AMERICAN JOURNALS
Open Access, Peer Reviewed Journals

American Journal of Research in Humanities and Social Sciences
ISSN (E): 2832-8019 Volume 42, | November - 2025

BETWEEN LIVELIHOOD AND MOBILITY: EXAMINING NON-MIGRATION DECISIONS AMONG FEMALE ARTISANAL QUARRY WORKERS IN MAROUA-CAMEROOM

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ABSTRACT

The principal driving force behind female quarry workers non-migration is poverty and economic hardship encountered in meeting individual and household daily needs. Female quarry workers are compelled to work under risky and difficult conditions in their place of birth rather than migrating. Non migration decision process is a dynamic and complex phenomenon shaped by cultural social, economic and environmental factors as well as the availability and access to natural resources for women Non migration decisions amongst females are often attributed to secure and stable livelihoods both at the individual and household levels. Women's position and role within the household have an impact on non-migration decision. Women are often less likely to migrate due to childcare, family responsibilities, limited or no skills and great insecurities in new destinations. The study seeks to critically explore the drivers of non-migration amongst female quarry workers employing both quantitative and qualitative data from 50 females. The dimensions of social capital, status of women in the household and the presence natural resource contribute to shape non-migration decisions amongst female quarry workers

KEYWORDS

Non-migration, women, small-scale, quarrying, Missingueleo.

Introduction

Livelihood construction remains an important concern for individuals and societies, as people depend on various human and environmental resources to sustain their lives. The security of a livelihood largely depends on the strategies adopted by individuals and households to meet their needs. Migration is one of the major strategies used to improve livelihood conditions and may occur voluntarily or involuntarily. It is widely recognised as an important part of broader processes of social change and development (de Haas, 2021). However, while some individuals seek better opportunities through migration, others rely on the resources available within their immediate environment to sustain their livelihoods. Migration decisions are influenced by individuals' aspirations and capabilities, as well as the geographical opportunities available to them. The capability framework therefore views human mobility as an individual's freedom to choose where to live, including the ability to remain in one's place of origin. However, the decision to stay may also reflect constrained mobility, particularly where

individuals remain because their circumstances limit their ability to move (Schewel, 2020). This perspective highlights the complex and non-linear ways in which structural changes influence people's desire and ability to migrate or remain in their communities. Consequently, improvements in economic conditions and access to livelihood resources may influence individuals' decisions to stay rather than migrate (Carling & Schewel, 2021).

Maroua, located in the Sahelian region, is characterized by challenging environmental conditions that place considerable pressure on livelihood activities. Recent assessments indicate that the Sahel is increasingly affected by climate change, including rising temperatures, rainfall variability, land degradation and recurrent environmental shocks (United Nations Environment Programme, 2023). These conditions affect agricultural productivity, contribute to food insecurity and intensify existing livelihood vulnerabilities. In a region highly dependent on subsistence agriculture and pastoral activities, climate variability and environmental degradation have made traditional livelihood systems increasingly difficult to sustain (McOmber, 2020). Consequently, migration, non-migration and livelihood adaptation have become important responses to the ecological and socioeconomic challenges facing Sahelian communities (International Organization for Migration, 2023). Individuals with adequate financial, social and material resources are generally better positioned to respond to environmental changes and prepare for future climate-related risks. However, these resources are not equally distributed across households and communities, thereby creating differences in people's ability to adapt (World Bank, 2022). Gender inequalities within the Sahel further complicate adaptation and resilience, particularly because women often experience restricted access to productive resources, employment opportunities and decision-making structures (International Labour Organization, 2021). Migration from the Sahel is influenced by several interconnected factors, including periodic droughts, political instability, conflict and economic hardship (Desmidt et al., 2021). The limited capacity of agricultural activities to provide sufficient food and income for many households has also encouraged the search for alternative livelihood opportunities (African Union Commission & OECD, 2024). These interconnected environmental and socioeconomic pressures continue to influence migration decisions across the region.

