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De-agrarianization in Northern Nigeria: Circular Migration Laid to Rest

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Abstract

This study examines the dynamics of migration from southern Niger to northern Nigeria, focusing on the processes that leads to de-agrarianization. Data was collected through household interviews and focus group discussions with migrants in Daura, Katsina, 'Yar Shanya, Magama Jibiya, Kano, and surrounding areas. Findings reveal that migration is driven by multiple factors including economic (bida), seasonal (ci rani), educational, health, and business-related motives. Most migrants initially engage in circular or seasonal migration, returning home during the rainy season for farming, but after six to ten years many transition into permanent settlement. This shift is often accompanied by household restructuring, where spouses either relocate from Niger or Nigerian partners join the household. Migrants sustain links to their origins through remittances, facilitated informally via personal networks. Results further show that economic migrants, particularly 'yan ci rani, are the group most associated with de-agrarianization, gradually abandoning farming for non-agricultural livelihoods. While this transition enhances income opportunities in host communities, it simultaneously contributes to farmland abandonment and declining agricultural productivity in areas of origin. The study concludes that de-agrarianization poses a growing threat to food security in the Sahel, underscoring the need for policies that encourage sustainable land use, strengthen agricultural support systems, and provide livelihood diversification strategies that complement rather than replace farming.

Keywords: *Nigerien, Migrant, Ci Rani, Livelihood, De-agrarianization.*

Introduction

Migration in the Sahel is not a new phenomenon but a deeply rooted livelihood strategy that has endured for centuries, only now taking place under more complex pressures. People have always moved seasonally and circularly to cope with uncertain harvests, but today these decisions are shaped not only by rainfall patterns and agricultural cycles, but also by economic volatility, insecurity, and shifting governance frameworks (Castles and Miller, 2009; Rain, 1999; Lona, 2015). Mobility remains central to survival and adaptation in the West African drylands, particularly across the Niger–Nigeria border, where Hausa cultural traditions of *ci rani* still guide seasonal moves southwards into cities like Kano, Katsina, and Daura (Rain, 1999; IOM, 2024). However, the environment in which these moves occur has become more precarious. Border restrictions, political instability in Niger, and the evolving relationship between ECOWAS and the newly formed Alliance of Sahel States (AES) have added layers of uncertainty to what used to be relatively predictable seasonal journeys (ECOWAS, 2023; Migration Policy Institute, 2025). While on the other hand climate change happened to be a trigger that has been contributing to migration.

Climate change is often described as a risk multiplier rather than a direct cause of migration. In practice, this means that erratic rainfall, shortened growing seasons, and more frequent

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droughts amplify the vulnerabilities of households that are already living with poverty, land scarcity, and limited opportunities (IOM, 2024; UNEP, 2023). In such settings, moving temporarily to urban centers remains a rational coping strategy. What has changed is that the temporary often becomes prolonged. Repeated seasonal migration can gradually lead to permanent settlement in Nigerian cities, drawing young men and increasingly women away from farming, and thereby accelerating processes of de-agrarianization (Bryceson, 1996; Ncube, Tanga and Bhumira, 2014; Baiphethi and Jacobs, 2009). Scholars now define this not merely as leaving farming, but as a broader reorientation of livelihoods and identities away from agriculture, even where land remains available (Bryceson, 1996; Frontiers in Sustainable Food Systems, 2025). The shift is visible across sub-Saharan Africa, where fewer young people see farming as a desirable or respectable occupation, preferring instead to seek non-farm opportunities in transport, construction, petty trade, or service work in urban areas (Mabhena, 2011; Ncube, Tanga and Bhumira, 2014).

