



SOCIAL COHESION AND FORCED MOBILITY IN A CHANGING CLIMATE: DATA FROM GHANA AND NIGER

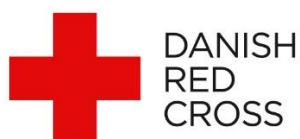
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Acknowledgements

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This working paper is part of a study commissioned by the Danish Red Cross entitled 'Displacement, climate change and social cohesion: exploring loss and damage dynamics' and is funded by the Danish Red Cross. The findings and conclusions are those of the authors alone.

The authors would like to thank the survey and interview respondents for sharing their time, perspectives and insights. We would also like to thank the Niger Red Cross and the Danish Red Cross - Niger Country Office for their engagement and input throughout the study and assistance with data collection. Without their contributions, this study and working paper would not have been possible.



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Cover photo: GS International / Alamy Stock Photo (ID A3MWM1)

DIIS WORKING PAPER 2024: 03

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www.diis.dk

ISBN

978-87-7236-166-6 (pdf)

DIIS publications can be downloaded free of charge from www.diis.dk

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EXECUTIVE SUMMARY

This working paper provides an overview of the results of the qualitative and quantitative data collection in Ghana and Niger in connection with the study ‘Displacement, climate change and social cohesion: exploring loss and damage dynamics’. The study was a collaboration between the Danish Institute for International Studies and the Danish Red Cross as well as research partners in Ghana and Red Cross partners in Niger.

The study explored changes in social relations and social cohesion in relation to climate change and forced mobility. It took a loss and damage perspective, seeking to understand how those affected by climate change and forced mobility may have experienced losses to social cohesion, and what impacts that has had on their well-being more broadly.

The study focused on the Upper West Region of Ghana and the Tillabéri Region of Niger, where livelihoods are under pressure due to environmental and development challenges and forced mobility is widespread. In Tillabéri, Niger, insecurity, conflict and displacement are common against a backdrop of climate and environmental stresses and shocks, for instance floods; here, the study focused on displaced populations in receiving areas, the areas displaced persons have moved to. In the Upper West Region of Ghana, livelihood stress is extreme, driven by climate variability and extremes, including recurring floods, and there are high levels of forced migration to secure livelihoods, well-being and survival; in Ghana, the study focused on migrant sending areas, or the areas migrants are leaving, an overlooked area in existing social cohesion work.

This working paper aims to present the bulk of the data from the study so that it is available for practitioners and researchers, as well as other interested parties, for further use. Discussion of the findings can be found in the project report *Loss*,

damage and social cohesion: impacts and next steps for policy and programming and the policy brief 'Losses and damages to social cohesion are overlooked'. It first presents the study's core concepts and methodology before presenting data from Ghana and subsequently the data from Niger.

INTRODUCTION

Globally, climate change is rapidly intensifying, but understanding of its social impacts remains limited. This working paper provides new data on social impacts on climate vulnerable communities in the Upper West Region of Ghana and the Tillabéri Region of Niger. It is part of a groundbreaking study titled 'Displacement, climate change and social cohesion: exploring loss and damage dynamics', a co-operation between the Danish Institute for International Studies and the Danish Red Cross, together with the Niger Red Cross and research partners in Ghana. The study has two empirical sites; the Tillabéri Region in Niger and the Upper West Region of Ghana. It provides a detailed understanding of social realities and developments in the areas as experienced by respondents themselves.

Planned responses to climate change have focused mostly on supporting resilience and adaptation and saving lives and livelihoods. Yet as climate change penetrates daily lives, environments and societies, it is increasingly clear that fundamental aspects of these structures and the relations that maintain them are under strain. This includes the social fabric of societies and communities that is fundamental to their identities and integrity as well as their resilience.

To gain a better understanding of this less tangible side of climate impacts, this study investigates how climate change and related developments are affecting social relations and social cohesion in the study areas. Social cohesion is receiving increased attention in policy and programming, gaining recognition as a central element of thriving societies. The term can be loosely understood as a dynamic quality of social 'togetherness' in a particular society or community (Walkenhorst and Unzicker, 2018) that can include elements of belonging, trust, co-operation, identity and many others. This working paper provides data on social cohesion impacts linked to climate change from a loss and damage perspective. This is based on increasing evidence of negative social impacts and losses in areas highly affected by climate change. The study has a particular focus on social cohesion and loss and damage in situations of forced mobility.

The purpose of this working paper is to share data from the study so that it is accessible for further analysis and use. All of the tables and figures present the authors' own data gathered through this study. Methods included key informant interviews, a survey of individuals in the study sites, supplementary interviews with some survey respondents and focus group discussions. Analytical insights are only developed in a preliminary manner in this working paper. For an expanded analysis with concrete recommendations for policy and practice, see the DIIS Report *Loss, damage and social cohesion: impacts and next steps for policy and programming* and DIIS Policy Brief 'Losses and damages to social cohesion are overlooked'. The report also provides in-depth reviews of existing research on social cohesion and the use of social cohesion in policy and practice. These and further information and outputs from the study can also be found at www.diiis.dk/social-cohesion. **Fejl! Linkreferencen er ugyldig.**

CORE CONCEPTS: SOCIAL COHESION AND LOSS AND DAMAGE

In this section, the concepts of social cohesion and loss and damage and their relation are briefly introduced and discussed. For a more in-depth discussion and review of concepts in academia, policy and practice, see the report mentioned in the introduction.

Social cohesion

In recent decades, the concept of ‘social cohesion’ has been revived in research and policy spheres in relation to issues around development, conflict and human mobility. Within research, social cohesion has been understood as a dynamic quality of social relations linked to a shared sense of identity, values and norms (Chan et al., 2006; Kusche, 2019). Within policy spheres, use of social cohesion varies across institutions, also in relation to particular focus areas and policy aims (Jensen, 2010; Holloway and Sturridge, 2022; see also discussion in Valli et al., 2019). Despite many major organisations such as the OECD, EU and World Bank working with social cohesion, definitions have long been lacking or vague (Jensen, 2010; Rodgers, 2022). In recent years, increased focus on social cohesion has led to greater efforts to clarify the concept, both in policy and in research (see e.g. Chan et al., 2006; Walkenhorst and Unzicker, 2018; Burns et al., 2021). Schiefer and van der Noll (2017) have formulated a definition based on a synthesis analysis of other definitions:

We identified three core dimensions of social cohesion that the majority of social cohesion approaches agree on: **social relations, sense of belonging and orientation towards the common good**. Three other, often incorporated, components of social cohesion – (in)equality, quality of life and shared values – we argue, should however be treated as antecedents or consequences of social cohesion...’ (Schiefer and van der Noll, 2017).

As indicated in this definition, approaches to social cohesion vary in their scope and flexibility, e.g. some are broader, indicative definitions, while others entail a fixed set of core elements. These different definitions reflect different understandings of the mechanisms producing cohesion and the results of social cohesion. Different understandings can translate into unclear or diverging theories of change in efforts to address social cohesion, including focus areas, operational approaches and aims (Rodgers, 2022).

Empirical studies and practical implementation indicate that social cohesion is highly context-based and subjective (Langer et al., 2017). It is not surprising that the elements constituting social cohesion, or how these elements are expressed or understood, would differ significantly across and within continents, societies and groups (Holloway and Sturridge, 2022). Some researchers point to the problematic nature of transplanting conceptions of social relations – and the complex social and cultural relations entailed – across cultures, development contexts and continents (Barolsky, 2016; Barolsky and Borges, 2019; Holloway and Sturridge, 2022). They suggest instead greater explorative social cohesion research especially

in the Global South and developing country contexts (Barolsky and Borges, 2019), as well as employing contextually anchored concepts of cohesion focusing on the elements deemed relevant in the particular context (Barolsky, 2016; Holloway and Sturridge, 2022).

Loss and damage

To work with social cohesion in relation to climate change, we connect the concept to the wider discussion of climate-related ‘loss and damage’. Losses and damages refer to the adverse impacts of climate change, which we have not or are not able to adequately prevent. In the study, we aim to understand the mechanisms behind climate-related losses to social cohesion. Further, we develop considerations of how these may be addressed in the report mentioned above.

Negative impacts to social cohesion fall under the broad category of *non-economic losses and damages (NELD)*, which are types of losses not typically traded in markets, such as loss of health, biodiversity, local knowledge, cultural practices and climate-related mobility (UNFCCC, 2013). This is in contrast to economic losses, such as declines in gross domestic product (GDP), damages to infrastructure and property due to floods and storms, and decreased production or damaged livelihoods due to climate change. There are in some instances overlaps or linkages between economic and non-economic losses. Examples include losses of ancestral lands or livelihoods, which can be linked to loss of identity, local knowledge, cultural practices and social relations as well as to economic losses.

In Ghana and Niger, observed challenges to social relations and social cohesion are playing out in the context of climate change and significant forced mobility. However, existing knowledge on these issues is limited. To investigate these dynamics, we examined elements of social cohesion in relation to climate change and mobility dynamics as well as in relation to sense of loss. Building on the insights from earlier research on social relations and climate-related loss, discussed in the full project report, we aimed to create a context-sensitive definition of social cohesion with specific attention to the interrelated nature of people’s social relations and the environment in which they live. Below, we introduce our approach.

Study approach

We assessed three elements of social cohesion that emerged as significant during previous work in the case study regions and initial interviews: (1) sense of belonging; (2) sense of security; and (3) sense of reliance and support. These elements reflect both international research-based definitions as well as context-based realities and perspectives.

Sense of belonging was considered relevant based on existing social cohesion literature and previously observed dynamics in the case study areas. In Ghana, it is particularly relevant in relation to the forced mobility dynamics in focus, which may place strain on intra-community relations in sending areas. In Niger, it was

relevant to the inter-group dynamics of displaced persons and host communities in receiving areas.

