anticipatory action intervention and how such is likely to impact their overall perception of accessing assistance. WFP/partners identified FR participants after they experienced losses, making the process easy, and thus, no person enrolled in FR opined that accessing assistance was difficult. Figure 17 below illustrates the ease of accessing assistance as opined by the treatment groups.

Figure 15: Respectful treatment from WFP/partners' staff

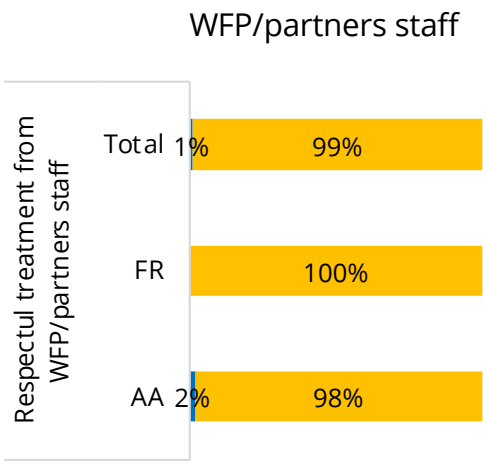


Figure 16: Perception of the targeting of the most vulnerable

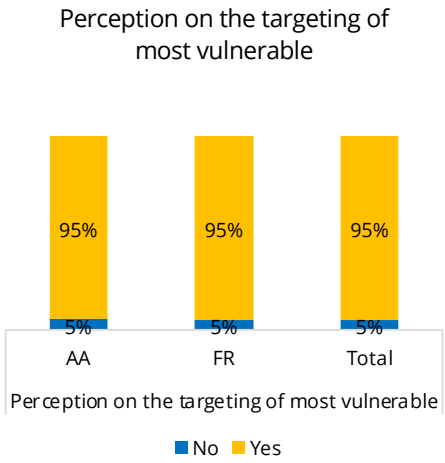
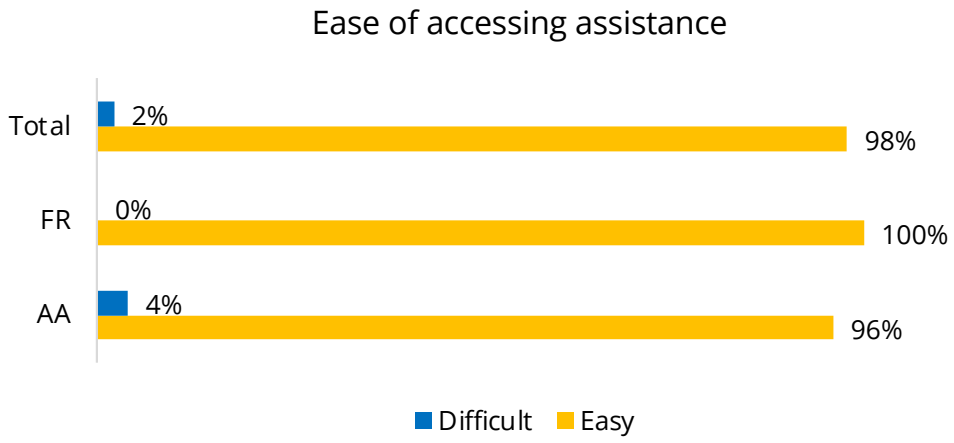


Figure 17: Ease of accessing assistance



3.8.4 HOUSEHOLD DECISION-MAKING

The involvement of both men and women in decision-making at the household level allows for better plans/decisions to be reached upon consultation. The study revealed that both men and women made decisions about apportioning the entitlement in 64% of the households. On the same note, women made decisions solely in 26% of the households, while men in 11%, as illustrated in Fig 18 below. On the other hand, both men and women made decisions together on the use of household income in 64% of the households, as shown in Fig 19 below. The findings of the above two household decision-making indicators are consistent. Thus, 63% of the households embraced the involvement of both men and women in household decision-making.

Figure 18: Household decision-making on the utilization of entitlement

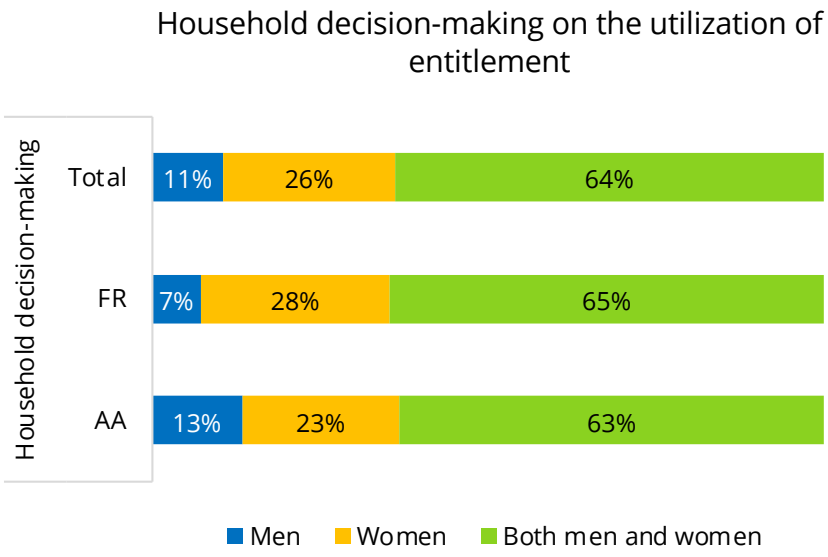
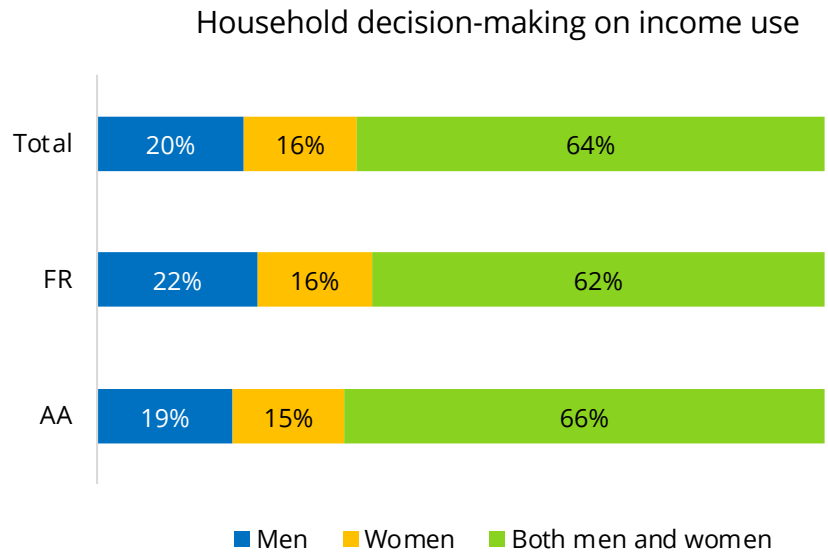