At the same time, the risks associated with these moves have increased. While much of the literature has focused on dangerous trans-Saharan and Mediterranean routes, there is growing recognition that even shorter cross-border moves, such as those from Maradi in Niger to Katsina or Kano, expose migrants to informal taxation, police harassment and periodic border closures (Mixed Migration Centre, 2024; IOM, 2019; UNHCR, 2022). These disruptions can transform what was intended as a short seasonal journey into a longer and more uncertain stay. Yet, there is little systematic data on how migrants navigate these challenges or how such risks shape their decisions to eventually settle permanently in urban centers.

Despite the growing body of research on mobility, important gaps remain. Most studies in the Sahel are regional or cross-sectional, making it difficult to trace how specific climate shocks translate into long-term livelihood changes at the household level (IOM, 2024). There is also very limited understanding of gendered migration pathways: while men are visible in construction sites or motor parks, women's roles in petty trade and processing are less documented, even though they are crucial to how families survive and gradually disengage from farming (UNEP, 2023). Similarly, we know very little about the quality of opportunities available to Nigerien and Nigerian youth in secondary cities like Kano, Katsina, and Daura, or how earnings from seasonal work are reinvested whether to strengthen farming back home or to anchor permanent life in town (Migration Policy Institute, 2025).

Against this backdrop, research that links rainfall variability, personal migration stories, and shifting border governance offers fresh insight into how seasonal migration tips into permanent settlement and agricultural exit. By situating the Hausa practice of *ci rani* within today's changing climatic, economic, and political realities, such work can make a novel contribution to debates on de-agrarianization in northern Nigeria and the wider Sahel.

The main objective of this study is to examine the migration dynamics of Nigerien migrants into northern Nigeria, with particular focus on the processes, patterns, and implications of de-agrarianization resulting from circular and permanent migration, and its effects on agricultural livelihoods and food security in the Sahel.

Material and Methods

Study Area

The study area lies between Latitudes 12°00'0"N and 15°00'0"N and Longitudes 5°00'0"E and 9°00'0"E, covering parts of northern Nigeria and southern Niger, which share a common border stretching about 1,608 kilometers from Kebbi State in the northwest to Borno State in the northeast (Figure 1). The region exhibits similar physical features, including relief, geology, soils, and climate, which facilitate social interaction, trade, migration, and cultural integration across the border. The relief is largely undulating plains of about 300 meters above sea level, declining to around 150 meters near Tahoua, with higher elevations of up to 600 meters in Katsina State. The geology is dominated by basement complex rocks and younger sediments, while rainfall varies greatly from 390 mm in the north to about 1,200 mm in the south, with rainy days ranging from 29 in the north to 105 in the south (Lona, 2014; Mohammed et al., 2015). In Niger, four climatic seasons are distinguished: a rainy season (June–September), a hot humid season (October–mid-November), a cool dry season (November–February), and a very hot dry season (March–May), with temperatures ranging between 10°C at night in the cold season to 46°C during peak heat.

Socio-economic activities are strongly tied to these climatic cycles. Rain-fed agriculture dominates during the wet season, with millet and sorghum serving as staple crops, while off-farm activities (*ci rani*) prevail in the dry season (Liman, Idris & Mohammed, 2014). The Nigerian side, particularly Kano, has historically been a commercial hub and a key southern terminus of the trans-Saharan trade, linking West Africa with the Maghreb and Europe. Kano, Katsina, and Daura host influential emirates, with strong historical and cultural ties to Maradi in Niger, which serves as that country's main commercial center and gateway to Nigeria (Rain, 1999). Despite only 13% of Niger being arable, regions such as Zinder, Maradi, and Tahoua form key agricultural zones. The shared geography, culture, and economic interdependence between northern Nigeria and southern Niger have made the area a focal point of migration, trade, and urbanization, especially around cities like Kano and Maradi (Olanrewaju, 2001).