Sense of security is not typically included as an element of social cohesion, but is a recognised principle of post-disaster support, drawing on scientific evidence (Dückers, 2013). In both case areas it is highly relevant to community and social relations, in relation to conflict and violence, to environmental insecurity, and to sense of physical place and connection. Environmental dimensions of sense of security come out clearly in research on sense of place, linked to disaster and climate risk (Quinn et al., 2018). In the study area in Ghana, sense of security is linked mostly to environmental shocks and stresses, particularly repeated floods. In the Niger context, it also includes dynamics of armed conflict.

Sense of reliance and support reflects elements of trust and co-operation common in social cohesion definitions, but tailored to the study areas. In the study areas of Ghana and Niger, trust and co-operation are embodied in mutual support and forms of reliance – both providing and receiving support – that are critical cultural practices and fundamental to communities' social fabric. Support can both be material (food, money, livelihood inputs) and non-material (social support during hard times, shared celebrations, knowledge-sharing).

METHODOLOGY

This was an exploratory, mixed methods study conducted in areas affected by climate and development challenges, as well as forced mobility, in northern Ghana and western Niger. This working paper provides data on responses from those directly affected. In Ghana, it seeks to understand dynamics related to (1) recurring displacements, (2) forced (im)mobility, and (3) sending areas. In Niger, the study focuses on (1) multiple displacements, (2) issues of conflict/security, and (3) receiving areas.

In addition to this multi-sited empirical study, we conducted a literature review, policy and programming analysis and key informant interviews of practitioners. Findings from the larger analysis can be found in the report.

The study areas

Ghana

The study was conducted in two climate stressed communities in the Wa West District in the Upper West Region. The Upper West Region lies in the northwestern part of Ghana. It borders Burkina Faso to the north and Ivory Coast to the west. The region is characterised by a single maxima rainfall regime which allows farmers to cultivate crops only once a year. About 80% of the inhabitants depend on agriculture for their livelihoods, relying largely on rainfall (Ghana Statistical Service, GSS, 2018). Thus, livelihoods are highly vulnerable to changes in rainfall and climate (Pervarah, 2023). The region has a population of about

800,000 people who mostly reside in rural areas (GSS, 2018). The population consist of about three ethnicities and eight languages (GSS, 2018).

The region, as in the rest of the savannah region, is patriarchal. Thus, social relations pivot on male dominance. People live together in communities headed by elders, the priests and chiefs. Notions of collectivity and reciprocity are key elements of the communities. These notions and their practices have been challenged over time not least by modernisations of all kinds and changes in climate. As a majority of the inhabitants maintain agrarian based livelihoods that draw significantly on traditional norms, changes in climate represent a challenge to social cohesion (Teye et al., 2021). We therefore investigate the influences of climate change on social cohesion in the region using data from two communities, one a typical rural community and the other a typical peri-urban community.

The communities studied were Ballesere and Poyentanga. Ballesere is a rural community located in the northwestern part of the Upper West Region on the edge of the border with Burkina Faso. It is approximately 34 kilometres from the regional capital, Wa. The community is generally low-lying and prone to flooding and contrastingly, less prone to drought. Most of the houses are located just about two kilometres from the bank of the Black Volta. The community comprises a main hub and two satellites or enclaves. The two are separated by other villages. This is the result of gradual yet ongoing relocations away from the flood prone main village.

The community is agrarian with negligible non-farm activities. The inhabitants mainly grow crops such as millet, sorghum, maize, rice, yam, cow pea, Bambara beans and groundnuts. They also rear livestock such as goat, sheep, pigs and poultry. Beyond agriculture, migration is also adopted as an important livelihood strategy and has been predominant among the youth for decades, like in the rest of the Upper West Region. Migration from Ballesere, as in the rest of rural northern Ghana, is generally a response to worsening poverty, both in relative and absolute terms, over several decades (Songsore and Denkabe, 1992; Awumbilla, 2014; Teye et al., 2021).

The north has been consistently less developed and poorer compared to the south of the country. This results from deliberate colonial underdevelopment strategies to prompt a flow of labour from the north to the south of the country, a less favourable climate in the north, and a development failure of modern-day governments to reverse structural inequalities between the two regions (Jarawura, 2021; Teye et al., 2021; Jarawura et al., 2024). Thus, many rural dwellers, especially the youth, migrate to the relatively endowed south of the country for jobs to earn much needed income to procure food during times of environmental crisis. Over time, this southwards movement has become a common practice as both an ad hoc response and a planned long-term strategy to climate contingencies, as productivity is affected by long-term changes in rainfall, flood, drought and wind storms. Migration has also been ongoing for other social and economic reasons such as youthful exploration, escape from witchcraft accusations and persecutions and the quest to learn modern skills.

The other study site, Poyentanga, is a peri-urban community located in the southeastern part of the Upper West Region. It lies about 40 kilometres from the regional capital, Wa. The community, like Ballesere, is agrarian with inhabitants mainly growing crops such as millet, sorghum, maize, rice, yam, cow pea, Bambara beans, groundnuts and cashew. They keep a range of livestock including goat, sheep, cattle, pigs and poultry. Beyond agriculture, non-farm activities such as carpentry, masonry, weaving, tailoring, retailing, *pito* (local alcohol) brewing are largely secondary activities for most of the inhabitants. The existence of these activities is an important part of the growing urbanisation experienced by the community over the last few decades. Its proximity to Wa, the regional capital, and its location on the main trunk road leading in and out of the region affords it an advantage in modernising its economy. This is in contrast to the community of Ballesere which is located typically in a rural enclave. However, the migration situation in Poyentanga is quite similar to that of Ballesere. The youth dominate the migration streams and mostly head southwards in search of greener pastures especially in times of environmental crises such as poor rainfall, floods and droughts.

Niger

The Tillabéri Region of Niger is located at the western tip of the country and has a dry Sahelian climate. The whole of Niger is extremely vulnerable to the adverse effects of climate change; 80% of the population is dependent on agriculture, which is highly vulnerable to changes in the environment and natural hazards (Danish Red Cross, 2022: 1). Over the last 20 years, Niger has experienced nine major droughts, five major floods, and food crisis every four years, on average (Baptista et al., 2023). The country is also experiencing armed conflict, violence and insecurity, driving displacements and loss of livelihoods. These challenges exacerbate the existing poverty-related vulnerabilities of large parts of the population, who struggle to cope. Overall, there are interlinked relations between climate change, security and displacement.

The Tillabéri Region, the focus of this study, is particularly hard hit. Military operations are currently underway in the region and there are incursions by non-state armed groups, armed banditry and theft of goods and livestock. This rapidly shifting and at times extremely dangerous security situation has also impacted livelihoods and mobility. Livelihoods in rural areas are largely agrarian, with both crop farming and animal husbandry. In situations of extreme insecurity and risk, many move from these areas to try to find more secure areas to live and support themselves. Often, they are unable to continue their livelihood in destination areas. In addition, in areas of severe livelihood stress, those who are better off become targets of theft, for instance of livestock. This poses an additional challenge for surviving and thriving and can also inform decisions to move.

Tillabéri is considered the first region to face a resurgence of attacks by non-state armed groups (GANE), with deadly incursions, accompanied by extortion of the population's property, as well as threats and ultimatums given to the population to leave their localities. Thus, the region serves as a home to the largest number of

internally displaced persons (IDPs) in the country. Very recently, the number of IDPs has been fluctuating as a result of the recurrent waves of displacement caused by these GANE attacks. The deterioration in the security situation in areas where displaced persons are taking refuge is having a negative impact on the regional economy, reducing opportunities for host and displaced populations. Also, the humanitarian space is shrinking as a result of renewed GANE activity and restrictions from authorities.

Environmental- and security-related dynamics are correlated and reinforce each other. Inter- and intra-community conflicts continue and are amplified by the presence of the GANE and resource stress. Climate change, coupled with increased degradation of farmland, is also a major issue affecting livelihoods, health and well-being. People in the region are exposed to both floods and droughts at various times of the year, which contributes to increased losses, vulnerability and insecurity (Danish Red Cross, 2022). At the same time, traditional prevention and resolution mechanisms are increasingly deteriorating. Also, discriminatory practices persist in the region, particularly with regard to tribal affiliations, the rights of women and children.

The study was conducted in four departments of Tillabéri Region, namely Tillabéri, Gotheye, Sakoirra and Ayorou. Within those departments, four sites were selected for this study. These include Tillabéri: Kandadji, Famalé et Diomona; Gotheye: city of Gotheye; Sakoirra: city of Sakoirra, and Ayorou: city of Ayorou. These were chosen due to their relevance for the study, with security and climate challenges, and as ‘receiving’ areas with high numbers of displaced persons. These areas were accessible to local Red Cross staff, but were otherwise largely inaccessible to external organisations during data collection in April 2024. The data generated by this study therefore provides unique insights into a setting facing extreme challenges.

Study design and methods

The study was an exploratory study utilising a mixed method approach where possible. Due to limited data collection options in Niger, data collection relied almost exclusively on quantitative data collection in Niger, with a survey of 254 individuals. In Ghana, a survey of 304 individuals was conducted. This was accompanied by qualitative data collection including key informant interviews, individual interviews and focus group discussions. The survey tool was informed by previous work in both countries, initial interviews in Ghana and existing research on social cohesion dynamics.

In Ghana, the data collection was conducted in November 2023. In Niger, it was conducted in April 2024 due to a lengthy process to obtain research approvals.

Ghana

Quantitative data collection in Ghana used a survey tool, and responses were collected by 304 respondents from two communities, one rural and the other peri-

urban. Qualitative data was collected from the same communities using interviews and focus group discussions.

The two communities were selected for their relative proneness to climate catastrophes, specifically floods. Officials of the National Disaster Management organisation (NADMO) identified these communities among the range of communities known for their proneness to floods. Using a list of these communities, we segregated them into rural and peri-urban communities. We then used a simple random sampling procedure to select one village from each side. The rural and urban differentiation is necessary in understanding how such spatial differentiation plays a role in people's experiences and responses to climate perturbations and the outcomes for social cohesion.