Figure 19: Household decision-making on income use



Despite the improvements in decision-making at the household level, some women still felt that they were not empowered to make decisions adequately, emphasizing the need to implement interventions geared towards decision-making equality continuously. Below are some views that the discussants shared.

> *...Traditionally, men take the lead in decision-making within our community. This meant that women often had less say in crucial matters during the floods, such as where to evacuate to or how to access resources...*
>
> **AA Women FGD**

> *...Husbands (men) mostly decide what to do with cash although women's inputs are considered...*
>
> **FR Men FGD**

> *...In our household, my husband traditionally makes the final decisions about which actions to take. This can be frustrating, especially when we disagree. Unfortunately, when there are differences in opinion, men often don't give us women much space to voice our concerns or propose alternative solutions...*
>
> **AA Women FGD**

> *...The lack of shared decision-making power is a significant issue for many women in our community. It's important to find ways to ensure both spouses have a say in important household decisions...*
>
> **AA Women FGD**

3.9 Coordination of Humanitarian Assistance

While measuring the success of humanitarian assistance, coordination cannot be underestimated. Coordination with other agencies and government structures is essential as it ensures, amongst others, the complementarity of assistance to address humanitarian needs holistically, thus improving the sustainability of realized benefits. It also leads to the strengthening capacities of government structures and the institution of policies that provide a bedrock upon which interventions rest, improving sustainability.

During an FGD, project participants expressed views about their multisectoral needs, firmly pointing to the much-needed coordination.

> *...Despite the preparations made based on the early warning information, there were certain areas where additional support or resources would have greatly enhanced our ability to recover from the floods. Chief among these has been the availing of food commodities and non-food items (NFIs). Access to adequate food supplies would have relieved the immediate strain of scarcity and ensured that our nutritional needs were met during the period of displacement. Additionally, NFIs such as blankets, clothing, and hygiene kits would have improved our comfort and well-being, contributing to a smoother recovery process. Therefore, while the early warning system was crucial in preparing for the floods, supplementing it with essential resources would have further strengthened our resilience and facilitated a more effective response to the disaster...*
>
> **AA Women FGD**

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The early messages relayed via phone ring back, and radio reached the citizenry without exclusion. The provision of AA before floods was meant to enable the households to act in good time and avert/reduce humanitarian losses. In this regard, AA performed well in all the independent variables relative to FR. Likewise, FR performed better than CG. For instance, in the food outcome indicators, i.e., FCS, LCS-FS, and rCSI, AA had better outcomes than FR, while FR performed better than CG. With all the households receiving EWMs, it is evident that the cash assistance influenced the direction of food outcomes. Further analysis of the three anticipatory actions showed statistical significance in the observed differences, indicating a strong correlation between the scores and the cash assistance component of the AA intervention. It is further evident that the timing of the interventions influenced the scores.

AA group had better CSS than FR. Likewise; the FR had better CSS than CG. Thus, anticipatory cash assistance (since the other two AA interventions were available to all people) contributed to better CSS relative to FR, which was true for FR compared to CG. The timeliness of disbursing transfers and the circulation of EWMs at the time positively influenced people who participated in AA, explaining the CSS scores of the three groups. Holding the other variables, ceteris paribus, and using food outcome indicators and CSS, it can be inferred that AA was the ideal approach.

Even though the evidence generation did not directly conduct an audit of financial losses that could have been minimized by

Anticipatory Action response, the 2020 Somalia Floods Losses quantification by the Federal Government provides a starting point for exploring the reduced losses. The cost of inaction also provides a reasonable premise for evaluating the losses. With all the (treatment and non-treatment) groups receiving EWMs, it is evident that all acted at varying degrees. Supplementing EWMs with cash further improved the outcomes. Relooking at this from a point where EWMs were not broadcasted and shared as phone ringback tones, all the groups would have had worse outcomes. Eliminating the extensive monitoring of river levels and other AAP activities would translate to floods, reaching people in a surprise, leading to loss of lives that can only be counted on absolute numbers and not quantified financially. Thus, AA served to reduce losses to the people.