Migration patterns are also shaped by gender differences in access to resources, household responsibilities and social expectations. Women may experience cultural restrictions, limited employment opportunities, unequal access to productive resources and other forms of exploitation that influence their ability to migrate (McOmber, 2020). These constraints, alongside women's productive and reproductive responsibilities within households, may contribute to differences in migration decisions between men and women. The social organization of many communities also reflects patriarchal structures that influence the distribution of responsibilities and opportunities between men and women (Buss & Rutherford, 2020). Female immobility therefore reflects different economic, social and cultural circumstances that influence women's decisions and ability to remain in their communities (Schewel, 2020). A geographical and socioeconomic description of Maroua provides a better understanding of female non-migration in the area. Economically, the population is engaged mainly in crop farming and livestock production. Rain-fed agriculture constitutes an important livelihood activity, while livestock production is traditionally associated more with men. These occupations are increasingly affected by climatic variations and demographic pressures. Recent research on agropastoral livelihoods in Maroua identifies climatic constraints and socioeconomic difficulties as important challenges affecting agricultural productivity and household welfare (Chindji

& Sammad, 2025). Indeed, variations in rainfall distribution and environmental degradation have placed considerable pressure on farming systems and household livelihoods. As returns from traditional occupations become increasingly uncertain, women may seek alternative income-generating activities such as artisanal quarrying and small-scale retail operations. These activities provide additional livelihood opportunities for households. Although quarrying is an established economic activity, its growing importance as a source of income has increased its relevance to women who remain in their communities (Ofosu et al., 2022).

The importance of quarrying to local development is widely recognized because it provides essential raw materials for construction and infrastructure development. Quarrying involves the extraction of naturally occurring materials such as stones, gravel and sand, which are used in the construction of houses, roads and other infrastructure (African Union Commission & OECD, 2024). These materials are highly demanded in the construction and transportation sectors. In Maroua, the importance of quarrying is associated with increasing urban development, population growth and demand for construction materials. The expansion of educational institutions, commercial activities and residential settlements has contributed to the demand for building materials within the urban area. This demand has increased the economic relevance of quarrying, making the activity an important source of livelihood for different categories of workers, particularly women. Research conducted in Maroua confirms that sand and gravel extraction generates income for participants across the extraction and trading value chain, although it also creates environmental and socioeconomic challenges (2024 Maroua gravel and river sand mining study). Quarrying and artisanal mining activities provide employment and livelihood opportunities, particularly in communities where alternative income-generating activities are limited (Ofosu et al., 2022). The sector is highly labour-intensive and involves different categories of workers performing extraction, transportation, processing and trading activities. However, women's participation is often concentrated in less-skilled and less-remunerated activities, reflecting existing gender inequalities within the sector (Baddianaah, 2023). Furthermore, women working in informal mining activities may experience limited access to legal protection, financial resources and institutional support (International Labour Organization, 2021).

The quarrying sector is often perceived as a male-dominated economic activity, despite the increasing involvement of women in artisanal and small-scale mining across developing countries, particularly in sub-Saharan Africa. Women's participation is influenced by economic necessity, household responsibilities and the need to diversify livelihood sources (Buss & Rutherford, 2020). Artisanal quarrying is generally labour-intensive and provides income opportunities for individuals who may have limited access to formal employment (Stokes-Walters et al., 2021). Economic restructuring and changes in rural livelihood systems have also encouraged women to engage in income-generating activities beyond their traditional agricultural responsibilities. Recent studies indicate that women's involvement in artisanal mining provides important livelihood opportunities, although their participation remains influenced by gendered divisions of labour, unequal access to resources and household responsibilities (Baddianaah, 2023). Despite their contribution, women engaged in artisanal mining continue to receive limited recognition in research and policy discussions. Their participation often involves activities such as carrying, processing, crushing and trading mineral products, although specific roles differ across geographical settings (Ofosu et al., 2022). These responsibilities are further shaped by sociocultural perceptions that associate certain mining activities with men and restrict women's access to more profitable positions. Nevertheless, recent research on women in development

