UNIVERSITY OF GHANA, LEGON

COLLEGE OF HUMANITIES

REGIONAL INSTITUTE FOR POPULATION STUDIES

MIGRATION AND SUSTAINABLE PRACTICES: INVESTIGATING THE MEDIATING ROLE OF RELATIVE DEPRIVATION AND SUBJECTIVE WELL-BEING AMONG MIGRANTS AND NON-MIGRANTS IN ACCRA.

BY

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DECEMBER, 2023

DECLARATION

I, **Michael Amponsah**, hereby declare that, with the exception of duly acknowledged references to other individuals' works, this research is entirely the outcome of my own efforts and has not been previously presented in part or in its entirety for any other degree elsewhere.

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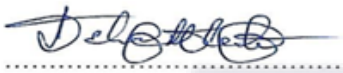

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DEDICATION

This thesis is dedicated to the memory of my beloved father, Mr. Thomas Larbi Amponsah whose unwavering love, encouragement, and guidance have profoundly influenced my academic pursuits and personal growth. Although he passed away at the inception of my Ph.D. program, his legacy of resilience, determination, and passion for learning continues to inspire me every day.

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ABSTRACT

This study investigates the interconnection between migration and sustainable practices while exploring the mediating roles of relative deprivation and subjective well-being among migrant and non-migrant populations in Accra, Ghana. The primary research objectives encompass examining socio-demographic and household characteristics, analyzing sustainable practices, exploring associations between these characteristics and sustainability, investigating the mediating effects of relative deprivation and subjective well-being on migration and sustainability relationships, and identifying predictors of sustainable practices mediated by subjective well-being and relative deprivation. The study focuses on diverse populations residing within the Greater Accra Region,

specifically targeting the Accra Metropolitan Assembly (AMA), Ashaiman, Adenta, and Ledzokuku-Krowor Municipal Assembly (LEKMA). The research encompasses non-migrants, internal migrants (Ghanaians relocating within the country), and international migrants from the ECOWAS Sub-region particularly, Nigeria and Niger. Employing a cross-sectional quantitative research approach, the study leverages data from the Migration, Transformantion and Sustainability (MISTY) project, scrutinizing these populations within the aforementioned districts. The findings unveil compelling insights into the mediating influences of relative deprivation and subjective well-being. Both internal and international migrants exhibit significantly higher levels of relative deprivation and lower subjective well-being compared to non-migrants, indicating pronounced disparities in perceived satisfaction and deprivation across these groups. Furthermore, the study identifies diverse determinants influencing sustainable practices across economic, social, and environmental dimensions for non-migrants, internal migrants, and international migrants. Factors such as locality of residence, access to infrastructure, place attachment, educational levels, and family size demonstrate varying degrees of influence on sustainability within these populations. Subjective well-being emerges as a pivotal influencer across multiple dimensions of sustainable practices for both migrant and non-migrant populations, underscoring its critical role in shaping perceptions and behaviours toward sustainability. The findings emphasize the significance of tailored sustainability initiatives that address disparities and leverage strengths within diverse communities. Recommendations include targeted efforts by policymakers and stakeholders to enhance local conditions, infrastructure, and community satisfaction, thereby fostering sustainability among Ghana's heterogeneous migrant and non-migrant populations.

Educational programs, collaborative endeavors, and interventions aimed at cultivating sustainable attitudes, particularly among international migrants, are proposed to fortify sustainability and wellbeing in Ghana's diverse population groups.

CHAPTER ONE

INTRODUCTION

1.0 Background

A global agenda on societal transformation in line with the Sustainable Development Goals (SDGs) to combat climate change, environmental pollution, and the depletion of natural resources, as well as to protect the quality of life and meet the needs of both present and future generations, is urgently required on both local and global levels (IPCC, 2018). This calls for countries to integrate sustainability into the development agenda to ensure that socio-economic growth is less environmentally damaging and guarantee fairness in access to the benefits of development. Such a revolution will need comprehensive technological, economic, behavioural, value-oriented, and socio-political adjustments in the form of a fundamental paradigm shift which results in a society adopting the principles of sustainability to be effective (D'Adamo et al., 2020; McManners, 2019; Burns, 2016).

Sustainable practices, which lie at the heart of this agenda, refer to actions and strategies that promote the responsible use of resources to meet present needs without compromising the ability of future generations to meet their own (United Nations, 2015). These practices encompass three key components: environmental, social, and economic sustainability. Environmental sustainability focuses on preserving ecosystems, minimizing pollution, and protecting natural resources (Goodland, 1995). Social sustainability emphasizes equitable access to resources, fostering community cohesion, and ensuring the well-being of all individuals (Colantonio, 2009). Economic sustainability involves creating long-term economic value, fostering financial stability, and supporting livelihoods while minimizing harm to the environment and society (Harris, 2000).

The participation of people is vital in this process, even though macroeconomic and political reforms are necessary to achieve such a revolution (Ernst et al., 2016; Wadin, 2017; Lahtinen, 2019; Ringrose, 2017; Sanders, 2015; Gallagher, 2018). In the end, the reorientation of political, social, economic, and consumer processes and technologies toward higher sustainability will be based on how individuals behave and make impacts (Gifford, 2011; Shittu, 2020; Valor, 2020).

The link between migration and Sustainable development goals (SDGs) emphasizes migration as a mechanism contributing to the attainment of various SDG goals rather than a developmental challenge to be resolved. This is because the process of migration represents an opportunity to transform the lives of those involved and for the places and economies of origin and destination (Adger et al, 2019).

Migration has been shown to have positive economic effects on both the micro and macroeconomies (Gavonel et al., 2021; De Haas, 2010). Through migration, the migrants themselves, their families, as well as their host and places of origin are transformed. At places of origin, migration can lead to increased wages for non-migrants, particularly in the short-term, which can affect national poverty levels (Elsner, 2015). It can also lead to higher economic growth through increased incomes and spending, investment by migrant households, and knowledge transfers. With remittances and other mechanisms, such as knowledge and norm transfers, in-kind transfers, and shifting household dynamics, migrants and their families are able to spend more on necessities, access to services, and investments (Bertoli and Marchetta, 2014). The remittances can be seen as an informal insurance mechanism, helping households cope with economic shocks (Stark and Lucas, 1988; Yang, 2008) and preventing them from falling deeper into poverty.

At places of destination, migration can have positive economic effects such as increased productivity, new demand for and supply of goods and services, and more labour-intensive production. With respect to access to education and health which forms part of well-being and an important determinant of long-term poverty, migration could lead to improved health and access to education. Additionally, migration can also result in 'social remittances or norm transfers (Levitt, 1998) that can have positive effects on both the individual and family well-being.

In spite of these benefits associated with migration, the process doesn't always offer the rewards anticipated by migrants. Migrants themselves can be highly vulnerable and may need specific support. The conditions in host destinations can be entrenched in poverty, including poor living conditions and limited access to social services, low wages, and poor working conditions.

Sometimes, wages paid by employers are lower than promised, or not paid at all (Donini et al., 2013; Hagen-Zanker et al., 2014; Maher, 2009). The wages can be irregular, particularly for those in the informal economy, making it difficult for migrants to sustain themselves in the host community and send remittances back home. Furthermore, migrants may not be able to make full use of their education and skills as skills recognition tends to be lacking, especially with low- and medium-skilled migrants (ILO, 2017). This can lead to deskilling or 'brain waste' and migrant workers earning less than anticipated. Additionally, migrants in the working age group are much less likely to have 'decent-work benefits' such as a contract, occupational health and safety, and fundamental labour rights (Aleksynska et al., 2017). Migrants often experience precarious working conditions, which can lead to adverse health outcomes. They are more likely to hold jobs that are 'dirty, dangerous and difficult' (ILO, 2017). Migrant workers are at greater risk of being victims of forced labour (ILO, 2017) and are more likely to experience work-related accidents and diseases

(Berlin et al., 2011; ILO, 2017). This is especially relevant for those who are undocumented and/or working in the informal economy, who are also less likely to be protected through social insurance schemes. As such, many may lose extended periods to illness and can end up with disabilities that could limit future earning potential or, in extreme cases, lose their lives (Jimenez, 2021).

Most of the conditions migrants are exposed to in host destinations are different compared to non-migrants, in terms of gaps that cannot be explained fully by differences in education, work experience, and language skills (ILO, 2015), thereby affecting their subjective well-being and relative deprivation.

These conditions usually offset the benefits associated with migration such as improvement in the standard of living and well-being of migrants. The expectations of migrants and the cost of living in cities cause dissatisfaction with the rate of material gains (Chen et al., 2019; Knight & Gunatilaka, 2009; Yu et al., 2019). Again, higher incomes do not necessarily translate into improved material outcomes for migrants who are concentrated in marginalised informal settlements where they lack access to decent housing and basic services such as water and sanitation (Owusu et al., 2008; Siddiqui et al., 2021). Compared to non-migrants, migrants frequently report lower levels of subjective well-being, in part because they assess their material circumstances relative to the status of native urban residents who become their new social reference group rather than in absolute terms (Chen et al., 2020; Mulcahy & Kollamparambil, 2016; Yu et al., 2019). In addition to material conditions, weak social capital in destination and systemic forms of exclusion from labour markets and social protection have also been shown to result in unmet or frustrated aspirations and lowered subjective well-being for migrants (Li & Rose, 2017; Wang et al., 2010; Wen & Wang, 2009; Zhang, Li, Fang, & Xiong, 2009).

Migrant populations in these destinations are therefore faced with a situation commonly referred to as the "miserable migrant" effect (Knight & Gunatilaka, 2010; Stillman et al., 2015) caused by their insecure material circumstances, bad social experiences, social costs of migrating, and increased aspirations at destination. This situation may persist even after residing for long at place of destination (Chen et al., 2019; Knight & Gunatilaka, 2012). These challenges associated with the place of destinations coupled with the conditions of migrants have implications for sustainable development (Tacoli, 2015). The future and well-being of migrants are endangered by population increase, deregulated industrialization, and social inequalities at place of destinations predominantly urban areas. Other key challenges include, climate change, high levels of consumption and residue production, intensified pollution, greater energy and natural resource consumption, increased emissions of gases into the atmosphere and the resulting greenhouse effect, loss of green spaces, and wear and tear on infrastructure (Tacoli, 2015; Jeronen, 2013), making it difficult to achieve overall sustainability.

Overall, sustainability improvement could be achieved through the holistic integration of economic development, social cohesion, and maintenance of the integrity of environmental systems (Gavonel, et al, 2021). Although the process of migration has implications for global sustainability, the 2030 global agenda portrays migration as a transient, unplanned occurrence that must be controlled rather than as a permanent component of sustainable development and social transformation. Meanwhile, migration occurs simultaneously with and in conjunction with other socioeconomic changes, many of which are the explicit focus of the SDGs. For instance, migration has been shown to be more effective in reducing poverty than other development programmes (Gibson and McKenzie, 2014), and could contribute to achieving the Sustainable Development

Goal (SDG) 1 which calls for 'ending poverty in all its forms everywhere'. The achievement of SDG 1 and the targets cannot be met successfully unless their links to migration are considered. Targets 1.1 and 1.2 call for an end to poverty around the world, and migration can be an effective instrument in reducing poverty, especially in the case of income, where the potential gains are very large for migrants and their families, leading to wider positive spillover effects. Target 1.4 calls for greater access to economic resources, financial services, and basic services. With this, labour migration could help families in the place of origin to invest in assets and access financial services. Similar to Target 1.5 which calls for greater resilience and insurance for individuals and families, migration can be a form of self-insurance; protecting migrant families experiencing shocks and stressors while Target 1a which calls for better and smarter mobilization of resources for development could be achieved through the remittances and other forms of diaspora financing and investment that can be mobilized to improve infrastructure, services, and development more generally at a community level. Apart from SDG 1, migration could also affect multidimensional poverty (SDGs 1, 3, and 4), economic growth and employment (SDG 8), and innovation (SDG 9), which can have indirect effects on poverty.

Finally, migration can lead to increases or decreases in inequality, relevant to SDG 10 as well as playing a role in achieving SDG 11 which aims at sustainable cities and communities. With SDG 11, which seeks to promote resilient, safe, and sustainable cities, the indicators must take into account the fact that migration to urban areas is what really drives urbanization. Specifically, one of the targets of the SDG 11 is to minimise the "proportion of urban population living in slums, informal settlements or inadequate housing". This SDG 11 could not be achieved if migrants are not considered in the process because slum development is driven by the continued movement of

new migrants to cities, especially in many developing countries, where more than half of residents are lifetime migrants.

Migrants are recognized as agents of social transformation and are a key component of a larger process of social development (Castles & Miller, 2014). They have the potential to both positively and negatively influence social transformation. The concerns of migrants must be more explicitly considered when making plans for sustainable development, with an emphasis on how and to what extent the SDGs take into account their transformational reality. Thus, what conditions could be transformed to engage migrants in sustainable practices given the challenges at the place of destination, their subjective well-being, as well and their relative deprivation? This study therefore explores the relationship between migration and sustainable practices taking into consideration the mediating role of relative deprivation and subjective well-being among migrants and non-migrants in Accra, Ghana.

1.2 Problem Statement

Global migration poses numerous challenges impacting migrants across various aspects of their lives. Legal barriers and complex immigration policies often create obstacles, limiting migrants' access to essential rights and services, and making them more vulnerable (McConnell & Kelly, 2016; Gammeltoft-Hansen & Hathaway, 2015). Moreover, economic exploitation, such as low wages, inadequate working conditions, and job insecurity, exacerbates migrants' socio-economic struggles (Cerna, 2018; De Genova, 2013), resulting in socio-economic gaps (Norredam et al., 2014).

Migrants in less developed nations are particularly worsened by challenges that could negate the advantages of migration. (Awumbila, 2014; de Brauw, 2014; Brueckner, 2015; Kleemann 2017).

Urban towns which serve as a major destination for migrants are limited in terms of employment, access to land, and basic amenities to cater for the increasing migrant population (Gong, 2012; Turok, 2013).

In Ghana, over half the population resides in urban areas, with a significant proportion of this urbanization driven by rural-to-urban migration (Cobbinah, 2015). Migrants in cities like Accra encounter various vulnerabilities, including inadequate housing, poor access to essential services, and environmental risks, which further exacerbate socio-economic disparities and undermine their well-being (Das et al., 2021). Despite some economic benefits, many migrants experience relative deprivation and dissatisfaction due to unmet expectations, high living costs, and material insecurity (Chen et al., 2019; Knight & Gunatilaka, 2010). These conditions highlight a tension between migration-driven urban growth and the sustainability of cities.

Sustainable practices defined as social, economic, and environmental actions that meet present needs without compromising the ability of future generations to meet their own are critical to addressing the challenges posed by migration. However, urban policies and planning often fail to adequately incorporate the transformative impacts of migration into sustainability frameworks. For example, while Sustainable Development Goal (SDG) 11 emphasizes creating inclusive, resilient, and sustainable cities, its metrics largely overlook the role of migration in urbanization and its implications for social equity and environmental resilience. The influx of migrants into urban areas contributes to the proliferation of slums and informal settlements, exposing migrants to precarious living conditions that challenge urban governance and sustainability (Szaboova et al., 2021).

Although migrants may encounter some benefits in their new communities, such as higher incomes, most migrants are dissatisfied with their expectations, the high cost of living in cities, and the rate at which they advance materially (Chen et al., 2019; Knight & Gunatilaka, 2008, 2010; Yu et al., 2019). This leads to a decline in their subjective well-being (Chen et al., 2019; Mulcahy & Kollamparambil, 2016; Yu et al., 2019). Also, migrants who are concentrated in marginalized informal communities without access to adequate housing or essential utilities like water and sanitation, and who have higher incomes at these destinations will not always translate into better material outcomes (Owusu et al., 2008; Siddiqui et al., 2021). Along with material conditions, migrants' goals are often unmet or unfulfilled, which further lowers their subjective well-being (Li & Rose, 2017; Wang et al., 2010; Wen & Wang, 2009; Zhang, Li, Fang, & Xiong, 2009). Despite the fact that most migrants may be better off in their new communities than they were in their origins (Chen et al., 2019), as they transition from low-income to high-income areas with high costs of living and standards of living, they feel worse off than urban non-migrants who serve as their reference point (Banks et al., 2011; Ravallion et al., 2007).

Although migration has been widely recognized as a driver of social transformation, there is limited understanding of how migrants' experiences, particularly their subjective well-being and relative deprivation, interact with sustainable practices in urban areas. Existing literature has focused primarily on material aspects of urbanization, such as habitat fragmentation and urban sprawl, while neglecting the broader sustainability challenges that arise from the intersection of migration, social dynamics, and environmental pressures (Acheampong et al., 2017; Szaboova et al., 2021). Furthermore, there is little theoretical engagement on how sustainable and unsustainable practices manifest within urban settings and how these practices affect migrants' lived experiences and the sustainability of cities.

This study addresses these gaps by exploring the interplay between migration, sustainable and sustainable practices, with a specific focus on Accra, Ghana. By integrating the three dimensions of sustainability social, economic, and environmental this study investigates how migrants' subjective well-being and relative deprivation shape sustainable practices in their destination cities. The study also aims to provide a holistic understanding of sustainable practices and their role in fostering inclusive and resilient urban environments, offering critical insights for achieving the broader sustainability agenda outlined in the SDGs.

1.3 Research Questions

1. What are the socio-demographic, personal and household characteristics of migrants and non-migrants in Accra?
2. What are the sustainable practices executed by migrants and non-migrants in Accra?
3. What is the association between the socio-demographic, personal/household characteristics, and sustainable practices among migrants and non-migrants in Accra?
4. How does relative deprivation and subjective well-being mediate the relationship between migration and sustainability?
5. What factors predict sustainable practices among migrants and non-migrants mediated by their subjective well-being and relative deprivation?

1.4 Rationale of the Study

Migration is transformative both for those who move and for the places and economies of origin and destination. It forms an intrinsic part of social transformation that occurs in parallel and in combination with other societal trends, including many that are the explicit focus of the SDGs. With the 17 SDGs, ranging from ending poverty and hunger, to promoting quality education and gender equality, to economically sustaining cities and communities, migration must be

comprehensively integrated into the development agenda of countries with a focus on the extent and way in which the SDGs incorporate the transformative reality of migration. This is because migration processes can have positive and negative effects on social transformation.

Migrant populations have been shown throughout the world to be on average healthier and more economically active than host populations (WHO, 2022). Additionally, through knowledge, skills transfer, and remittances migration can be a significant poverty-reduction tool for migrants and their families. Further, migration can make significant contributions to development efforts in both countries of origin and destination.

Nevertheless, migrants are often vulnerable, especially within cities (OHCHR, 2022). Migrants often face vulnerabilities, such as limited knowledge of local contexts, inadequate housing, precarious employment, and intersecting forms of discrimination. These vulnerabilities highlight the need to examine not just the material aspects of migration but also its subjective and relational dimensions, including well-being, identity, and inclusion. These dimensions interact with the social and environmental conditions of urban areas, creating opportunities and challenges for both migrants and the sustainability of cities.

This study focuses on addressing the gaps in understanding how migration impacts sustainability through the lens of subjective well-being, relative deprivation, and sustainable practices. While migration has often been recognized as a tool for social transformation (Castles & Miller, 2014), the mechanisms through which it drives or hinders sustainability remain poorly articulated in existing literature. By examining these interactions in Accra, Ghana a city experiencing rapid urbanization fueled by migration this study provides critical insights into how migration contributes to or detracts from the sustainability agenda.

The findings of this study will contribute to theoretical and empirical debates on migration, sustainability, and urbanization by proposing a holistic framework that integrates the material, subjective, and relational dimensions of well-being with the socio-economic and environmental determinants of sustainability. This framework will provide actionable insights for urban planning, city governance, and policy development, ensuring that the challenges and contributions of migrants are adequately integrated into sustainability initiatives.

In essence, this study advances the argument that migration, social transformation, and sustainability are interconnected phenomena that must be addressed in a unified manner. By bridging these concepts, the study aims to generate credible knowledge that strengthens theoretical debates, informs policy development, and promotes inclusive and sustainable urbanization. It underscores the importance of elevating migrant perspectives in policy and planning processes to achieve the broader sustainability agenda articulated in the SDGs.

1.5 Organization of the Study

This work is structured into nine main chapters. Chapter one comprises the introduction which focuses on the background of the study, statement of the problem, significance/rationale of the study, research questions and objectives, and organization of the study. Chapter two considers the review of the literature on which the study is based, as well as theoretical and conceptual frameworks. Chapter three focuses on the methodology and consists of the research design, population under study, sampling techniques, sources of data, and methods of data analysis. Chapters four, five, and six and seven present, the results of the analysis. These chapters comprehensively detail and interpret the results of the analysis conducted. Chapter eight is devoted to the extensive discussion and interpretation of the findings, providing a comprehensive

analysis and critical examination of the results in relation to the study's objectives and existing literature while Chapter nine presents the summary, conclusions, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The relationship between migration and sustainability involves examining various dimensions across economic, social, and environmental contexts (Menkhoff & Pang, 2011). Migration, often intertwined with sustainable development goals, plays a pivotal role in shaping societies and economies globally (IOM, 2018). The complex interplay between human mobility and sustainability is multifaceted, impacting economic growth, social integration, environmental changes, and policy frameworks (UN DESA, 2020).

Economically, migration influences labor markets, contributing to workforce diversity and facilitating economic growth through remittances and entrepreneurship (Ratha et al., 2018). Socially, it influences cultural diversity, social cohesion, and community resilience, but it also poses challenges related to social integration and inclusivity (Brettell & Hollifield, 2015). Environmentally, migration patterns often intersect with climate change, resource depletion, and urbanization, affecting ecosystems and land-use dynamics (McLeman & Hunter, 2010).

Policies governing migration profoundly impact sustainable development outcomes. Effective governance frameworks are crucial to addressing the social, economic, and environmental dimensions of migration (IOM, 2021). However, policy coherence remains a challenge, necessitating comprehensive strategies aligning migration policies with sustainable development goals (IOM, 2018). The relationship between migration and sustainability is intricate and multifaceted, impacting various aspects of society and requiring integrated policies and strategies to harness its potential for sustainable development (Kuptsch & Pang, 2011; UN DESA, 2020;

IOM, 2021). In light of this, the study takes into consideration different sociodemographic, personal and household characteristics and how they contribute to sustainable practices considering current deprivation and SWB of migrants compared to non-migrants.

This chapter presents a review of relevant literature, theories, and empirical evidence showing the relationship between migration, and other personal and household characteristics, and sustainable practices.

2.2 Migration Trends

Migration is a complex phenomenon that has become increasingly prevalent in a globalized world. As societies become more interconnected and barriers to travel are reduced, people are moving across borders and within their own countries at unprecedented rates (Levitt & Jaworsky, 2007). This has led to significant changes in population demographics and has given rise to a range of economic, social, and political implications that need to be understood and addressed (Massey et al., 1993). However, despite its importance, the subject of migration is often misunderstood and misrepresented, with debates being dominated by political rhetoric rather than empirical evidence (Castles & Miller, 2003). Therefore, it is crucial to critically examine global migration trends, both internal and international, to gain a deeper understanding of this complex phenomenon and its implications for countries and individuals alike (Koser, 2010).