For the survey, the Yemane (1969) sampling method was used to determine the sample size from a sample frame of the adult population of the communities. A simple random method was used in selecting the respondents. Individuals in the communities were also purposively selected for in-depth qualitative interviews. These included key informants such as sub-chiefs and local government authorities with relevant knowledge of the community's history and livelihood situation. Focus groups discussions were also held with women, men and youth with each group consisting of eight to twelve participants. The ages of the participants ranged from 25 to 98.

Niger

The study in Niger included four background, semi-structured interviews to key informants from the International Red Cross Red Crescent Movement, at both international and national/local levels, including Niger Red Cross employees working in the domains of climate change, displacement and social cohesion. These interviews aimed at providing qualitative insights around the impact of climate change and ensuing displacements to social cohesion, whilst waiting for the ethical clearance to collect quantitative data in the field.

Quantitative data was collected using a survey. This involved 253 individuals from the region of Tillabéri, and more specifically from five communities in four departments (Tillabéri, Gotheye, Sakoiria and Ayorou). The inclusion of these departments was key to ensuring that different experiences and causes of displacement were accounted for, actively addressing the confounding effect of security challenges and teasing out the effects of climate change on displacement and social cohesion. These communities were selected taking into consideration the following criteria: (1) relative proneness to climate hazards and disasters, especially floods, droughts and fires; (2) known or indicated presence of displaced people by humanitarian and government stakeholders; and (3) security and logistics access.

Regional governmental authorities (specifically, the Adjoint Secretary General of the region, appointed by the Governor as focal point for this specific activity, the different prefectures and mayors and local representatives of the Ministry of Humanitarian Action - MHA) were briefed about the study and its objectives and

facilitated identification of and access to the study sites. The communities/villages were purposefully selected, according to the above-mentioned criteria. After having estimated a sample size of 200-250 respondents, the community leader gave access to an initial pool of potential respondents; a snowball sampling strategy was subsequently adopted to reach more respondents. The MHA representative was present onsite and accompanied the data collectors.

Data collectors continually sought to ensure the best possible stratification according to age and gender. However, it is important to note that estimates of demographic breakdown and/or census data were not available. For this reason, interviewers were previously trained on the importance of identifying the most representative sample possible, e.g. by reaching out to women where and when present and by ensuring that people of different age ranges were taken into consideration. However, the data collectors identified cultural and social practices which posed limitations to the sample's stratification. These included the role of women in society and their typical responsibilities to attend to housework, childcare and small livelihoods practices throughout the day, making them less accessible to the study enumerators; moreover, if displaced as household/family, the head of household is generally the representative. Younger individuals were not as present at the identified sites, as they are often responsible for making a living through occasional jobs and other livelihoods activities. These dynamics led to an overrepresentation of older, male respondents in the study sample.

Due to the rapidly deteriorating security situation, the department of Ayorou could not be directly accessed by the data collectors. Nonetheless, considering the high volume of displacement from the rural villages to the chef lieu of the department and the impact of climate change in the area, telephone interviews could be conducted through Niger Red Cross volunteers based in the community. In coordination with the data collectors, identified volunteers helped establish a list of respondents, who were contacted telephonically the day after (either on their own telephone number or through the volunteer's own telephone). The volunteer remained available and present throughout the whole questionnaire, in case help or specifications were needed.

DATA FROM GHANA

Demographic and socioeconomic characteristics

Table 1 shows the demographic, socioeconomic and household characteristics of the survey participants. It provides information on variables such as gender, age, marital status, household size, livelihood, education level and presence of disabled household members. The data shows a fairly even number of female and male respondents, with the majority between the ages of 30 and 49. Additionally, nearly 75% of the participants were married, while more than half (56.9%) had no formal education. The most common household size was between five to ten members,

accounting for 47.7% of responses. In terms of livelihood, a significant 72.7% of respondents reported crop farming as their primary source of income.

Table 1. Demographic and socioeconomic characteristics of the survey respondents

Variable	Answer category	Frequency	Percentage
Sex	Female	159	52.3
	Male	145	47.7
Age	18-29	30	9.9
	30-49	159	52.3
	50+	115	37.8
Marital status	Married	227	74.7
	Single, separated/divorced	34	11.2
Household size	11 or above	45	14.8
	Between 1- 4	109	35.9
	Between 1- 5	2	0.7
	Between 1- 6	1	0.3
	Between 5- 10	145	47.7
	Between 5- 11	1	0.3
	Prefer not to answer	1	0.3
Livelihood or means of supporting yourself	No	6	2.0
	Yes	297	97.7
	Other	1	0.3
Main means of supporting yourself	Animal husbandry	3	1.0
	Business employment	2	.7
	Civil servant	5	1.6
	Crop farming	221	72.7
	Fishing	4	1.3
	Government/state support	1	0.3
	Other (specify)	4	1.3
	Remittances/ mutual support	3	1.0
	Skilled labour (mason, carpenter, mechanics)	28	9.2
	Trading/commerce	24	7.9
	unskilled labour	9	3.0
	Artist	1	0.3
	Craft and an artisan	1	0.3
	Family support	1	0.3
	Pito brewing	1	0.3
Secondary means of supporting yourself	No	136	44.7
	Yes	168	55.3
	JSS/JHS/middle school	49	16.1
	No formal education	173	56.9

Educational level	Primary	45	14.8
	Religious education	1	0.3
	Secondary	24	7.9
	Tertiary	12	3.9
Household members with disabilities	No	245	80.6
	Yes	59	19.4

Climate

The climate of the Savannah zone in which the two communities are located is characterised by low rainfall with high rainfall variability within and across years. Almost 98% of respondents perceived a change in the climate of the area in the last 10-25 years. The study also found that almost 89% of respondents perceived increased drought, 90% perceived an increase in temperature, and 72% perceived declining rainfall over the same period.

Table 2. Nature of climate in your area of origin over the last ten to 25 years

Response	Frequency	Percentage (%)
The climate has changed	297	97.70
The climate has not changed	5	1.64
Don't know	2	0.66
Total	304	100

Table 3. Drought occurrence in your area of origin over the last ten to 25 years

Response	Frequency	Percentage (%)
Decreasing	23	7.57
Increasing	270	88.82
The same	11	3.62
Total	304	100

Table 4. Temperature change in your area of origin over the last ten to 25 years

Response	Frequency	Percentage (%)
Decreasing	19	6.25
Increasing	275	90.46
The same	8	2.63
Don't know	2	0.66
Total	304	100

Table 5. Rainfall changes in area of origin over the last ten to 25 years

Response	Frequency	Percentage (%)
Decreasing	218	71.71
Increasing	60	19.74
The same	24	7.89
Don't know	2	0.66
Total	304	100

The high rainfall variability has led to some scholars referring to the Savannah as the most climate vulnerable region in Ghana (Bawakyilenuo et al., 2016; Jarawura et al., 2024). This finds expression in the lives of the inhabitants of the two communities as explained by an elderly man:

Over here we are already used to rainfall difficulties, the droughts come and go, the floods come and go, and when the rains get 'angry' they don't even show up for long. But the thing is that most of these problems are not reducing but adding up every year. There are many reasons why they keep adding up. The rains are more these days, when we were kids, hardly do you see any long droughts, but the flooding now occurs every day (year). The patterns of particular rains that we know have also changed so it makes it difficult to predict the rains and planting, and then it makes farming difficult. That is why many people now want to have a second source of income in case the crops fail (Individual interview).

An elderly woman narrates:

In my early days (from 1950s), we grew early maize and beans in the lowlands to help with the hunger of the middle of the rainfall season. Those days the rains were fewer but less dangerous, so we often harvested without flooding problems or at least we had enough time to harvest before the area experienced flooding. But for the last twenty years, this has changed, with the rains coming more and more often, and more and more heavy, resulting in early flooding of the fertile lands (Individual interview).

A male respondent in the village further explains:

Those days the rains were less heavy and less frequent but these days they occur anytime, anywhere, and many more times in the year. Also, more water comes from the Black Volta than before [...]. We were told the people upstream have built an Akosombo (power plant) so they send the water down here when they have had enough. This makes it difficult to rely on the lowlands for growing crops because they get flooded easily (Individual interview).

The quotations are quite elaborate on the nature of climate stressors; torrential rainfall, flooding and river overflows in the community over time. Focus groups discussions of males, females and youth generally agreed with the assertions of rising trends of torrential rainfall, intensity of winds storms and rainfall variability. For the community close to the Black Volta River, the growing flooding episodes were of particular concern. Flooding in the community mostly occurs through accumulation of rainwater in the lowlands and through overflow of the Black Volta which results from both torrential rains and the release of excess water from the dams in neighbouring Burkina Faso. The observations by respondents of increasing and torrential rainfall are consistent with scientific reports of the wider and local region. For example, Van der Geest (2011) and Yaro et al. (2015) observe

that rainfall in West Africa has generally improved from the 1990s. Codjoe et al. (2012) and the Environmental Protection Agency of Ghana (2018) also report an increase in flooding in the Savannah agro-ecological zone largely due to torrential rainfall.

During a focus group discussion (FGD), an 82-year-old male respondent observes that the climate situation and the occurrence of climate hazards had changed over time. In his early days as a young adult, rainfall was generally less frequent and less intense. The rains were barely, if at all, adequate for watering the crops. And when occasionally the rains provided excess water early in the season, which wasn't the norm, the beans and maize plants suffered while the rice plants survived and 'produced food'. Millet was also vulnerable to early excess water - it turned yellow and then withered away. 'Millet is very vulnerable to torrential rainfall when it is still a few weeks old and it dies off slowly, so the increasing nature of early heavy rains is not good for us', he emphasises. The old man observes an improving but variable rainfall situation over the last 20 to 30 years, which has increased the cadence of flooding. 'The rains are much heavier than when we were young men. It is no longer the droughts that is the problem but the floods because we are sitting on low ground', he explains.