minerals emphasizes the importance of recognizing women's economic contributions and strengthening their participation in mining governance (2025 Women in Development Minerals study). Although existing studies have examined women's participation, livelihood experiences and challenges in artisanal and small-scale mining, limited attention has been given to the relationship between women's participation in artisanal quarrying and their household-level non-migration decisions. This paper therefore examines the extent to which female participation in artisanal quarrying and the incomes generated reshape and influence non-migration decisions at the household level. The paper draws on both qualitative and quantitative data to provide an understanding of how women use their income to sustain their households and remain within their communities rather than migrate. More importantly, this paper uses the aspirations-capabilities framework to examine the capabilities of women alongside their aspirations, providing information on how female quarry workers combine their abilities and available natural resources to sustain their livelihoods and support non-migration. In doing so, the paper seeks to answer one major theoretical question: what drives non-migration among female quarry workers in Maroua?

Theoretical underpinning

Non-migration is a complex and diverse phenomenon that deserves greater attention because, just like migration processes, non-migration decisions are an intrinsic part of broader processes of social change and development. The aspirations-capabilities framework explains that the decision to remain in a particular location or exercise the option to stay depends on people's capabilities and aspirations (de Haas, 2021). Non-migration decisions can therefore be understood as a combination of the capabilities and preferences of an individual woman or household to continue living in a particular place (Schewel, 2020). However, changing resources, opportunities and personal aspirations over time also play important roles in shaping these decisions (Carling & Schewel, 2021). Based on this framework, women's decisions not to migrate may be influenced by their capabilities to engage in physically demanding and strenuous quarrying activities. Borrowing from this framework, the capabilities of women are embedded in their human potential to transform available environmental resources into usable opportunities for livelihood sustenance. Non-migration may therefore reflect either an individual's preference to remain or circumstances that restrict their ability to move. The decision to stay can be conscious and active, but it may also be influenced by limited financial resources, household responsibilities and restricted access to alternative opportunities. Capabilities involve the ability and determination to cope with difficult situations and demanding livelihood activities such as quarrying. They also involve attitudes and beliefs towards non-migration, which may generate the desire for people to remain in their places of birth rather than migrate. Women's roles within households, particularly their responsibilities for providing for their children and contributing to household welfare, may constitute additional motivations for remaining in their communities (McOmber, 2020). Women's aspirations also involve their expectations and prospects for achieving a promising future within their communities of origin. The framework therefore provides an appropriate basis for understanding how women's capabilities, livelihood opportunities and aspirations interact to influence their decisions to remain in Maroua.

Methodology

The study is conducted in Maroua, the capital of the Far North Region of Cameroon and the principal urban centre of the Diamaré Division. The region is characterized by considerable cultural diversity, with several ethnic communities contributing to its social and economic composition. Maroua is situated at the foothills of the Mandara Mountains and serves as an important administrative, commercial and educational centre in northern Cameroon. The wider Diamaré Division covers approximately 4,665 km² and is bounded by Mayo-Kani Division to the south, Logone-et-Chari and Mayo-Sava divisions to the north, Mayo-Danay Division to the east and Mayo-Tsanaga Division to the west. The city is located within the Sudano-Sahelian ecological zone, where climatic conditions influence agricultural production, water availability and other livelihood activities. Recent research on Maroua has highlighted the challenges faced by agropastoral households, particularly in relation to climate variability and access to livelihood resources (Chindji & Sammad, 2025). The geographical location of the study area is presented in Figure 1.