2.2.1 International Migration

International migration has been a significant aspect of globalization, shaping and influencing the social, economic, and political dynamics of both sending and receiving countries (Castles & Miller, 2009). It refers to the movement of people from one country to another to reside and work there. It involves crossing national borders and often requires obtaining legal permission from the host country. The United Nations Department of Economic and Social Affairs (UN DESA)

compiles the global estimates of international migrants. The ensuing discourse relies on these estimates, which stem from data furnished by member States. The United Nations defines an

"international migrant" as an individual who has altered their habitual country of residence (UN DESA, 1998). This classification further segregates migrants into "short-term migrants," those who have relocated for a duration exceeding three months but under one year, and "long-term migrants," those whose migration surpasses a year. It is important to recognize that this definition is not consistently applied by all countries (UN DESA, 1998). Some nations adopt distinct criteria for identifying international migrants, possibly by imposing varying thresholds for minimum durations of residency. These disparities in conceptualization, definitions, and methodologies for data compilation among countries impede the complete comparability of national statistics concerning international migrants.

Spanning the last five decades, there has been a rise in the estimated count of international migrants. By 2019, the collective estimate of individuals dwelling in a country apart from their birthplace stood at 272 million, signifying a surge of 119 million compared to 1990 figures (153 million). Remarkably, this statistic was over threefold the count recorded in 1970 (84 million) (IOM, 2020). Despite the augmented proportion of global international migrants during this period, it remains apparent that the substantial majority of individuals continue to reside within their countries of origin.

In the year 2019, the majority of international migrants (approximately 74%) fell within the working-age bracket of 20 to 64 years. Notably, there was a minor reduction in the proportion of migrants below 20 years old from 16.4% to 14%. Between 2000 to 2019. Additionally, the segment of international migrants aged 65 and above remained consistent at around 12% since the year 2000 (UN DESA, 2019),

When contextualized against the population of each region, the proportions of international migrants were most prominent in Oceania, North America, and Europe, where international migrants accounted for 21 percent, 16 percent, and 11 percent of the overall population, respectively (UN DESA, 2019). Conversely, the share of international migrants in Asia and Africa was relatively modest, at 1.8 percent and 2 percent, respectively, along with Latin America and the Caribbean at 1.8 percent (UN DESA, 2019).

In terms of growth, Asia displayed remarkable growth between 2000 and 2019, experiencing a staggering 69 percent increase, equivalent to approximately 34 million individuals (UN DESA, 2019). Europe followed with the second-largest growth during this period, accommodating an additional 25 million international migrants, trailed by North America with an increase of 18 million migrants, and Africa with 11 million (Ibid, 2020).

The progression of international migration in select regions has exerted discernible effects on population dynamics. Despite Europe's historical status as a primary recipient of international migrants, it exhibited the most gradual rate of proportional population change during this span, slightly surpassing 1 percent. Nevertheless, it is arguable that this rate would have been notably lower if not for the presence of international migrants, who have counteracted population decline in certain European countries that contend with diminishing birth rates as an example (UN DESA, 2019). In contrast, Africa experienced the most substantial transformation, marked by a nearly 30 percent surge in population over the same period. This shift stems from elevated fertility rates and extended lifespans (UN DESA, 2019). Yet, this growth has been tempered by emigration from Africa to other regions.

2.2.2 Internal Migration

Internal migration refers to the movement of individuals within a country from one location to another. This type of migration is influenced by a variety of socioeconomic factors such as economic opportunities, job availability, and political stability (Laquian, 1996; Zimmerman, 2011). Internal migration can occur at various scales, ranging from rural-urban migration, where individuals move from rural areas to cities in search of employment, to intra-urban migration, where individuals move from one urban area to another within the same country (Murray, 2016). It is important to note that while internal migration may alleviate overcrowding in rural areas and stimulate economic growth in urban areas, it can also lead to social and economic inequalities, challenges in providing adequate services, and strained infrastructure in receiving regions (Zimmerman, 2011).

Over the past few decades, internal migration has been a prominent trend in many countries around the world. For example, in China, rural-to-urban migration has led to significant population shifts from rural areas to booming cities like Shanghai and Beijing (Chan, 2010). Similarly, in India, internal migration has been fueled by factors such as employment prospects and the search for better living conditions. The migration of rural dwellers to urban areas in India has resulted in the growth of slum settlements and increased pressure on urban resources (Deshingkar, 2006). Similar patterns of internal migration can also be observed in other developing countries where individuals seek better economic prospects and improved living conditions in urban areas (Anarfi, 2006). Additionally, internal migration can also occur within urban areas, with people moving from one neighbourhood or district to another in search of affordable housing, better schools, or access to amenities and services (Musterd, 2005).

2.3 Migration Dynamics within Africa

Migration patterns within Africa encompass substantial volumes of migrants relocating both within the continent and from it. The year 2019 witnessed over 21 million Africans residing in different African nations, signifying a notable rise from 2015 when the estimate stood at approximately 18.5 million intra-regional migrants. During the same time, the count of Africans dwelling in various global regions also expanded, escalating from roughly 17 million in 2015 to nearly 19 million in 2019. There has been a remarkable escalation in international migration within the African continent since 2000. Furthermore, since 1990, the number of African migrants living outside the continent has more than doubled, with the most conspicuous growth observed in the European context. By 2019, the largest concentration of African-born migrants residing outside the continent was found in Europe (10.6 million), followed by Asia (4.6 million) and Northern America (3.2 million).

A notable observation highlighted pertains to the relatively modest count of migrants born outside Africa who subsequently settled within the region. From 2015 to 2019, this figure remained remarkably constant, hovering around 2 million individuals. The majority of these migrants originated from Asia and Europe.

Numerous African nations have undergone significant shifts in their population sizes in recent times (IOM, 2020). This figure ranks the top 20 African countries based on the most significant proportional population changes spanning from 2009 to 2019. Remarkably, all these top-ranking nations are situated in sub-Saharan Africa and have each witnessed substantial population expansions during this duration. This selection of 20 countries mirrors the overarching trend across the continent, with Africa currently standing as the swiftest-growing global region. Predictions estimate that by 2050, Africa's population will surpass 2 billion individuals (UN DESA, 2019).

It's crucial to emphasize that the most substantial proportional population shifts from 2009 to 2019 were concentrated in countries with comparatively smaller populations, as one would expect. Notably, Africa's most populous nations, such as Nigeria, Ethiopia, and Egypt, may not have displayed the same pronounced proportional shifts due to their already substantial population bases and are not among the top. However, it is important that all three of these countries also underwent population increases (UN DESA, 2019). This population growth trajectory in Africa stands in blunt contrast to the demographic dynamics observed in Europe during the same period where certain European nations, had relatively slower population growth, and in some cases, even experienced decline.

The surge in intracontinental migration within Africa has emerged as a contributing factor to recent population growth at the national level. While migration is not the sole influencer, factors such as elevated fertility rates and increased life expectancy also exert their effects (UN DESA, 2019). For example, in Equatorial Guinea, the proportion of international migrants in the national population has sharply risen in recent years. In 2005, international migrants constituted less than 1 percent of the nation's populace, whereas by 2019, this proportion had surged to nearly 17 percent. South Africa offers another illustrative instance. In 2005, international migrants accounted for 2.8 percent of South Africa's population, and by 2019, this share had grown to 7 percent.

In terms of outflows, a prevalent trend exists in the northern African region where countries with the largest outflows of emigrants are concentrated. In 2019, Egypt emerged as the country with the highest count of its citizens residing abroad, followed by Morocco, South Sudan, Somalia, Sudan, and Algeria.

Regarding immigrant numbers, South Africa stands as a key destination within Africa, housing approximately 4 million international migrants. Other countries that are not in the top 20 list, also

exhibit significant proportions of immigrant populations relative to their overall inhabitants. These include Gabon (19%), Equatorial Guinea (18%), Seychelles (13%), and Libya (12%) (UN DESA, 2019).

2.4 Migration Dynamics in Ghana

2.4.1 International Migration to Ghana

Throughout Ghana's history, international migration has been instrumental in shaping its demographic, cultural, and socio-economic landscape. The impact of the transatlantic slave trade, spanning the 15th to the 19th century, forcibly displaced millions of Africans to the Americas, leaving an enduring imprint on the continent and setting the stage for subsequent waves of international migration (Kwame Nkrumah, 1963). Ghana's independence in 1957 marked a significant shift, catalyzing increased migration from neighboring West African countries, mainly driven by economic opportunities (Teye, 2009). These historical events provide a crucial lens to understand the complexities and dynamics of international migration in Ghana.

Ghana's colonial history significantly influences the present-day migration patterns. Under British rule until independence, colonial policies such as the establishment of cocoa plantations, modern infrastructure, and shaping the education system have left an indelible mark on Ghana's socioeconomic landscape (Adu-Baffour, 2018). This historical context forms the backdrop for Ghana's appeal as a destination for international migrants, revealing the underlying factors influencing migration trends.

Recent years have witnessed a remarkable surge in international migration to Ghana, notably from neighboring West African nations. In 2019, Ghana recorded a stock of 466,780 international migrants, primarily originating from ECOWAS countries, notably with significant numbers hailing from Togo (101,677), Nigeria (79,023), and Côte d'Ivoire (72,728). This notable influx was largely

influenced by the ECOWAS Protocol on Free Movement of Persons, outlining the open movement agreement among member nations (UN DESA), 2019). This influx holds substantial economic and social implications for Ghana (Ellis, 2015). Driven by various factors, including economic opportunities, political stability, and social influences, this trend portrays intriguing dynamics in the evolving migration landscape within the country.

International migration to Ghana has been significantly influenced by a stable political environment and the country's thriving economic sectors such as mining, agriculture, and services, making it an appealing destination for migrants (Essien & Yeboah, 2017). Economic instability in neighboring nations has acted as a push factor, compelling individuals to seek better opportunities in Ghana, attracted by its abundant mineral resources and growing service industry (Adu-Gyamfi & Riller, 2017). Again, Ghana's stable political climate and harmonious coexistence among diverse ethnic and religious groups have acted as pull factors, contributing to the increase in migration to the country (Adu-Gyamfi & Riller, 2017). The combination of these push and pull factors has resulted in a substantial rise in international migration to Ghana in recent years.

2.4.2 Internal Migration in Ghana

Ghana's landscape is composed of sixteen distinct regions, with the Ashanti and Greater Accra regions standing out as the most densely populated. Among these, the city of Accra, situated within the Greater Accra region, serves as the primary hub, accommodating approximately 3.2 million residents as of 2019 (World Bank, 2021). Notably, this region exhibits a remarkably high level of urbanization, with about 90% of its inhabitants residing in urban areas (GSS, 2019).

The phenomenon of internal migration in Ghana has deep historical roots, with the Greater Accra region notably serving as the primary recipient region; nearly 50% of its residents hail from different regions. Conversely, the Upper East, Upper West, and Northern regions exhibit the lowest

proportions of incoming migrants. This disparity aligns with variations in agroecological conditions, population density, rural infrastructure, and levels of urbanization (Diao, Magalhaes, et al., 2019), rendering the northern areas potentially less attractive to migrants.

During the colonial period, migration was primarily driven by the demand for labor to support the mining and agricultural industries (Agyei-Mensah, 2010). This era, spanning from the late 19th century to the mid-20th century, marked a period of significant transformation characterized by the arrival of European powers and the establishment of colonial rule. This period significantly influenced Ghana's internal migration patterns, with many Ghanaians compelled to move from their original homes to serve as laborers in European-owned plantations or urban centers (Hay, 2002). This migration was motivated by economic necessities and political factors, such as displacement resulting from colonial policies and the disruption of traditional livelihoods (Hansen, 2011). Consequently, the colonial era reshaped Ghana's population distribution, and settlement patterns, and gave rise to rural-urban migration (Hay, 2002; Hansen, 2011), leaving lasting legacies that impact contemporary migration patterns and the socio-economic dynamics of the country.

The post-independence era in Ghana signaled a notable shift in internal migration patterns. This period, marked by significant political and economic changes, witnessed population shifts from rural to urban areas (Duedu & Annor-Frempong, 2019). Furthermore, the implementation of structural adjustment policies in the 1980s contributed to internal migration, as individuals sought enhanced economic prospects in urban centers (Abebrese, 2007). The drive for industrialization and rural development led to a surge in rural-urban migration, particularly towards urban centers like Accra and Kumasi, driven by the pursuit of better job opportunities and improved living conditions (Atibila, 2020).

Recent years have witnessed significant internal migration within Ghana. The movement of people from rural to urban areas has been propelled by various factors, including economic opportunities, access to improved education and healthcare services, and the aspiration for enhanced living standards (Gyasi et al., 2020). As a result, it leaves a profound footprint on both the social and economic landscapes of the regions involved, affecting sending and receiving areas in Ghana (Adepoju & Chamberlain, 2011). This migration trend has spurred rapid urbanization, notably observed in cities like Accra and Kumasi, which have experienced substantial population growth (Boamah, 2019).

The impact of internal migration in Ghana is extensive and covers various aspects of the nation. A significant consequence is the strain on local infrastructure and vital services, including housing, healthcare, and education (Appiah-Kubi et al., 2014; Twumasi-Ankrah et al., 2017; Gyasi et al., 2020). This strain is particularly evident in urban areas, where migrants often settle, seeking better prospects (Gyasi et al., 2018). Moreover, internal migration prompts shifts in social structures and cultural dynamics as diverse ethnic groups interact and integrate into new regions, leading to the emergence of novel cultural practices and evolving social norms within migrant communities (Gyasi et al., 2018). Managing these impacts requires astute strategies to foster sustainable development and social harmony (Gyasi et al., 2018).

Economically, internal migration in Ghana drives increased economic activity in urban areas as migrants actively seek employment and contribute to the local economy (Acheampong, 2014). However, this surge in migration intensifies economic competition, leading to pressure on social services and urban infrastructure (Yeboah et al., 2015).

Socially, internal migration strains urban infrastructure and public services, resulting in overcrowding, inadequate transportation systems, and limited access to essential services for

migrants and residents alike (Anarfi, 2011; Arthur, 2016). Migrants often settle in slums and informal settlements, exacerbating social inequality and depriving individuals of basic amenities (Owusu, 2008). Therefore, internal migration significantly shapes the social dynamics in Ghana's urban areas.

The environmental repercussions of internal migration in Ghana are also substantial. The migration influx into urban areas amplifies the demand for housing, water, and energy, exerting stress on natural resources. Furthermore, agricultural activities initiated by migrants contribute to deforestation and land degradation, leading to biodiversity loss and ecological imbalance (Twumasi-Ankrah et al., 2017, Ewusu et al., 2019).

The strain on natural resources in urban areas stands as a significant fallout of internal migration in Ghana. The rapid urban influx heightens the demand for scarce resources like water, land, and energy (Agyei-Mensah, 2014). Consequently, urban areas encounter challenges in sustaining a sufficient supply of these resources to meet the burgeoning population's needs (Agyei-Mensah, 2014). Without effective resource management strategies, this pressure on natural resources risks environmental degradation and a diminished quality of life for urban residents (Agyei-Mensah, 2014). This situation affects living conditions, urban development, public health, and social cohesion, demanding holistic approaches for sustainable urban growth (Das et al., 2018; Yaro & GSS, 2020).

On the other hand, opportunities for internal migration include better employment, education, and living standards in urban areas (Amoako, 2017). Cities like Accra and Kumasi offer diverse job opportunities and superior educational institutions, attracting rural migrants (Amoako, 2017). Moreover, remittances sent by internal migrants significantly contribute to rural development, supporting, agriculture and small-scale enterprises, and promoting economic growth (Shittu &

Teye, 2017; Amuah et al., 2016; Teye & Amanor-Boadu, 2016; Adams, 2009). Additionally, knowledge and skills transfer from urban to rural areas benefit rural communities by introducing innovative practices and enhancing educational and occupational opportunities.

2.5 Empirical Review on the Relationships between Migration, Relative Deprivation and Subjective Well-Being, and Sustainable Practices

2.5.1 Migration and Sustainable Practices

The influence of migration status on sustainable practices spans economic, social, and environmental dimensions, a complex interplay elucidated by scholarly studies in recent years.

Economically, the migration status of individuals, especially those in vulnerable positions like irregular migrants or refugees, significantly impacts their engagement in sustainable economic practices. Research highlights the economic challenges faced by these groups, such as limited access to formal employment opportunities and financial instability (Dustmann et al., 2013; Bloemraad et al., 2017). These constraints often impede their ability to engage in economic sustainability practices like long-term financial planning, investments, or responsible consumption, thus affecting their overall economic stability.

Regarding social sustainability, migration status can act as a barrier for migrants' social integration and participation within host societies. Uncertain legal statuses and social exclusion hinder access to social services and community engagement (Dito, 2019; Schwiertz et al., 2020). Consequently, this may limit their contribution to social sustainability efforts, such as community involvement, volunteering, or fostering social cohesion within their new communities.

In the realm of environmental sustainability, the impact of migration status is nuanced. While socio-economic vulnerabilities and transient living conditions may limit migrants' ability to engage in environmentally friendly practices (Choguill, 2008; IOM, 2018), studies also indicate that

migrants might carry sustainable practices from their home countries or adopt eco-friendly behaviours in new environments (Brebbia & Rivas, 2012; Akama & Kieti, 2003). However, these efforts might be constrained by access to resources and the specific circumstances of their migration status.

The multifaceted relationship between migration status and sustainable practices underscores the need for tailored interventions addressing the unique challenges faced by individuals across different migration statuses. Enhancing access to resources, providing social support, and fostering inclusive policies are crucial steps toward promoting sustainable practices among migrants, thereby facilitating their integration and contribution to economic, social, and environmental sustainability within host societies.

2.5.2 Migration and Relative Deprivation

Relative deprivation refers to the perception of being disadvantaged or having fewer resources compared to others in the same social or reference group (Stouffer, 1949; Runciman, 1966). Several studies have highlighted the relative deprivation experienced by migrants in various contexts. For instance, migrants frequently encounter economic disparities and challenges in access to resources in comparison to the native population. This economic disadvantage is often a driving force for migration, as individuals seek better economic prospects and opportunities in destination countries (Massey et al., 1994; Portes & Rumbaut, 2006). Studies have consistently demonstrated that migrants often face economic disparities upon arrival in their host countries. They may encounter challenges in attaining economic stability, resulting in lower household wealth compared to the native population (Portes & Rumbaut, 2006; Dustmann et al., 2013). This economic disadvantage often stems from difficulties in accessing employment opportunities

commensurate with their skills, educational background, or legal status, leading to lower income levels and limited accumulation of household wealth (Massey et al., 1994; Heath & Cheung, 2007).

Relative deprivation among migrants might extend beyond income differentials. It may encompass disparities in asset ownership, such as housing, savings, and access to credit facilities. Studies suggest that migrants often face challenges in acquiring property or accumulating savings, resulting in a relative lack of household wealth compared to the native population (Berry, 2005; Esses et al., 2010). Additionally, in terms of social comparisons within the host society. Perceptions of exclusion or marginalization due to cultural differences, discrimination, or limited access to social resources can contribute to a sense of relative disadvantage concerning household wealth and overall socio-economic status (Berry & Sam, 1997; Jetten, Haslam, & Haslam, 2012).

Furthermore, studies have indicated that migrants often experience occupational downgrading or a decline in their social status upon migration. This downward mobility in the occupational hierarchy can contribute to a sense of relative deprivation, as migrants may perceive themselves as occupying lower socio-economic positions than their previous status in their home countries (Dustmann et al., 2013; Heath & Cheung, 2007).

2.5.3 Migration and Subjective Well-Being

The multifaceted nature of this relationship between migration and subjective well-being has been established by extant literature. While some studies on subjective well-being focus on the life satisfaction and happiness of migrants in international destinations (Hendriks et al., 2018; Khawaja et al., 2016; Stillman et al., 2015; Tegegne & Glanville, 2019; Wright, 2011), others focus on the subjective well-being of international migrants' left behind families (Ivlevs et al., 2019; Sulemana et al., 2019) and of migrant returnees (Vathi & King, 2017).

Emerging research that explores the subjective well-being of migrant populations in their urban destinations (Akay et al., 2012; Chen, 2013; Chen et al., 2019; Cheng et al., 2013; de Jong et al., 2002; Knight & Gunatilaka, 2010, 2012) shows divergence between trajectories of material and subjective elements of well-being, which may prevail even following long-term residence in the destination (Chen et al., 2019; Knight & Gunatilaka, 2012). This phenomenon is often termed the "miserable migrant" effect (Knight & Gunatilaka, 2010; Stillman et al., 2015). The prevalence of the miserable migrant effect among rural to urban migrants is explained by migrants' precarious material conditions, negative social experiences, and the social costs of migration, as well as rising aspirations at their destination. With this, migrants often report lowered levels of subjective wellbeing despite having higher incomes in cities (Chen et al., 2019; Mulcahy & Kollamparambil, 2016; Yu et al., 2019). This partly occurs because migrants evaluate their material circumstances not in absolute terms but relative to the status of native urban residents who become their new social reference group (Mulcahy & Kollamparambil, 2016; Yu et al., 2019).

While migration often represents a pursuit of better opportunities such as increased income and improved living conditions, the experiential aspect of increased incomes is moderated by migrants' expectations and the cost of living in cities, which cause dissatisfaction with the rate of material gains (Chen et al., 2019; Knight & Gunatilaka, 2008, 2010; Yu et al., 2019). Indeed, higher incomes do not necessarily translate into improved material outcomes for migrants who are concentrated in marginalized informal settlements where they lack access to decent housing and basic services such as water and sanitation (Owusu et al., 2008; Siddiqui et al., 2021).

Other challenges associated with the migration process such as cultural adjustment, social integration, language barriers, unemployment, and discrimination, could also impact the subjective well-being of migrants (Khan et al., 2019; Li & Rose, 2017; Zimmerman et al., 201; Wang et al.,

2010; Wen & Wang, 2009; Zhang, Li, Fang, & Xiong, 2009; Suanet & Van de Vijver, 2009; Helliwell & Putnam, 2004).

Comparative studies between migrants and non-migrants provide insights into how migration impacts subjective well-being. These studies often reveal variations in well-being levels between different migrant groups, highlighting diverse experiences based on factors like migration motives, socioeconomic backgrounds, and integration into host communities (Dolan et al., 2008; Akay et al., 2012). Additionally, longitudinal research focusing on migrants' adaptation processes sheds light on changes in subjective well-being over time, indicating potential shifts from initial challenges towards improved well-being levels as migrants settle in their new environment (Chiswick & Hunsaker, 1998; Clark et al., 2008). Also, contextual factors such as social support networks, legal status, access to healthcare, and socio-economic opportunities significantly influence migrants' subjective well-being (Kofman & Sales, 2013; Böheim & Taylor, 2002).

2.5.4 Relative Deprivation and Sustainable Practices

Relative deprivation can significantly influence engagement in sustainable practices among individuals and communities, as suggested by various scholarly studies. Research indicates that feelings of relative deprivation, arising from the perception of being disadvantaged compared to others in society, can impact pro-environmental behaviours and sustainable practices (Cooke & Sheeran, 2004; Lehmann & Gutscher, 2015). Individuals experiencing relative deprivation may feel less empowered or motivated to participate in sustainable actions due to perceived social disparities, which can affect their sense of responsibility toward environmental issues (Cooke & Sheeran, 2004).