Asked why farmers still cultivated maize, beans and millet in the lowlands given the vulnerability to flooding, the respondent replied:

It is these crops that save us from hunger at a time when all food in this community is finished. These are early maturing crops that helps us deal with hunger. The hunger season is mostly halfway through the farming season when most crops are still flowering and at that time the previous year's harvest is either finished or just about to. So, we need something to push us on before the main harvest.

Mobility

Mobility is an important dimension of the lives of the people. It reflects the interplay of environment and development. Tables 6 and 7 show respondents' responses to questions about the mobility of themselves and other household members.

As shown in Table 6, the findings indicate that 75% of respondents reported that they themselves or a household member had moved when they would rather have stayed home (forced migration) within the past five years. This was generally to seek work and support themselves and their families. Only 1.6% of respondents or their household members were forced to move under extreme circumstances for their survival (displaced) in the last five years. This was mainly due to environmental perturbations including flooding and droughts. Forced mobility therefore dwarfs the 23% that reported someone moving voluntarily (voluntary migration), for instance to reunite with family or for opportunities elsewhere. There were also instances when people stayed home (10.5%) when they would rather have moved (forced immobility).

Regarding frequency of movement, the data shows that many respondents or members of their household moved multiple times over the last five years, as shown in Table 7. About four of ten respondents reported someone having moved two to three times in this period. About two out of ten reported someone moving four to five times. A similar number also moved for more than five times.

Table 6. Mobility in the last five years

Response	Frequency (%)
<i>In the last five years, have you or anyone in your household (mark all that apply):</i>	
Previously been forced to move for survival (displaced, e.g. due to security issues, flood or drought)	5 (1.6)
Moved when you would rather have stayed home (e.g. moved to find work in order to support your family)	228 (75.0)
Moved voluntarily (e.g. for social reasons, join family, opportunities elsewhere) for other reasons	70 (23.0)
Stayed home when you would rather have moved (e.g. because you didn't have the resources or information you needed to move)	32 (10.5)
Prefer not to answer	35 (11.5)

Table 7. Frequency of movements

Frequency of movements	Category	Frequency	Percentage
<i>About how many times have you or a member of your household moved in the last five years?</i>	1	40	17.62
	Between 2 - 3	99	43.61
	Between 4 - 5	45	19.82
	>5	43	18.94

The graph in Figure 1 displays the reasons for which respondents/members of their households migrated over the past five years. Most respondents (about 62%) reported lack of employment opportunities as a reason. Additionally, 26.6% of them migrated due to failing production. Interestingly, only 1.0% of the respondents migrated due to conflict or security, and 1.3% migrated due to a lack of farming or grazing land. About 10% of the respondents who migrated did so because of droughts. Marriage accounted for 7.2% of reasons for migrating among respondents. A few respondents mentioned lack of educational opportunities. The responses highlight the importance of economic reasons for migration, similar to many studies including those of Castles and Miller (1998), Adepuju, (2010) and Jarawura (2021).

Figure 1. Reasons for migrating

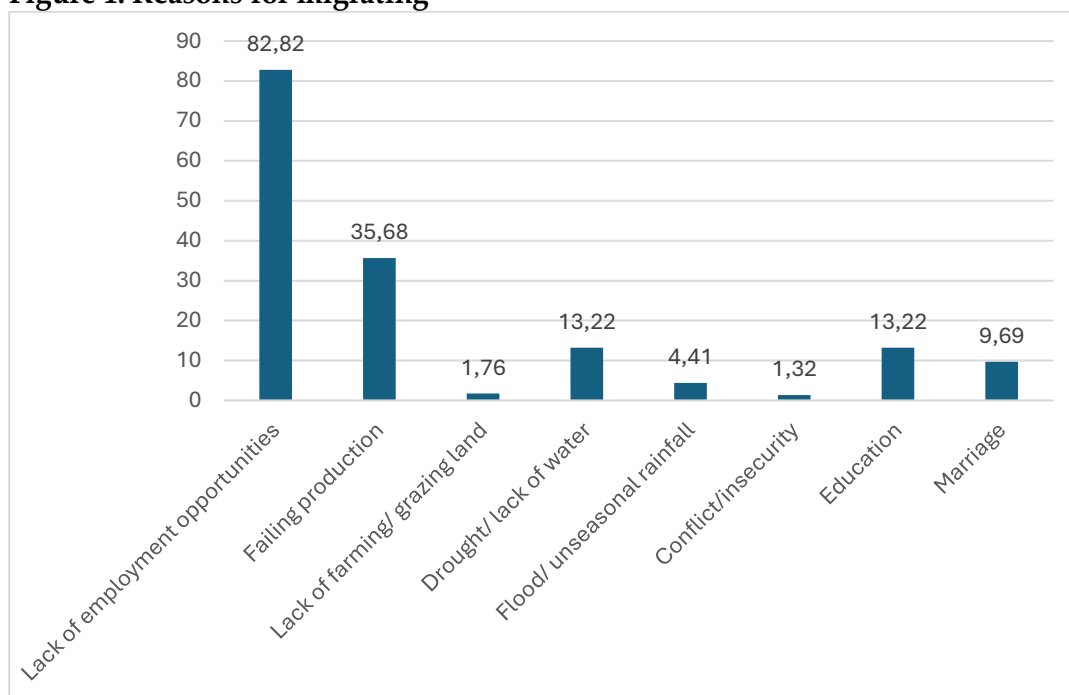
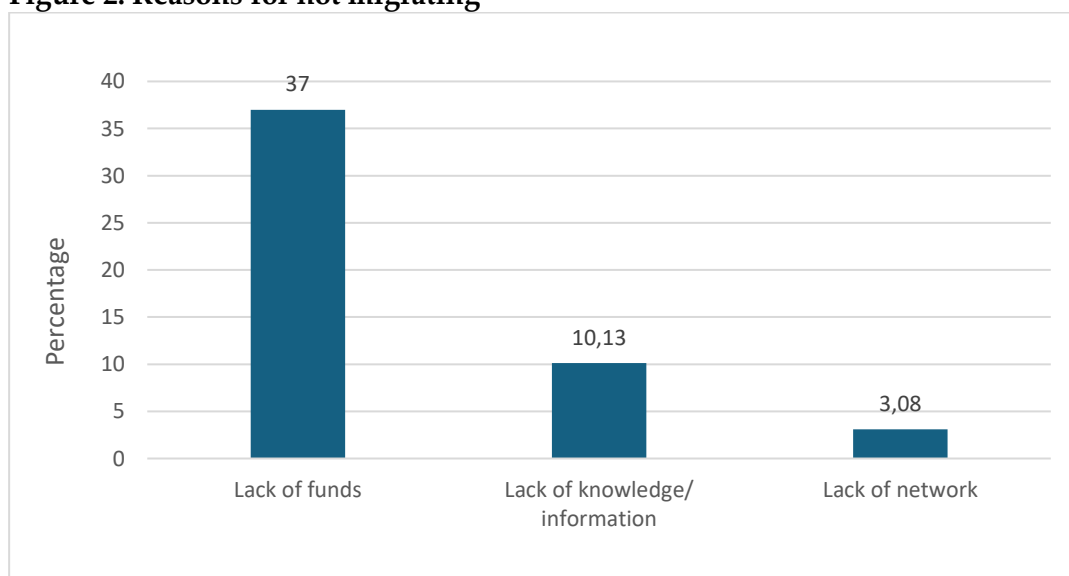


Figure 2 illustrates why some respondents/members of their households stayed home instead of moving. The most frequent response (37%) was that individuals stayed home due to lack of funds to move. Also, 10.1% remained at home because they lack knowledge or information about their destination, while 3.1% stayed home due to a lack of network.

Figure 2. Reasons for not migrating



Belonging, security and support

Sense of belonging

A sense of belonging is often considered a central element of social cohesion. Figure 3 depicts the level of sense of belonging in the study communities. Over half (54.3%) of respondents reported having a sense of belonging in the community to 'a large extent', though only 5.6% reported having a sense of belonging 'to a very large extent'. Of the remaining respondents, one in three reported their sense of belonging as 'somewhat.' Only 10.2% reported their sense of belonging as 'a little' and less than 1% reported 'not at all'.

Thus, 60% of respondents currently reported a robust sense of belonging ('to a large extent' and 'to a very large extent'). This is a sharp decline from 76% of respondents that reported a sense of belonging at the same levels ten years ago, with a particular drop in the 'to a very large extent' category.

Figure 3. Sense of belonging (previous and current)

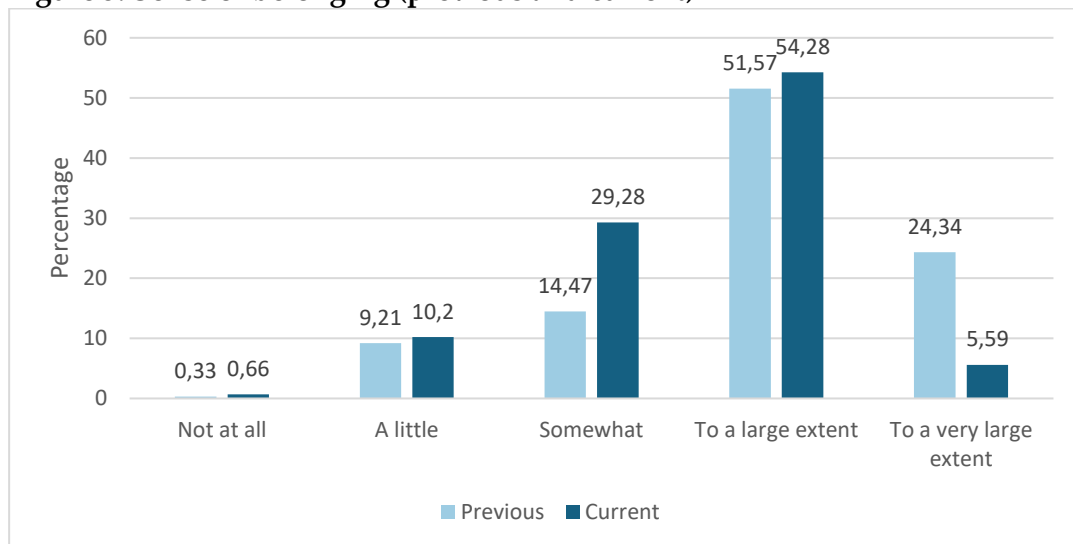


Table 8 below presents various sources of belonging in the community, i.e. activities or elements that contribute to belonging. According to the table, community activities/meetings were the most mentioned source of belonging, with 80% of respondents marking this as a source of belonging. Also notable were shared infrastructure/facilities, which were indicated by 53% to be a source of belonging, and shared religious beliefs, which were pointed to by 42%.