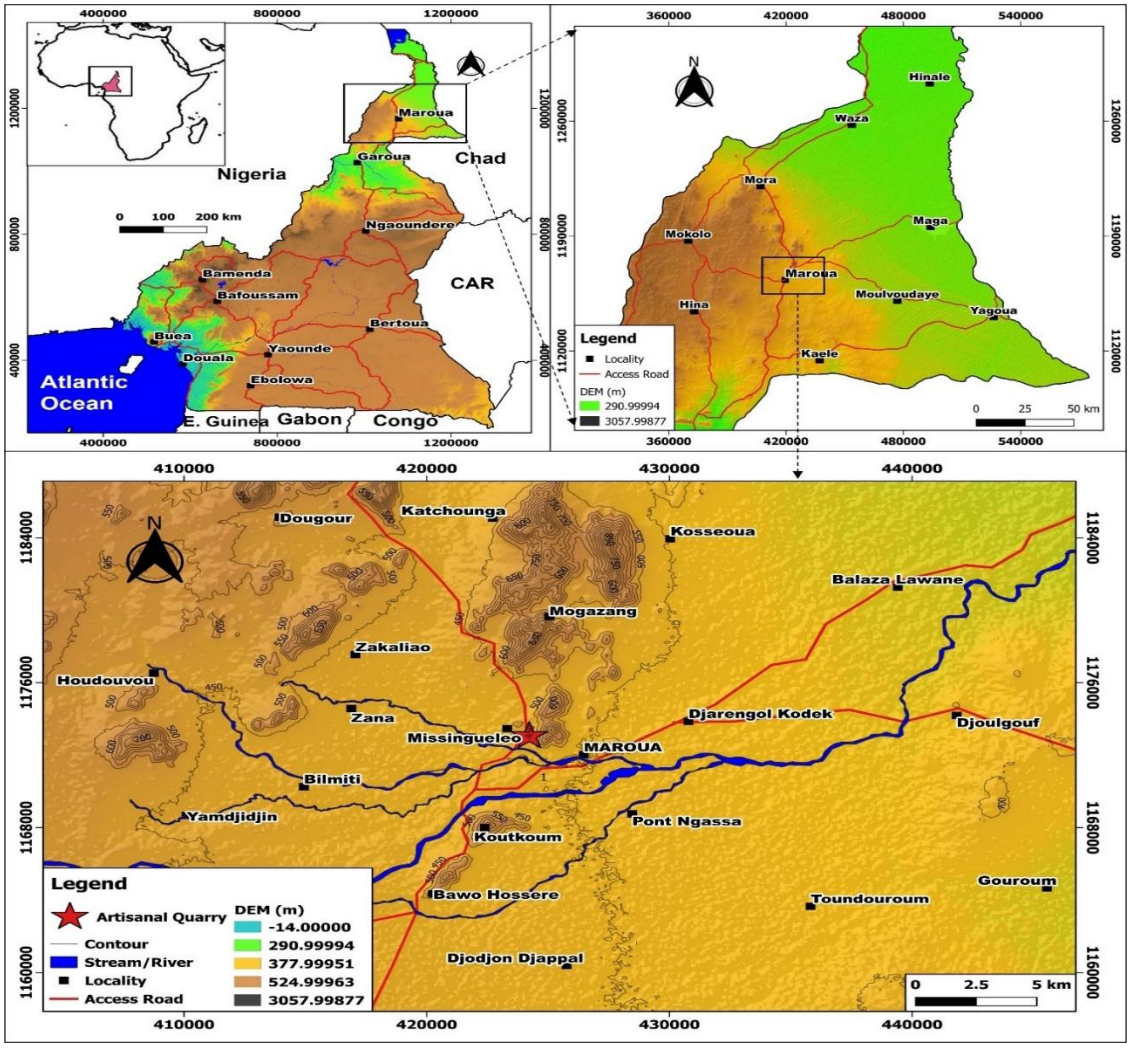


Fig 1: Geographical Location of Maroua.

Missingueleo is the principal location where artisanal quarrying activities are carried out in Maroua, it's a neighborhood in Maroua town though the products from this activity commonly called grave of various dimensions are demanded and use in the whole urban center. This activity has grown in importance since 2008 when the University of Maroua was created. The creation of the university

attracted student and workers alike into the town. This influx increased the demand for housing and other infrastructure to accommodate the population. Consequently, the demand for gravel a major construction material experienced an increase in value.