Moreover, relative deprivation might lead to psychological distress, reducing individuals' capacity or willingness to engage in sustainable behaviours. Studies have found that when individuals feel

disadvantaged or marginalized in comparison to their peers or societal groups, it can result in stress, anxiety, or a sense of powerlessness, thereby affecting their motivation to adopt sustainable practices (Lehmann & Gutscher, 2015; Hudders & Pandelaere, 2012).

In connection with the domains of sustainability, Relative deprivation can significantly impact various dimensions of sustainable practices, including economic, social, and environmental aspects.

Economically, feelings of relative deprivation can influence consumer behaviours and financial decisions. Research suggests that individuals who perceive themselves as economically disadvantaged compared to others in their social reference group might engage in conspicuous consumption or overspending to mitigate this perceived gap, potentially hindering sustainable economic practices (Hsee et al., 2013; Solberg & Diener, 2013). Such individuals might engage in conspicuous consumption or resource-intensive behaviours as a means to compensate for their perceived lower status, which can contradict sustainable practices and environmental conservation efforts (Dittmar et al., 2014; Griskevicius et al., 2010).

Socially, relative deprivation can affect community cohesion and social relations. When individuals or groups feel deprived in terms of social status or resources compared to their peers, it may lead to social tensions, marginalization, or even social unrest (Crosby, 1976; Walker & Smith, 2002). These social disparities and conflicts may impede collaborative efforts toward social sustainability, such as inclusive governance, social equity, and community well-being. Consistent with a study by Stouffer et al. (1949), perceived inequalities can negatively affect social bonds and community sustainability. In other words, as people feel better compared to others in the neighbourhood, they engage in more socially sustainable practices (Kim and Lee, 2013).

Environmentally, relative deprivation can influence attitudes and behaviours towards environmental conservation and resource management. Research indicates that feelings of relative disadvantage or exclusion might lead individuals to adopt attitudes that prioritize immediate economic gains over long-term environmental sustainability (Klein, 2014; Buhaug & Urdal, 2013). In some cases, communities facing relative deprivation may resort to unsustainable exploitation of natural resources for immediate economic relief, disregarding long-term environmental consequences. Nevertheless, an improvement in relative deprivation is a motivating factor for proenvironmental behaviours. This is confirmed by a study by Pickett and Wilkinson (2015) "The Spirit Level" which explores the connection between income inequality and various social and health issues, including environmental sustainability. The results suggest that an improvement in relative deprivation can be associated with more pro-environmental attitudes and behaviours. Therefore, when individuals perceive their socioeconomic status or resource access as rising in comparison to others, they may become more inclined to engage in sustainable practices.

Moreover, relative deprivation can impact access to resources and opportunities essential for sustainable practices. Individuals or communities experiencing relative disadvantage may have limited access to education, healthcare, or employment opportunities, hindering their ability to engage in sustainable practices (Jetten et al., 2012; Esses et al., 2010).

It is important to note that the influence of relative deprivation on sustainable practices is complex and multifaceted, and its impact can vary based on contextual factors, individual values, and social norms (Cooke & Sheeran, 2004; Hudders & Pandelaere, 2012). Addressing perceptions of relative deprivation and promoting inclusive societal structures that reduce disparities and empower individuals may contribute positively to fostering a culture of sustainability and encouraging proenvironmental behaviours (Lehmann & Gutscher, 2015; Hudders & Pandelaere, 2012).

2.5.5 Subjective well-being and Sustainability

Subjective well-being, comprising an individual's feelings of life satisfaction, happiness, and overall mental state, has been linked to their engagement in sustainable practices in various scholarly studies. Research suggests a positive association between higher levels of subjective well-being and increased involvement in sustainable behaviours. Individuals with higher subjective well-being tend to exhibit greater concern for environmental issues and demonstrate a stronger inclination toward adopting sustainable practices (Dolan et al., 2008; Bain et al., 2019). Studies have indicated that individuals with higher levels of subjective well-being are more likely to engage in pro-environmental behaviours such as recycling, conserving energy, and supporting sustainable initiatives (Evans et al., 2017; Bain et al., 2019). This positive relationship between subjective well-being and sustainable practices can be attributed to several factors.

One factor is the psychological aspect; individuals experiencing higher levels of well-being tend to possess a greater sense of connectedness to nature, leading to a deeper appreciation and concern for the environment (Evans et al., 2017; Howell et al., 2012). Additionally, higher subjective wellbeing often correlates with a stronger sense of personal agency and a greater motivation to contribute positively to society, including engaging in actions that benefit the environment (Bain et al., 2019; Howell et al., 2012).

Furthermore, individuals with higher subjective well-being tend to prioritize long-term benefits and have a greater capacity for empathy and altruism, which can lead to a stronger commitment to sustainable practices aimed at preserving resources for future generations (Dolan et al., 2008; Bain et al., 2019).

Delving into the domains of sustainability, studies suggest a positive correlation between subjective well-being and economically sustainable behaviours. Higher levels of subjective

wellbeing are associated with greater financial prudence, such as saving money, responsible spending, and long-term financial planning (Lyubomirsky et al., 2006; Aknin et al., 2013). Individuals with higher subjective well-being tend to exhibit more cautious consumption habits, leading to reduced materialism and lower ecological footprints (Kasser, 2017).

Subjective well-being has also been linked to social sustainability. Research indicates that individuals experiencing higher levels of subjective well-being are more inclined towards prosocial behaviours, community engagement, and fostering social connections (Oishi & Kesebir, 2015; Howell et al., 2007). This inclination towards social connections and community involvement contributes to building cohesive societies, enhancing social capital, and promoting mutual support, all of which are integral to social sustainability (Howell et al., 2007).

Moreover, subjective well-being plays a role in influencing environmentally sustainable behaviours. Studies have shown that individuals with higher levels of subjective well-being tend to exhibit more environmentally friendly behaviours, such as recycling, conservation efforts, and support for renewable energy initiatives (Gatersleben & O'Brien, 2011; Otto & Kaiser, 2014). Higher levels of life satisfaction and happiness are associated with a stronger sense of environmental concern and a greater motivation to protect the natural environment (Gatersleben & O'Brien, 2011; Otto & Kaiser, 2014). This inclination towards environmental sustainability is substantiated by the findings of Capaldi et al. (2014), whose research highlights that individuals experiencing elevated subjective well-being are more likely to be intrinsically motivated to partake in activities that bolster environmental sustainability. In essence, the contentment and well-being that individuals derive from sustainable actions serve as an internal reward, reinforcing these environmentally beneficial behaviours. Gatersleben and Griffin (2017) found a correlation between subjective well-being and pro-environmental attitudes. Their research establishes a

positive association between high levels of subjective well-being and a more favorable disposition towards environmental concerns. In practical terms, individuals who experience contentment and emotional security are more likely to develop positive attitudes towards the environment, translating these attitudes into tangible, pro-environmental behaviours.

Overall, while the relationship between subjective well-being and sustainable practices across economic, social, and environmental domains is complex and multifaceted, evidence suggests that higher levels of subjective well-being are generally associated with more sustainable behaviours. Enhancing individuals' subjective well-being may serve as a potential pathway to encourage and promote various forms of sustainable practices in society.

However, while a positive relationship exists between subjective well-being and sustainable behaviours, the causal direction of this association is complex and bidirectional. Engaging in sustainable behaviours can also contribute positively to an individual's subjective well-being by fostering a sense of purpose, accomplishment, and connection with their surroundings (Evans et al., 2017; Howell et al., 2012).

2.6 Empirical Review on Factors Influencing Sustainable Practices

2.6.1 Age and Sustainable Practices

Age is often associated with variations in attitudes and behaviours related to sustainability. Research suggests that younger individuals tend to exhibit more positive attitudes toward sustainable economic behaviours, including responsible consumption and ethical purchasing (Luchs, Naylor, Irwin, & Raghunathan, 2010). For example, younger consumers might be more inclined to choose environmentally friendly products due to their awareness of environmental issues.

Age can also influence individuals' likelihood to engage in sustainable social behaviours. For instance, younger individuals may demonstrate higher engagement in activities like volunteering and community service (Wilson & Musick, 1997). Younger generations often value social impact and collective well-being, leading to greater participation in initiatives that contribute to societal betterment. On the contrary, other studies highlight that older individuals tend to have strong support networks, including family, friends, and social groups. These social connections are essential for their well-being and for reducing feelings of loneliness and isolation (Antonucci, Akiyama, & Lansford, 1998). Studies have shown that older adults often take an active role in civic and community organizations, which are vital for social sustainability (Musick & Wilson, 2008; Verba, Schlozman, & Brady, 1995). They participate in local governance, community development projects, and advocacy efforts, all of which contribute to the overall well-being of their communities (Musick & Wilson, 2008; Verba, Schlozman, & Brady, 1995). In addition, old age provides an opportunity for individuals to build and maintain relationships with younger generations. Older people often act as mentors and sources of wisdom for younger individuals. These interactions promote social sustainability by passing down knowledge, skills, and cultural traditions (Kaplan et al., 2003).

In terms of environmental sustainability, active participation in socially sustainable activities, such as environmental volunteer work, not only fosters social integration but also offers potential health benefits, particularly for older individuals. Past studies have demonstrated that environmental volunteering often involves physical activities, contributing to improved health (Librett, Yore, Buchner, & Schmid, 2005; Pillemer, Fuller-Rowell, Reid, & Wells, 2010). Research has shown positive impacts for older individuals, including better self-rated health, fewer functional

limitations, enhanced psychological well-being, and a potential decrease in the risk of dementia (Anderson et al., 2014). Furthermore, volunteering may offer protection against certain diseases and health issues, such as hypertension (Burr, Tavares, & Mutchler, 2011) and hip fractures (Warburton & Peel, 2008), ultimately reducing the risk of mortality (Jenkinson et al., 2013; Okun, Yeung, & Brown, 2013).

2.6.2 Sex and Sustainable Practices

Sex differences have been observed in sustainable economic behaviours. Studies have found that women, on average are more likely to engage in sustainable consumption practices (Ozanne & Vlosky, 2015). Women tend to be more engaged in social and community-oriented actions (Stukas, Hoye, Nicholson, Brown, & Aisbett, 2016). These behaviours align with women's historically stronger ties to social relationships and empathy.

Meanwhile, the male sex is also confirmed by other studies to be associated with social sustainability (Hoffman & Borders, 2001). According to this study differential socialization of boys and girls becomes apparent from an early age, with boys being encouraged to partake in group activities and assertiveness, which can align with involvement in social organizations. Again, other studies indicate that men prioritize networking and building connections through participation in social organizations, thereby enhancing their professional opportunities (Kossek & Zonia, 1993). Furthermore, studies suggest that males perceive certain benefits within social organizations that resonate with their interests and values, encompassing personal growth, skill development, and opportunities for driving change (Rudman et al., 2012). These perceived benefits contribute to their greater involvement in socially sustainable practices, such as volunteering in social organizations, among other activities.

With regards to environmental sustainability, empirical research conducted by Johnson (2016), reveals that women frequently possess a stronger environmental identity and are more inclined to prioritize sustainable behaviours. Additionally, studies have shown that women tend to demonstrate a more pronounced sense of responsibility toward future generations and are more likely to adopt pro-environmental attitudes and behaviours (Brown, 2014; Thompson et al., 2017). Other studies have also confirmed that women tend to exhibit more environmentally responsible behaviours, such as recycling and energy conservation (Steg & Vlek, 2009).

2.6.3 Education and Sustainable Practices

Higher levels of education are often associated with greater awareness and knowledge of sustainability issues. Educated individuals may be more likely to engage in sustainable economic behaviours due to their understanding of the environmental impacts of their choices (Davies, 2015). Their educational background might lead to more informed purchasing decisions.

Meanwhile, education is strongly associated with higher earning potential. Research shows that individuals with advanced degrees or specialized training tend to command higher salaries, reflecting the education wage premium (Oreopoulos & Petronijevic, 2013). This means that, on average, individuals with more education earn more money over their lifetimes. Those with higher levels of education are generally less likely to experience joblessness due to their enhanced adaptability in the job market (Carneiro & Heckman, 2002). Education equips individuals with versatile skills and enables access to high-paying positions and job opportunities that might be out of reach for those with no education (Baum & Ma, 2014). Education is a powerful tool for poverty reduction by empowering people to secure better economic prospects for themselves and their families, breaking the cycle of poverty (Haveman & Wolfe, 1984). Against this background, people who have attained a certain level of education may be better off compared to those with no

education and therefore may not engage in more economically sustainable practices. Studies have shown that highly educated individuals may earn more and have higher levels of disposable income. This can lead to greater consumption and spending on goods and services that may not be economically sustainable (Dietz, Gardner, Gilligan, Stern, & Vandenbergh, 2009). Education has also been found to contribute to consumerism, where individuals place a higher value on material possessions and a lifestyle associated with high consumption. This can lead to behaviours that are less economically sustainable, such as buying new clothes instead of second-hand clothes or excessive spending on luxury goods (Verain, Herpen, Dagevos, Sijtsema, & Antonides, 2015).

In terms of social sustainability, studies have shown that higher education levels have been associated with increased participation in sustainable social behaviours. A formal educational system often involves interaction with peers, teachers, and extracurricular activities. These experiences can enhance social skills and the ability to engage in group activities (Ladd & Dinella, 2009). Schooling exposes individuals to a more extensive network of peers, which can lead to greater involvement in social group activities such as participation in school clubs, sports teams, and other organized activities (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Consistent with Huang, Zhou, & Nguyen, (2017) educational institutions provide structured environments for social engagement, encouraging students to collaborate, work in teams, and participate in group projects. Others have asserted that attaining a certain level of education can boost an individual's self-confidence and sense of social integration, making them more willing to engage in social group activities (Diemer, Li, & Klima, 2010).

Higher levels of education are associated with greater environmental knowledge and awareness. Educated individuals may have a better understanding of the environmental consequences of their actions, leading to more eco-friendly behaviours (Davies, 2015).

2.6.8 Number of Children and Sustainability

The correlation between household size, specifically the number of children, and the adherence to sustainable economic practices has been a recurrent subject within scholarly discourse. Extensive empirical studies consistently demonstrate an inverse relationship, where an increase in the number of children within a family unit tends to correspond with a decreased engagement in economically sustainable behaviours. Research suggests that the number of children in a family can affect household income. Larger families may face increased financial strain due to the additional expenses associated with raising children, including education, healthcare, and daily living costs (Lundberg, 2010). Other studies suggest that larger families may have lower savings and investments due to the need to allocate a larger portion of income to immediate family expenses (Hanna & Wang, 2010). Generally, having more children can lead to increased consumption and reduced income levels, influencing economically sustainable practices by parents.

Research conducted by Grunewald and Roland-Lévy (2019) supports this pattern, highlighting that families with more children experience increased financial pressure due to higher expenses linked to raising more children. These expenses cover various needs, such as higher costs for education, healthcare, and day-to-day household maintenance in larger families.

Confronted with increased financial demands, families often feel compelled to adopt economic sustainability strategies, as highlighted by Goldman and Lovasi (2011). These strategies involve prudent financial management, including cost-cutting measures and efforts to minimize unnecessary expenditures. The aim is to maintain financial stability within the household while adequately catering to the diverse needs of their children.

Moreover, Lundberg's comprehensive analyses (2010) shed light on how households with a greater number of children manage their income and assets. Families facing heightened financial

responsibilities due to children tend to prioritize saving and embrace sustainable consumption patterns to effectively manage their fiscal obligations.

Furthermore, the parental role assumes significant importance, particularly in households with children, serving as a key driver behind the adoption of economically sustainable practices. Poortinga, Steg, and Vlek's research (2004) emphasize that parents, recognizing their responsibility to ensure the financial well-being of their families, tend to embrace sustainable practices as a prudent and forward-thinking approach.

The relationship between the number of children in families and socially sustainable practices has been established in various studies (Henly & Lyons, 2000; Sayer, 2005). Larger families, characterized by a greater number of children, often experience distinct dynamics in engaging with socially sustainable practices.

Studies have indicated that larger families may face challenges in allocating time and resources to participate in certain socially sustainable activities due to the increased demands of childcare and household responsibilities. This might affect their engagement in community-oriented actions or volunteering activities (Henly & Lyons, 2000). Additionally, the size of the family could potentially influence social interactions and community engagement, as larger families may face constraints in dedicating time to social activities outside the household (Sayer, 2005).

However, it's essential to note that the relationship between the number of children and socially sustainable practices is nuanced and context-dependent. While larger families might face challenges in certain aspects of social sustainability due to increased caregiving responsibilities, they might also foster a sense of communal support and cooperation within the family unit. Studies have shown that larger families often cultivate strong bonds among siblings, promoting teamwork and empathy (Luthar & Latendresse, 2005). This could potentially translate into positive social

behaviours and values, contributing to a sense of social connectedness and support within the family.

For environmentally sustainable practices, several studies have suggested that larger families tend to have a more considerable environmental footprint due to increased consumption of resources (Murtaugh & Schlax, 2009). Larger households generally consume more energy, produce more waste, and have a larger ecological impact than smaller ones (Meyer, 1995). This correlation is often attributed to higher resource consumption for daily needs, including food, water, and energy, resulting in increased greenhouse gas emissions and waste generation (Murtaugh & Schlax, 2009). However, the relationship between family size and environmental sustainability is multifaceted. Some studies indicate that the impact of the number of children on environmental practices can vary significantly based on various factors, such as parental values, education, and socioeconomic status. For instance, while larger families may have a greater ecological footprint overall, they might also foster environmentally responsible attitudes and behaviours, teaching children about conservation and sustainability (Schultz & Zelezny, 1999).

Moreover, research suggests that the number of children in a family might not be the sole determinant of environmentally sustainable practices. Other factors, including the level of education, income, and urban versus rural living, play significant roles in shaping a family's environmental practices (Dietz, Rosa, & York, 2009).

2.6.9 Number of Partners and Sustainable Practices

The number of partners has been found to influence sustainable practices. Studies have shown that an increased number of partners is negatively associated with economic sustainability. This means that having multiple partners can lead to increased consumerism and higher consumption patterns, as individuals may feel pressure to meet the expectations of their partners (Dew, 2007). This can result in excessive spending and lower economically sustainable practices (Dew, 2007). Complex

relationships may lead individuals to prioritize immediate financial needs over long-term sustainability. In situations where financial stability is a concern, individuals may focus on shortterm economic goals, such as meeting expenses, rather than engaging in sustainable practices (Mintz, 2020). Interdependence in complex relationships can affect economically sustainable practices. Economic interdependence with multiple partners may limit an individual's ability to engage in practices such as saving and investing for sustainability (Grunewald & Roland-Lévy, 2019).

In terms of social sustainability, the number of partners an individual has may not directly impact socially sustainable practices if all partners share similar social values and goals. In such cases, individuals with multiple partners may collectively engage in social sustainability activities, such as community involvement or volunteering (Smith & Wilson, 2020). Other studies have shown that individuals with multiple partners may engage in resource sharing for social sustainability. They may collectively support community projects or participate in group activities, which can enhance social sustainability (Gatersleben & Griffin, 2017).

The positive relationship between the number of partners an individual has and environmentally sustainable practices are consistent with research in that individuals with multiple partners may have their partners share their eco-friendly values and concerns for the environment with them. This alignment of values can lead to a greater emphasis on environmentally sustainable practices within the relationships (Hartikainen-Saari, 2013). Also, studies have shown that multiple partners may choose to engage in collective environmental efforts. This can include activities such as recycling, reducing waste, and conserving energy as a joint effort, potentially leading to increased environmentally sustainable practices (Gatersleben & Griffin, 2017). Again, sharing resources with partners can lead to more efficient and sustainable use of those resources. For instance,

individuals with multiple partners may collectively purchase eco-friendly products or engage in communal gardening and resource-sharing practices (Hank, 2010). Additionally, environmental education and awareness can be enhanced in relationships with multiple partners. Partners may exchange knowledge about sustainable practices, introduce each other to eco-friendly habits, and jointly participate in environmental initiatives (Beck & Rossetto, 2019).

2.6.10 Place Attachment and Sustainability

Studies have shown that place attachment have a positive influence across all dimensions of sustainable practices (Kyle, Graefe, & Manning, 2004; Williams & Patterson, 1999; DevineWright, 2013).

In the economic sphere, individuals exhibiting strong place attachment tend to engage in procommunity economic behaviours (Kyle, Graefe, & Manning, 2004). Studies indicate that residents deeply attached to their locality are more inclined to support local businesses and promote economic growth within their communities (Kyle et al., 2004; Williams & Patterson, 1999). A study by Devine-Wright (2013), found that place-attached individuals tend to be more conscientious about resource management, which has economic benefits in terms of cost savings and sustainable resource use (Devine-Wright, 2013).

Moreover, place attachment intertwines with social aspects of sustainability by fostering community cohesion and social capital. Strong place attachment encourages active community participation, cooperation, and collective action toward shared goals (Devine-Wright, 2013; Lewicka, 2011). Residents with a strong bond to their community are more likely to engage in social initiatives, volunteer work, and collaborative efforts, thereby enhancing the social sustainability of their locality. Strong place attachment is also associated with increased civic participation. Individuals who feel deeply connected to their community are more likely to take

part in local governance, community decision-making, and advocacy for social justice, all of which contribute to the social sustainability of the area (Hernández et al., 2010).

In terms of environmental sustainability, place attachment plays a crucial role in shaping attitudes and behaviours towards the environment. Individuals deeply connected to their surroundings demonstrate a higher propensity for environmentally responsible actions, such as recycling, conservation efforts, and a preference for sustainable practices (Manzo & Perkins, 2006; Stedman, 2002). Other studies have confirmed that people with strong place attachment are more likely to engage in responsible resource management practices including sustainable agriculture, efficient energy use, and reduced consumption of finite resources (Hidalgo & Hernández, 2001). Their attachment fosters a deeper understanding of local ecosystems and the impact of human activities on the environment. This awareness can lead to more eco-conscious behaviours (Brown & Raymond, 2007). Their emotional connection to the place drives them to engage in behaviours that preserve natural resources, reduce waste, and minimize environmental harm (Scannell & Gifford, 2010). Their commitment to the well-being of their local environment drives these sustainable practices (Hidalgo & Hernández, 2001). This sense of attachment fosters a sense of responsibility and stewardship toward the local environment, contributing positively to environmental

sustainability.

However, while place attachment can encourage sustainable practices, it may also present challenges. Overly strong attachment to a specific place might impede adaptation to necessary changes for environmental conservation or hinder the acceptance of sustainable innovations (Devine-Wright, 2013; Devine-Wright & Clayton, 2010). Striking a balance between attachment to place and openness to sustainable changes is essential in achieving holistic sustainability.