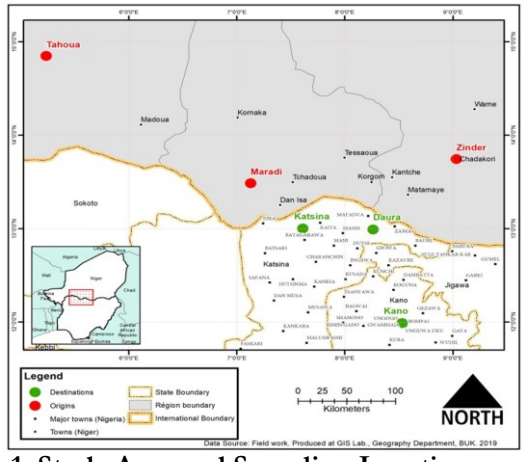

Figure 1. Study Area and Sampling Locations

Data Collection

For migration data, both quantitative and qualitative methods were employed to collect primary information through surveys such as interviews, focus group discussions (FGDs), and participant observation. Some interviews were conducted using the traditional paper-and-pencil method, while others were administered digitally through the Open Data Kit (ODK), a mobile platform designed to handle complex application logic and multiple data types, including text, location, images, audio, video, and barcodes. The use of ODK provided greater ease in data collection, collation, and analysis.

Sampling Techniques

Two transects of 50km width were drawn from Kano moving up into Niger Republic. The first transect (A) going in the northern direction covers a distance of about 202 Km (Kano – Zinder) while the second transect (B) going northwest wards covering 478 Km (Kano – Tahoua). The towns Zinder, Maradi and Tahoua were chosen to serve as benchmarks as the migrants reside in remote villages around these urban centers. Katsina and Daura in Nigeria were previously sampled being the major towns along each route. This decision is informed by the findings of Halliru (2015) that these migrants would prefer to reside mainly in urban centres since they are basically seeking new and better livelihood opportunities. Snowballing technique was employed to locate family and friends of people that had participated in migration. Sampling of individuals for both the interview and FGD basically depended on those migrants that answered the call of the guide from the consulate.

Methods of data collection

Data collected was by means of surveys. Interviews and Focus Group Discussions (FGDs) were carried out at different locations to gather information about migrants and their histories. While a good number agreed to take part, some migrants simply refused being interviewed despite the introduction by their local executives, and in some cases with the presentation of the Laisser-Passer. They simply felt they would be deceived. Those that finally agreed repeatedly asked questions that had been answered a couple of times. On the first visit to Magama Jibia, after addressing the audience, introducing the research team and the purpose of the visit, a whole lot of them left the scene of the FGD saying they were not migrants but Nigerians forgetting that assembly of migrants in the area was what was sought for in the first instance. However, subsequent visits yielded more fruitful results.

Data Analysis

After completing field data collection through surveys (both paper-and-pencil and ODK-enabled), interviews, focus group discussions, and participant observation, the responses were consolidated, cleaned, and coded before being entered into the Statistical Package for the Social Sciences (SPSS). Paper-based questionnaires were transcribed into structured templates, while digital submissions from ODK were exported and harmonized with the transcribed data to ensure consistency across variables. Each response was standardized, with categorical variables numerically coded and continuous variables properly formatted for analysis. SPSS was then used to generate descriptive statistics such as frequencies and percentages which provided a clear overview of the dataset. To enhance interpretation, results were presented using charts and graphs while quantitative findings were triangulated with

qualitative insights from interviews and FGDs, thereby enriching interpretation and contextualization.

Result and Discussion

The trend of migration in northern Nigeria between 1952 and 2015, as illustrated in Figure 2, reveals a steady but fluctuating increase in the number of migrants. While the linear trend line suggests that migration has gradually intensified over the decades, the actual yearly values show sharp rises and declines that reflect the cyclical and dynamic nature of movement in the region. For example, migration peaked dramatically in 1994 and again in 2011, years that, according to respondents, had no immediate social or political significance. However, historical climate records show that both the mid-1990s and early 2010s were marked by episodes of rainfall variability and drought across the Sahel, conditions that are widely recognized as triggers for mobility when households face declining harvests and food insecurity (Mortimore & Adams, 2001; Ayana, 2016). By contrast, the very low migrant counts recorded in 1987 and 2015 likely point to years of relative agricultural stability or, alternatively, restrictions linked to local economic and political circumstances.