The paper makes use of both qualitative and quantitative data assembled using surveys field observations and questionnaires. The principal instrument used for data collection was the questionnaire complemented by observation and one in-depth interview. A total of 50 questionnaires were administered to female quarry workers. The questionnaire consisted of open-ended questions focusing on respondent's perception and opinion on the drivers of non-migration among female quarry workers, the vulnerabilities involved in the activity. The respondents were purposefully selected since the study focused on women; also the respondent was drowning from two ethnic groups principally the Mofou and Matakam. These are the two principal ethnic groups involved in quarrying in Maroua. One in-depth interview was conducted with the oldest female in this activity who equally serves as the leader of the association of female quarry workers called "Tapi-nafi" which means- "As you crush, it helps you or you get food". The in-depth interview guide consisted of question relating to the origin of the activity and its contribution to non-migration among female quarry workers. The data collected was analyzed and presented in pie charts.

The Role of Female Artisanal Quarry workers in the Household

This relates to what is expected of women in the household and within their local traditional setting. It concerns the role performed by women in a traditional society. However the status of women in the household varies across villages and ethnic groups in the Maroua. For instance insights gained from the study suggest that in the Mofou and Matakam ethnic groups, where majority (95%) of quarry workers originates, women are active players in the economic pursuit of the household. Women are guardians of their children's welfare and have explicit responsibility to provide for them materially. They are the household managers providing food, health, education and shelter. Women play a primary role in the provision of cash earnings as the primary cash providers in the household. Respondent's opinion on the status of women is presented in figure (2). Perception on the status of women in the household is a major driver of non-migration among female quarry workers. Women are categorized into two groups depending on the household. In some household women are considered as the household managers and the producers of income while in other households women are household managers, producers and reproducers (fig 2).

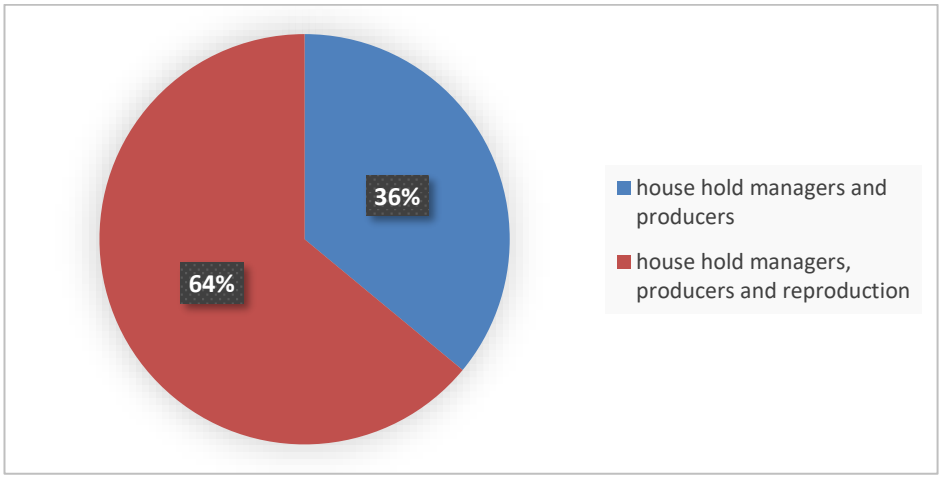


Fig 2 The Role of Female Artisanal Quarry workers in the Household

The status of women among 64% of the respondents relates to household managers producers and reproducers while 36% of the respondents indicate women status in the household relates to household managers and producers. This expectation places heavy burden on women. Infact with the changing economic and social situation of Maroua, women economic capabilities and ability to manage family welfare is being threatened. Susan a female quarry worker reports "A woman in my ethnic group is just like a man, the woman plays the role of the man in the house such as providing food, educating children and building a house". The economic role played by the woman alongside her reproductive role interact jointly to shape womens non-migration aspirations. Contextual factors and informal institutions such as gender related social norms including traditions and gender-related socio-cultural norms shapes womens desire to stay. The distribution of domestic work within the household and the household formation and size very often represent additional incentives for women to stay. "Womens domestic and care work within the household significantly limit their migration aspirations by depriving them of time. Harrison (2008) correctly observes that womens burden, heavy throughout the third world are enough to break a Camels back in much of Africa"