Overall, the relationship between place attachment and sustainable practices is multifaceted, influencing economic, social, and environmental dimensions. Understanding and harnessing the positive aspects of place attachment while addressing its potential challenges are crucial for fostering sustainable communities and environments

2.6.11 Access to Infrastructure and Sustainable Practices

Access to infrastructure has been found to affect economic sustainability negatively. This is consistent with studies (Browning & Lusardi, 1996; Khandker, 2012), indicating that the cost of accessing water electricity, and other infrastructural items can be high posing a strain on disposable income. This limits the financial resources available for economically sustainable practices like saving for the future, investing in education, or starting a business. Other studies also emphasize that excessive household expenditure can lead to debt accumulation, particularly if individuals rely on loans to maintain their spending levels (Kumar & Asish, 2011; Agarwal, Amromin, Ben-David, Chomsisengphet & Evanoff, 2015). High-interest debt can be a significant financial burden, diverting resources from economically sustainable practices (Agarwal et al., 2015). According to (Kumar & Asish, 2011), high household expenditure can shift resource allocation away from economically sustainable practices due to limited funds available for savings, investments, or debt repayment. Sustaining high levels of household expenditure can lead to financial stress and anxiety. This can negatively impact overall well-being and hinder the pursuit of economically sustainable practices, as individuals may prioritize addressing immediate financial challenges (Prawitz, Garman, Sorhaindo, O'Neill, & Kim, 2006).

Access to household infrastructure, such as reliable water supply, sanitation, electricity, and housing, can significantly impact engagement in socially sustainable practices. Studies have shown that having access to essential household infrastructure is closely linked to better living

conditions, health outcomes, and overall well-being (WHO/UNICEF, 2020). This can translate into socially sustainable practices.

In terms of environmentally sustainable practices access infrastructure that includes separate bins for different types of waste (e.g., recyclables, organic waste, and general waste) supports recycling and waste diversion efforts. It encourages people to sort their waste properly and participate in recycling programs, reducing the amount of waste sent to landfills. Research often indicates that access to adequate household infrastructure, such as reliable water and sanitation services, plays a significant role in shaping environmentally sustainable practices. For instance, studies have shown that improved access to clean water and sanitation facilities within households positively influences hygiene practices and sanitation behaviours (Waddington & Snilstveit, 2009). Better access to these basic infrastructures tends to lead to more responsible use of water resources and better waste management, contributing indirectly to environmental sustainability.

Moreover, studies have suggested that households with access to energy-efficient infrastructure, like renewable energy sources or energy-efficient appliances, are more likely to engage in environmentally friendly behaviours. The availability of such infrastructure often correlates with reduced energy consumption and a lower environmental impact (Lutzenhiser, 1993; Hensley & Koehler, 2008).

2.6.12 Sustainable Attitudes and Sustainable Practices

The literature consistently illustrates a strong correlation between sustainable attitudes and sustainable practices across economic, social, and environmental domains. Studies demonstrate that individuals with positive sustainable attitudes tend to exhibit behaviours aligned with economic sustainability (Aknin, Dunn, Whillans, Grant & Norton, 2013). These behaviours

include responsible consumption patterns, prudent financial management, and a preference for ethical and sustainable products (Lyubomirsky et al., 2006; Aknin et al., 2013).

In the realm of social sustainability, individuals with pro-social and community-oriented attitudes are more inclined to engage in various social practices. These practices encompass volunteering, community service, and active participation in collective efforts aimed at fostering social cohesion and mutual support within communities (Oishi & Kesebir, 2015; Howell et al., 2007).

Regarding environmental sustainability, individuals holding strong environmental values and concerns typically adopt behaviours that prioritize environmental conservation. These behaviours involve recycling, reduced waste generation, energy conservation efforts, and support for ecofriendly initiatives (Gatersleben & O'Brien, 2011; Otto & Kaiser, 2014). Their commitment to preserving natural resources and reducing environmental harm aligns with their attitudes towards sustainability.

Sustainable attitudes have been found by studies to influence sustainable practices positively. Bamberg and Möser (2007) found that pro-environmental behaviour is influenced by various psychosocial determinants, including attitudes, norms, and personal beliefs. Positive attitudes towards sustainability are associated with increased pro-environmental behaviour. Meanwhile, other studies have found some barriers to translating positive attitudes into practice. A study by Kollmuss and Agyeman (2002) discussed the barriers to pro-environmental behaviour, indicating that despite having positive attitudes, individuals may not always translate these attitudes into action. This suggests that external factors and contextual influences play a significant role in determining sustainable practices.

2.7 Theoretical Review

2.7.1 Migration and Development Theories

From an extensive literature review, it becomes apparent that the relationship between migration and sustainable development lacks comprehensive theoretical frameworks. This scarcity arises due to the relatively recent emergence of the concept of sustainable development, which constitutes a paradigm shift within the domain of development studies. The discourse surrounding the nexus of migration and development has only gained substantial attention in the past decade. One notable scholarly contribution in this area is the work of De Hass (2010) titled "Migration and Development: A Theoretical Perspective."

De Hass (2010) identifies three primary theoretical approaches that elucidate the intersection of migration and development. These perspectives align with the traditional "optimistic" and "pessimistic" viewpoints articulated by Taylor (1999), thereby delineating a profound division within social and development theories specifically, the functionalist versus structuralist paradigms and the balanced growth versus asymmetric development paradigms.

The optimistic stance, espoused by neoclassical and developmental theories, views migration as an efficient means to allocate production factors, benefiting both sending and receiving countries. This perspective aligns with the concept of "balanced growth," positing that the movement of labor from agrarian-based rural areas to industrially driven urban centers is indispensable for economic progress. This migration is regarded as a pivotal factor influencing the holistic development process (Todaro, 1969: 139). Over time, this unrestricted labor movement could result in labor shortages in the areas of origin, leading to decreased productivity in sending countries and consequent wage increments. Consequently, capital flows contrarily from labor-scarce yet affluent places of origin to labor-abundant destinations facing capital scarcity. Harmonization in labor

prices between these regions may occur, ultimately ceasing migration when wage differentials between origin and destination regions diminish (Massey, et. al., 1998).

Conversely, the pessimistic viewpoint, rooted in historical structuralist and dependency theories as posited by Frank (1966, 1969), interprets migration as an endeavor to escape the destitution caused by global capitalist expansion. This perspective contends that migration inherently fails to address the structural predicaments instigating migration due to the overpowering impact of global capitalism.

In essence, this discourse illustrates the dichotomous perspectives surrounding migration and development, portraying divergent conceptualizations arising from distinct ideological underpinnings within social and development theories.

The perspective diverges when migration is viewed as a developmental setback, complicating efforts toward progress. As articulated by Papademetriou (1985), migration from sending countries is perceived as exacerbating the scarcity of skilled workers, diminishing the labor force of these nations despite the emigrating individuals being healthy, dynamic, and productive citizens. The act of sending skilled labor to destination countries is deemed detrimental to the sending country's interests, dismissing the valuable resources of experienced and professional labor in developing nations, despite substantial investments made in education (Baldwin, 1970).

Another viewpoint considers the impact of migration on development in an adverse light. Remittances from migrants to sending countries lead to increased consumption and inflation in the origin area. Empirically, migrants rarely invest their earnings in productive sectors, thereby burdening places of origin while predominantly benefiting destinations. This dichotomy between the advantages and drawbacks of migration presents a complex scenario for development.

A more moderate stance, advocated by the pluralist group, introduces a nuanced view acknowledging the heterogeneous and non-deterministic nature of migration's impact on development. This approach, influenced by postmodernism, seeks to reconcile structural and agency-oriented perspectives, recognizing the significance of both elements. This recognition facilitates a more nuanced understanding of the diverse interactions between development and migration.

The emergence of this new perspective has fueled new debates centered on migration and development, delineating at least three viewpoints: the New Economics of Labor Migration (NELM) emphasizing a household-oriented approach, the Livelihood approach focusing on household livelihood strategies, and the Transnational perspective exploring technological advancements enabling migrants to maintain transnational livelihoods.

While the framework proposed by De Hass (2010) for development and migration analysis does not entirely align with Sustainable Development (SD), which revolves around the interconnected pillars of environment, economy, and society, it provides a basis and analytical framework for understanding migration's association with SD. The intricate link between migration and SDGs emphasizes migration as a mechanism contributing to the attainment of various goals rather than a developmental challenge to be resolved.

The multidimensional nature of SD, encapsulating economic, social, health, environmental, and sustainability dimensions, necessitates comprehensive strategies encompassing seventeen SDGs aimed at addressing global equity, resource utilization, and sustainability concerns. This collective approach seeks to ensure equitable and sustainable development within and among nations (Short, Macrus, & Balasubramanian, 2016; Cerin, 2006; Kuliga, et. al., 2019).

2.7.2 Sustainability Theory

The term "sustainability" encompasses multiple interpretations. For some, it signifies safeguarding available natural resources from overexploitation to prevent future scarcity, while others relate it to the formulation of public policy. However, the definition outlined by the UN Commission on Economic Development in the 1987 Brundtland report stands widely accepted: sustainability entails meeting present needs without compromising the ability of future generations to meet their own needs (United Nations, 1987).

Barton's and Du Plessis' (2000) conceptual model presents "sustainable development" as comprising three interconnected sectors: Society, Economy, and Environment. They argue that achieving global sustainable development necessitates maintaining a balanced interaction among these sectors. According to Barton and Du Plessis (2000), society provides the foundation for social equity and well-being, the economy drives resource allocation and wealth creation, and the environment ensures the availability of natural resources and ecological health. Sustainable development, therefore, involves fostering harmony among these dimensions to achieve long-term viability. This as depicted in Figure 2.1

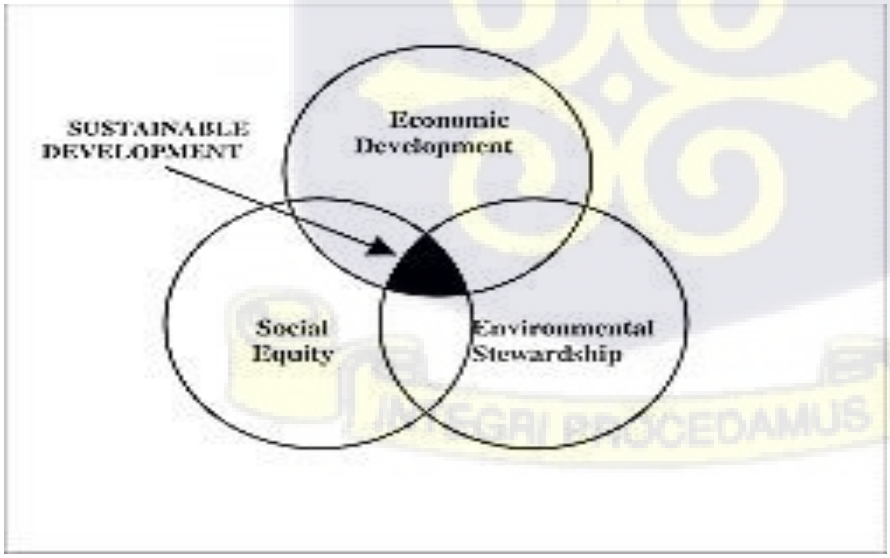


Figure 2.1: Interaction between Main Sectors of Sustainability Source: Barton's and Du Plessis' (2000)

Sustainability theory, stemming from various disciplines including environmental science, economics, and sociology, revolves around the concept of meeting present needs without compromising the ability of future generations to fulfill their own needs (United Nations, 1987). At its core, sustainability focuses on balancing economic growth, environmental protection, and social equity to ensure long-term well-being for both humanity and the planet (Dresner, 2002). The theory encompasses several dimensions, notably the triple bottom line or three pillars: economic, environmental, and social (Elkington, 1997). These pillars form the foundation of sustainable development, advocating for the integration of economic progress while safeguarding environmental resources and promoting social equity (World Commission on Environment and Development, 1987).

Economic sustainability involves fostering economic growth and development without compromising future economic opportunities (Daly, 1990). It emphasizes responsible resource management, circular economy models, and fair trade practices to ensure economic resilience while minimizing negative impacts on the environment (Hawken et al., 1999).

Environmental sustainability underscores the preservation of natural resources, biodiversity, and ecosystems (Costanza et al., 1997). It advocates for sustainable resource management, renewable energy adoption, pollution reduction, and biodiversity conservation to maintain ecological balance and mitigate environmental degradation (Rockström et al., 2009).

Social sustainability centers on equity, justice, and social well-being within societies (Morse, 1999). It emphasizes social inclusivity, human rights, access to education, and healthcare, and

addressing societal inequalities to ensure fair and equitable opportunities for all individuals and communities (Max-Neef, 2005).

The theory of sustainability, therefore, promotes a holistic approach, emphasizing the interconnectedness of economic, environmental, and social factors (Folke et al., 2002). It calls for integrated strategies and policy frameworks that balance these dimensions to achieve enduring well-being for current and future generations (Meadows et al., 1972).

In summary, sustainability theory seeks to harmonize human activities with environmental capacities while ensuring social equity and economic progress. It serves as a guiding principle for decision-making processes, advocating for a balanced and inclusive approach to development that safeguards the planet's resources and fosters societal well-being (WCED, 1987; Elkington, 1997).

2.7.3 Place Attachment Theory

Place Attachment theory, rooted in environmental psychology, posits that individuals establish emotional bonds and connections with specific places due to personal experiences, memories, and social interactions (Low & Altman, 1992). This theory is instrumental in comprehending how people perceive and relate to their environment, influencing their behaviours, attitudes, and overall well-being. People have emotional bonds to places that embody the collection of meanings, values, and feelings associated with a locality (Adams et al., 2013; Agyeman, 2004; Tuan, 1977). Place attachment involves the formation of emotional connections to physical environments (Altman & Low, 1992; Giuliani & Feldman, 1993; Hidalgo & Hernandez, 2001; Lewicka, 2005, 2010; Low & Altman, 1992). However, there is substantial diversity in how place attachment is conceptualized across different disciplines (Lewicka, 2011). This variability is evident in the multitude of terms used to describe the emotional bond between individuals and places, including place attachment, rootedness, sense of place, and urban attachment (Hernández, Hidalgo, & Ruiz, 2014).

The interdisciplinary nature of place attachment has led to theoretical and epistemological variations, resulting in disagreements regarding its definition, conceptualization, and assessment (Giuliani, 2003; Hernández et al., 2014; Lewicka, 2011a, 2011b; Patterson & Williams, 2005; Scannell & Gifford, 2010; Turton, 2016). For instance, definitions of place attachment may focus on the quality of the bond between people and places, the outcomes associated with these bonds, or related constructs like place identity (Altman & Low, 1992; Low & Altman, 1992; Giuliani & Feldman, 1993; Hummon, 1992; Moore & Graefe, 1994).

Despite these theoretical disagreements, the research on people's emotional connections to places remains significant, finding applications in various social science disciplines and research contexts, such as social housing policy, neighbourhood design, health and well-being, natural resource management, tourism, regional planning, and pro-environmental engagement.

Several models have been proposed to understand people-place relationships, including the structural alternative model, the model of place dependence, and the place identity model. Based on recent empirical tests and systematic reviews, place attachment is considered a multidimensional construct that includes affective, cognitive, and behavioural components

(Turton, 2016). This perspective aligns with the person-process-place (PPP) model proposed by Scannell and Gifford (2010), which organizes place attachment into three interconnected dimensions: the person dimension, the psychological process dimension, and the place dimension.

1. The person dimension distinguishes between individual- and group-determined meanings of place.

2. The psychological process dimension differentiates between the components involved in the attachment process, including affect (emotion), behaviour, and cognition (thoughts).

3. The place dimension distinguishes between the physical and socially bound characteristics of a place that contribute to the bond between people and place.

However, the significance of variables within these dimensions may vary depending on the scale and type of environment. Variables salient in one setting may not be relevant in another, making predictors context-dependent. Consequently, place attachment should not be viewed as a universally generalizable phenomenon but should be understood within its specific context (Turton, 2016).

The distribution of place attachment is most frequently explained as a function of residence time (Hay, 1998; Lewicka, 2008). However, findings on place relations among mobile groups, such as tourists, second-home owners, and migrants, suggest that place attachment can also develop independently from length of residence (Gustafson, 2001; Williams & Kaltenborn, 1999) and people perceive a sense of affinity to multiple places (Di Masso et al., 2019; Gustafson, 2001).

Low and Altman (1992) highlight that place attachment theory has found applications in various fields such as environmental psychology, urban planning, and tourism studies. For example, in the realm of urban planning, understanding individuals' attachment to their neighbourhoods can inform community development strategies and enhance social cohesion (Brown, Raymond, & Corcoran, 2003). Moreover, within tourism research, this theory aids in understanding tourists' emotional connections to specific destinations, thereby influencing their travel decisions and behaviours (Kyle, Graefe, & Manning, 2004).

Place attachment theory also has significant relevance when examining the relationship between migration and individuals' connections to specific locations. However, there is limited evidence on place attachment in the context of low-income migration and mobility. Qian et al. (2011) show

in Guangzhou, China that migrants' place attachment to the destination is ultimately constrained by their perceived social capital and emotional investment in their origin. Njwambe et al. (2019) observed a similar behaviour among circular migrants in Cape Town, South Africa, who, in their interviews, reported that they could never develop a sense of belonging in the city. Migrants from the municipality of Mnquma, located along the coastal region of the Eastern Cape, viewed Cape Town only as a place to earn a living. Research in Dhaka, Bangladesh, also revealed that rural–urban migrants maintained a strong desire and longing to return home (Ayeb-Karlsson et al., 2020). Therefore, migrants' relationship to their destination might be one of place dependence, derived from the functional characteristics of the place, rather than a deep emotional bond (Qian et al., 2011). Scannell and Gifford (2010) argue that such dependence on the physical characteristics, resources, and amenities associated with a place is not contrary to place attachment, but rather it is part of its three dimensions (place, person, and process). They further highlight the role of amenity-based place attachment for survival and security, as well as for the attainment of goals and aspirations (Scannell & Gifford, 2010), which are pertinent considerations for low-income migrants and could potentially offset some of the risks linked to migration. Research across eight cities in China found that access to public services was positively associated with migrants' propensity to develop a sense of belonging to their new urban residences (Huang et al., 2020).

Migration can disrupt individuals' place attachments by necessitating a departure from familiar environments, which may trigger emotional responses. The loss of attachment to the original place can lead to feelings of nostalgia, longing, or even a sense of disorientation (Brown & Perkins, 1992). Conversely, as individuals settle in new places, they may gradually develop attachments to their new surroundings, influenced by the quality of social interactions, sense of belonging, and perceived place characteristics (Lewicka, 2010).

Brown and Perkins (1992) emphasize that understanding the interplay between place attachment and migration is crucial, as it can shed light on migrants' psychological and emotional adaptation to new environments. Individuals who manage to establish new attachments to their destination may experience a smoother integration process and enhanced well-being (Lewicka, 2010).

In essence, place attachment theory provides a lens through which to explore the dynamics of migration. It underscores how emotional bonds to places can influence migrants' decisions, feelings, and experiences during the process of leaving one place and forming connections to another. One of the key insights of place attachment theory lies in its exploration of the potential tension between personal attachment and the physical transformation of places. Scannell and Gifford (2010) emphasize that as urban areas undergo development and change, individuals' attachments to these places may be challenged, leading to emotional responses and debates about the preservation of cultural and historical landmarks.

2.7.4 Theory of Reasoned Action

According to the Theory of Reasoned Action (TRA), attitudes refer to an individual's overall evaluation of a particular behaviour. Positive attitudes toward a behaviour are likely to lead to stronger intentions to engage in that behaviour (Ajzen & Fishbein, 1980). These attitudes are shaped by an individual's beliefs about the likely outcomes or consequences of the behaviour and their subjective evaluations of these outcomes.

Subjective norms, another component of TRA, pertain to an individual's perception of social pressure or expectations from significant others to perform or not perform a behaviour. Perceived social approval or disapproval can impact an individual's intention to engage in a specific behaviour (Ajzen, 1991). The TRA also emphasizes the role of intention as a crucial intermediary between attitudes, subjective norms, and actual behaviour. Strong intentions to perform a

behaviour increases the likelihood of the behaviour being carried out (Ajzen & Fishbein, 1980). The TRA has been applied to various domains of sustainability, including sustainable economic, social, and environmental behaviours.

In the context of sustainable economic behaviour, TRA can help understand and predict individuals' intentions and actions related to responsible consumption and financial decisions. For instance, researchers have used TRA to study consumers' intentions to purchase eco-friendly products. Positive attitudes toward environmentally friendly products and the perception of social norms favoring such products can influence consumers' intention to buy them (Thogersen, 2004). By identifying these factors, marketers can design strategies to promote sustainable consumption.

In the realm of sustainable social behaviour, TRA can shed light on intentions and actions related to social responsibility, volunteering, and charitable giving. For instance, individuals' attitudes toward participating in community service or donating to charitable causes can influence their intentions to engage in these behaviours (Larson, Tobin, & Clawson, 2016). By addressing attitudes and perceived social norms, organizations can encourage more active participation in social sustainability initiatives.

The application of TRA to sustainable environmental behaviour is perhaps the most prominent. TRA helps understand individuals' intentions and actions toward environmentally friendly practices such as recycling, energy conservation, and waste reduction. Positive attitudes toward these behaviours and the perception of societal approval for such actions can increase the likelihood of intention to perform them (Stern, 2000). Interventions targeting attitudes and subjective norms have been successful in promoting pro-environmental behaviours (Steg & Vlek, 2009).

2.7.5 Relative Deprivation Theory

Relative Deprivation Theory (RDT) is a prominent area of contemporary sociology, closely connected to the racial contact hypothesis. A central premise within this field of study posits that the sensation of being disadvantaged is intricately linked to a reference group (Berger, Zelditch, Anderson & Cohen, 1972; Davis, 1959; Ferrer-i-Carbonell 2005; Flynn, 2008; Frank, 2007; Runciman, 1966; Silber & Verme, 2009; Yitzhaki, 1979). This sense of deprivation emerges through the act of comparing oneself to others.

The foundation of Relative Deprivation Theory can be traced back to the analysis of military institutions, specifically the research conducted in 1949 titled "The American Soldier" by Stouffer et al. In this study, based on interviews, it was revealed that dissatisfaction among US soldiers in the 1940s, especially among non-white soldiers, stemmed from the belief that others (primarily white soldiers) were unfairly promoted at a faster rate. Staub (1999) subsequently applied this theory to elucidate collective violent incidents and explored the underlying causes of the Rwandan genocide in the mid-1990s. He posited that discrimination and limited violence can transform individuals and groups, potentially culminating in mass killings or genocide. Staub also argued that specific cultural traits may increase the likelihood of this process, while the passivity of bystanders can enable its progression. Thus, justice, in this context, is closely associated with comparisons and the perception of entitlement (Wegener, 1991). Karl Marx (1847) vividly expressed this idea in his analogy involving house sizes, highlighting the discomfort experienced when one's circumstances are unfavorable compared to others.

Relative deprivation, therefore, denotes the sense of being deprived of something believed to be rightfully one's own. It stems from discontent when individuals gauge their status against others and recognize disparities to their disadvantage. This discontent is often amplified by challenging societal conditions, encompassing severe economic difficulties, political instability, and rapid

societal transformations. Even in situations where other potential triggers exist, adverse living conditions can activate or intensify their influence (Staub, 1999: 305; Bayertz, 1999). Schaefer (2008) succinctly characterizes it as "the conscious experience of a negative gap between legitimate expectations and present realities."

Walter Runciman (1966) expanded the theory of relative deprivation by accentuating the paradox inherent in social life. He contended that individuals who perceive no opportunity to attain more than they currently possess will not feel dissatisfied with their circumstances. However, dissatisfaction emerges when people see a prospect for improvement by comparing themselves to others in more favorable situations. Furthermore, Runciman (1966) elucidated that the degree of relative deprivation can be contingent on the form of the perceived deprivation. On one hand, it can be individually experienced when a person compares themselves to others. On the other hand, collective deprivation occurs when a person measures themselves against their peer group or other reference groups. This study compares migrants with non-migrants as their reference group.