Table 8. Sources of belonging in the community

Response (mark all that apply)	Frequency (%)
Shared meals	119 (39.40)
Extending credit	81 (26.82)
Community activities/meetings	242 (80.13)
Sports	8 (2.65)
Shared infrastructure/facilities	160 (52.98)
Shared natural resources	114 (37.75)
Shared support/benefits	69 (22.85)
Shared religious beliefs/practices	126 (41.72)
Shared place of origin	57 (18.8)
Other	1 (0.33)

Security

Table 9 presents the level of security perceived by the respondents in the study areas. In terms of current security situation, the study revealed that 45.4% of respondents perceived their level of security to be high, while 32.2% measured their level of security as somewhat secure. On the other hand, 17.4% estimated their level of security as low. Comparing the responses over time, respondents generally felt more secure previously (ten years ago) than currently, as seen in the notable decline in positive responses to the 'to a large extent' and 'to a very large extent' categories.

Table 9. Security (current and previous)

Level of security	Current Frequency (%)	Previous Frequency (%)
Not at all	6 (1.97)	1 (0.33)
A little	53 (17.43)	37 (12.17)
Somewhat	98 (32.24)	44 (14.47)
To a large extent	138 (45.39)	157 (51.64)
To a very large extent	9 (2.96)	65 (21.38)

Support

Support systems, both formal and informal, can be significant to social cohesion. These include economic and social support of all kinds. For example, reciprocity and communal labour are very important in the context of agrarian livelihoods in Ghana.

Table 10 shows respondents' access to financial and material support when needed, both currently and previously. Overall, there is a decline in perceived support. The results for current support reveal that respondents most commonly (34.5%) only *somewhat* have access to financial and material support when needed, indicating limited scope and high uncertainty in support systems. Also, 26% report their access to support as only 'a little' and 11% of respondents reported

‘not at all’ having access to financial and material support when needed. At the same time, almost three of ten respondents indicated a high level of access to financial and material support when in need (26.3% ‘to a large extent’ and 1.6% ‘to a very large extent’).

These numbers show a clear decline when compared to perceptions of support ten years ago. When taking the top categories of access to support ‘to a large extent’ and ‘to a very large extent’ together, there has been almost a 20 percentage point drop from 46% ten years ago to 28% currently. This is paralleled by increases in reported access to support of ‘a little’ or ‘not at all’.

Table 10. Access to financial and material support (current and previous)

Level of access	Current Frequency (%)	Previous Frequency (%)
Not at all	33 (10.86)	4 (1.32)
A little	80 (26.32)	49 (16.17)
Somewhat	105 (34.54)	111 (36.63)
To a large extent	81 (26.64)	103 (33.99)
To a very large extent	5 (1.64)	36 (11.88)

Focus groups emphasise that those lacking access to support largely consist of unstable circular migrants with poor social connections in both home and destination areas and people who do not have (active) membership in modern associations. This is explained by a respondent:

Those who migrate everywhere and do not stay anywhere long enough to know people well and also get to be known and trusted, often do not get any support when in trouble. They miss out on many social events at home and at their many destinations, they get too busy to find their relations and friends as they are always looking for the thing called money. So, they hardly make any good and trusted friends too. Also, because they are always on the move, they cannot be (actively) part of any groups of today’s kind that deals in money.

Failure to engage in family and clan responsibilities and reciprocity and poor or lack of membership of modern associations such as the UNICEF’s crafted ‘Village Savings and Loans Associations (VSLA)’ leaves many seasonal and circular migrants without substantial networks needed to secure financial support. As seasonal and circular migration increasingly characterises migration in northern Ghana – due largely to economic reasons resulting from poor governance and increasing climate impacts – the migration impact on social cohesion can be expected to increase in the near future.

Focus group discussions, however, noted that one form of adaptation to livelihood stress from climate change is holding back some seasonal and circular migrants, with some level of reinvigoration of social support, as noted in the following narration by a man 95+ years old:

But one good thing is that migration is reducing from the last five years as young people have found a new job right here. They have adopted fishing on our river as the increasing volume of water has also increased the fish stock. Until recently no one in this village knew how to catch fish in commercial quantities but the old man in that house sent his son to a village (30km away) to learn fishing because he saw that they had no food to eat after the floods kept destroying crops but there was fish in the river that no one was able to catch. This son has now returned and he is teaching all the young men how to catch the fish. Now we are getting together again and when you see the young people chatting and laughing together, helping each other again, we the old men are happy. They contribute monies to solve problems that their colleagues face. The only difference is that they contribute money but we used to contribute food and labour.

Respondents also indicated the range of types of support and the extent of their accessibility. Table 11 displays the type of support and equipment respondents can access in their communities. The results indicate that most of the support received by respondents, regarding financing and material, was in the form of food (56.9%) and money or credit (55.3%). In an agrarian society one can expect support to food security to be paramount as much of the production is on a subsistence basis. As noted by Yaro (2008) and Van der Geest (2011), household food insecurity in northern Ghana is critically mediated by food support from kin and social networks. This form of support is referred to as ‘social claims’ by Armatya Sen (1981) in his classical analysis of food (in)security. It is considered a critical element of survival in times of poor or failed crop production as explained by a young woman:

When my husband migrates in search of food and money in a difficult year, before he even tries to send the first money, we already get food from his uncle on the other side of the village. Here, when people see that you are hungry, they try to share a little with you. That is how we live.

Support in the form of land is also important in the study areas as close to one fifth were able to access usufructuary rights when they needed more land to expand their farms. Land fragmentation largely due to an increasing population is reducing land per head. So, families that are growing faster with yet less permanent out-migration have to then depend on other families to gain access to more land for cultivation. About a quarter of respondents also mentioned having access to accommodation support. It is explained that most of the individual/families supported with accommodation are the later migrants’ group from across the border in Burkina Faso. They followed the footsteps of their kin after an earlier migration in the last century. They are absorbed into households, offered an old house or helped to build a new house.

Table 11. Types of available financial and material support

Response (mark all that apply)	Number (%)
Type of financial and material support:	
Food	173 (56.9)
Money/credit	168 (55.3)
Accommodation	82 (27.0)
Building materials	13 (4.3)
Land	53 (17.4)
Environmental resources (e.g. grass, wood, etc.)	78 (25.7)
Household items	82 (27.0)
Transport	30 (9.9)
Job/income opportunities	13 (4.3)
Other	13 (4.3)

Table 12 details sources of financial and material support accessed by respondents currently and 10 years ago. Approximately 86% of respondents receive financial and material support from family, whilst almost 23% of sources of financial and material support were from wider kin/ethnic groups. Also, 76.5% receive such support from friends/personal networks. Only 11% and 1.8% report support from traditional authorities/community leaders and NGOs/IOs, respectively. The role of the state is fairly marginal, as only 9.2% mentioned receiving support from government. State neglect and poor initiatives have characterised developments in northern Ghana since the colonial period, thus contributing to high levels of poverty (Boafo-Arthur, 1999). The most recent government poverty assessment placed the Upper West Region as the poorest in the country (GSS, 2018). Over time, there have been some changes in perceived support, particularly an almost halving of support from respondents' broader 'kin/ethnic group', suggesting that this may be a relevant area to further assess changes in support.

Table 12. Sources of financial and material support accessed (current and previous)

Response (mark all that apply)	Current Frequency (%)	Previous Frequency (%)
Family	234 (86.03)	282 (94.00)
Wider kin/ethnic group	62 (22.79)	120 (40.00)
Friends/personal network	208 (76.47)	228 (76.00)
Government (state/local agencies)	13 (4.78)	19 (6.33)
Traditional authorities/ community leaders	30 (11.03)	40 (13.33)
NGOs/IOs	5 (1.84)	16 (5.33)
Other	7 (2.57)	7 (2.33)
Prefer not to answer	5 (1.84)	1 (0.33)

Responses on the state of social support in Table 13 indicate a decline over time. About 36% and 2% indicate support ‘to a large extent’ and ‘to a very large extent’ respectively, compared to 46% and 17% in the past.

Table 13. Access to social support (current and previous)

Response	Current Frequency (%)	Previous Frequency (%)
Not at all	3 (0.99)	4 (1.32)
A little	62 (20.39)	30 (9.87)
Somewhat	123 (40.46)	78 (25.66)
To a large extent	110 (36.18)	141 (46.38)
To a very large extent	6 (1.97)	51 (16.78)

Types of available social support are shown in Table 14. They range from group/community activities to talking about opportunities/possibilities. Group/community activities were most frequently mentioned (by 80.1% of respondents), followed by talking about challenges/grief and support with daily tasks/childcare (56.8% and 53.8%, respectively). This highlights the importance of community support in relation to grief and challenges, relevant to interlinked dynamics of climate change, mobility and social cohesion.