The Availability of Quarry Material and Non-migration

These are resources with no effective rules defining property rights because no entity has laid claim successfully to legitimate ownership. Natural resources are assets present in a particular area below or above the surface and available for potential utilization by their owners or users (Hall & Bonanomi, 2021). These resources are often described as Open Access resources. Open access resources are the consequence of conscious public policies to guarantee the access of all citizens to the use of a resource within a political jurisdiction. Open access resources can result from the ineffective exclusion of non-owners by the entity assigned formal rights of ownership (Hall & Bonanomi, 2021). In Maroua the rocks are the natural resources that are not yet identified as private property. The presence of the rocks indicates an important natural resource base and a primary source of livelihood (Fig 1 Picture of rocks). The availability of a natural resource (stone) which is a primary source of livelihood used for generating cash and income supports the findings of Biswas and Mallick (2021) who contend that the availability of diversified livelihood opportunities can support long-term non-migration. Furthermore diversified income generating opportunities may influence people's decisions to remain in their communities (Mallick et al., 2020; Biswas & Mallick, 2021). Similarly, Mallick et al. (2020) suggest that livelihood opportunities play a significant role in shaping migration and non-migration aspirations.



Plate 1a and 1b: Natural Resource (Stones) for quarrying

Income has been noted as a fundamental aspect shaping non-migration decisions and increasing women's bargaining power within the household. Through quarrying women are able to generate income and contribute to the socio-economic empowerment of women. An increase in women's relative economic resources within the household gives women greater participation in decision making. The income generated monthly from quarrying vary from one female to another depending on individual capabilities and aspirations. Female monthly income varies between 1000frs -35000frs monthly.

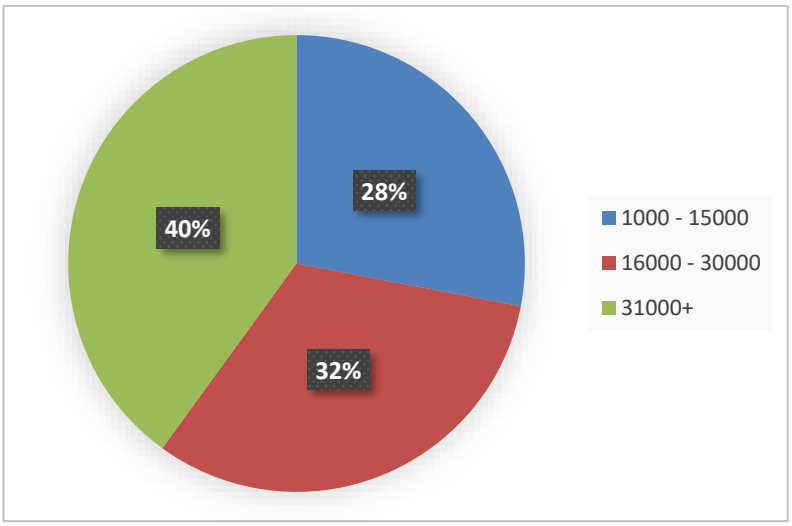


Fig 3: Income from Quarrying (Monthly)

Based on findings above, 40% of women earn 31000 FRS and above monthly from quarrying, 32% earn 16000frs -30000frs, while 28% earn between 1000frs-15000frs from the same activity. The presence of this economic resource and the income generated provides a strong incentive for female to stay. Women monthly income from quarrying plays an important role in the decision to stay or not to migrate. In most communities in Africa the lower caste depends on natural resources and cannot afford to move. They lack resources to move to other places and have no choice than to stay. Also, local employment opportunities reduce the chances of seasonal and long-term migration (Mallick et al., 2020). The income obtained from quarrying make substantial contributions to the livelihood aspiration of non-migrating household. Field evidence suggest income is used to satisfy four major needs including food, health, education and shelter.