The application of relative deprivation theory to migration has been extensively examined in scholarly literature, offering insights into how perceived inequalities and social comparisons drive migration patterns and behaviours. Several studies have explored how relative deprivation influences migration decisions. For instance, disparities in wealth, income, or opportunities between social groups or regions can prompt individuals or communities to seek better prospects elsewhere, leading to migration as a means of improving their relative position (Massey et al., 1994; Portes & Rumbaut, 2006). Economic disparities play a significant role in migration dynamics. Individuals experiencing relative deprivation due to limited economic opportunities or income disparities in their home regions may be motivated to migrate in pursuit of better

livelihoods and economic prospects in areas perceived as offering greater opportunities (Stark, 1991; Borjas, 1999).

Moreover, relative deprivation is not solely confined to economic dimensions but also extends to social and cultural factors. Social comparisons involving status, access to resources, or discrimination can lead to feelings of relative disadvantage, driving migration as individuals seek environments where they perceive a fairer or more equitable social standing (Berry, 2005; Jetten et al., 2012). Furthermore, political and societal changes can influence migration patterns through relative deprivation. Instances of political turmoil, social unrest, or perceptions of injustice may exacerbate feelings of relative disadvantage, prompting individuals or groups to migrate in search of more secure or equitable environments (IOM, 2010; Portes & DeWind, 2004).

However, the application of relative deprivation theory to migration is not without its complexities. It is influenced by various contextual factors, including cultural norms, institutional structures, and individual perceptions. Additionally, the decision to migrate is multifaceted and often influenced by a combination of factors beyond relative deprivation, such as personal aspirations, family ties, and available migration opportunities (Esses et al., 2010; Massey et al., 1994).

The application of RDT to sustainable practices has been explored extensively in scholarly research, offering insights into how perceived economic disparities influence and shape behaviours toward sustainability. In the economic domain, relative deprivation manifests in various ways impacting sustainable practices. Individuals or communities experiencing economic relative deprivation might face challenges in adopting or supporting sustainable practices due to limited financial resources or perceived economic disparities. Studies suggest that relative deprivation can hinder the adoption of sustainable consumption behaviours. Individuals experiencing economic disparities or feeling economically disadvantaged compared to their reference groups might

prioritize immediate economic gains over long-term sustainability, leading to unsustainable consumption patterns (Solberg & Diener, 2013; Hsee et al., 2013). Furthermore, economic constraints might limit access to sustainable products or services, making it challenging for economically deprived individuals to engage in eco-friendly consumption (Klein, 2014). In the social aspects of sustainability, the theory reveals how perceptions of relative disadvantage in social status or access to resources impact sustainable practices. Feelings of relative deprivation in social standing may discourage individuals from engaging in pro-social behaviours or collective actions for sustainable development due to perceived inequalities or lack of social recognition (Walker & Smith, 2002; Jetten, Haslam, & Haslam, 2012). Additionally, social comparisons can influence the adoption of sustainable practices, as individuals tend to conform to group behaviours, whether sustainable or unsustainable, to align with perceived social norms (Schultz et al., 2007; Cialdini, 2003).

Moreover, RD can influence attitudes toward environmental conservation and pro-environmental behaviours. Individuals experiencing economic disadvantages might be less inclined to engage in environmentally friendly actions due to perceived trade-offs between economic concerns and environmental responsibilities (Stedman, 2002; Buhaug & Urdal, 2013). Additionally, economic deprivation might lead to a lack of investment in sustainable infrastructure or technologies due to competing economic priorities (Manzo & Perkins, 2006).

However, Relative Deprivation's influence on sustainable practices is complex and multifaceted. Some studies suggest that individuals experiencing economic disadvantage can still engage in sustainable behaviours, driven by motivations to mitigate environmental impacts or to seek costsaving measures (Dietz et al., 2005; Stern, 2000). Furthermore, RD can also stimulate

innovative solutions and community initiatives aimed at addressing economic disparities while promoting sustainable practices (Moliner, 2017; Elster, 1989).

2.7.6 Sociological Assimilation Theory

Sociological assimilation theory, a fundamental concept in sociology, examines the process by which individuals or groups from diverse cultural backgrounds integrate into a larger society, adopting the norms, values, and behaviours of the dominant culture. This theory elucidates the mechanisms involved in cultural integration and explores the resulting social dynamics within a society. Sociological assimilation theory encompasses various dimensions, each contributing to the understanding of the assimilation process.

One of the critical dimensions is structural assimilation, which emphasizes the physical and social interaction between different cultural groups. It entails the integration of minority groups into various social institutions such as schools, workplaces, and neighbourhoods within the dominant society (Alba & Nee, 2003). Cultural assimilation, another dimension, focuses on the adoption of cultural norms, practices, language, and values of the dominant culture by minority groups. This process often leads to changes in the cultural identity of the assimilating group (Gordon, 1964). Marital assimilation involves intermarriage between individuals from different cultural backgrounds. It is regarded as a means of achieving assimilation by fostering social connections between distinct groups (Qian & Lichter, 2007). Identification assimilation pertains to changes in the self-identification and sense of belonging of individuals or groups. It occurs when minority groups identify more with the broader society than with their original cultural group (Waters, 1990).

While sociological assimilation theory provides insights into cultural integration, it also acknowledges the role of factors such as discrimination, acculturation, and cultural pluralism in shaping the assimilation process. Discrimination and prejudice can hinder or impede assimilation

by creating barriers to integration (Portes & Rumbaut, 2006). Acculturation refers to the process of adapting to a new culture while retaining some aspects of one's original culture (Berry, 1997). Cultural pluralism advocates for maintaining distinct cultural identities within a larger society (Kallen, 1915).

Critics of assimilation theory argue that it oversimplifies the complexities of cultural integration and underestimates the persistence of ethnic identity and the potential loss of cultural diversity in the pursuit of assimilation (Cornell & Hartmann, 2007). Nevertheless, it remains a foundational concept in understanding the dynamics of cultural exchange, integration, and identity formation within societies.

Sociological assimilation theory is deeply intertwined with the concept of migration, particularly concerning the integration of migrant populations into host societies. When individuals or groups migrate to a new country or region, assimilation theory becomes relevant in understanding their processes of integration into the social fabric of the host society. Migration often leads to encounters between diverse cultural groups, resulting in interactions that can lead to different levels of assimilation.

Structural assimilation is notably visible in migration scenarios, as migrants settle into new neighbourhoods, workplaces, and educational institutions within the host society. This dimension encompasses the physical and social interactions that occur between migrant communities and the dominant culture.

Cultural assimilation plays a significant role as migrants adapt to the norms, customs, language, and values of the host society. Over time, migrants may adopt certain cultural aspects of the host society while retaining elements of their original culture, illustrating the process of acculturation within the context of migration.

Moreover, marital assimilation, a dimension of assimilation theory, is often observed as migrants engage in relationships and marriages within the host society. Interethnic marriages contribute to social connections between different cultural groups and can be seen as a form of assimilation, fostering bonds across diverse communities.

Identification assimilation becomes relevant as migrants navigate their sense of belonging and identity within the host society. Some migrants may gradually identify more with the broader societal norms and values of the host country, impacting their self-perception and affiliation with their original cultural group.

The application of the Sociological Assimilation Theory to sustainability is rooted in understanding how different cultural groups integrate into larger societies, and holds relevance to the concept of sustainability, particularly in fostering cohesive, and inclusive communities (Park, 1950).

Sustainability, in the context of diverse societies, emphasizes the need for harmonious interactions among varied cultural, ethnic, and social groups to ensure long-term social stability and progress (Adger, 2000). Assimilation theory's dimensions, including structural, cultural, and identificational assimilation, underscore the integration of diverse groups into societal frameworks, institutions, and cultural practices (Gordon, 1964). These dimensions align with sustainability objectives by promoting social inclusivity and cooperation among various identities while maintaining cultural diversity (Berry, 2003). Structural assimilation resonates with sustainability goals by advocating for equitable access to resources and opportunities for all cultural groups within a society (Alba & Nee, 2003). In the context of sustainability, it's imperative to maintain cultural diversity and respect for various cultural traditions while encouraging shared societal values (Schaefer, 2015). In terms of identificational assimilation and sustainability, communities must value cultural pluralism,

allowing for the preservation and celebration of different identities while fostering a common sense of belonging and unity (Esses et al., 2010). For sustainability, balancing integration and diversity is crucial. Promoting social integration while respecting and celebrating cultural differences contributes to cohesive and sustainable societies (Nagle, 2010).

2.8 Conceptual Framework

This study examines the relationship between migration and sustainability, exploring the mediating role of relative deprivation and subjective well-being among migrants and nonmigrants. Background characteristics, namely age, sex, level of education, number of children and number of partners were explored. Other personal and household characteristics explored in terms of their relationship with sustainable practices were place attachement access to infrastructure, and sustainable attitudes. There is very limited literature on migration and sustainability relationships and also limited literature on studies comparing these relationships among migrants and nonmigrants.

Studies examining migration status and sustainable practices highlight a substantial relationship across economic, social, and environmental aspects. Economically, vulnerable migrant groups like irregular migrants or refugees face obstacles such as limited access to formal job opportunities and financial instability, hampering their involvement in sustainable economic practices (Dustmann et al., 2013; Bloemraad et al., 2017). Consequently, migrants often prioritize managing economic resources to save and remit funds to their places of origin due to their circumstances in the destination areas. In terms of social sustainability, migration status creates barriers to migrants' integration into host societies, limiting their access to social services and community involvement due to uncertain legal statuses and social exclusion (Dito, 2019; Schwiertz et al., 2020).

Consequently, their contribution to social sustainability initiatives, like community engagement and promoting social cohesion, may be restricted. Regarding environmental sustainability, the impact of migration status varies. Socio-economic vulnerabilities and transient living conditions might constrain migrants' ability to adopt environmentally friendly practices (Choguill, 2008; IOM, 2018). However, studies also suggest instances where migrants bring sustainable practices from their places of origin or adopt eco-friendly behaviours in new environments (Brebbia & Rivas, 2012; Akama & Kieti, 2003). Despite this, their efforts toward environmental sustainability might encounter limitations due to restricted access to resources and the specific circumstances associated with their migration status.

Migration and relative deprivation relationships is substantiated by several studies that underscore the relative deprivation experienced by migrants across various contexts, particularly concerning economic disparities upon their arrival in host destinations. These studies consistently reveal that migrants often encounter challenges in achieving economic stability, leading to lower household wealth compared to the native population (Portes & Rumbaut, 2006; Dustmann et al., 2013). This economic disadvantage primarily results from difficulties in accessing suitable employment opportunities matching their skills, educational background, or legal status, resulting in reduced income levels and limited accumulation of household wealth (Massey et al., 1994; Heath & Cheung, 2007). Moreover, research indicates that migrants frequently undergo occupational downgrading or experience a decline in social status after migration (Dustmann, Frattini, & Halls, 2013). This downward shift in the occupational hierarchy can foster a sense of relative deprivation as migrants may perceive themselves as occupying lower socio-economic positions than their previous status in their home countries (Dustmann et al., 2013; Heath & Cheung, 2007).

Considering these circumstances, it is anticipated that migrants may exhibit lower levels of relative deprivation at their destination compared to non-migrants.

The relationship between migration status and subjective well-being depicts an inverse relationship. Studies have shown that migrants frequently report reduced levels of subjective wellbeing, even with higher incomes in urban areas (Chen et al., 2019; Mulcahy & Kollamparambil, 2016; Yu et al., 2019). This phenomenon is partly attributed to migrants evaluating their material circumstances not solely in absolute terms but in comparison to the status of native urban residents, who become their new social reference group (Mulcahy & Kollamparambil, 2016; Yu et al., 2019). Despite migration being associated with the pursuit of improved opportunities such as increased income and better living conditions, the actual experience of higher incomes is affected by migrants' expectations and the city's cost of living (Yu et al., 2019). This often leads to dissatisfaction with the rate of material gains among migrants (Chen et al., 2019; Knight & Gunatilaka, 2008, 2010; Yu et al., 2019).

Various scholarly studies suggest that relative deprivation significantly influences engagement in sustainable practices among individuals and communities (Cooke & Sheeran, 2004; Lehmann & Gutscher, 2015). Feelings of relative deprivation, stemming from perceiving oneself as disadvantaged compared to others in society, can impact pro-environmental behaviours and sustainable practices (Cooke & Sheeran, 2004; Lehmann & Gutscher, 2015). Relative deprivation's influence spans across economic, social, and environmental dimensions of sustainability. Economically, it affects consumer behaviours and financial decisions, with individuals perceiving economic disadvantage potentially engaging in conspicuous consumption or overspending to bridge the perceived gap, hindering sustainable economic practices (Hsee et al., 2013; Solberg & Diener, 2013). In social sustainability, perceived inequalities might affect social bonds and

community sustainability, where individuals feeling better-off compared to others in their neighbourhood tend to engage more in socially sustainable practices (Kim & Lee, 2013), in line with Stouffer et al.'s study (1949). Concerning environmental sustainability, relative deprivation influences attitudes and behaviours toward environmental conservation and resource management. Individuals experiencing relative disadvantage or exclusion may prioritize short-term economic gains over long-term environmental sustainability (Klein, 2014; Buhaug & Urdal, 2013).

The relationship between subjective well-being and sustainability across economic, social, and environmental dimensions is evident. Firstly, higher subjective well-being aligns with responsible financial behaviours like saving, prudent spending, and reduced materialism, contributing to economic sustainability (Lyubomirsky et al., 2006; Aknin et al., 2013; Kasser, 2017). In terms of social sustainable practices, elevated well-being levels correspond to pro-social behaviours and active community engagement, fostering social sustainability by enhancing social capital and community cohesion (Oishi & Kesebir, 2015; Howell et al., 2007). With environmentally sustainable practices, individuals with higher subjective well-being demonstrate environmentally friendly actions, such as recycling and supporting renewable energy, contributing to environmental sustainability (Gatersleben & O'Brien, 2011; Otto & Kaiser, 2014).

In terms of age, research indicates that younger individuals tend to display more favorable attitudes towards sustainable economic behaviours, such as responsible consumption and ethical purchasing (Luchs, Naylor, Irwin, & Raghunathan, 2010). Additionally, age can impact engagement in sustainable social activities, with younger individuals demonstrating higher involvement in activities like volunteering and community service (Wilson & Musick, 1997). Regarding environmental sustainability, participation in socially sustainable activities like environmental volunteering not only fosters social integration but also offers potential health benefits, particularly

for older individuals. Studies suggest that such activities, involving physical engagement, contribute to improved health among older adults (Librett, Yore, Buchner, & Schmid, 2005; Pillemer, Fuller-Rowell, Reid, & Wells, 2010).

Sex differences play a significant role in sustainable behaviours across various dimensions. Women exhibit a higher tendency toward sustainable economic behaviours, notably engaging more in practices of sustainable consumption (Ozanne & Vlosky, 2015). They also demonstrate greater involvement in social and community-oriented actions compared to men (Stukas et al., 2016). On the other hand, studies confirm that males are associated with fostering social sustainability, finding benefits within social organizations that align with their interests and values, such as personal growth and driving change (Hoffman & Borders, 2001; Rudman et al., 2012). In terms of environmental sustainability, research suggests that women often possess a stronger environmental identity and are more inclined to prioritize sustainable behaviours (Johnson, 2016). Studies also indicate that women show a heightened sense of responsibility toward future generations, leading them to adopt pro-environmental attitudes and behaviours (Brown, 2014; Thompson et al., 2017).

Higher levels of education are linked with a greater understanding of sustainability issues, potentially leading to more informed choices regarding sustainable economic behaviours (Davies, 2015). Educated individuals may make purchasing decisions considering the environmental impacts, owing to their knowledge (Davies, 2015). Moreover, education opens doors to betterpaying jobs, enhancing financial stability and access to goods and services that might not be attainable for those with lower education levels (Baum & Ma, 2014). However, studies suggest that highly educated individuals may have higher disposable incomes and tend to engage in greater consumption, potentially leading to less economically sustainable behaviours (Dietz et al., 2009).

Education might also contribute to consumerism, placing higher value on material possessions and a lifestyle associated with high consumption, which can undermine economically sustainable practices like buying second-hand items or prioritizing excessive spending on luxury goods (Verain et al., 2015).

In terms of socially sustainable practices, higher education levels have shown a correlation with increased engagement in sustainable social behaviours (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011). Education exposes individuals to broader social networks, encouraging participation in group activities like clubs and team sports (Durlak et al., 2011). Educational institutions provide structured environments promoting social engagement and collaboration among students (Huang, Zhou, & Nguyen, 2017). Additionally, higher education is linked with enhanced environmental knowledge and awareness (Davis, 2015). Educated individuals tend to understand better the environmental impacts of their actions, potentially leading to more environmentally friendly behaviours (Davies, 2015).

The number of children within a family exhibits a consistent inverse relationship with engagement in economically sustainable behaviours (Lundberg, 2010; Hanna & Wang, 2010). Larger families face heightened financial strain due to increased child-related expenses, impacting savings, investments, and overall financial stability (Lundberg, 2010; Hanna & Wang, 2010; Grunewald & Roland-Lévy, 2019). In terms of social sustainability, larger families encounter challenges in allocating time and resources for community engagement, affecting participation in social activities and volunteerism (Henly & Lyons, 2000; Sayer, 2005). Regarding environmental sustainability, empirical studies consistently show that larger families tend to have a greater environmental footprint due to increased resource consumption. These households consume more

energy and produce more waste, contributing to higher greenhouse gas emissions and environmental impact (Meyer, 1995; Murtaugh & Schlax, 2009).

Studies indicate that the number of partners influences sustainable behaviours. More partners are linked to reduced economic sustainability, leading to increased spending to meet expectations, affecting financially prudent habits (Dew, 2007; Mintz, 2020; Grunewald & Roland-Lévy, 2019). For social sustainability, the impact of multiple partners varies based on shared values. When partners align in values, they may engage collectively in social sustainability like community involvement (Smith & Wilson, 2020; Gatersleben & Griffin, 2017). Regarding environmental sustainability, having multiple partners aligned in eco-friendly values fosters greater emphasis on environmentally responsible actions within relationships. Joint efforts like recycling or energy conservation may increase environmental sustainability (Hartikainen-Saari, 2013; Gatersleben & Griffin, 2017).

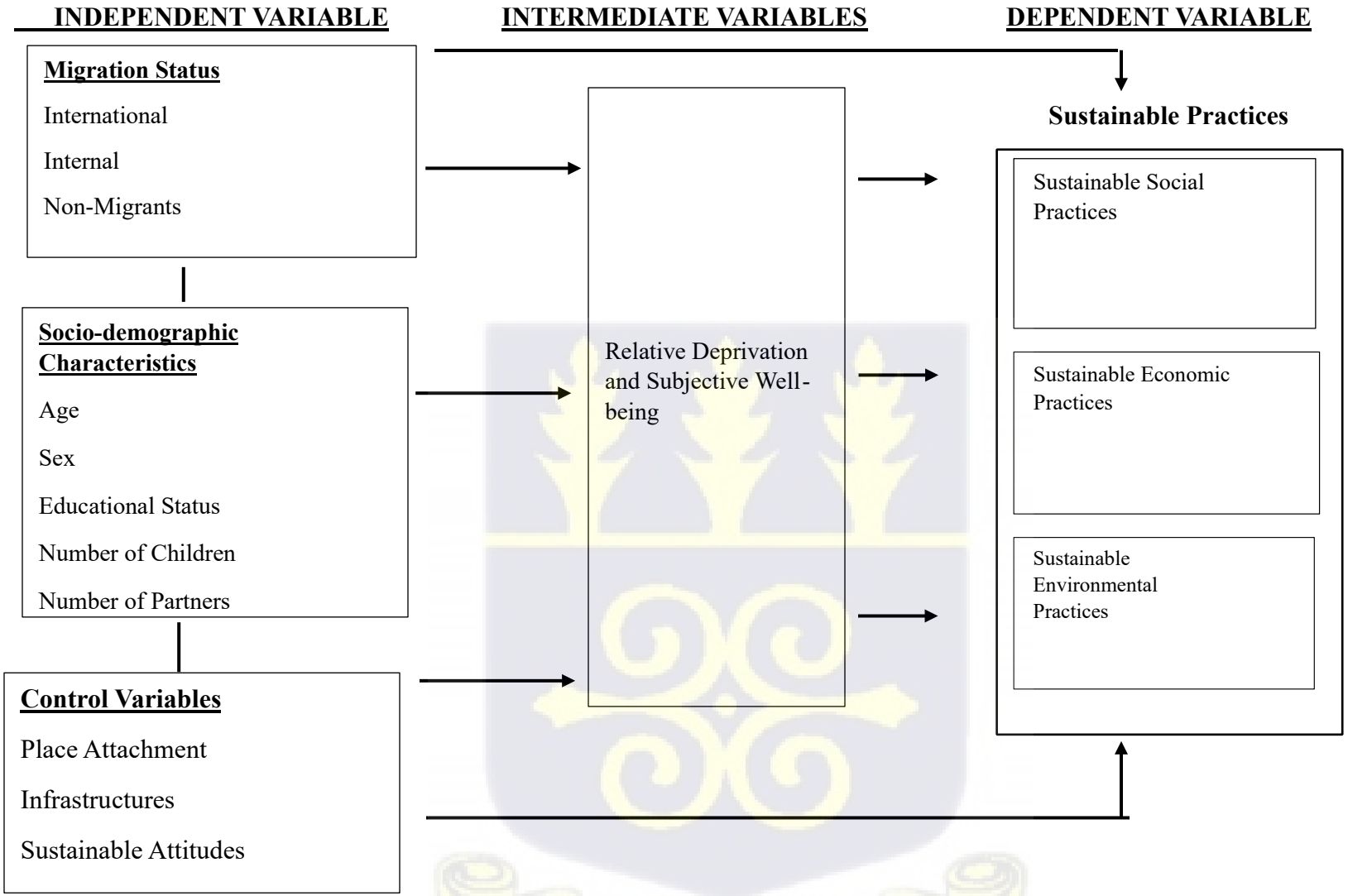
Studies affirm that place attachment positively impacts all dimensions of sustainability. Economically, those attached to their locale tend to support local businesses and manage resources prudently for economic benefits (Kyle et al., 2004; Devine-Wright, 2013). In social aspects, strong place attachment fosters community participation, cooperation, and engagement in local governance, enhancing social sustainability (Lewicka, 2011; Hernández et al., 2010). Additionally, environmentally, individuals deeply connected to their surroundings exhibit more eco-friendly actions, embracing practices like recycling and conservation, thus promoting environmental sustainability (Manzo & Perkins, 2006; Scannell & Gifford, 2010).