Table 14. Types of available social support

Response (mark all that apply)	Frequency (%)
Group/community activities	241 (80.07)
Religious/spiritual support	123 (40.86)
Support with daily tasks/childcare	162 (53.82)
Talking about challenges/grief	171 (56.81)
Talking about opportunities/possibilities	85 (28.24)
Others	6 (1.99)
Prefer not to answer	-

Table 15 depicts sources of social support accessed by respondents over time (currently and 10 years ago). Currently, a vast majority of respondents (93%) receive support from their family, while 77.4% receive support from friends or personal networks. A small percentage of respondents (10.3% and 1.3%) receive support from traditional authorities/community leaders and NGOs/IOs, respectively. Additionally, 32.9% receive support from their wider kin/ethnic group. Similarly to changes in financial and material support over time, there is a major fall in support from wider kin/ethnic group, but stability in other sources of support.

Table 15. Sources of social support accessed (current and previous)

Response (mark all that apply)	Current Frequency (%)	Previous Frequency (%)
Family	281 (93.36)	283 (94.33)
Wider kin/ethnic group	99 (32.89)	159 (53.00)
Friends/personal network	233 (77.41)	224 (74.67)
Government (state/local agencies)	28 (9.30)	28 (9.33)
Traditional authorities/ community leaders	31 (10.30)	30 (10.00)
NGOs/IOs	4 (1.33)	8 (2.67)
Other	7 (2.33)	2 (0.67)
Prefer not to answer	1 (0.33)	-

Infrastructure and services

As shown in Table 16, the majority (36.5%) of respondents rated their access to infrastructure as 'somewhat'. 'A little' access and access 'to a large extent' were reported by roughly one in four respondents. Only 0.7% reported no access.

Table 16. Extent of access to infrastructure and services

Response	Frequency	Percentage
Not at all	2	0.66
A little	76	25
Somewhat	111	36.51
To a large extent	74	24.34
To a very large extent	41	13.49

Table 17 shows the types of infrastructure or services that respondents had access to. From the table, it was revealed that the majority of respondents (86%) had access to water, 75.5% to schools and 64% to open spaces. Additionally, 39.4% had access to sanitation/toilet facilities. However, only 13% and 17% of respondents had access to security and conflict resolution services, respectively.

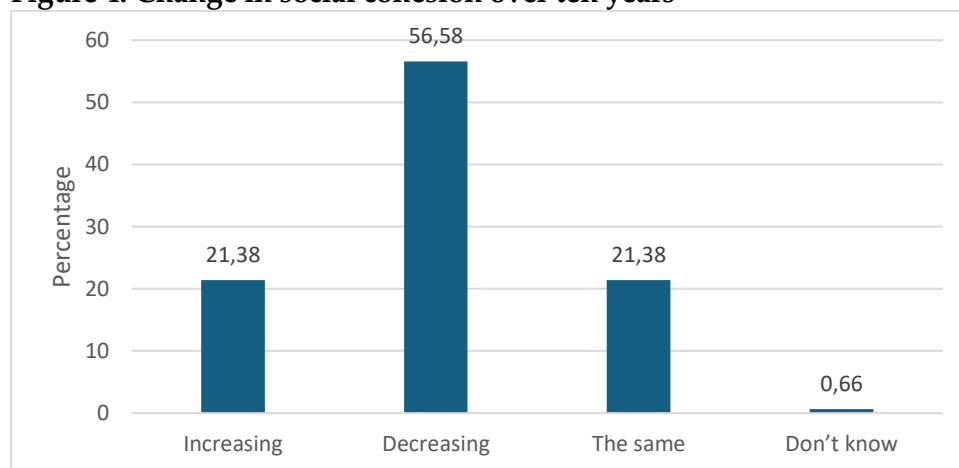
Table 17. Types of available infrastructure/services

Response (mark all that apply)	Frequency (%)
Water	260 (86.09)
Sanitation/toilet	119 (39.40)
School	228 (75.50)
Open spaces	193 (63.91)
Security	38 (12.58)
Conflict resolution	51 (16.89)
Other	46 (15.23)
Prefer not to answer	1 (0.33)

Social cohesion: changes and impacts

Respondents were asked their perspectives of the trends of social cohesion in their respective communities over a period of roughly ten years. Figure 4 illustrates their responses. More than half (56.6%) of respondents reported a decrease in social cohesion in their communities. At the same time one in five respondents noted an increase in social cohesion, and another one in five felt that social cohesion had remained the same over time.

Figure 4. Change in social cohesion over ten years



Focus group discussions emphasised the effect of migration, as a form of adaptation to environmental challenges, on social cohesion. The explanations shows that unlike other strategies, migration results in absence of the individuals which has detrimental effects on functioning of norms on social support and vibrancy of community life as noted by an older man:

I have many children who have learned different trades: fishing, tailoring and masonry. They are here and we have them contribute to everything including food, decisions, festivals, naming ceremonies and a big house. In a big house, you know there are bigger strengths so you can be calm and assured, so you sleep well. But those that have migrated rarely show up here when you need them most for family and community activities. They may just send money.

Similarly, another respondent narrated:

Some migrants no longer return for funerals so that the celebration will be as nice as before, they just send some money but it is not just the money we need but the people, to dance and to cry and to greet each other, and work for each other.

Respondents were also asked about the impact of the changing nature of social cohesion on their material well-being and social/emotional well-being and to what degree they think social cohesion can be improved. As presented in Table 18, the findings indicate over 40% of respondents feel that changes in social cohesion

have negatively affected their material well-being ‘to a large extent’ or ‘to a very large extent’. However, only four of 10 respondents believe that this can be significantly improved (‘to a large extent’ or ‘to a very large extent’).

Table 18. Impact of change in social cohesion on material well-being

	Not at all (%)	A little (%)	Somewhat (%)	To a large extent (%)	To a very large extent (%)
To what extent do you think changes in social cohesion have negatively affected your material well-being?	21 (6.9)	87 (28.6)	73 (24.0)	118 (38.8)	5 (1.6)
To what extent do you think that this can be improved?	3 (1)	78 (25.7)	95 (31.3)	122 (40.1)	6 (2.0)

Similarly, respondents report significant losses to social/emotional well-being due to changes in social cohesion, as shown in Table 19. About 43% pointed to losses ‘to a large extent’ or ‘to a very large extent’. Here, however, almost half of respondents felt that negative impacts could be improved ‘to a large extent’ or ‘to a very large extent’.

Table 19. Impact of change in social cohesion on social/emotional well-being

	Not at all (%)	A little (%)	Somewhat (%)	To a large extent (%)	To a very large extent (%)
To what extent do you think changes in social cohesion have negatively affected your social and emotional well-being, incl. sense of belonging, social support, etc.?	10 (3.3)	84 (27.6)	80 (26.3)	125 (41.1)	5 (1.6)

To what extent do you think that this can be improved?	1 (0.3)	55 (18.1)	100 (33)	144 (47.2)	4 (1.3)
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Addressing loss

Respondents were asked to consider potential means of addressing losses to material well-being and social/emotional well-being. Responses are shown below in Table 20.

Regarding material well-being, almost 68% of respondents believe that improved access to financial and material support could help address or reduce negative impacts. Social support (50.3%) and access to infrastructure and services (47.7%) are also considered important.

In relation to social and emotional well-being, 72.3% of the respondents consider access to financial and material support strategies relevant. About 54.6% and 50.3% of respondents suggested access to social support and access to infrastructure and services, respectively.

Table 20. Ways to address impacts on material and social/emotional well-being
What do you think could help? Improved...

Response category	Material well-being Frequency (%)	Social well-being Frequency (%)
Access to financial and material support	206 (67.76)	220 (72.37)
Access to social support	153 (50.33)	166 (54.61)
Access to infrastructure and services	145 (47.70)	153 (50.33)
Sense of belonging	140 (46.05)	118 (38.82)
Sense of trust/reliance on others in this community	126 (41.45)	113 (37.17)
Inclusion in celebration of festivals/commemoration of special occasions	86 (28.29)	71 (23.36)
Security	61 (20.07)	101 (33.22)
Strategies of tension/conflict resolution	39 (12.83)	18 (5.92)
Other	3 (0.99)	1 (0.33)

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Demographic and socioeconomic characteristics

Table 21. Socio-demographic characteristics of respondents

Socio-demographic characteristics of respondents			
	Variables	Frequency	Percentage
Sex	Female	79	31.35
	Male	173	68.65
Age	18-29	29	11.51
	30-49	115	45.63
	50+	108	42.86
Marital status	Married	229	90.87
	Prefer not to answer	1	0.40
	Single, Separated/divorced	5	1.98
	Windowed	17	6.75
Household size	Between 1- 4	30	12.00
	Between 5- 10	134	53.60
	Between 5- 11	1	0.3
	11 or above	84	33.60
	Prefer not to answer	2	0.80
Livelihood or means of supporting yourself	No	140	55.56
	Yes	104	41.27
	Other	4	1.59
Main means of supporting yourself	Animal husbandry	11	4.37
	Business employment	23	9.13
	NGO	55	21.83
	Crop farming	63	25.00
	Other (specify)	29	11.51
	Remittances/mutual support	13	5.16
	Skilled labour (mason, carpenter, mechanics.)	1	0.40
	Trading/commerce	15	5.95
	unskilled labour	42	16.67
Secondary means of supporting yourself	No	178	70.63
	Yes	74	29.37
Most important secondary means of supporting yourself	Animal husbandry	3	4.05
	Business employment	1	1.35
	NGO	4	5.41
	Crop farming	8	10.81
	Other (specify)	5	6.76

	Remittances/mutual support	3	4.05
	Skilled labour (mason, carpenter, mechanics.)	15	20.27
	Trading/commerce	35	47.30
	unskilled labour	3	4.05
Educational level	No formal education	138	54.76
	Prefer not to answer	3	1.19
	Primary	48	19.05
	Religious education	55	21.83
	Secondary	8	3.17
Household members with disabilities	No	191	75.79
	Yes	61	24.21

Table 21 presents the socio-demographic characteristics of respondents. The respondents were 31% female and 69% male and most often (46%) between the ages of 30 to 40. Respondents older than 50 made up about 43% of the sample. However, those from 18 to 29 were least represented, making up some 12% of the sample.