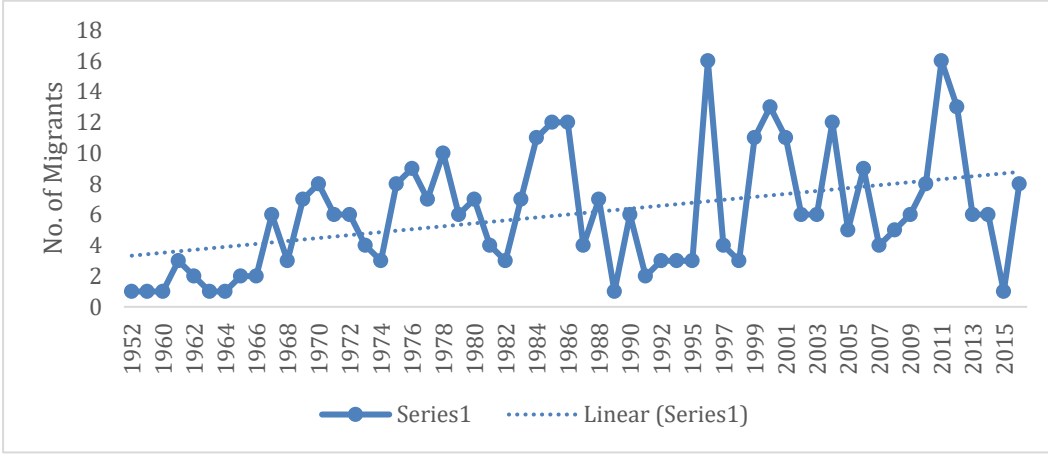

Figure 2. Year of arrival from Niger

What stands out in the graph is not just the fluctuation, but the overall increase in migration as a livelihood strategy. Earlier researches have shown that rural households in northern Nigeria and the wider Sahel often resort to temporary or circular migration to cope with environmental stress and declining returns from farming (Rain, 1999; Adepoju, 2005). More recent studies confirm that this trend is continuing in the 21st century, with climate variability, youth unemployment, and regional insecurity all contributing to intensifying patterns of mobility (Obokoh & Nwosu, 2020; Ibrahim *et al.,* 2022). In fact, the latter research argue that migration has increasingly shifted from being a short-term coping mechanism to becoming a more permanent livelihood strategy, especially as rural communities face both ecological shocks and long-term structural challenges such as land fragmentation and population pressure.

Taken together, the result underscores how migration in northern Nigeria is not a random phenomenon but rather a structured response to shifting socio-economic and environmental realities. The peaks and troughs mirror the lived experiences of households adapting to risk

sometimes moving out of necessity, at other times moving in search of better opportunities. This aligns with the broader narrative of de-agrarianization, where reliance on agriculture is gradually giving way to diversified survival strategies that are increasingly tied to movement and mobility.

Length of Stay as Seasonal Migrants

The distribution of respondents' length of stay as seasonal migrants, shown in Figure 3, demonstrates that most migrants initially begin their mobility journeys as temporary workers practicing *ci rani* or *bida*, but many gradually extend their stay. The peak percentages fall between 5 and 8 years, after which many migrants make the decision to settle permanently at their destinations. This finding underscores the sustainability of the jobs they engage in, suggesting that migration is not merely a coping strategy but also a livelihood pathway that provides stability and comfort. At this stage, family reunification becomes significant, as many migrants either bring their Nigerien wives to join them or contract new marriages locally, a process consistent with earlier observations by Adegbola (1972) on settlement dynamics among seasonal migrants in West Africa.