Access to household infrastructure has notable implications for economic, social, and environmental sustainability. Studies like those (Browning & Lusardi, 1996; Khandker, 2012) highlight how the high costs associated with accessing infrastructure like water and electricity

strain disposable income, impacting economic sustainability negatively. Essential household infrastructure such as water, sanitation, electricity, and housing affect engagement in socially sustainable practices. Access to these elements correlates with better living conditions, improved health, and overall well-being (WHO/UNICEF, 2020), fostering socially sustainable practices. Moreover, adequate household infrastructure, like reliable water and sanitation, shapes environmentally sustainable practices. Improved access to clean water and sanitation facilities influences responsible water use and waste management, indirectly contributing to environmental sustainability (Waddington & Snilstveit, 2009). Furthermore, households equipped with energyefficient infrastructure tend to engage in eco-friendly behaviours, reducing energy consumption and environmental impact (Lutzenhiser, 1993; Hensley & Koehler, 2008).

For sustainable attitudes, research consistently confirms a strong link between attitudes favoring sustainability and actual sustainable practices. Individuals displaying positive attitudes toward sustainability tend to engage in sustainable practices across economic, social, and environmental aspects (Lyubomirsky, Sheldon, Schkade, 2005; Oishi & Kesebir, 2015; Gatersleben & O'Brien, 2011; Otto & Kaiser, 2014). Economically, those with such attitudes tend to practice responsible consumption, manage finances prudently, and prefer ethical products (Lyubomirsky et al., 2006; Aknin et al., 2013). Socially, they are more likely to participate in community-oriented activities, such as volunteering and fostering social cohesion (Oishi & Kesebir, 2015; Howell et al., 2007). In terms of environmental sustainability, individuals with pro-environmental attitudes exhibit behaviours aligned with conservation, recycling, energy efficiency, and support for eco-friendly initiatives (Gatersleben & O'Brien, 2011; Otto & Kaiser, 2014).

Figure 2.2 Conceptual Framework



Author's Construct, 2023

INTEGRI PROCEDAMUS

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This study draws upon data sourced from the Migration Transformation and Sustainability Project (MISTY project), conducted at the Regional Institute for Population Studies. The overarching goal of the MISTY project is to explore the intricate interplay between migration patterns and sustainability dynamics within destination cities, emphasizing the often-overlooked positive impacts migration can bring. This multi-city project was conducted in six diverse urban centers: Accra, Worcester, Brussels, Amsterdam, Dhaka, and Maputo. The specific focus of this research centers on the dataset collected within Accra, Ghana, as part of Theme 2 of the MISTY project. Theme 2 aimed to delve into the ways new migrant populations contribute to transformative changes fostering sustainability. It encompasses data collection on various dimensions, including life course perspectives, resource utilization patterns, and the intensity of consumption among mobile populations. Moreover, the project examined intricate aspects such as identity formation, attachment to place, and the potential of migrant communities to act as catalysts for change.

This chapter discusses the research design, target population, sample size, sampling technique, data collection instrument and procedure, ethical considerations, and other important activities that are crucial to the validity of the outcome of the study.

3.1 Research Design

In this study, a cross-sectional research approach was adopted to scrutinize data about migrant and non-migrant populations within the MISTY project, focusing on selected districts within the Greater Accra Region of Ghana namely, Adenta, Ashaiman, LEKMA, and AMA. Employing quantitative research techniques, the study sought to delve into the mediating roles of relative deprivation and subjective well-being in the intricate relationships between migration, and sustainability among migrants and non-migrants in selected communities in the Greater Accra Metropolitan Area.

3.2 Scope of the Study

The study was conducted in the Greater Accra Region of Ghana, recognized as the country's most densely populated area, boasting a population of 5,455,692 in 2021, representing 17.7 percent of Ghana's total population. Notably, the Greater Accra region stands out as Ghana's most urbanized area, with an overwhelming 87.4% of its inhabitants residing in urban zones. Primarily, rural-urban migration constitutes the predominant pattern of migration in this region, with Accra serving as the primary destination for a significant percentage of internal migrants. Consequently, this migration trend has contributed to approximately 40% of the population settling in slum conditions within Accra.

This demographic shift, coupled with sociocultural diversity, has initiated a multitude of changes encompassing demographics, health, environment, and socio-economic aspects, profoundly influencing sustainability efforts and the achievement of Sustainable Development Goals (SDGs). In this context, the study specifically focuses on four districts within the Greater Accra Region:

Adenta, Ashaiman, LEKMA, and AMA. These districts serve as microcosms representing the larger dynamics of urbanization, and migration, and their implications on sustainability and SDG outcomes.

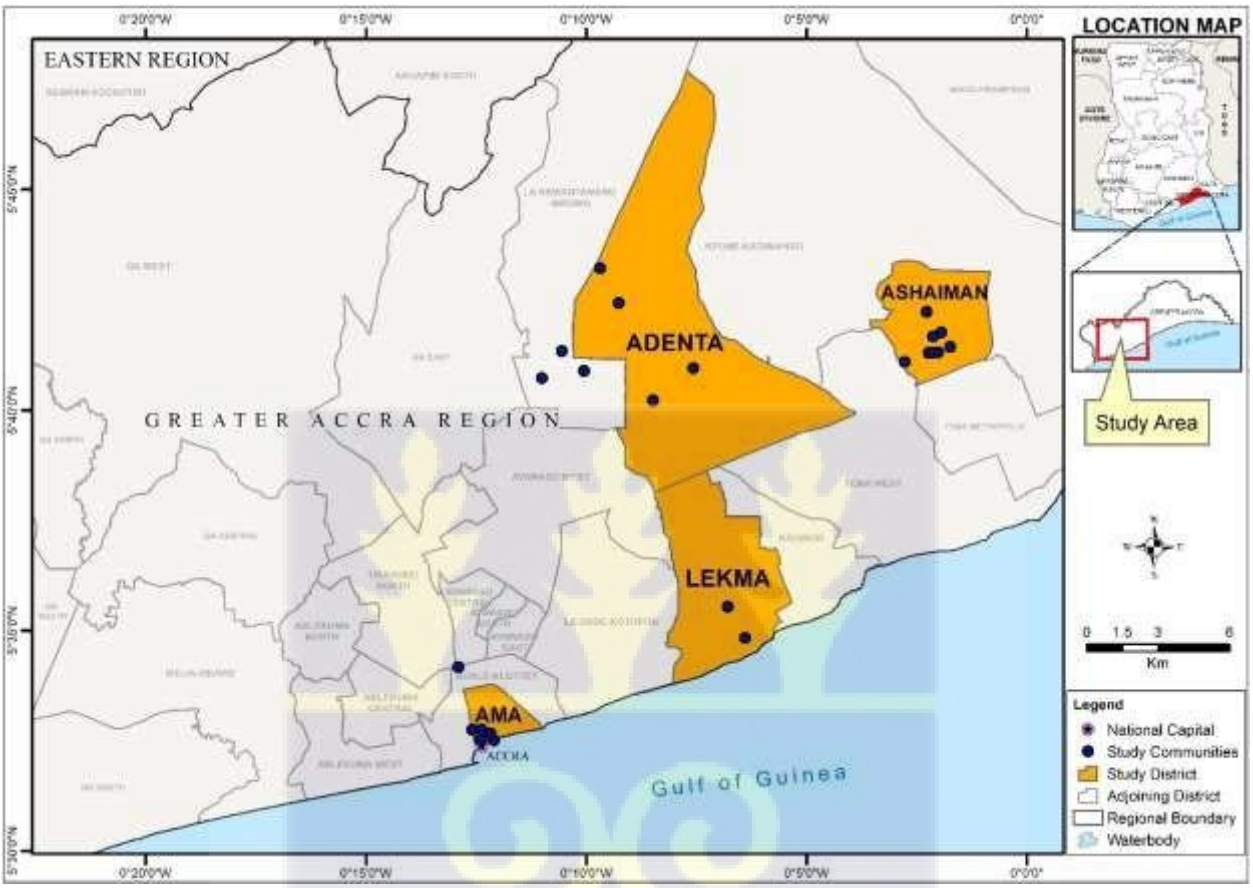


Figure 3.1 Map of Greater Accra Region

3.3 Target Population

The study narrows its focus to the populations residing within the Greater Accra Region, targeting individuals situated in four distinct districts: AMA, Ashaiman, Adenta, and LEKMA. Specifically, the research encompasses non-migrants, internal migrants, and international migrants aged 15 years and above, who have lived in their respective destinations for a minimum of one year before the data collection phase. Internal migrants were Ghanaians migrating from other regions within

the country to Greater Accra and settled in these study areas within one year prior to the data collection. International migrants targeted were those from the Global South specifically Nigerians and Nigerians, who had migrated into the study areas one year prior to data collection.

3.4 Sampling Technique

The MISTY project employed a sampling strategy that harmonized two non-probability methods: purposive sampling and snowball sampling. Purposive sampling, also known as subjective sampling, grants researchers the discretion to select respondents based on specific qualities, experiences, or knowledge they possess (Etikan, 2016). This approach efficiently targets individuals with the required information, optimizing the use of time.

In this study, purposive sampling was deployed to select respondents who were migrants, leveraging the researcher's discretion to approach individuals with relevant migration experiences.

Furthermore, snowball sampling complemented purposive sampling by expanding the sample size. This method involves initial interviewees recommending additional potential respondents who might possess deeper insights or pertinent knowledge related to the study's subject (Creswell, 2015). Leveraging the networks and recommendations of initial participants facilitated the identification of individuals with valuable information aligned with the study's focus.

The combined use of purposive and snowball sampling techniques resulted in a final sample of 1,163 respondents. This sample comprised 305 non-migrants, 299 internal migrants, and 559 international migrants, contributing diverse perspectives and experiences essential to the study's objectives.

3.5 Data Collection

The study utilizes the MISTY (Migration, Transformation, Sustainability), 2020 data. The MISTY study aims to investigate the intersections between migration and sustainability considerations in destination cities, Specifically the study used data collected in Accra by the Regional Institute for Population Studies, Legon. Quantitative data collected from migrants and non-migrants in selected communities in Accra was adopted by this study. The survey was designed to study changes in sustainable practices (attitudes and behaviours) in individuals' lives over the life course and the migration trajectories of international, and internal migrants, and non-migrants in different cities across the globe.

3.6 Positionality

In the pursuit of advancing scholarly understanding within the realm of migration dynamics and sustainability, I assumed a critical role as a research assistant in the MISTY (Migration Transformation and Sustainability) study. My positionality within this research endeavor extended beyond the conventional boundaries of a mere observer, as I undertook the significant responsibility of conducting the pretesting phase of the study instrument. This involved meticulous scrutiny and refinement of the measurement tools to ensure their efficacy in capturing the nuanced complexities inherent in migration phenomena.

Furthermore, my active involvement extended to the substantive phase of data collection, where I contributed to the generation of empirical insights that form the bedrock of the MISTY study. As a conscientious participant in this research initiative, I approached my responsibilities with a commitment to methodological rigor, ethical considerations, and a keen awareness of the broader implications of the study. My positionality, situated at the intersection of researcher and facilitator, underscores my dedication to fostering a comprehensive and nuanced understanding of migration

dynamics, thereby contributing to the ongoing discourse on sustainability in the context of human mobility.

3.7 Data Categorization and Coding

Selected variables from the Misty Project data were utilized for this study. This constitutes selected sociodemographic characteristics, personal and household characteristics as well as sustainable practices as captured in Table 3.1

3.7.1 Independent Variable

The independent variable used in the study was migration status. These were categorized as nonmigrants, internal migrants, and international migrants. The variable was treated as a nominal variable where all analyses were done by comparing across migration status.

3.7.2 Background Characteristics

Apart from migration status, other background characteristics were also considered in this study. These included age, educational level, locality of residence, number of children, and number of partners. These characteristics were all measured as categorical variables using frequency and percentages.

3.7.3 Control Variables

The control variables include selected personal and household characteristics of respondents. These include place attachment, access to infrastructure, and sustainable attitudes. For place attachment, seven (7) items were used to measure respondents' attachment level to place of destination using a Likert scale (Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree). All questions were coded positively with strongly disagree bearing a smaller, value of 1 than strongly agree which bears a value of 5. An index of place attachment was created to have an overall score

for access to infrastructure. The closer the mean score is to 5 the more attached one is to the locality of residence.

Access to infrastructure items was measured using fourteen (14) items. This was individually measured as Yes or No to each infrastructural item in percentages, with overall mean scores computed and compared among migrants and non-migrants. The closer the mean is to 14, the more the infrastructural items respondents have access to.

Sustainable attitudes were measured using twelve questions for which respondents were to show their level of agreement and disagreement with the statements using the Likert Scale (Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree). Means scores were generated for each of the sustainable attitudes whereas an overall index score was created to access the overall sustainable attitudes of respondents which was compared across migration status.

3.7.4 Mediating Variables

Two mediating variables were used in this study. These were relative deprivation and subjective well-being.

Relative deprivation, was gauged through a two-part assessment focusing on respondents' subjective perceptions of their household wealth in relation to others. Participants were prompted to evaluate their households' wealth status on a scale from "among the poorest" to "among the richest," encompassing the categories of below average, about average, and above average. This assessment involved comparing their household wealth first within the neighbourhood and subsequently within the broader city context.

To measure relative deprivation, mean scores were calculated based on respondents' assessments. A score closer to the highest value of five indicated that respondents perceived their households to

be in a comparatively favorable economic position than others. This assessment approach captured participants' subjective viewpoints regarding their household's economic standing relative to their immediate neighbourhood and the broader city, offering insights into their perceived levels of relative deprivation.

Subjective well-being encapsulates an individual's evaluation of life satisfaction within their neighbourhood context. To measure this subjective assessment, a Likert scale was employed, offering respondents five distinct options: 1. Very unsatisfied, 2. Rather unsatisfied, 3. Neither unsatisfied nor satisfied, 4. Rather satisfied, and 5. Very satisfied. These options were numerically scored in ascending order, ranging from the lowest score of 1 assigned to 'Very unsatisfied' to the highest score of 5 allocated to 'Very satisfied'.

The analysis of subjective well-being was computed by generating mean scores for the satisfaction levels reported by respondents. A higher mean score, closer to the maximum value of five, signified greater levels of satisfaction and, consequently, better overall well-being within the neighbourhood.

3.7.5 Dependent Variable

The primary focus of this study centers around the assessment of sustainable practices, delineated into three distinct domains: economic, social, and environmental. Each domain's evaluation relied on a set of four items tailored to gauge the frequency of respondents' engagement in sustainable behaviours. Participants were asked to indicate the frequency of their involvement in these practices using a Likert scale, offering response options spanning from 'Never' to 'Always'. These options were numerically scored from 1 for 'Never' to 5 for 'Always', establishing a gradient of responses based on the frequency of engagement.

To comprehensively evaluate the sustainable practices within each domain, means and standard deviations were computed. These statistical measures allowed for an assessment of the central

tendency and variability of responses for each specific sustainable practice item. Moreover, the analysis extended to deriving an overall score for each domain, aggregating the means of individual items within the respective economic, social, and environmental domains.

In addition to domain-specific assessments, an overarching sustainability index was computed. This index amalgamated the three domains, enabling the formulation of a holistic perspective on respondents' overall engagement in sustainable practices. By integrating these domains, this index provided an encompassing evaluation of participants' sustainable behaviours across economic, social, and environmental dimensions, offering a comprehensive insight into their overall sustainability practices.

Table 3.1 Measurement of Variables

Variable	**Measurement**
Socio-demographic Characteristics	
Age (years)	1. 15-24, 2. 25-34, 3. 35-44, 4. 45-74
Sex	1. Male, 2. Female
Educational Attainment	1. No Formal Education, 2. Preschool/Primary, 3. JHS, 4. SHS, 5. Post Secondary, 6. Tertiary 7. Koranic
Place of Residence	1. Adenta, 2. AMA, 3. LEKMA, 4. Ashaiman

Number of children	(1). No Child, (2). 1, (3). 2, (4). 3, (5). 4 and above
Number of Partners	1) No partner,

	2). 1, 3). 2, 4). 3, 5). 4 and above
Control Variables (Personal/ Household Characteristics)	
Place Attachment	1) Strongly disagree 2) Disagree 3) Neither agree nor disagree 4) Agree 5) Strongly agree
	This neighborhood was part of my life
	I wanted my family and friends to live there in the future
	I don't feel like an outsider in this place
	I lived there because it was practical
	I missed the place when I was not there
	My friends and/or family there were good support for me
	I enjoyed being involved in the neighborhood activities
Sustainable Attitudes To what extent do you agree with the following statements?	**1)** Strongly disagree 2) Disagree 3) Neither agree nor disagree 4) Agree 5) Strongly agree
	Looking after the environment is important; to care for nature and save life resources.
	It bothers me that the world's natural environment is changing so quickly
	Ordinary people have responsibilityto conserve resources for future generations.
	Myindividual actions will make a difference regarding global climate change.
	It is important to me to do something for the good of society
	It bothers me when people do not care about the Wellbeing of others

	People should help strangers or people they do not know who need help.
	My own actions can improve how things work in the community.
	It is important to restrain ourselves from buying new goods (for example mobile phone, laptop,clothes,shoes,car etc.)
	It bothers me to see in the market so many one-use plastic products that produce a lot of waste.
	We all have the responsibilityto limit our use of energyresources and cause less pollution.
	Byswapping and using second-hand clothes or other products Ican contribute to reduce the amount of pollution and waste produced in the world.
Access to Infrastructure	1. Yes 2. No
	Access to Tap Water
	Access to Electricity
	Access to Flushing Toilet
	Access to Pit Latrine/ KVIP
	Access to Garbage collection
	Access to Garbage separation bins
	Access to Public transport: near resident
	Access to Affordable Public transport
	Access to Private car
	Access to good quality healthcare
	Access to good quality education
	Access to good quality Housing
	Access to good quality support from the local government
	Access to good quality support from NGO's
Mediating Variables	1. Among the poorest 2. Below average 3.About average 4. Above average 5. Among the richest 0. Don't know
Relative Deprivation	Compared to other households in Neighborhood, your household was
	Compared to other households in that city/town/village, your household was

	1. Very unsatisfied 2. Rather unsatisfied 3. Neither unsatisfied nor satisfied 4. Rather satisfied 5. Very satisfied 0. Don't know
Subjective Well-being	All things considered, how satisfied were you with your life as a whole while living in Neighbourhood?

Dependent Variable	**1. Never 2. Rarely 3. Sometimes 4. Often 5. Always**	**Reference for classification**
Economic Sustainable Practices	How often did you wear second-hand clothes?	Jackson, Spiro, Kartha, Bradford, & Meadows (2019).
	How often did you borrow, rent or swap products such as a hammer, a car or a ladder instead of buying them?	Mont, (2004). Tukker, (2015).
	How often did you grow your own fruit, nuts, vegetables, cereals, or other food and/or keep your own animals (for instance chickens, sheep or pigs)?	Zhang, X., Zhang, R., & Zhang, X. (2019). Specht, Siebert, Hartmann, I., Freisinger, Sawicka, Werner & Henckel (2014).
	When you were living in NEIGHBOURHOOD, how often did you move around by foot, bicycle or public/shared transport?	Litman, (2019).
	How often did you make efforts to save everyday water use (through less number of baths in a week, cleaning and cooking, immediate action to repair leaks in water pipe or tap, ensuring multiple uses of used water etc.)?	Biswas (2008).
Social Sustainable Practices	How often were you volunteering in any community/national/international organisation aimed at preserving the environment?	Lozano, (2018). Kaiser et al., (2019) Pargman & Fisker (2014)

	How often were you volunteering in any community/national/international organization aimed at preserving people's rights (e.g., right to equality, health, housing, religion, etc.)?	O'Meara & Tynan, (2018). Stuk., Hoye, Nicholson, Brown, & Aisbett (2016)
	How often did you choose certain products to consume because the people involved in their production were treated and paid fairly?	Newholm & Shaw (2007). Glanville & Paxton (2007).
	Apart from family members and friends, how often did you help people who were worse off than you, e.g., through giving food, gifts, donations, or money?	
Environmentally Sustainable Practices	How often did you separate organic waste (coffee grounds, fruit and vegetable peels, garden waste, etc.) from the rest of your everyday waste?	Eriksson, Finnveden, Björklund & Ekvall (2005).
	How often did you take care of the common areas near your house (pavement/staircase/green area, etc.)?	Niemelä, Saarela, Söderman, Kopperoinen, Yli-Pelkonen, Väre,... & Kotze, D. J. (2011).
	How often did you use your bag when carrying groceries?	Cohen, D. A., & McMorrow, J. (2017).

Source: MISTY, 2020

3.7 Data Analysis

The research methodology adopted a quantitative approach for data analysis. Upon gathering responses from the administered questionnaires, the data were meticulously collated and then exported to IBM SPSS Statistics version 23 for coding and subsequent analysis. This robust statistical software facilitated both descriptive and inferential analyses.

The collected dataset underwent a comprehensive analysis aimed at elucidating the intricate relationships and predictive factors related to sustainable practices within the study population.

Various statistical analyses were employed to achieve this objective, encompassing diverse techniques suited for different facets of exploration.

The analytical procedures encompassed several key statistical methods. ANOVA (Analysis of Variance) was utilized to discern categorical associations, allowing for the examination of differences in sustainable practices across different groups or categories. Pearson correlation analysis was employed to explore and quantify the relationships between continuous variables, unveiling the strength and direction of associations among these variables. Further mediation analysis was conducted, drawing from the models proposed by Baron and Kenny (1986) and MacKinnon, Warsi & Dwyer (1995). This methodological approach facilitates a nuanced understanding of the relationships between variables by examining the role of a third variable termed a mediator influencing the connection between an independent variable and a dependent variable. Specifically, mediation analysis explored not only how independent variables impact the dependent variable but also delves into the influence of independent variables on an intermediate variable, the impact of the intermediate variable on the dependent variable, and the collective influence of both independent and intermediate variables on the dependent variable. By scrutinizing these interactions, mediation analysis offers a comprehensive perspective, unveiling the mechanisms through which variables interact and influence one another within the complex web of relationships under study.

Lastly, linear regression analysis was executed to ascertain predictive factors influencing sustainable practices, allowing for the identification of key variables contributing to the prediction of such practices within the studied population.

By employing a suite of statistical analyses including ANOVA, Pearson correlation, mediation and linear regression, the research sought a multifaceted understanding of sustainable practices. These

analyses did not only facilitate the exploration of relationships but also provided valuable insights into the factors influencing and predicting sustainable behaviours among the study participants.

3.7.1. Descriptive Statistics.

Descriptive techniques were used to perform univariate analysis for each variable in the study. Frequencies and percentages as well as mean scores and standard deviation were used to describe each variable across migration status. These were presented using charts and tables.

3.7.2 . ANOVA (Analysis of Variance)

To investigate the impact of categorical variables (Sex, Age group, Educational Level, Locality of Residence, Number of Children, and Number of Partners) on Sustainable practices (i.e Economic, Social, and Environment), ANOVA was conducted. Specifically, the differences in mean sustainable practices among distinct demographic groups were examined. This analysis aimed to ascertain if there were statistically significant variations in sustainable practices concerning demographic factors among migrants and non-migrants.

3.7.3 Pearson Correlation

The Pearson correlation, as outlined by Ersin Karaman et al. (2011), serves as a vital statistical tool for assessing the relationship strength between two variables. Widely acknowledged as the most utilized correlation coefficient, it ranges from -1 to 1, denoting a perfect negative correlation at -1, no correlation at 0, and a perfect match at 1. Computed by dividing the covariance of the variables under scrutiny by their respective standard deviations, it offers a comprehensive measure of the relationship's magnitude and directionality. The Pearson correlation analysis was employed in this study to assess the strength and direction of linear relationships between continuous variables specifically the control variables (Access to Infrastructure, Place Attachment,

Sustainable Attitudes, Relative Deprivation, and Subjective Well-being) and Sustainable practices (i.e. Economic, Social, and Environment).