About 91% were married, 7% widowed, and 2% either single, separated or divorced. The majority of respondents belong to large households, with 54% part of households between five and ten members and 34% part of households with 11 or more members. Smaller households of less than six members are less common with low frequencies and percentages.

More than half (55%) of respondents had no formal education while 22% had received religious education. About 19% had primary education with only 3% having secondary education.

Less than 50% of respondents had a main source of livelihood or means of supporting themselves. The most frequent livelihood mentioned is crop farming with about 25% engaging in it. About 22% are also being supported by the NGO sector while unskilled labour accounts for about 16%. The least frequent main source of livelihood is skilled labour at 0.4%.

Less than half of respondents had a secondary means of supporting themselves. Trading/commerce is the major source of secondary support with 47%. Skilled labour accounted for 20% of secondary source of livelihood. About 24% of households had members with a disability.

Climate

About 91% of respondents felt that the climate had changed. About 96% of respondents had the perception that the occurrence of drought was increasing. About 95% believed that temperature is increasing. Some 81% perceived rainfall amounts to be reducing.

Table 22. Nature of climate in area of origin over the last ten to 25 years

Response	Frequency	Percentage
The climate has changed	230	91.27
The climate has not changed	18	7.14
Don't know	4	1.59

Table 23. Drought occurrence in area of origin over the last ten to 25 years

Response	Frequency	Percentage
Decreasing	6	2.38
Increasing	243	96.43
The same	2	0.79
Don't know	1	0.40

Table 24. Changes in temperature in area of origin over the last ten to 25 years

Response	Frequency	Percentage
Decreasing	4	1.59
Increasing	240	95.24
The same	5	1.98
Don't know	3	1.19

Table 25. Changes in rainfall in area of origin over the last ten to 25 years

Response	Frequency	Percentage
Decreasing	205	81.35
Increasing	1	0.40
The same	45	17.86
Don't know	1	0.40

Mobility

Regarding mobility, Table 26 shows that 75% respondents report that they themselves or another member of their household have been forced to move for survival in the last five years. Also, about 10% and 4% either migrated or stayed home when they rather would not have, respectively. About 16% preferred not to respond to the questions.

Table 26. Mobility in the last five years

Response	Frequency (%)
<i>In the last five years, have you or anyone in your household (all that apply):</i>	
Previously been forced to move for survival (displaced, e.g. due to security issues, flood or drought)	187 (74.80)
Moved voluntarily (e.g. for social reasons, join family, opportunities elsewhere) for other reasons	24 (9.60)
Stayed home when you would rather have moved (e.g. because you didn't have the resources or information you needed to move)	10 (4.00)
Prefer not to answer	41 (16.40)

Many reasons were provided by respondents for moving to their current locations. About 97% of respondents had moved to find a more peaceful environment. The second most common reason is access to social support with a percentage of only 17%. Also access to infrastructure and financial and material support accounted for 6.76% each.

Table 27. Reasons for moving to this location

Response	Frequency (%)
Peaceful environment/community (security)	216 (97.3)
Non-agricultural employment opportunities	3 (1.35)
Agricultural opportunities, e.g. good climate, access to land/inputs	6 (2.75)
Have a network there	
Access to infrastructure and services	15 (6.76)
Access to financial or material support	15 (6.76)
Access to social support	38 (17.12)
Other	2 (0.90)
Prefer not to answer	3 (1.35)

In terms of length of stay, about 46% of respondents had stayed in the current location for one to two years. The second most common length of stay (37%) was from three to four years. Very short periods, like one to three months, and very long periods, from five years and more, recorded very low percentages. These results show that most respondents had stayed in their current location for between one and four years, possibly indicating low levels of secondary displacements.

Table 28. Length of stay in current location

Response	Frequency	Percentage
1-2 years	102	45.95
1-3 months	15	6.76
3-4 years	81	36.49
5-7 years	2	0.90
7 and above years	1	0.45
< 1 month	3	1.35
Over 3 months	18	8.11
Total	222	100.00

About 68% of respondents did not know how long they might stay in their current location. However, 10% had short term plans to stay.

Table 29. Planned length of stay in the future

Response	Frequency	Percentage
1-2 years	7	3.15
3-4 years	3	1.35
5-7 years	1	0.45
Don't know	151	68.02
Other	15	6.76
Over 3 months	19	8.56
Prefer not to answer	2	0.90
Short term - up to 3 months	24	10.81
Total	222	100.00

Regarding travel accompaniment, about 99% of migrants moved with their families or familiar people rather than alone.

Table 30. Travel accompaniment

Response	Frequency	Percentage
Alone	3	1.35
Family or/and others	219	98.65
Total	222	100.00

Regarding type of travel companions, about 99% moved with family; 79% also moved in the company of their friends and 26% in the company of a wider network. A low percentage of 10% moved in the company of government or local leaders.

Table 31. Type of travel companions

Response	Frequency (%)
Family	216 (98.63)
Friends	172 (78.54)
Wider network	57 (26.03)
Local leaders/government	22 (10.05)
Other	20 (9.13)

A majority of 63% of respondents had been forced to move (displaced) once while 26% had been forced to move between two to three times. Only 5% had been displaced between four to five times.

Table 32. Number of displacements

Response	Frequency	Percentage
1	118	63.10
>5	10	5.35
Between 2 - 3	49	26.20
Between 4 - 5	10	5.35
Total	187	100.00

Regarding the reasons for movement from their previous locations, a vast majority of respondents (96%) had moved due to conflict and insecurity issues. Other reasons ranged from lack of employment to marriage.

Table 33. Main reasons for moving

Response (mark all that apply)	Frequency (%)
Lack of employment opportunities	4 (2.14)
Failing production	3 (1.60)
Lack of farming/grazing land	1 (0.53)
Droughts/lack of water	4 (2.14)
Floods/unseasonal rains	0
Conflict/insecurity	180 (96.26)
Education	5 (2.67)
Marriage	0

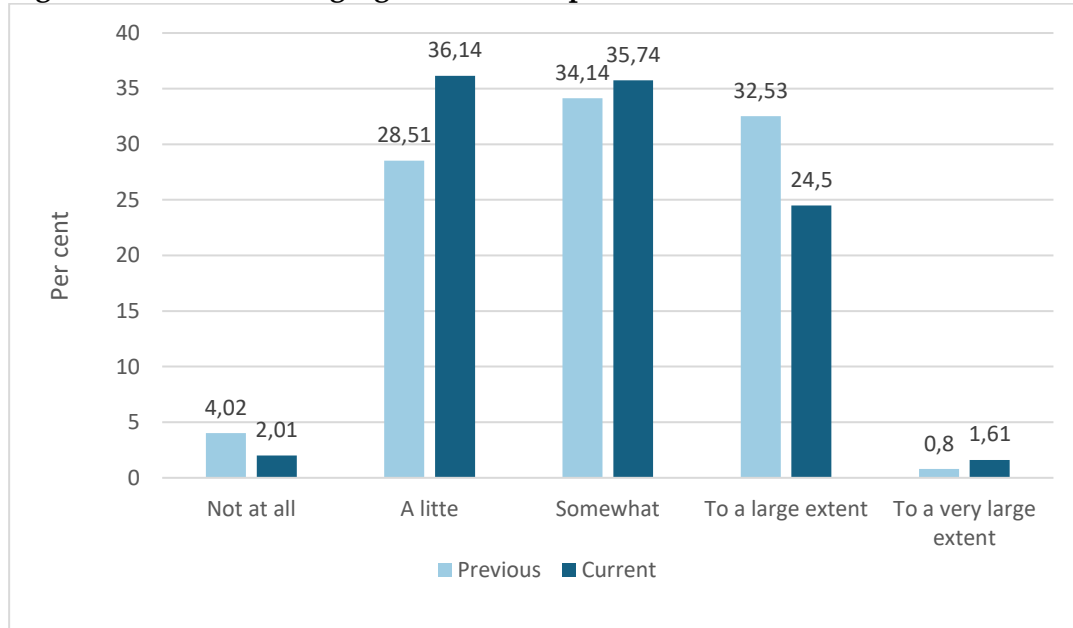
In addition, some respondents reported reasons for not migrating. These included lack of funds (1.6%), lack of knowledge/information (1.07%) and lack of network (0.53%).

Belonging, security and support

Belonging

Figure 5 presents the results for sense of belonging both currently and previously (in their location/community ten years ago). Overall, there has been a slight decrease in sense of belonging over time.

Figure 5. Sense of belonging (current and previous)



Regarding sources of belonging, shared infrastructure/facilities is the most frequently mentioned (57%) source of sense of belonging. About 52% also report that community activities/meetings gave them a sense of belonging. Shared natural resources, shared meals, shared support/benefits and shared place of origin were all reported by about one third of respondents.

Table 34. Sources of belonging (current)

Response (mark all that apply)	Frequency (%)
Shared meals	90 (36.14)
Extending credit	19 (7.63)
Community activities/meetings	129 (51.81)
Sports	7 (2.81)
Shared infrastructure/facilities	144 (57.83)
Shared natural resources	95 (38.15)
Shared support/benefits	86 (34.54)
Shared religious beliefs/practices	44 (17.67)
Shared place of origin	82 (32.93)
Other	11 (4.42)

Security

As shown in Table 35, perceptions of change in level of security over time are mixed. There are notable increases on both ends of the scale. There was a major increase in the number of respondents that reported feeling secure 'to a very large extent', from 7% previously (10 years ago) to 26% currently. However, there was also a major increase in the number of respondents feeling 'not at all' secure from 1% previously to 26% currently. At the same time, feeling secure 'to a large extent' decreased from 40.87% previously to 17.13% currently. Because most respondents have moved over this time period, the change reflects both changes in perceived level of security over time and across locations.