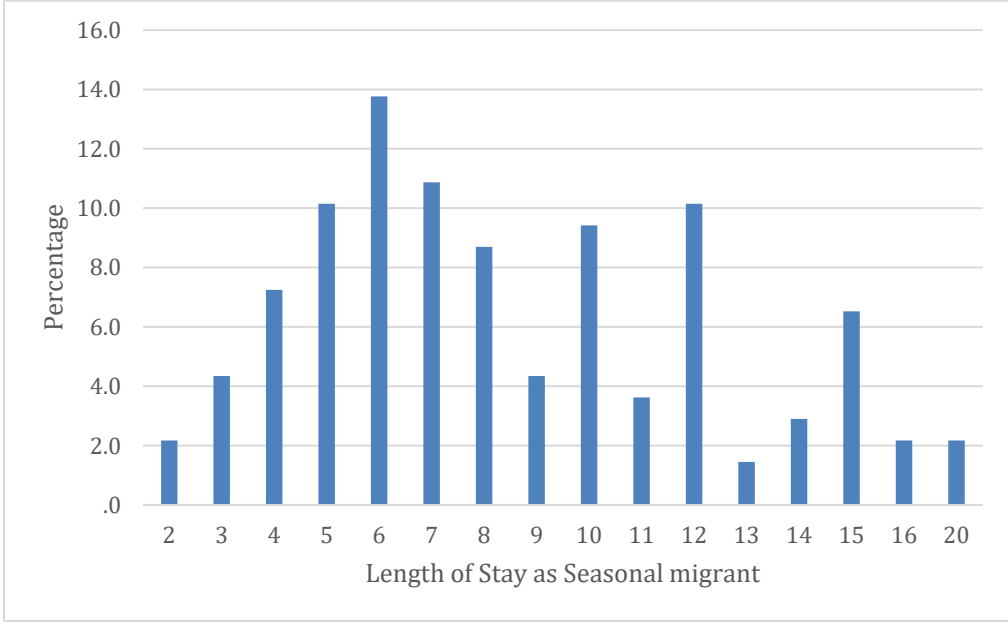

Figure 3: Length of stay as seasonal migrants from southern Niger

The result also shows that some migrants remain seasonal for much longer, extending their stay into double-digit years before making settlement decisions. Notably, a small but significant group has remained migrants for up to 20 years without relocating their families, highlighting a distinctive lifestyle strategy. These individuals often oscillate between home and destination, returning during the rainy season to engage in farming and coming back afterwards for off-season urban work.

Their testimonies such as those of Malam Tela and Malam Na Rumfa, who have lived this cycle for over two decades illustrate how *ci rani* can evolve into a permanent rhythm of livelihood rather than a short transitional phase.

This prolonged seasonal migration has important implications. First, it reflects a flexible livelihood strategy that allows households to balance rural agricultural survival with urban non-agricultural income streams. Second, it demonstrates how migration shapes social dynamics, with some individuals choosing eventual settlement (e.g., Mallam Muhammadu after 7 years) while others maintain cyclical detachment from their families. This dual pattern reflects what recent studies describe as "hybrid livelihoods," where rural households increasingly diversify across space to reduce vulnerability to environmental and economic shocks (Ibrahim *et al.,* 2022; Yaro *et al.,* 2021).

Furthermore, the testimonies show that even after settlement, challenges remain. For instance, Mallam Auwalu highlights economic pressures despite transitioning from *ci rani* to permanent residence with his wife. This illustrates the precariousness of migrant livelihoods in urban Nigeria, where informal work dominates and long-term stability is often uncertain. Recent scholarship emphasizes that while migration offers short-term security, structural barriers such as limited access to capital, weak social protection, and urban informality restrict the full integration of migrants into host economies (Awumbila & Deshingkar, 2022).