3.7.4 Regression Analysis

Multiple linear regression stands as a fundamental statistical method utilized to discern and forecast the continuous outcome of a dependent variable through the utilization of two or more independent variables (Kutner, Neter, Li, & Wasserman, 2005). Multiple linear regression offers a nuanced understanding of the interplay between the dependent and multiple independent variables (Hair, Black, Babin, & Anderson, 2010). It serves as a powerful mechanism for exploring the extent to which these independent variables collectively account for the variance observed in the dependent variable. Furthermore, this method facilitates the identification of the unique contribution of each independent variable towards the overall variance explained by the model, enabling researchers to gauge the relative significance and influence of individual predictors within the larger predictive framework.

This study employed a multiple linear regression analysis to predict sustainable practices based on various independent variables. This was employed due to the continuous nature of the dependent variable (economic, social and environmental sustainable practices) with indexes computed for each domain of sustainability. The regression model incorporated demographic factors, control variables, and intermediate variables to predict and understand their collective influence on sustainable practices. This analysis aimed to identify the most significant predictors and their respective contributions in explaining the variability observed in sustainable practices among the study participants. The equation for the multiple linear regression model is given as;

$Yi= \beta 0 + \beta 1xi1 + \beta 2xi2+\ldots+ \beta pxip+\epsilon$ Where:

Yi is a dependent or predicted variable β0 is the y-intercept, i.e.,

the value of y when both xi and x2 are 0.

β1 and β2 are the regression coefficients representing the change in y relative to a one-unit change in xi1 and xi2, respectively. βp is the slope coefficient for each independent variable.

The model would be run at a 95% significance level with a confidence level, expressed as a decimal (0.05)

3.7.5 Mediation Analysis

Multiple regression, often recognized as the primary method for assessing mediation effects in research studies, has been extensively documented in the literature. Referred to as stepwise regression or progressive adjustment, this methodological approach serves as a systematic means to examine and delineate the presence of mediated effects within a given model.

Baron and Kenny's seminal work in 1986 laid the groundwork for testing mediation through multiple regression analysis. Their influential framework proposed a step-by-step procedure to investigate mediation effects. Initially, researchers regress the dependent variable on an independent variable thought to be connected to the dependent variable through one or more intermediary variables. This initial regression model establishes the baseline relationship between the independent (migration status) and dependent variables. (Economic, Social and Environmentally Sustainable practices).

Subsequently, the model was progressively augmented by introducing the two mediating variables (relative deprivation and subjective well-being). This incremental approach enables the evaluation of how the inclusion of these intermediary variables affects the parameter estimates and the statistical significance of relationships within the model.

CHAPTER FOUR

SOCIO-DEMOGRAPHIC NEIGHBOURHOOD AND HOUSEHOLD CHARACTERISTICS OF MIGRANTS AND NON-MIGRANTS

4.1 Introduction

This chapter presents the descriptive analysis of the individual sociodemographic and household characteristics, place attachment, sustainable attitudes, relative deprivation, subjective well-being and and sustainable practices, among migrants and non-migrants in Accra. The individual sociodemographic and household characteristics included the age, sex, education, locality of residence, number of partners, and number of children of respondents.

4.2 Migration Status of Respondents

The study sample comprised non-migrants, internal migrants, and international migrants. Out of 1163 who responded to the survey, international migrants constitutes 48.1 percent, non-migrants, 26.2 percent and internal migrants, 25.7 percent. This is depicted in Figure 4.1.

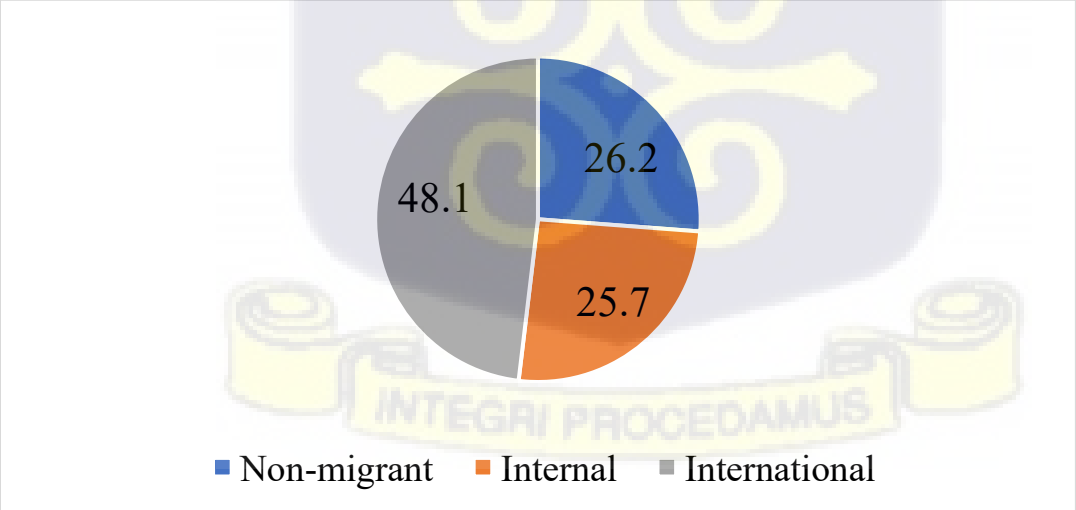


Figure 4.1: Percentage Distribution of Respondents by Migration Status

Source: MISTY, 2020

4.3 Age and Migration Status

Table 4.1 illustrates the distribution of respondents by age and migration status. Approximately 40 percent of non-migrants belong to the 15-24 years age bracket, while about 31.8 percent fall within the 25-34 years category. The lowest proportion (11.5 percent) is observed among individuals aged 45-75 years.

Internal migrants display a different age distribution, with slightly over a third (37.8 percent) falling in the 25-34 years range and 27.1 percent belonging to the 15-24 years age group. The older age categories constitute the smallest percentage (14 percent) among internal migrants.

In contrast, international migrants show distinct age demographics, with 43.1 percent in the 15-24 years bracket, 42.0 percent in the 25-34 years range, and a mere 2.0 percent falling within the 45-75 years age group.

The concentration of internal migrants in the 25-34 years age range (37.8%) indicates that internal migration is particularly attractive to young adults in their prime working or family-establishing years, supporting arguments that migration often occurs during life stages where individuals seek better economic opportunities or improved living conditions (Tacoli, 2012; Awumbila, 2014). Similarly, the prominence of international migrants in younger age groups aligns with literature identifying young adults as the most mobile demographic, driven by the pursuit of education, employment, and higher living standards abroad (International Organization for Migration [IOM], 2019; De Haas, 2021).The age distribution aligns with the "migration hump" theory, where younger individuals are more mobile and willing to take risks for better opportunities (Martin & Taylor, 1996).

Table 4.1 Percentage distribution of respondents by age and migration status

Age (Years)	Non-migrant N=305	Internal Migrant N=299	International Migrant N=559	Total N=1163
	Percent	Percent	Percent	Percent
15-24	39.3	27.1	43.1	38
25-34	31.8	37.8	42	38.3
35-44	17.4	21.1	12.9	16.2
45-75	11.5	14	2	7.6
Total	**100**	**100**	**100**	**100**

Source: MISTY, 2020

4.4 Sex and Migration Status

Figure 4.2 illustrates the percentage distribution of respondents based on sex and migration status. Among non-migrants, there is a slightly higher representation of males (51.1 percent) compared to females (48.9 percent).

Regarding migrants, international migrants exhibit a predominant proportion of males, constituting 95 percent of the group. In contrast, internal migrants display a different pattern, with approximately 58.9 percent being females and 41.1 percent being males, representing the lowest proportion among the different migration statuses.

The findings suggest distinct gendered patterns in migration, reflecting broader socio-cultural and economic dynamics. The near parity in the sex distribution among non-migrants (51.1% males and 48.9% females) indicates a balanced gender representation within the non-mobile population. However, the overwhelming predominance of males among international migrants (95%) aligns with existing literature highlighting the gendered nature of international migration, where men often dominate due to factors such as traditional breadwinning roles, employment opportunities in

male-dominated sectors, and societal norms that restrict women's mobility in certain contexts (IOM, 2019; De Haas, 2021).

In contrast, the higher proportion of females among internal migrants (58.9%) supports studies that identify internal migration as a pathway for women seeking to improve their socio-economic status or escape restrictive traditional roles (Awumbila, 2014; Tacoli, 2012). Additionally, the lower proportion of males among internal migrants (41.1%) suggests that men may be more likely to engage in international migration, possibly due to higher risks or costs associated with cross-border movements that men are culturally or economically more likely to assume (UN DESA, 2020).

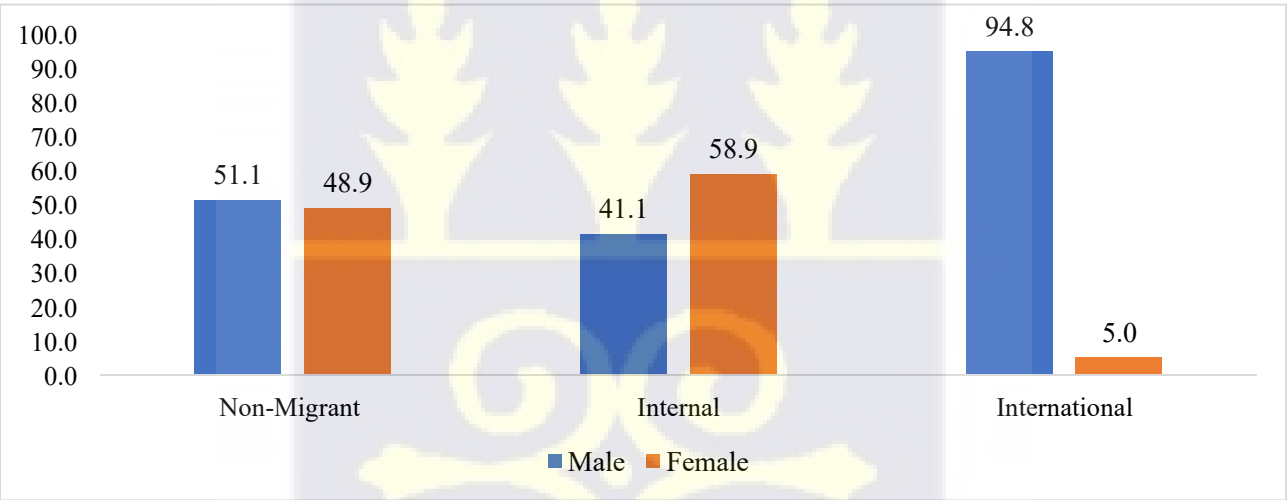


Figure 4.2 Percentage distribution of respondents by sex and migration status

Source: MISTY, 2020

4.5 Education and Migration Status

Table 4.2 presents the distribution of study respondents based on their educational backgrounds and migration status. It shows that 39.7 percent of non-migrants has a secondary school education, while nearly a fourth (23.6 percent) has a primary school education. The least proportion (1.3 percent) of non-migrants has a Koranic school education.

For internal migrants, about one-third (34.8 percent) has completed their primary school education, and 28.4 percent has obtained a senior high school education. Only a small portion (1.3 percent) of internal migrants has a Koranic school education.

Among international migrants, about one-fourth (26.1 percent) has obtained a senior high school education, and a fifth (21.3 percent) has received education at a Koranic school. The least group (4.1 percent) has pursued a post-secondary school education.

The relatively high proportion (21.3%) of international migrants with Koranic school education suggests that cultural or religious influences may also play a role in migration decisions, particularly for migrants originating from predominantly Islamic regions (IOM, 2019).

Table 4.2 Percentage distribution of respondents by education and migration status

Education	Non-migrant N=305	Internal Migrants N=299	International Migrants N=599	Total N=1163
	Percent	Percent	Percent	Percent
No Formal education	4.3	6.7	11.1	8.2
Pre -school/ Primary	13.8	19.1	17.5	16.9
JHS	23.6	34.8	13.1	21.4
SHS	39.7	28.4	26.1	30.3
Post Secondary	8.2	5.7	4.1	5.6
Tertiary	9.2	4	6.8	6.7
Koranic	1.3	1.3	21.3	10.9
Total	**100**	**100**	**100**	**100**

Source: MISTY, 2020

4.6 Locality of Residence and Migration Status

According to Figure 4.3, approximately a third (35.1 percent) of non-migrants reside in Adenta, while approximately thirty percent (29.8 percent) live in the AMA area. The smallest proportion (7.5 percent) of non-migrants are residents of LEKMA.

Moreover, almost half (48.8 percent) of internal migrants live in Adenta, and about a fourth (24.4 percent) reside in Ashaiman. The least proportion (8 percent) of internal migrants resides in LEKMA.

Similarly, within the international migrant group, the highest proportion (43.3 percent) resides in Adenta, followed by 35.8 percent in Ashaiman, and the lowest percentage (3.8 percent) lives in LEKMA.

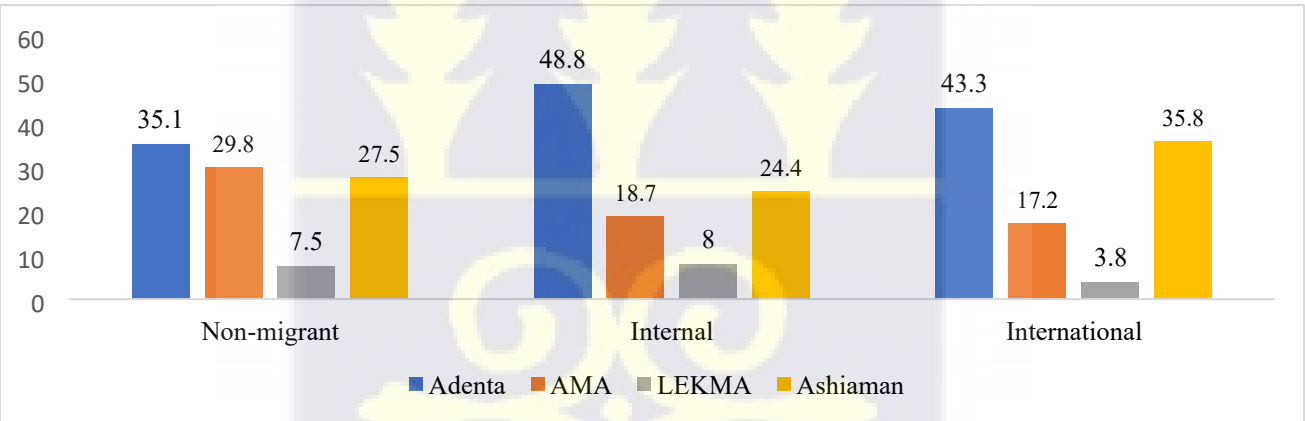


Figure 4.3 Percentage distribution of respondents by locality of residence and migration status

Source: MISTY, 2020

4.7 Number of Children and Migration Status

Figure 4.4 shows that among non-migrants, the majority (52.5 percent) do not have any children, followed by 16.1 percent who had two children, and the lowest group (8.2 percent) had three children. For internal migrants, 40.5 percent has no children, while close to one-fifth (19.7 percent)

has two children, and the least (10.4 percent) has three children. Among international migrants, the highest proportion (67.3 percent) has no children, followed by 18.2 percent who has one child, and the lowest group (3.0 percent) has more than three children. In general, the highest percentage of respondents across all migration statuses do not have any children.

Migration, especially international migration, might be more common among younger individuals who are in a life stage where they have not yet started families, or they may be delaying family formation due to the challenges or opportunities presented by migration (Rendall et al., 2019; Raymer & Stillwell, 2009).

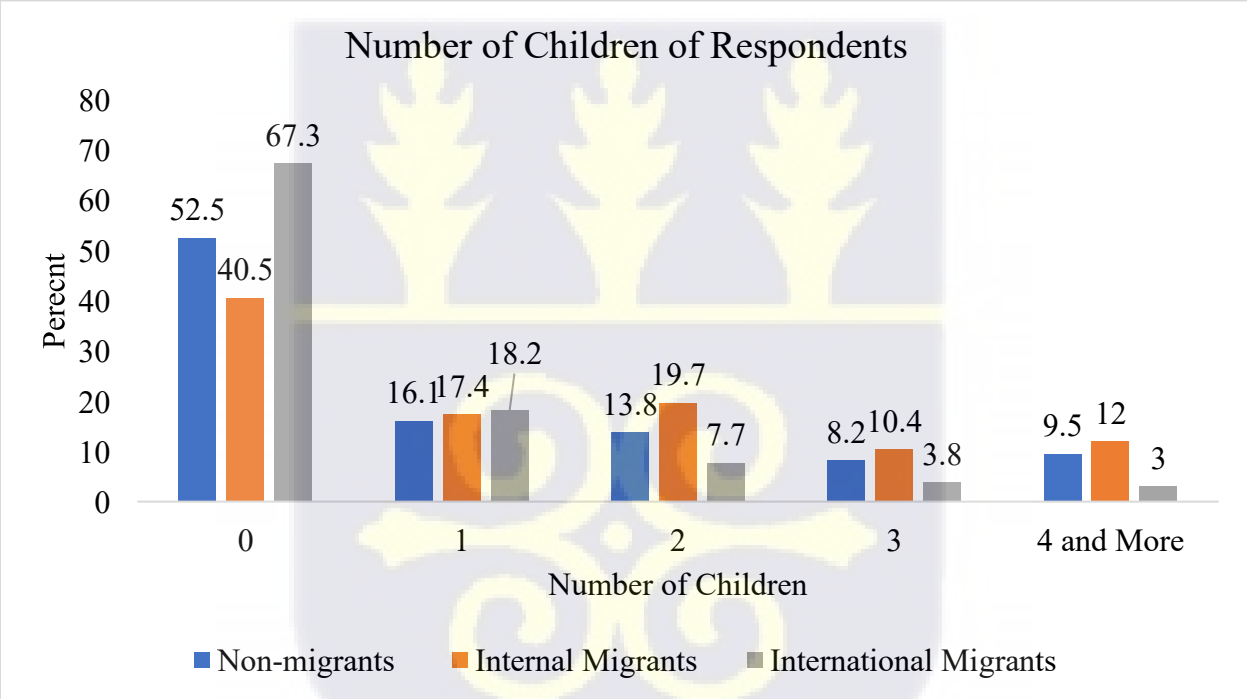


Figure 4.4: Percentage distribution of respondents by number of children and migration status

Source: MISTY, 2020

4.8 Number of Partners and Migration Status

The distribution of number of partners among different migrant groups is illustrated in Figure 4.5. Among non-migrants, the majority (48.9 percent) reported having one partner, while a substantial portion (41.6 percent) indicated having no partner. Similarly, among internal migrants, a significant percentage (53.8 percent) reported having one partner, with 31.1 percent stating they had no partner.

In contrast, international migrants displayed a distinct pattern, with the highest proportion (52.1 percent) reporting having no partner, while 41.9 percent reported having one partner. The smallest subset (0.9 percent) mentioned having three partners.

The findings suggest that migration status influences the number of partners individuals report having, with international migrants displaying a distinct pattern. International migrants show a higher proportion (52.1%) reporting no partner, and 41.9% reporting one partner. This could reflect the challenges and pressures associated with international migration, such as economic instability, social isolation, and the difficulty of maintaining relationships across borders (Lundborg, 2012; King & Christou, 2010). Additionally, the small proportion (0.9%) of international migrants reporting three partners might suggest the presence of non-traditional relationship structures, possibly due to exposure to diverse cultural norms (McDonald & Kippen, 2002). Overall, the findings imply that migration, particularly international migration, may lead to fewer or less stable relationships due to the complexities and demands of migration (Sjaastad, 1962; Kulu et al., 2009).

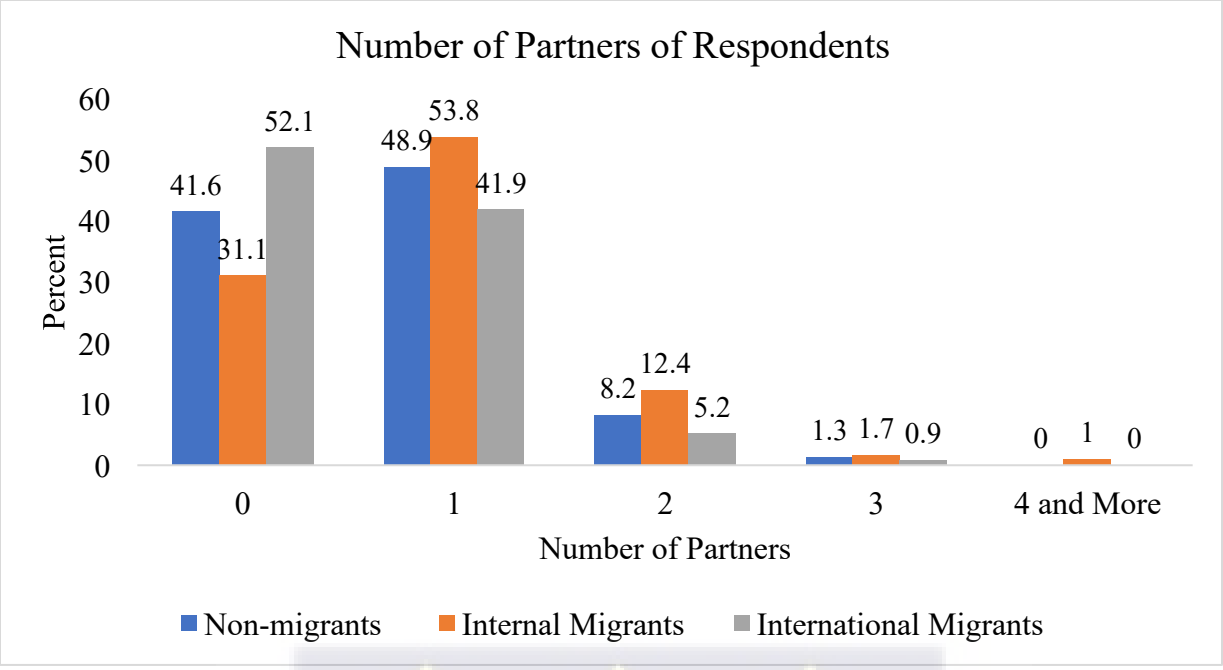


Figure 4.5: Percentage distribution of respondents by number of partners and migration status

Source: MISTY, 2020

4.9. Personal and Household Characteristics

4.9.1 Access to Infrastructure and Migration Status

The study assesses the access to infrastructure among respondents in different migration statuses. Non-migrants demonstrate the highest proportion of access to various infrastructure elements compared to internal and international migrants. Among non-migrants, more than half have access to nine out of the 14 analyzed infrastructure items. These encompass access to electricity (96.1 percent), tap water (82.3 percent), quality healthcare (81.6 percent), affordable public transport (80.3 percent), quality education (72.1 percent), proximity to public transport (69.2 percent), garbage collection (63.3 percent), and flush toilets (50.5 percent).

For international migrants, access extends to six out of the 14 infrastructure items, including electricity (85.5 percent), tap water (70.5 percent), affordable public transport (69.6 percent),

quality healthcare (58.5 percent), quality education (57.6 percent), and proximity to public transport (53.5 percent).