The above-mentioned financial losses required a considerable amount to address. Meeting such high financial demands can be costly for humanitarian agencies, and it can take a lengthy time to address the humanitarian crisis—causing more losses and depleting the resources available in humanitarian assistance kitty, leaving so many needs unmet. Qualitative findings demonstrated that people in the three groups evacuated before the floods, thus reducing the losses they were likely to experience. In summary, anticipatory action reduces losses to the people and saves humanitarian agencies from employing huge financial resources to address humanitarian crises.

4.2 Recommendations

Following the effective implementation of the MAM 2024 anticipatory action intervention, the evidence generation unearthed several recommendations. These include:

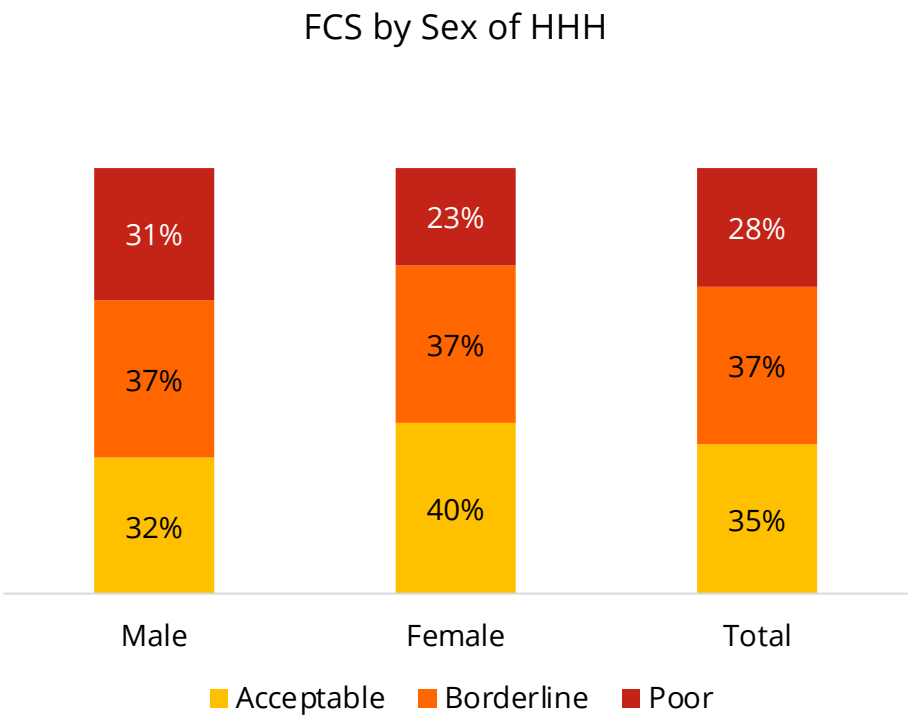
- **Plan for implementing similar projects in the future** – climate change interventions are not a one-off activity. The ever-ongoing human activities that cause climate change are increasing, implying that the effects will continue manifesting in extreme weather conditions. Thus, learning from the current and previous projects and Somalia's weather trends, it is essential to plan how to mitigate extreme weather changes. In this regard, WFP/partners should source the necessary support to invest in delivering anticipatory action interventions that have proved more effective than post-shock response ones.
- **Collaborate with other agencies and government structures** - Working with SODMA to monitor and relay trigger information activation proved to be an effective strategy. This underlines the need for continued collaboration with the SODMA, Federal, and State governments. Additionally, exploring other partnership opportunities and leveraging each party's strengths is necessary.
- **Extensive mapping of actors in select sites of WFP projects** - WFP/partners should thoroughly assess the actors in the select project sites. Mapping actors helps identify other like-minded organizations implementing similar activities to avoid duplication and provides an opportunity to identify other needed complementary assistance.
- **Implement activities likely to enhance communal participation in the projects beyond receiving assistance to informing decision-making.** The sharing of project information was lacking, implying that most of those who were enrolled only knew that WFP would be assisting them without necessarily understanding the details of the project. There is a need to relook at the community engagement strategies and make the necessary amends to the design or change how they are deployed in communities to improve participation for increased ownership, improved decision-making, and likely sustainability of benefits.

- **Emphasize the intensity of disasters in the early warning messages** – most people stated that they could not tell the intensity of the floods from the early warning messages. Where possible and with improved projections certainty, it is essential for future interventions to design messages to include the intensity of an anticipated disaster to guide people in the response decision-making.
- **Continue using phone ringback and radio to share EWMs and integrate the two channels with community structures.** With phone ringback garnering the most mentions, the AAP should continue using it to share EWMs. Though community structures had the second highest mentions, it is worth considering the likely origins of messages; thus, radio cannot be downplayed as an essential channel for conveying EWMs. In this regard, the content of EWM should be designed to inform the primary recipient to share the message with other community members (neighbours, families, and friends). This will ensure the utility of the two primary channels (ringbacks and radios) and an integration of community structures, thus increasing the reach of EWMs.
- **Divulge EWMs to the people as early as four months before the occurrence of the envisioned disaster** - AAP designs should factor in the right timing as perceived by the people to allow those likely to be affected by a particular undesired event to take the requisite mitigation actions/response.
- **Maintain flexible anticipatory action project designs to adapt to changing climate conditions.** These designs should also include adaptability that accounts for and supports different gender needs and roles, addressing gender-related challenges as they arise. For example, women often have unique needs and responsibilities during extreme weather events. Adaptive measures should include safe spaces for women in shelters and resources to support their caregiving roles during emergencies.
- **Safe access to AA Services:** Design AA interventions to ensure the safe access of women and girls to services and resources. This may include setting up gender-segregated spaces during cash distributions, ensuring safe and private access to water and sanitation facilities, and involving female staff and volunteers in AA activities to create a more secure environment for women and girls.