The result presents the frequency and patterns of return visits by migrants to their places of origin. The most striking feature is that nearly 70% of respondents reported visiting home only when the need arises, suggesting a strong tendency towards irregular and necessity-driven visits. This indicates that many migrants prioritize visits only when circumstances such as family obligations, ceremonies, or urgent matters demand their presence. By contrast, 13.4% of respondents stated that they return at the onset of the rainy season, which reflects a continuing connection to agricultural activities back home, as farming remains a livelihood anchor.

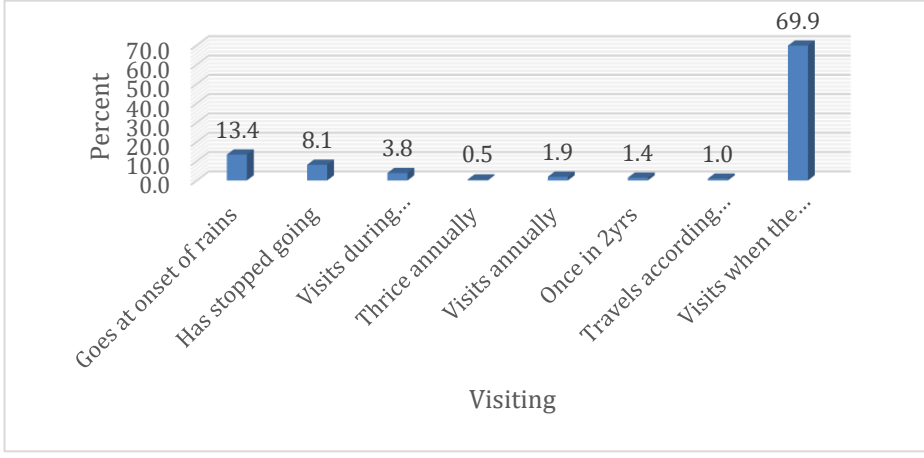

Figure 4: Migrants visitation times to southern Niger

A further 8.1% of respondents have completely stopped visiting, which may suggest processes of assimilation and settlement at their destinations, or possibly financial and logistical challenges that hinder their return.

The smaller proportions represent varied but less common patterns of visitation. For instance, 3.8% visit during holidays, likely aligning with festive or religious periods, while 0.5% and 1.9% reported visiting thrice annually or once annually, respectively. An additional 1.4% travel according to business demands, highlighting the role of trade and economic opportunities as drivers of mobility, while only 1.0% maintain visits based on occasional necessity. Overall, the distribution reveals that while a few migrants sustain regular, seasonal ties with their places of origin, the majority maintain irregular and conditional connections. This finding is consistent with recent studies emphasizing that migrants' ties to their homelands are increasingly shaped by socio-economic realities, livelihood priorities, and the challenges of sustaining translocal obligations in the face of urban pressures (Awumbila & Deshingkar, 2022; Ibrahim *et al.,* 2022).

Malam Ashiru comments

"…these days one learns about the happenings at home due to the availability of the cell phone. As soon as the first rain falls, one receives several calls and those intending to farm that year leave immediately to prepare the farms…"

Mai Suna reported

"…I learnt that the family had moved (gushi) from Ahmadu my brother who has a phone and even though we don't have service in our village he treks to Brigade (the security post) to call me whenever there's the need…"

Means of livelihood in Nigeria

Agriculture remains the backbone of migrants' livelihoods in their places of origin. However, upon arrival at their destinations, many migrants aspire to engage in alternative, non-agricultural forms of work. The availability of diverse economic opportunities in urban centers thus serves as a classic pull factor attracting economic migrants from southern Niger Republic into northern Nigeria. These migrants, often low-income earners with limited formal education, are absorbed into the informal sector, which requires little specialized skill. As Yaro (2008) observed, the expansion of the informal economy across African cities has provided significant employment opportunities for migrants excluded from the formal wage sector, thereby masking the severity of urban unemployment. Common occupations among Nigerien migrants include security guarding (*mai gadi*), water vending (*mai ruwa*), masonry (*magini*), bakery work (*mai bredi*), tea making (*mai shayi*), fruit selling (*masu kayan marmari/gwari*), and various trading activities (Liman, 2016). Trading extends beyond petty shop ownership to include the sale of grains, sacks, dates, jewelry, and textiles, reflecting the diversity of livelihoods pursued. A notable example is tea sellers, who operate in two forms: permanent stallholders with cooking equipment and food displays, and itinerant hawkers carrying large kettles with portable charcoal stoves, cups, and supplies, as famously described in *Kakkabi na Indo's* song *Wakar Dan Shayi.*