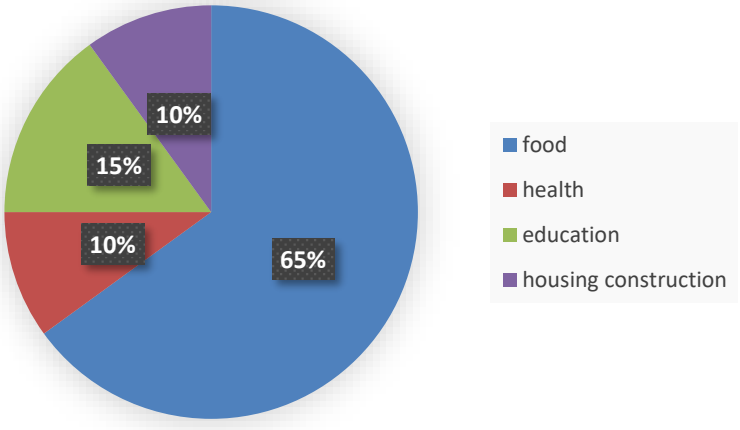


Fig 4: Uses of Income from Quarrying

Household food security emphasizes food availability at the national and regional level and sustainable access at local levels, which are both considered essential to household food security (Kyerematen et al., 2024). Findings presented in Fig. 4 state that income from quarrying is used to satisfy four major household needs. 65% of the income is used to provide food, 15% for children's education, 10% for health care and 10% for housing construction (Field Survey 2026). The Far North Region has been under severe threat of food crises. Recent studies indicate that food insecurity remains a major challenge in sub-Saharan Africa, particularly where climate-related pressures, economic difficulties and limited household purchasing power affect access to food (Awoke & Brück, 2026). It has become clear that adequate food availability at the national level does not automatically translate into food security at the individual and household level. Food insecurity can occur in situations where food is available but households cannot afford or physically access it because of limited income and purchasing power (Kyerematen et al., 2024; Rashid et al., 2024).

Social Capital and Non-migration

Social capital is a set of shared values that allows individuals to work together in a group to effectively achieve a common purpose. It involves the potential of individuals to secure benefits and invent solution to the problem through membership in a social network. It is a concept used to describe how members of a particular activity are able to bond together in society to live harmoniously. It is the network of relationships among women who work in the quarry enabling the effective functioning of their activities and society. Social capital contributes to the persistence of women in quarrying. The dimension of social capital contributing to non-migration has 4 principal components which include; influence of spirituality and culture, benefit from interacting with friends and trusted person during financial difficulties, benefits from financial aid and benefits from involvement in association. Based on field evidence 75% of respondents identified the benefits derived from belonging to an association as the most important social capital responsible for the immobility of women. 20% identified benefits from interaction with trusted persons and friends and 5% indicated the influence of spirituality and culture as an important social capital restricting immobility. The most important component of social capital influencing non-migration is the benefits derived by female quarry workers by belonging to an association called "Tapi-nafi". Based on this group, free will donations in cash are given to members in the event of an unforeseen such as death, accidents or sickness.

Conclusion

Female quarry workers prefer to stay despite the difficult activities and risk associated with quarrying. Women non migration decision is a personal choice and influenced by livelihood conditions of women. More importantly limited knowledge and the fear of exploitation in the new destination deter female quarry workers from moving. This on the other hand is reflected in place confidence and it is more associated with the indigenous knowledge of females with the place of their birth. It reflects the practices developed by female quarry workers from an understanding of the local environment, which is being acquired over generations. This is distinct from the other knowledge, and it originates within the community, maintaining a non-formal means of dissemination, collectively owned, developed over several generations and subject to adaptation, and embedded in a community's way of life as a means of survival. This article emphasizes the importance of social capital from four different dimensions as a major concept in female non-migration decisions. Social capital in the form of influence of spirituality

and culture, benefit from interacting with friends and trusted persons during financial difficulties, benefits from financial aid and benefits from involvement in association contribute to non-migration decisions amongst females in Maroua.