ANNEX 1: GENDER ANALYSIS

The charts below summarize the key outcome indicators investigated in the AAP evidence generation analyzed by sex of household head.

a) Aggregate FCS by sex of household head

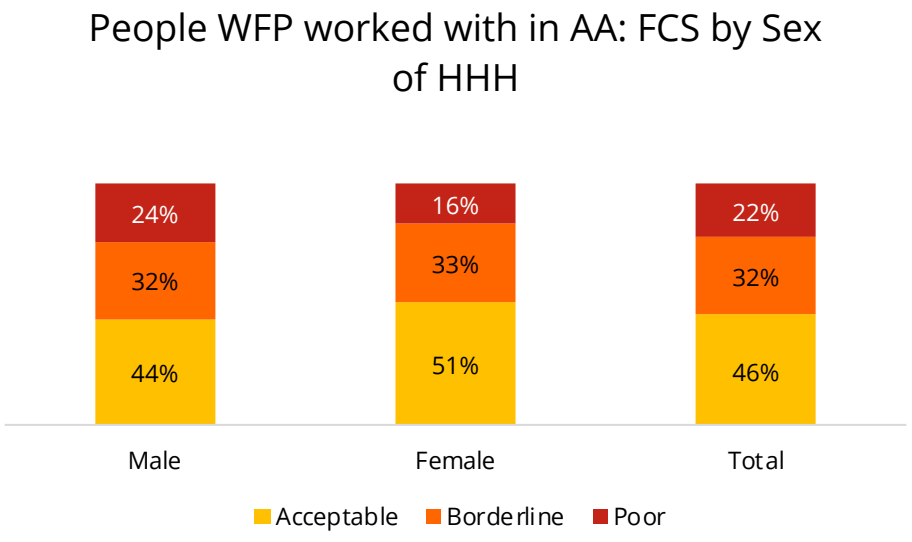


Pearson:

Uncorrected chi²(2) = 4.7373

Design-based F (1.98, 978.40) = 1.0604 P = 0.3461

I. Aggregate FCS by sex of household head

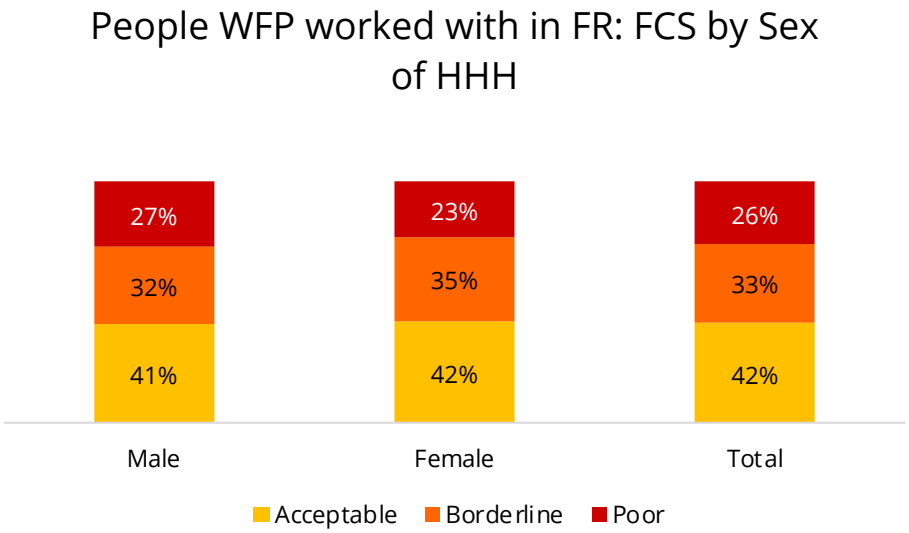


Pearson:

Uncorrected chi²(2) = 2.7531

Design-based F (2, 724) = 1.3728 P = 0.2541

II. People we worked with in FR: FCS by sex of household head

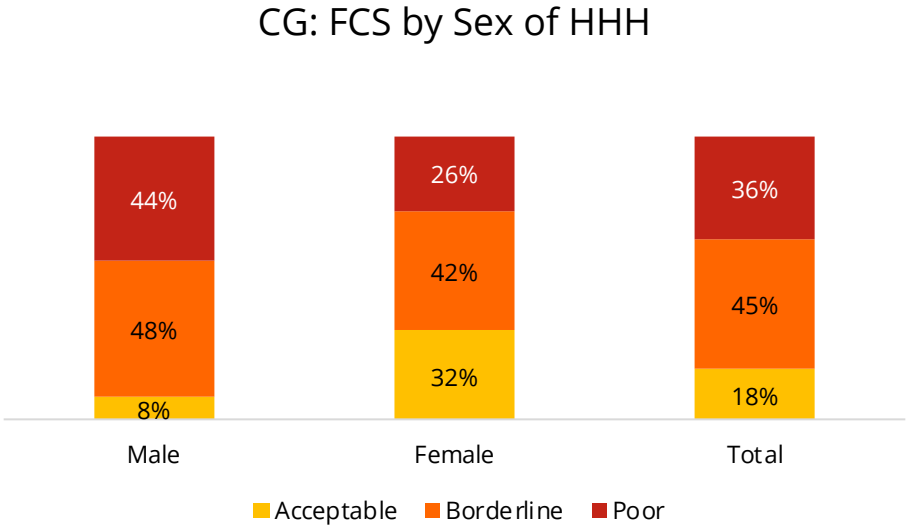


Pearson:

Uncorrected chi²(2) = 0.1600

Design-based F (2, 176) = 0.0791 P = 0.9240

III. CG: FCS by Sex of Household Head

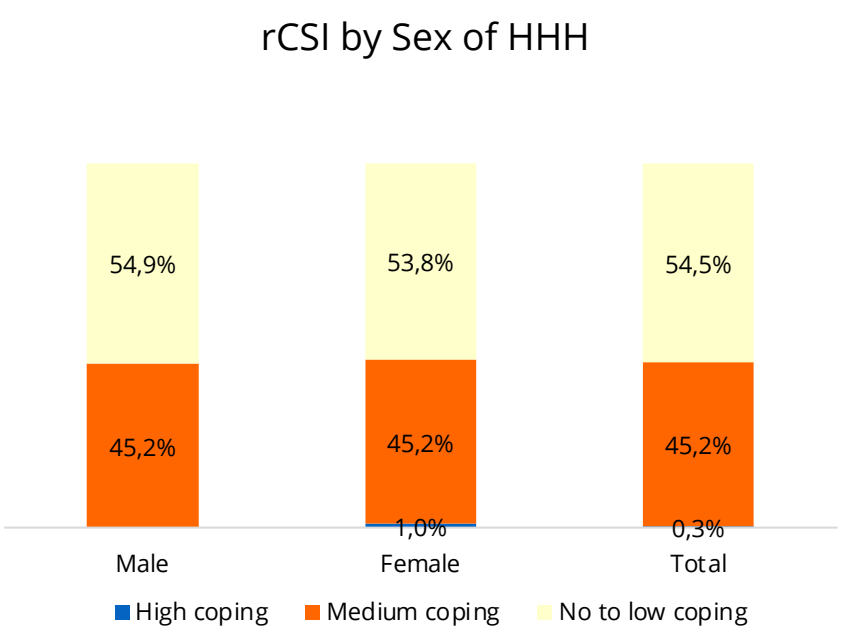


Pearson:

Uncorrected chi²(2) = 4.3120

Design-based F (2.00, 86.00) = 2.1070 P = 0.1278

b) Aggregate rCSI by sex of household head

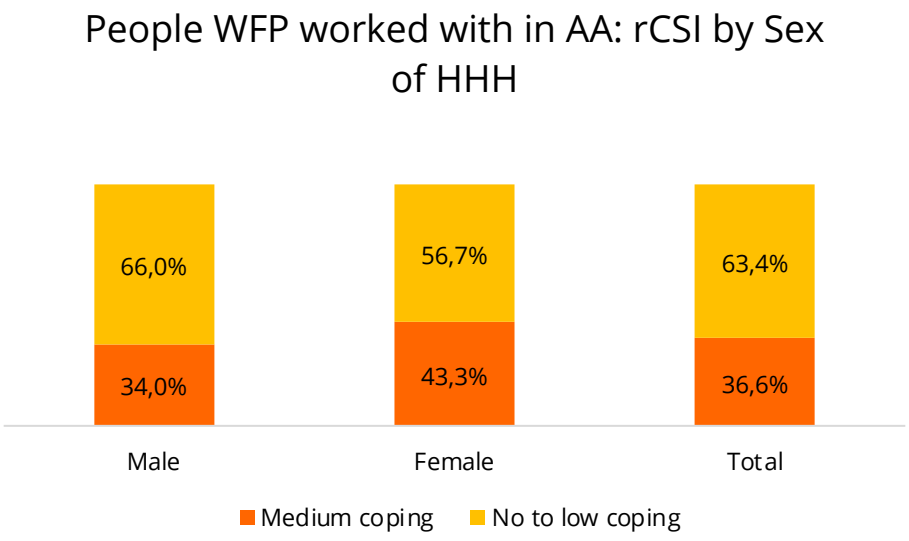


Pearson:

Uncorrected chi²(2) = 3.3049

Design-based F (1.96, 971.87) = 0.8425 P = 0.4291

I. People we worked with in AA: rCSI by sex of household head

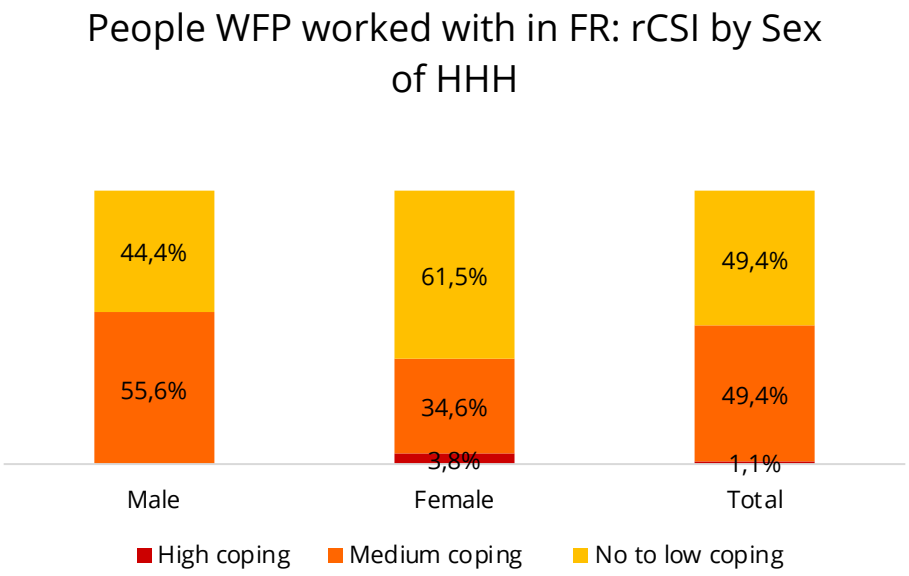


Pearson:

Uncorrected chi²(1) = 2.7600

Design-based F (1, 362) = 2.7524 P = 0.0980

II. People we worked with in FR: rCSI by sex of household head

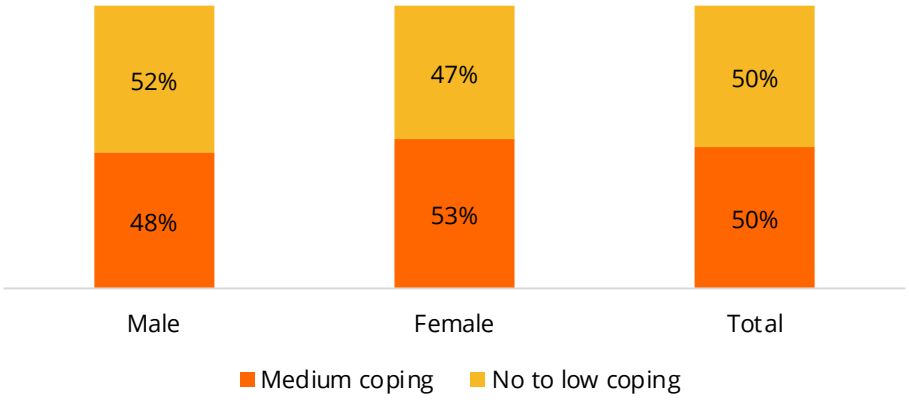


Pearson:

Uncorrected $chi^2(2)$ = 5.1433

Design-based F (2.00, 175.99) = 2.5563 P = 0.0805

III. CG: rCSI by sex of household head

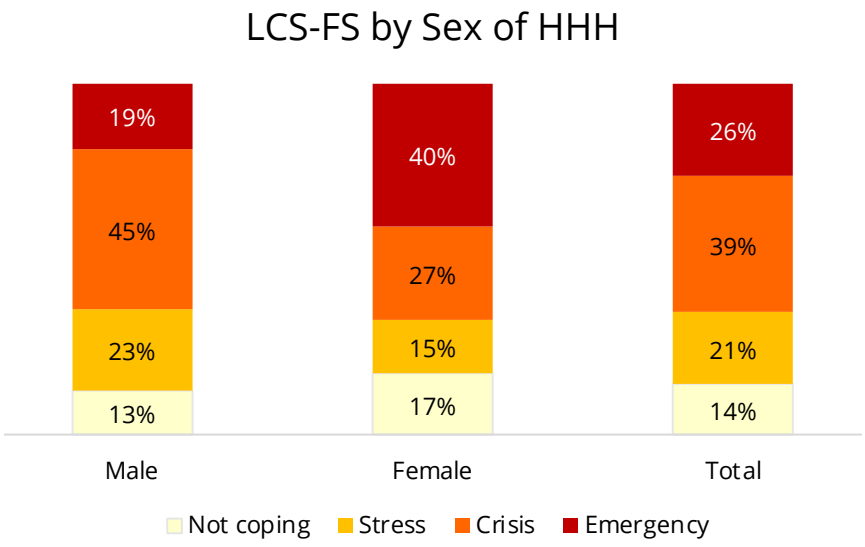


Pearson:

Uncorrected $chi^2(1)$ = 0.0926

Design-based F (1, 43) = 0.0905 P = 0.7650

c) Aggregate LCS-FS by Sex of household head

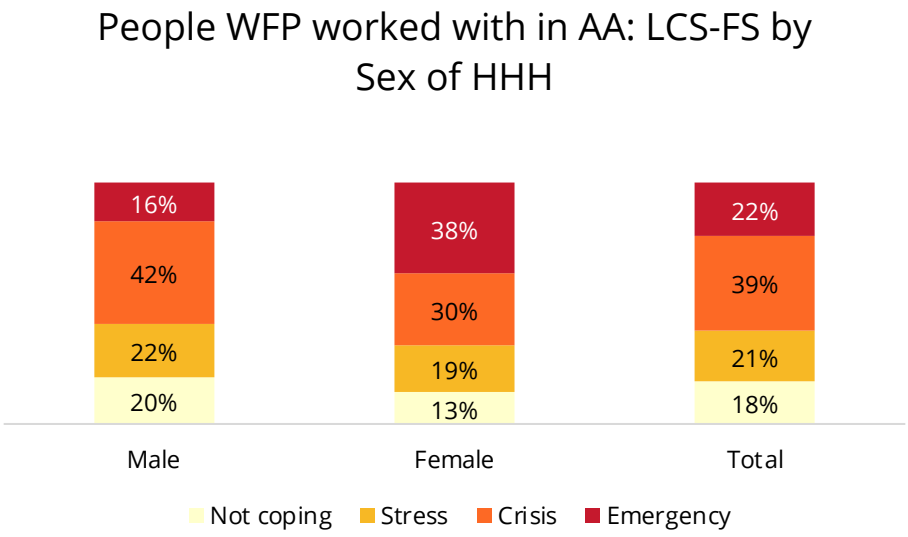


Pearson:

Uncorrected chi²(3) = 35.2314

Design-based F (2.94, 1455.94) = 5.9858 P = 0.0005

I. People we worked with in AA: LCS-FS by sex of household head

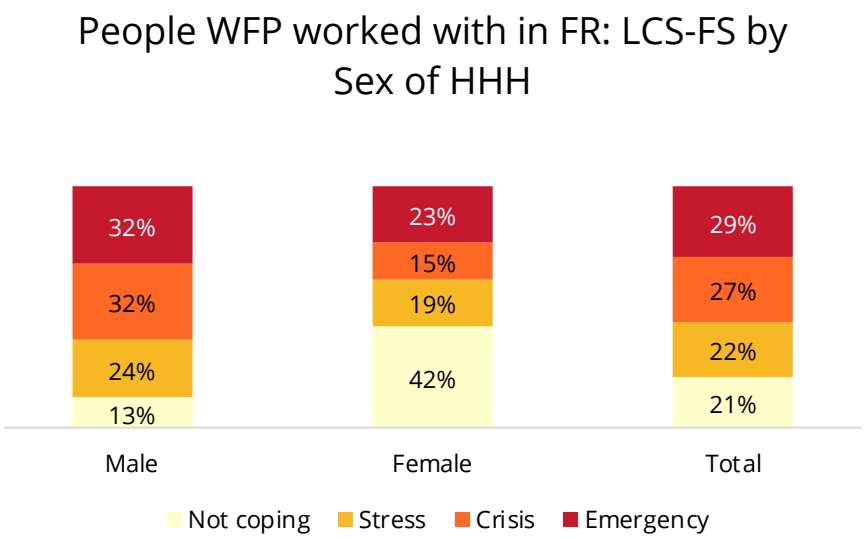


Pearson:

Uncorrected chi²(3) = 20.7523

Design-based F (3.00, 1086.00) = 6.8984 P = 0.0001

II. People we worked with in FR: LCS-FS by sex of household head

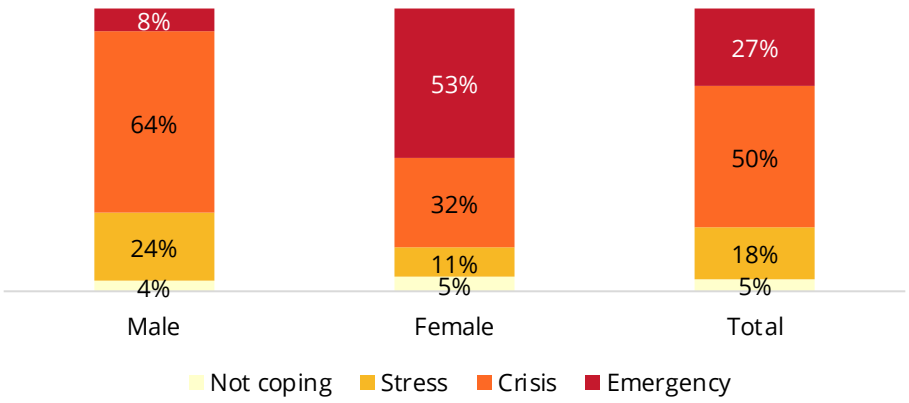


Pearson:

Uncorrected chi²(3) = 10.0304

Design-based F (3.00, 264.00) = 3.3059 P = 0.0208

III. CG: LCS-FS by sex of household head

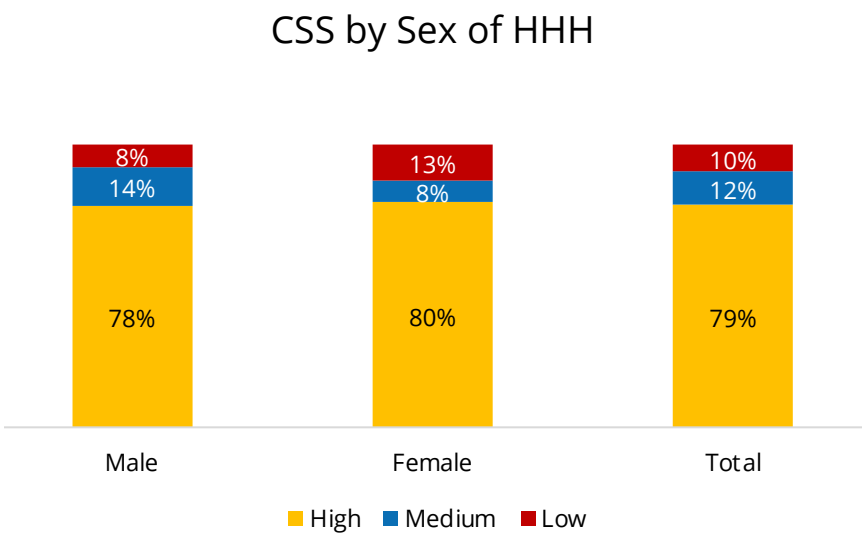


Pearson:

Uncorrected chi²(3) = 11.2702

Design-based F (3, 129) = 3.6713 P = 0.0140

d) Aggregate CSS by Sex of household head

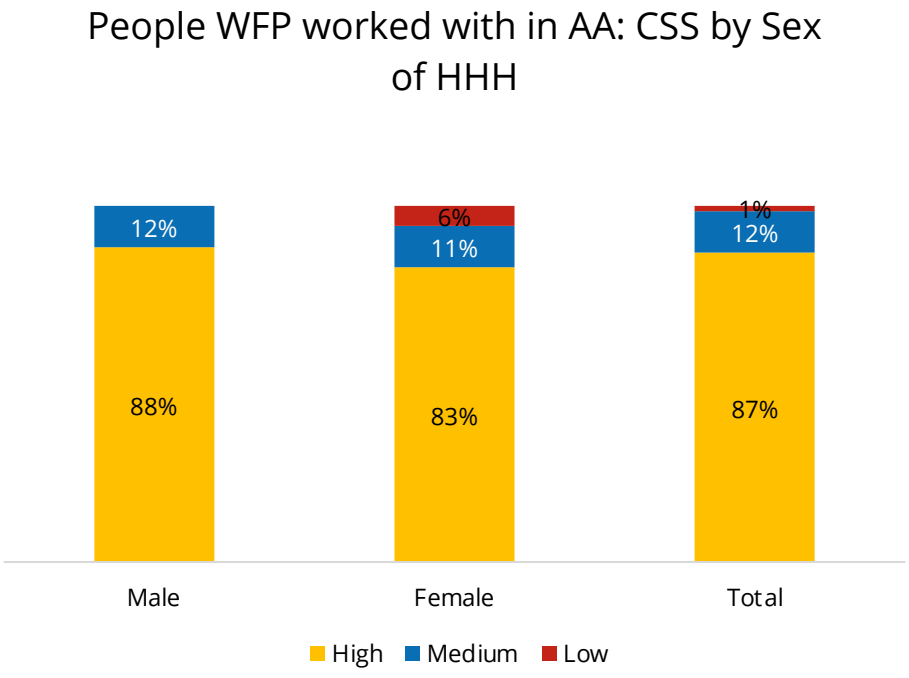


Pearson:

Uncorrected chi²(2) = 2.3653

Design-based F (1.70, 341.08) = 0.4965 P = 0.5785

I. People we worked with in AA: CSS by sex of household head

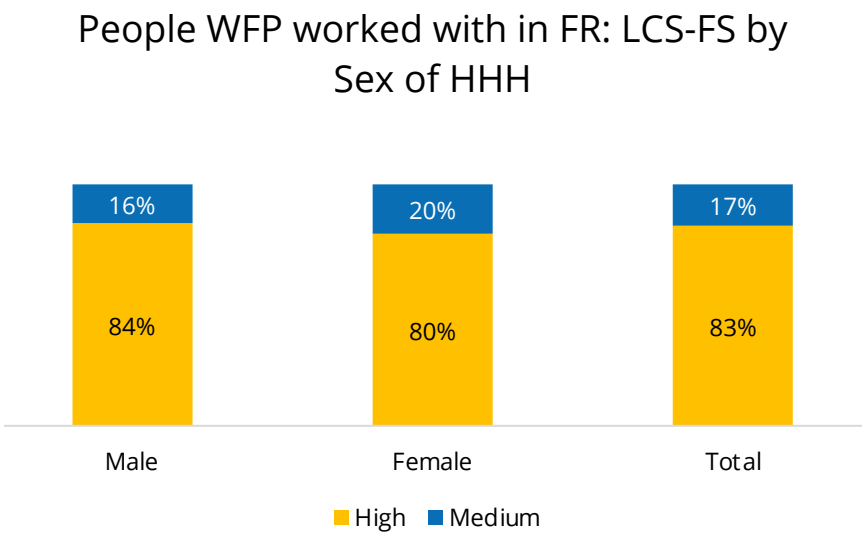


Pearson:

Uncorrected chi²(2) = 5.9179

Design-based F (2.00, 271.99) = 2.9573 P = 0.0536

II. People we worked with in FR: CSS by sex of household head

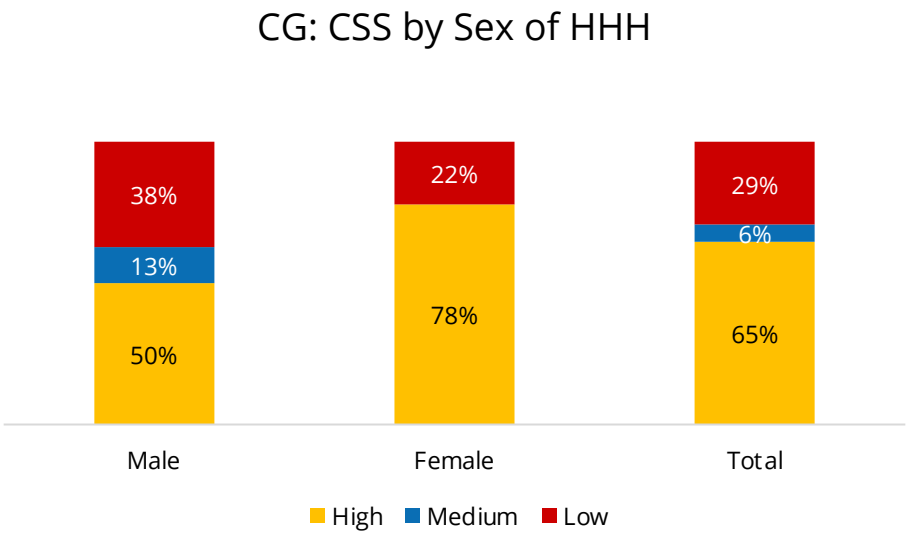


Pearson:

Uncorrected chi²(1) = 0.1011

Design-based F (1, 47) = 0.0989 P = 0.7545

III. CG: CSS by sex of household head



Pearson:

Uncorrected chi²(2) = 1.9662

Design-based F (2.00, 31.98) = 0.9472 P = 0.3984

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