Beyond these male-dominated roles, Nigerien migrants also diversify into other forms of work such as teaching, sand quarrying, tailoring, driving, and daily labor, with some even entering civil service positions. Interestingly, while some of these jobs are considered menial within Nigerian society, Nigerien migrants display a positive attitude toward them, often dignifying their occupations with the prefix *aikin* (meaning "work"), as in *aikin gadi* (security), *aikin tuki* (driving), and *aikin gini* (masonry) (Liman, 2016). Women migrants, who mostly arrive as

wivesor brides, actively contribute to household income through hair braiding, second-hand clothing sales, laundry services (*wankau*), restaurant work, domestic service, and even trading in traditional female aphrodisiacs (*maganin mata*) (Liman, 2023). Among Tuareg subgroups such as the Buzaye, other economic niches include date selling, blacksmithing, rope weaving, and even begging in streets, mosques, and filling stations (Barau, 2009; Adamu, 2014). Employment patterns vary: while about 44% of migrants are employed by Nigerians, 16% work under fellow Nigeriens, and nearly 40% are self-employed. Unlike seasonal agricultural laborers engaged in ci rani (dry-season farming), most others work year-round, illustrating the resilience and adaptability of Nigerien migrants in sustaining their livelihoods across northern Nigeria.

Farming at Origin

About half of the interviewed migrants reported that they still own farmland in Niger Republic. While some continue to cultivate their fields, a significant proportion leave them idle, with many farmlands managed collectively under the traditional family system known as *Gandu* (Hausa). The cultivation of such farms relies heavily on communal labor, as monetary substitution is culturally unacceptable.

As Mai Suna explained, once the first rains arrive, all members of a *Gandu* gather to clear and prepare the land for planting, carrying out all farming tasks collectively and sharing the harvest at the end of the season. This practice requires physical presence, thereby excluding absentee members from the benefits of that farming cycle. Agriculture in southern Niger, particularly in the Sahelian zone, is shaped by limited rainfall, with an annual average between 150 mm and 600 mm, covering only about 22% of the country's land area (Lona, 2014). Consequently, cultivation is restricted to fast-maturing crops that can withstand the short rainy season of three to four months. According to FEWSNET (2012), more than half of Niger's population is actively engaged in crop production, with millet (*gero*) and sorghum (*dawa*) serving as staple foods, while cash crops such as sesame (*ridi*), groundnuts (*gyada*), beans (*wake*), and tiger nuts (*aya*) provide additional income. Farmers often intercrop millet or sorghum with beans or groundnuts, a strategy that maximizes land productivity and generates dual benefits of subsistence and marketable yields.

As Mai Suna narrated,

"back home we cultivate millet and sorghum as the main crops while groundnut and beans are laced in between them… one gets double yield, from the one standing and the one spreading on the ground."

In contrast, communities' further north, such as Farak in the Saharan-Sahelian zone, experience lower annual rainfall averaging between 150 mm and 300 mm, which makes crop cultivation difficult (Lona, 2014).