References

1. African Union Commission, & OECD. (2024). Africa's development dynamics 2024: Skills, jobs and productivity. OECD Publishing. https://doi.org/10.1787/df06c7a4-en
2. Baddianaah, I. (2023). Navigating access to golden lands: Gender roles and constraints of women in artisanal and small-scale mining operations in north-western Ghana. Geo: Geography and Environment, 10(2), e130.
3. Buss, D., & Rutherford, B. (2020). Gendering women's livelihoods in artisanal and small-scale mining: An introduction. Canadian Journal of African Studies, 54(1), 1–16.
4. Carling, J., & Schewel, K. (2021). Revisiting aspiration and ability in international migration. Journal of Ethnic and Migration Studies.
5. Chindji, R. M., & Samba, M. N. (2025). Agropastoralists of Maroua: Climate and socioeconomic challenges. African Journal on Land Policy and Geospatial Sciences, 8(1). https://doi.org/10.48346/imist.prsm/ajlp-gs.v8i1.53789
6. de Haas, H. (2021). A theory of migration: The aspirations-capabilities framework. Comparative Migration Studies, 9, Article 8. https://doi.org/10.1186/s40878-020-00210-4
7. Desmidt, S., Puig, O., Detges, A., van Ackern, P., & Tondel, F. (2021). Climate change and resilience in the Central Sahel. CASCADES.
8. International Labour Organization. (2021). Women in mining: Towards gender equality. International Labour Organization.
9. International Organization for Migration. (2023). World migration report 2024. International Organization for Migration.
10. McOmber, C. (2020). Women and climate change in the Sahel. OECD Publishing. https://doi.org/10.1787/e31c77ad-en
11. Ofosu, G., Torbor, M., & Sarpong, D. (2022). Gender and artisanal and small-scale mining: Exploring women's livelihood and occupational roles in formalised settings. Journal of Rural Studies, 96, 121–128. https://doi.org/10.1016/j.jrurstud.2022.10.013
12. Schewel, K. (2020). Understanding immobility: Moving beyond the mobility bias in migration studies. International Migration Review, 54(2), 328–355. https://doi.org/10.1177/0197918319831952
13. Stokes-Walters, R., Fofana, M. L., Songbono, J. L., Barry, A. O., Diallo, S., Nordhagen, S., Zhang, L. X., Klemm, R. D., & Winch, P. J. (2021). “If you don't find anything, you can't eat”: Mining livelihoods and income, gender roles, and food choices in northern Guinea. Resources Policy, 70, Article 101939. https://doi.org/10.1016/j.resourpol.2020.101939
14. United Nations Environment Programme. (2023). Sahel region: Climate change, environmental degradation and resilience. United Nations Environment Programme.
15. World Bank. (2022). Cameroon country climate and development report. World Bank.
16. Gravel and River sand mining activities in Maroua (Far-North Region, Cameroon): Environmental and Socioeconomic aspects (2024). Archives of Agriculture and Environmental Science. https://doi.org/10.26832/24566632.2024.0901018

17. Biswas, B., & Mallick, B. (2021). Livelihood diversification as key to long-term non-migration: Evidence from coastal Bangladesh. Environment, Development and Sustainability, 23, 8924–8948. https://doi.org/10.1007/s10668-020-01005-4
18. Hall, D. M., & Bonanomi, M. M. (2021). Governing collaborative project delivery as a common-pool resource scenario. Project Management Journal, 52(3), 250–263. https://doi.org/10.1177/8756972820982442
19. Kyerematen, E., Molua, E. L., Mvodo, S. M. E., & Ndip, F. E. (2024). Credit, gender, and food security: Empirical evidence of determinants to access, affordability, and consumption in Cameroon. World Food Policy, 10(1), 48–85. https://doi.org/10.1002/wfp2.12069
20. Mallick, B., Sultana, Z., & Bennett, C. M. (2020). How do sustainable livelihoods influence environmental (non-)migration aspirations? Applied Geography, 124, Article 102328. https://doi.org/10.1016/j.apgeog.2020.102328
21. Awoke, M. D., & Brück, T. (2026). Climate, conflict, and food security: A systematic review of household-level evidence (2020–2025). Journal of Health, Population and Nutrition, 45, Article 70. https://doi.org/10.1186/s41043-026-01267-0