Table 35. Level of security (current and previous)

Response	Current Frequency (%)	Previous Frequency (%)
Not at all	64 (25.50)	2 (0.79)
A little	74 (29.48)	61 (24.21)
Somewhat	70 (27.89)	69 (27.38)
To a large extent	43 (17.13)	103 (40.87)
To a very large extent	64 (25.50)	17 (6.75)

Support

Regarding access to financial and material support, there has overall been a decline. For example, far more people (18.33%) currently did not have access compared to the previous ten years (1.32%).

Table 36. Access to financial and material support (current and previous)

Response	Current Frequency (%)	Previous Frequency (%)
Not at all	46 (18.33)	4 (1.32)
A little	98 (39.04)	49 (16.17)
Somewhat	83 (33.07)	111 (36.63)
To a large extent	24 (9.56)	103 (33.99)
To a very large extent	46 (18.33)	36 (11.88)

In terms of type of financial and material support, food is the most common, received by 65% respondents. After food come money/credit and accommodation account for 32% and 31% of financial and material support received, respectively. Building materials and land are also received by about 15% and 16% respondents, respectively. Also, about 10% of respondents received support in the form of environmental resources while very few or no respondents received support in the form of transportation or job/income opportunities.

Table 37. Types of available financial and material support

Response (mark all that apply)	Frequency (%)
Food	165 (65.48)
Money/credit	80 (31.75)
Accommodation	77 (30.56)
Building materials	39 (15.48)
Land	40 (15.87)
Environmental resources (e.g. grass, wood, etc.)	26 (10.32)
Household items	15 (5.95)
Transport	0 (0%)
Job/income opportunities	3 (1.19)

Regarding sources of financial and material support, these include wider kin/ethnic group (65%), family (64%) and friends/personal network (43%). NGOs/IOs were described as sources of accessible support by 37% of respondents. The role of NGOs/IOs in Niger illustrates a sharp contrast with that of Ghana. The NGOs/IOs role is considerably higher in Niger. This is, however, unsurprising as context of high insecurity in Niger draws more attention from these organisations.

Table 38. Sources of financial and material support accessed (current and previous)

Response (mark all that apply)	Current Frequency (%)	Previous Frequency (%)
Family	119 (47.22)	161 (63.89)
Wider kin/ethnic group	132 (52.38)	164 (65.08)
Friends/personal network	85 (33.73)	109 (43.25)
Government (state/local agencies)	8 (3.17)	6 (2.38)
Traditional authorities/ community leaders	31 (12.30)	28 (11.11)
NGOs/IOs	119 (47.22)	93 (36.90)
Other	132 (52.38)	2 (0.79)
Prefer not to answer	85 (33.73)	31 (12.30)

Regarding access to social support, respondents reported that access to social support was limited. The most frequent response regarding access to social support was 'somewhat', reported by almost 40% of respondents. Only one person felt they had access to social support to a very large extent.

Table 39. Access to social support

Response	Frequency (%)
Not at all	15 (6.17)
A little	88 (36.21)
Somewhat	96 (39.51)
To a large extent	43 (17.70)
To a very large extent	1 (0.41)

Group/community activities is the type of social support (91%) respondents most frequently had access to. Religious/spiritual support was accessible for 41% of respondents and daily task/childcare for 33%. Talking about challenges/grieve was accessible for 23% while talking about opportunities/possibilities only for 16%.

Table 40. Types of social support

Response (mark all that apply)	Frequency (%)
Group/ community activities	230 (91.27)
Religious/ spiritual support	104 (41.27)
Support with daily tasks/childcare	82 (32.54)
Talking about challenges/grief	58 (23.02)
Talking about opportunities/possibilities	40 (15.87)
Others	8 (3.17)

Respondents most frequently reported family as a source of social support with 69.8% and 74.6% in current and previous locations, respectively. Sources of social support were generally quite stable apart from a dramatic fall in support from wider kin/ethnic group – from 73% receiving support from this source in in their previous location to 27% currently. The government (state agencies) was the least common source of social support in both locations, while NGOs/IOs were a source of social support for almost one third of respondents both currently and previously.

Table 41. Sources of social support accessed (current and previous)

Response (mark all that apply)	Current Frequency (%)	Previous Frequency (%)
Family	176 (69.84)	188 (74.60)
Wider kin/ethnic group	69 (27.38)	183 (72.62)
Friends/personal network	126 (50.00)	129 (51.19)
Government (state/local agencies)	14 (5.56)	8 (3.17)
Traditional authorities/ community leaders	32 (12.70)	46 (18.25)
NGOs/IOs	82 (32.54)	77 (30.56)
Other	6 (2.38)	4 (1.59)

Infrastructure and services

About 40% and 38% had ‘a little’ or ‘somewhat’ access to infrastructure, respectively, while 13% had access ‘to a large extent’. Very low percentages of 5% and 4% had no access ‘at all’ and ‘to a very large extent’, respectively.

Table 42. Access to infrastructure and services

Response	Frequency	Percentage
Not at all	13	5.28
A little	98	39.84
Somewhat	93	37.80
To a large extent	32	13.01
To a very large extent	10	4.07
Total	246	100.00

Water is the most common type of infrastructure accessible, reported by 88% of respondents. Access to schools and sanitation were reported by 76% and 52%, respectively. Forty per cent of respondents had access to conflict resolution, and 32% had access to open spaces. The least frequent response is security with only 26% reporting access.

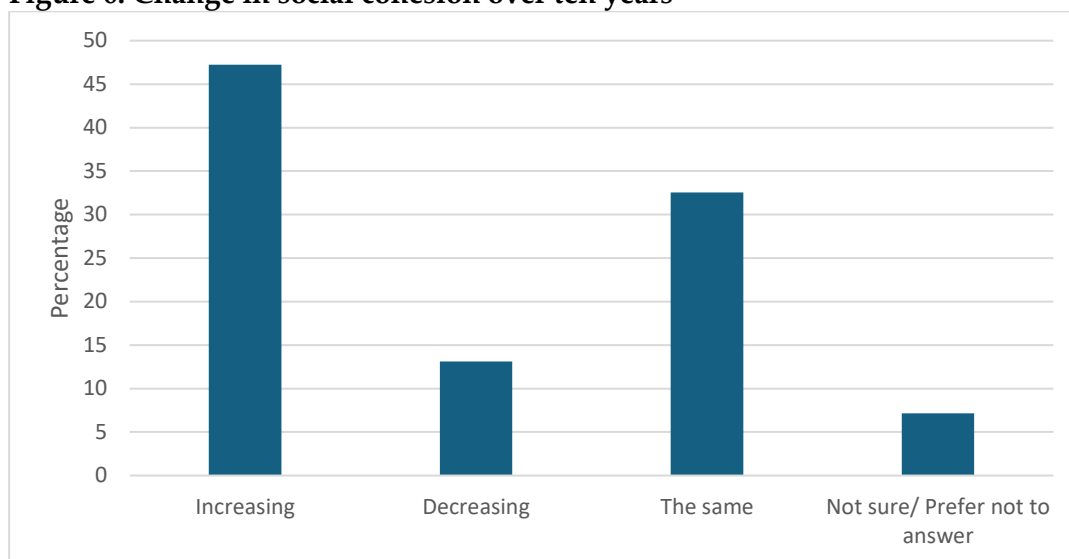
Table 43. Types of accessible infrastructure/services

Response (mark all that apply)	Frequency (%)
Water	217 (88.21)
Sanitation/toilet	130 (52.85)
School	187 (76.02)
Open spaces	81 (32.93)
Security	64 (26.02)
Conflict resolution	99 (40.24)
Other	6 (2.44)
Prefer not to answer	12 (4.88)

Social cohesion: changes and impacts

When asked to describe the nature of social cohesion over time, respondents most often (47%) reported an increase in social cohesion. Only a relatively small percentage (13%) reported a decline, while almost a third of respondents reported that cohesion was the same.

Figure 6. Change in social cohesion over ten years



Respondents were asked to describe how changes in the nature of social cohesion had impacted their material and social/emotional well-being. As shown in the tables below, the majority of respondents reported a negative impact to both kinds of well-being. Negative impacts to material well-being were more frequent. These negative impacts may be climate-related losses to well-being.

Table 44. Impact of change in social cohesion on material well-being

<i>To what extent do you think changes in social cohesion have negatively affected your material well-being?</i>		
Response	Frequency	Percentage
Not at all	61	24.30
A little	82	32.67
Somewhat	73	29.08
To a large extent	34	13.55
To a very large extent	1	0.40

Table 45. Impact of change in social cohesion on social/emotional well-being

<i>To what extent do you think changes in social cohesion have negatively affected your social and emotional well-being, incl. sense of belonging, social support, etc.?</i>		
Response	Frequency	Percentage
Not at all	64	25.50
A little	98	39.04
Somewhat	50	19.92
To a large extent	38	15.14
To a very large extent	1	0.40

Addressing loss

Respondents were asked to what extent impacts to material and social/emotional well-being could be improved, and responses were mixed. The most common response was 'somewhat'.

Table 46. Potential to address negative impacts/losses

<i>To what extent do you think that this can be improved?</i>		
Response	Frequency	Percentage
Not at all	8	3.21
A little	69	27.71
Somewhat	86	34.54
To a large extent	69	27.71
To a very large extent	17	6.83

Respondents were asked what measures could help improve well-being. Responses are ranked above in order of how frequently they were selected by respondents. Most frequent responses were improved access to social support (69%), access to material/financial support (69%) and security (57%).

Table 47. Ways to address impacts on material and social/emotional well-being

<i>What do you think could help? Improved...</i>	Frequency (%)
Response (mark all that apply)	
Access to social support	175 (69.44)
Access to financial and material support	174 (69.05)
Security	144 (57.14)
Access to infrastructure and services	134 (53.17)
Strategies of tension/conflict resolution	117 (46.43)
Sense of trust/reliance on others in this community	105 (41.67)
Inclusion in celebration of festivals/ commemoration of special occasions	103 (40.87)
Sense of belonging	93 (36.90)
Other	31 (12.30)
Prefer not to answer	-

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