As Malam Sidi explained, in these areas

"*dabbobi sune hankalin mutanen mu*,"

meaning livestock are considered the most valuable resource. Here, households depend on livestock not only as a source of food but also as a form of savings, wealth accumulation, and a means of addressing health and material needs. During harvest seasons, households purchase food crops in bulk and store them in traditional silos known as *ataram*, ensuring year-

round availability. Livestock, especially cattle (*saniya*), are multifunctional assets—providing meat, milk, cheese, hides, horns, manure, and even spiritual value. They also serve practical purposes such as ploughing fields, carting goods, drawing water from wells, and powering rudimentary machines for milling and grinding. Small ruminants like sheep (*bisashe*) and goats are also widely reared, often functioning as an informal savings mechanism, where breeding generates surplus wealth over time. This dual livelihood system of crop farming in the south and livestock rearing in the north demonstrates the adaptive strategies of Nigerien households in managing scarce resources within fragile Sahelian and Saharan environments (Issa *et al*., 2022).

Farming at Destination

The Nigerien migrants studied are concentrated in Daura, Katsina, 'Yar Shanya, Magama Jibiya, and the Kano area of northwestern Nigeria, a tropical savanna region with annual rainfall of 600–1200 mm (mostly June–September) and temperatures averaging 26–32°C (Olofin, 1987; Usman *et al*, 2014). They cultivate grains such as maize, millet, sorghum, and rice, alongside sesame, hibiscus, and fruits like watermelon, guava, and mango, while also rearing poultry, cattle, goats, and sheep. Farmers generally avoid intercropping sesame with millet or sorghum, as its large leaves limit water access to nearby crops and its high nutrient demand depletes soil fertility, requiring intensive fertilization for sustained yields. Migrants acknowledge sesame's high economic value but emphasize its soil-degrading effect and greater need for fertilizer and rainfall. Some permanent migrants also own farms locally, while many at 'Yar Shanya cultivate government plots under usufruct arrangements.

The De-agrarianization Process

The de-agrarianization process among Nigerien migrants in northwestern Nigeria reflects a gradual shift from agricultural to non-agricultural livelihoods. From the interviews, migrants arrive for various reasons environmental, educational, health, and economic (including *ci rani*, *tabiradi*, *bida*, and business travel) with about one in ten eventually settling permanently. Many seasonal migrants transition into permanent settlers after years of circular mobility, often starting as workers during the dry season before abandoning farming entirely.

The UN (1998) defines long-term migrants as those living abroad for over a year, while short-term migrants stay between three months and a year; in this study, permanent migrants fall into the former category, with most originating as seasonal migrants. Educational migrants, some arriving as children under Islamic scholarship, often remain as teachers, while health migrants particularly leprosy patients also stay permanently due to rehabilitation needs. The economic migrants include *'yan ci rani* (seasonal farmers seeking dry-season livelihoods), *'yan tabiradi*, and business travellers; however, only the *'yan ci rani* undergo de-agrarianization. Traditionally leaving their stored grains at home to seek income in Nigeria, they eventually become accustomed to non-agricultural livelihoods and settle permanently, relinquishing farming as a way of life an entrenched process with roots predating colonial West Africa (Rain, 1999).

Conclusion and Recommendation

The steady increase in migration from southern Niger to northern Nigeria reflects a complex interplay of drivers, including climate change, economic opportunities, and landlessness in host communities. While some migrants initially engage in agriculture, many gradually shift to

non-agricultural livelihoods, often through years of seasonal and circular migration that eventually results in permanent settlement and de-agrarianization. This process ensures flourishing lifestyles and businesses at the destination but contributes to declining agricultural activity at areas of origin, leaving farmlands fallow and untended at a time when climate change already undermines food production, thereby posing serious threats to regional food security. Sustaining agricultural practices in the migrants' homelands is therefore critical to mitigating food insecurity in the wider Sahel.

However, the study recommends for media, NGOs, and local institutions to raise awareness about the risks of farmland abandonment while promoting land-use sustainability through targeted interventions such as improved access to inputs, climate-smart agriculture, and incentives for continued cultivation. Strengthening cross-border agricultural cooperation and providing livelihood diversification options that complement rather than replace farming will help reduce the threat of food insecurity while securing the agricultural landscapes that remain central to community survival in the region.

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