Regarding internal migrants, over half have access to five out of the 14 infrastructure items, comprising electricity (79.9 percent), tap water (62.9 percent), pit latrines or KVIPs (62.5 percent), affordable public transport (61.5 percent), and quality healthcare (58.5 percent).

Overall, more than half of the study participants across all migration statuses have access to electricity, tap water, affordable public transport, and quality healthcare. Non-migrants notably exhibit the highest overall infrastructure access within their communities, scoring a mean of 5.98. This is followed by international migrants (4.66) and internal migrants (4.24) in terms of mean infrastructure access. On average, non-migrants access approximately six infrastructural items, international migrants access five items, and internal migrants access four items, This pattern underscores the role of migration in influencing access to essential services, with non-migrants residing in established communities benefiting from better infrastructure compared to the mobility-driven and often transitional living arrangements of migrants (Barrett & Browne, 2007; King & Christou, 2010). as presented in Table 4.3.

Table 4.3 Percentage Distribution of Respondents by Migration Status and Access to Infrastructure in Neighbourhood

	Non-Migrants N=305	Internal Migrants N=299	International Migrants N=559	Total N=1163
Access to Tap Water	82.3	62.9	70.5	71.6
Access to Electricity	96.1	79.9	85.5	86.8
Access to Flushing Toilet	50.5	18.4	35.2	34.9
Access to Pit Latrine/ KVIP	40.0	62.5	41.9	46.7
Access to Garbage collection	63.3	26.4	38.5	41.9
Access to Garbage separation bins	8.2	3.3	5.5	5.7
Access to Public transport: near your resident	69.2	49.2	53.5	56.5
Access to Public transport: affordable	80.3	61.5	69.6	70.3
Access to Private car	8.9	3.7	5.2	5.8
Access to good quality healthcare	81.6	58.5	64.3	67.2
Access to good quality education	72.1	49.5	57.6	59.3
Access to good quality Housing	36.1	22.1	22.7	26.1
Access to good quality support from the local government	5.2	5.0	4.8	5.0
Access to good quality support from NGO's	1.3	1.0	1.3	1.2
Overall Access to Infrastructure	**Mean=5.98 (SD=2.02)**	**Mean=4.24 (SD=2.13)**	**Mean=4.66 (SD=2.66)**	

Source: MISTY, 2019

4.9.2 Place Attachment and Migration Status

Table 4.4 presents various statements that gauge individuals' Place Attachment, along with mean scores and standard deviations. These statements shed light on residents' perceptions and interactions within their living environments.

Analyzing specific statements of place attachment, international migrants reported a highest mean score (Mean = 4.34, SD = 0.702), regarding the statement “The neighbourhood was part of my life”. This is followed by internal migrants (Mean = 4.18, SD = 0.727), and non-migrants (Mean = 4.11, SD = 0.919). Expressing a wish for family and friends to reside in the neighborhood in the

future also had the highest mean score among international migrants (Mean = 3.51, SD = 1.030), followed by internal migrants (Mean = 3.31, SD = 1.105), and it was least among non-migrants (Mean = 3.18, SD = 1.149).

Regarding feelings of being an outsider, international migrants reported the highest mean (Mean = 4.31, SD = 1.009), followed by non-migrants (Mean = 4.13, SD = 1.009), and then internal migrants (Mean = 4.01, SD = 0.986). Moreover, non-migrants demonstrated the highest mean regarding residing in the neighborhood due to practical reasons (Mean = 4.05, SD = 0.700), followed by international migrants (Mean = 4.87, SD = 0.768), and then internal migrants (Mean = 3.81, SD = 0.732).

Furthermore, the sentiment of missing the place when absent was most pronounced among international migrants (Mean = 4.08, SD = 0.869), followed by non-migrants (Mean = 3.96, SD = 0.908), and then internal migrants (Mean = 3.90, SD = 0.883). Additionally, international migrants reported the highest mean score for receiving support from friends and family at their destination (Mean = 3.82, SD = 0.791), followed by non-migrants (Mean = 3.80, SD = 0.791), and internal migrants (Mean = 3.78, SD = 0.733). Lastly, the statement "I enjoyed being involved in neighborhood activities" had the highest mean among international migrants (Mean = 3.56, SD = 0.890), followed by internal migrants (Mean = 3.53, SD = 1.004), and then non-migrants (Mean = 3.41, SD = 1.042).

Overall, international migrants reported the highest mean score for place attachment (Mean = 3.93), followed by non-migrants (Mean = 3.81), and then internal migrants (Mean = 3.79).

Contrary to the expected higher place attachment levels among non-migrants compared to migrants, this study found stronger place attachment among international migrants. Research

suggests that place attachment can emerge irrespective of residence duration (Gustafson, 2001; Williams & Kaltenborn, 1999), with individuals forming connections to multiple places (Di Masso et al., 2019; Gustafson, 2001). The attachment of international migrants to destinations in Ghana may stem from perceived peace, political stability, and security, contributing to their sense of belongingness and attachment to the country (IOM, 2019).

Table 4.4 Percentage Distribution of Respondents' Place Attachment by Migration Status

	Non-Migrant	**Internal Migrant**	**International Migrant**	**Total**
	Mean(SD)	Mean(SD)	Mean(SD)	Mean(SD)
This neighborhood was part of my life	4.11 (0.919)	4.18(0.727)	4.34(0.702)	4.24(0.776)
I wanted my family and friends to live there in the future	3.18 (1.149)	3.31(1.105)	3.51(1.030)	3.37(1.090)
I don't feel like an outsider in this place	4.13(1.009)	4.01(0.986)	4.31(0.793)	4.15(0.913)
I lived there because it was practical	4.05(0.700)	3.81(0.732)	3.87(0.768)	3.90(0.747)
I missed the place when I was not there	3.96(0.908)	3.90(0.883)	4.08(0.869)	4.00(0.885)
My friends and/or family there were good support for me	3.80(0.791)	3.78(0.733)	3.82(0.791)	3.80(0.776)
I enjoyed being involved in the neighborhood activities	3.41(1.042)	3.53(1.004)	3.56(0.890)	3.51(0.963)
Index of Place Attachment	**3.81 (0.544)**	**3.79 (0.523)**	**3.93 (0.467)**	**3.86(0.506)**

Source: MISTY, 2020

4.9.3 Sustainable Attitudes and Migration Status

The findings from Table 4.5 illustrate the sustainable attitudes prevalent among non-migrants, internal migrants, and international migrants across various dimensions. Notably, all three groups

showcased a shared concern for environmental preservation. Non-migrants displayed the highest mean score (4.32, SD = 0.516) regarding the importance of looking after the environment, closely followed by internal migrants (Mean = 4.29, SD = 0.585), and international migrants (Mean = 4.24, SD = 0.499). Furthermore, all groups expressed unease about rapid environmental changes, with international migrants displaying the highest concern level (Mean = 4.02, SD = 0.727) compared to internal migrants (Mean = 4.13, SD = 0.742) and non-migrants (Mean = 4.15, SD = 0.772).

A consensus among all groups emerged regarding the responsibility of ordinary individuals in conserving resources for future generations. Though the mean scores were fairly similar across groups, internal migrants and non-migrants exhibited slightly higher scores (Mean = 4.18, SD = 0.601) compared to international migrants (Mean = 4.13, SD = 0.646). Similarly, the belief that individual actions can contribute to global climate change mitigation was shared across the three groups, although non-migrants expressed slightly lower belief (Mean = 3.87, SD = 0.885) compared to internal migrants (Mean = 3.98, SD = 0.825) and international migrants (Mean = 3.81, SD = 0.840).

Moreover, all groups strongly endorsed the importance of contributing to social betterment, with non-migrants displaying the highest mean score (Mean = 4.26, SD = 0.552), followed closely by internal migrants (Mean = 4.22, SD = 0.591), and international migrants (Mean = 4.16, SD = 0.542). Notably, there was a consistent concern shared across the groups regarding neglecting the well-being of others and a strong inclination among respondents from all groups to assist strangers or those in need.

In terms of adopting sustainable practices, there was a collective inclination among respondents to limit purchasing new goods and a shared concern about the prevalence of single-use plastics in the market. Additionally, all three groups acknowledged their responsibility to limit energy use and minimize environmental impact, with non-migrants displaying the highest mean score (Mean = 4.04,

SD = 0.611), followed by internal migrants (Mean = 3.98, SD = 0.673), and international migrants (Mean = 3.81, SD = 0.698).

Furthermore, supporting the idea of using second-hand goods and engaging in swapping to promote sustainability was evident across all groups, with non-migrants (Mean = 3.27, SD = 0.931) exhibiting slightly higher scores compared to internal migrants (Mean = 3.26, SD = 0.941) and international migrants (Mean = 3.16, SD = 0.904).

The Sustainable Attitude Index, calculated based on mean scores, indicated that international migrants demonstrated particularly strong sustainable attitudes in certain areas (Mean = 3.93, SD = 0.47). Non-migrants (Mean = 3.81, SD = 0.54) and internal migrants (Mean = 3.79, SD = 0.52) also displayed positive sustainable attitudes, albeit with some variations in specific item agreement levels. Overall, these findings underscore a shared concern for sustainability and social responsibility among the surveyed groups, with international migrants showing particularly strong attitudes in certain dimensions.

The findings reveal shared sustainability attitudes among non-migrants, internal migrants, and international migrants, with non-migrants demonstrating the strongest pro-environmental behaviors (Steg & Vlek, 2009). International migrants show heightened concern for environmental changes, possibly influenced by exposure to diverse contexts (Adger et al., 2015), while internal migrants reflect a blend of rural-urban values (Tacoli, 2009). All groups acknowledge individual responsibility for addressing global environmental issues, aligning with Ajzen's (1991) Theory of Planned Behavior. These results highlight the importance of tailored, migration-sensitive sustainability policies to enhance engagement across different migrant groups (Black et al., 2011).

Table 4.5: Sustainable Attitudes by Migration Status

	Non-migrant	Internal Migrant	International Migrant	Total
Sustainable Attitudes	**Mean(SD)**	**Mean(SD)**	**Mean(SD)**	**Mean(SD)**
Looking after the environment is important; to care for nature and save life resources.	4.32(0.516)	4.29(0.585)	4.24(0.499)	4.27(0.528)
It bothers me that the world's natural environment is changing so quickly	4.15(0.772)	4.13(0.742)	4.02(0.727)	4.08(0.745)
Ordinary people have responsibilityto conserve resources for future generations.	4.18 (0.580)	4.18(0.601)	4.13(0.646)	4.16(0.618)
My individual actions will make a difference regarding global climate change.	3.87(0.885)	3.98(0.825)	3.81(0.840)	3.87(0.851)
It is important to me to do something for the good of society	4.26(0.552)	4.22(0.591)	4.16(0.542)	4.20(0.559)
It bothers me when people do not care about the Well-being of others	4.22(0.648)	4.21(0.614)	4.22(0.631)	4.22(0.631)
People should help strangers or people they do not know who need help.	3.98(0.681)	3.89(0.786)	4.07(0.762)	4.00(0.751)
My own actions can improve how things work in the community.	3.96(0.685)	3.98(0.700)	3.80(0.752)	3.89(0.726)

It is important to restrain ourselves from buying new goods (for example mobile phone, laptop,clothes,shoes,car etc.)	2.78(1.199)	2.81(1.185)	2.66(1.202)	2.78(1.198)
It bothers me to see in the market so many one-use plastic products that produce a lot of waste.	4.35(0.772)	4.30(0.845)	4.15(0.750)	4.24(0.785)
We all have the responsibility to limit our use of energy resources and cause less pollution.	4.04(0.611)	3.98(0.673)	3.81(0.698)	3.91(0.676)
By swapping and using second-hand clothes or other products I can contribute to reduce the amount of pollution and waste produced in the world.	3.27(0.931)	3.26(0.941)	3.16(0.904)	3.21(0.921)
Sustainable Attitude Index	**3.81(0.54)**	**3.79(0.52)**	**3.93(0.47)**	**3.89(0.34)**

Source: MISTY, 2020

4.10 Distribution of Relative Deprivation by Migration Status

The study investigated respondents' relative deprivation through two distinct approaches. First, respondents were asked to assess how their households compared to others in their neighborhood. Second, they were asked to gauge how their households compared to others in the city. These assessments were conducted using a Likert scale, allowing respondents to categorize their households as either among the poorest, below average, about average, above average, or among the richest, following this order.

4.10.1 Respondents' Households compared to other households in Neighbourhood

In analyzing respondents' perceptions of their households compared to others in their neighborhoods, it was observed that a significant proportion across all groups perceive their households as approximately average. Specifically, around 62.6 percent of non-migrants, 61.4 percent of international migrants, and 58.5 percent of internal migrants considered their households to be about average in comparison to their neighbours.

Conversely, a notable proportion of international migrants, approximately 24.5 percent, perceive their households as below average concerning others in the neighborhood. Similarly, roughly 21.7 percent of internal migrants and slightly over 13.1 percent of non-migrants categorized their households as below average when making comparisons within their local community.

The findings suggest that perceptions of household status relative to others in the neighborhood are shaped by migration status. A majority of respondents across all groups view their households as average, indicating a sense of parity and social integration. However, international and internal migrants are more likely to perceive their households as below average compared to non-migrants, possibly reflecting economic challenges, limited access to resources, or social disadvantages often faced by migrants in new or transitional environments (Black et al., 2011).

Table 4.6 Respondents' Households compared to other households in Neighbourhood

	Non-migrant (percent) N=305	Internal Migrant (percent)N=299	International Migrants (percent) N=559	Total
Among the poorest	0.3	2.3	0.2	0.8
Below average	13.1	21.7	24.5	20.8
About average	62.6	58.5	61.4	61.0
Above average	18.7	9.4	9.7	12.0
Among the richest	3.3	1.0	0.4	1.3
Don't know	2.0	7.0	3.9	4.2
Total	**100.0**	**100.0**	**100.0**	**100.0**
Mean (SD)	3.06(0.80)	2.64(0.97)	2.74(0.81)	**2.79(0.86)**

Source: MISTY, 2020

4.10.1 Comparing Respondent's household to other households in the City

In analyzing respondents' perspectives on their household wealth status concerning others in the city, it was found that a majority perceived their households to be of average status. Approximately 60.0 percent of non-migrants, 53.2 percent of internal migrants, and 51.9 percent of international migrants reported their households as being of about average status in comparison to other households in the city.

Conversely, a significant proportion of respondents perceived their households to be below average. Specifically, percentages indicating below-average status were reported by non-migrants (18.4 percent), international migrants (31.8 percent), and internal migrants (26.1 percent). Additionally, a small minority of respondents considered their households among the wealthiest, with minimal percentages in this category: non-migrants (2.0 percent), internal migrants (1.0 percent), and international migrants (0.9 percent).

Overall, non-migrants reported feeling comparatively better about their household wealth status, exhibiting a mean of 2.91 (SD=0.83) compared to international migrants (Mean =2.63, SD=0.87),

and internal migrants (Mean=2.53, SD=1.00) who had the lowest perception of household wealth status in comparison to the city.

The findings imply that migration status significantly influences perceptions of household wealth compared to others in the city. Non-migrants generally view their household wealth more positively, likely reflecting their established socioeconomic stability and access to resources within familiar settings. In contrast, internal and international migrants are more likely to perceive their households as below average, which may stem from the economic challenges and barriers to resource access commonly associated with migration (Black et al., 2011). The lower mean scores for internal and international migrants suggest a heightened sense of economic disparity, possibly due to transitional challenges and limited integration into urban economic systems (Adger et al., 2002).

Table 4.7 Comparison of Respondents' Households to Other Households in the City

	Nonmigrant (percent) N=305	Internal Migrant (percent) N=299	International Migrants (percent) N=559	Total
Among the poorest	1.6	4.3	2.1	2.6
Below average	18.4	26.1	31.8	26.8
About average	60	53.2	51.9	54.3
Above average	15.7	8	9.3	10.7
Among the richest	2	1	0.9	1.2
Don't Know	2.3	7.4	3.9	4.4
Total	**100**	**100**	**100**	**100**
Mean (SD)	**91(0.83)**	**2.53(1.00)**	**2.63(0.87)**	**2.68(0.90)**

Source: MISTY, 2020

4.11 Distribution of Subjective Well-being by Migration Status

Table 4.8 presents subjective well-being among migrants and non-migrants within their respective neighborhoods. Among non-migrants, 41 percent expressed a high level of satisfaction with their life in the neighborhood, while an additional 37 percent reported feeling rather satisfied. Conversely, a small minority (2.6 percent) indicated feeling very unsatisfied with their current situation.

Internal migrants demonstrated a slightly higher level of satisfaction, with approximately 46.5 percent expressing feeling rather satisfied with their life in the neighborhood. Moreover, 27.8 percent of internal migrants reported being very satisfied, while only 1.7 percent indicated feeling very unsatisfied.

Similarly, among international migrants, the largest proportion (47.8 percent) reported feeling rather satisfied with their life in the neighborhood, followed by 24.3 percent who expressed being very satisfied. Conversely, only a small fraction (2.3 percent) expressed uncertainty by selecting the option "Don't Know."

Analyzing the average life satisfaction in the neighborhood, non-migrants reported the highest mean (Mean=3.95, SD=1.26), indicating a higher level of satisfaction. Following this, international migrants reported a mean of 3.73 (SD=1.16), showing a slightly lower average satisfaction, while internal migrants recorded the least average satisfaction (Mean=3.62, SD=1.49).

The findings on subjective well-being among non-migrants, internal migrants, and international migrants reflect patterns identified in recent literature. Studies highlight that non-migrants tend to report higher well-being due to stronger social ties, familiarity with their environment, and better

access to established support systems (Bartram, 2021; Adger et al., 2020). These factors provide a sense of stability and security, which enhances life satisfaction in their neighborhoods.

For international migrants, the slightly lower satisfaction levels can be attributed to challenges in adapting to new cultural and social environments. However, research has shown that migrants often benefit from community networks and improved economic opportunities in host countries, which contribute to their overall life satisfaction (Nowok et al., 2013; Hendriks & Bartram, 2016).

Internal migrants, on the other hand, often face greater challenges in adjusting to urban life. Recent studies emphasize that internal migrants experience lower well-being due to inadequate access to housing, social exclusion, and economic vulnerabilities, particularly in developing countries (Chen et al., 2020; Awumbila et al., 2014). Their lack of established social networks and limited integration within urban communities can lead to a sense of alienation, further reducing their satisfaction with life in their neighborhoods.

Table 4.8 Respondents' Life Satisfaction in the Neighbourhood

	NonMigrant (percent) N=305	Internal Migrant (percent) N=299	International Migrants (percent) N=559	Total (percent) N=1162
Very Unsatisfied	2.6	1.7	2.9	2.5
Rather Unsatisfied	9.8	8	10.7	9.8
Neither Satisfied nor Unsatisfied	6.6	6.4	12	9.1
Rather Satisfied	37	46.5	47.8	44.6
Very Satisfied	41	27.8	24.3	29.6
Don't Know	3	9.7	2.3	4.4
Total 100 100	**Mean (S** 100 **3.95**	**100(1.26)**	**3.73(1.16)**	**3.76(1328(1.49)**

Source: MISTY, 2020

4.12 Distribution of Sustainable Practices by Migration Status

This section shows the sustainable practices index scores among migrants and non-migrants. The sustainable practices were categorized into economic, environmental and social dimensions.

4.12.1 Economic Sustainability

Table 4.9 provides an analysis of sustainable economic practices among non-migrants, internal migrants, and international migrants.

In terms of moving around by foot in neighbourhoods, international migrants exhibited the highest mean score (Mean=4.58, SD=0.72), closely followed by internal migrants (Mean=4.51, SD=0.72), while non-migrants displayed a slightly lower mean (Mean=4.38, SD=0.79). This suggests a heightened inclination among migrants both internal and international to use walking as a primary mode of transportation within their communities compared to non-migrants.

In growing own fruits and vegetables, internal migrants reported the highest mean score (Mean=3.35, SD=1.47), followed by international migrants (Mean=3.10, SD=1.43). In contrast, non-migrants showed the lowest mean score (Mean=1.51, SD=0.98) in this sustainable practice, indicating a less prevalent engagement in growing their own fruits, nuts, vegetables, or cereals.

Regarding sustainable practices such as wearing second-hand clothes, non-migrants exhibited the highest mean score (Mean=4.06, SD=0.97), followed by internal migrants (Mean=4.17, SD=0.96), whereas international migrants reported a slightly lower mean (Mean=3.82, SD=1.09). This indicates a relatively higher inclination among non-migrants and internal migrants toward embracing second-hand clothing compared to international migrants.

In terms of borrowing, renting, or swapping products, international migrants demonstrated the highest mean score (Mean=2.64, SD=0.92), followed by internal migrants (Mean=2.35, SD=1.06),

while non-migrants reported a slightly lower mean (Mean=2.3, SD=1.03). This implies a greater tendency among international migrants to engage in borrowing or swapping goods compared to the other groups.

In terms of efforts to save everyday water use, minimal variations were observed among the groups, with mean scores hovering around the same range: non-migrants (Mean=2.83, SD=1.12), internal migrants (Mean=2.88, SD=1.18), and international migrants (Mean=2.84, SD=1.11). This indicates a relatively consistent approach across all groups concerning their attempts to conserve water in their daily activities.

Across the overall economic sustainability index, internal migrants exhibited the highest mean score (Mean=3.45, SD=0.63), followed closely by international migrants (Mean=3.39, SD=0.59), whereas non-migrants reported a slightly lower mean (Mean=3.01, SD=0.501).

The findings suggest that internal and international migrants exhibit higher levels of economic sustainability compared to non-migrants, as reflected in their higher mean scores on the overall economic sustainability index. This implies that migrants, both internal and international, may demonstrate stronger economic resilience, adaptability, and resourcefulness in their efforts to achieve and maintain economic stability. These attributes are often associated with the need to navigate new environments and overcome challenges, such as finding employment and building livelihoods in unfamiliar contexts (UNDP, 2022; Adger et al., 2020).

For internal migrants, higher economic sustainability could result from their ability to capitalize on opportunities in urban or economically vibrant areas, where they often relocate for better prospects. Similarly, international migrants may benefit from exposure to diverse economic systems and opportunities, which can enhance their economic resilience (Chen et al., 2020; IOM, 2021).

In contrast, non-migrants may exhibit lower economic sustainability due to factors such as limited access to diverse economic opportunities or a potential over-reliance on local and static economic conditions, which might restrict their capacity to adapt to changes in the economic environment (Awumbila et al., 2014).

Table 4.9 Distribution of Economic Sustainable Practices by Migration Status of Respondents

Sustainable Economic Practices	Non-migrant N=305 Mean (SD)	Internal N=299 Mean (SD)	International N=558 Mean (SD)	Total N=1162 Mean (SD)
Moving around by foot in the neighborhood	4.38(0.79)	4.51(0.72)	4.58(0.72)	4.51(0.74)
Growing your fruit, nuts, vegetables, cereals, or other	1.51(0.98)	3.35(1.47)	3.10(1.43)	2.75(1.53)
Wearing second-hand clothes	4.06(0.97)	4.17(0.96)	3.82(1.09)	3.97(1.04)
Borrow, rent or swap products such as a hammer, a car	2.3(1.03)	2.35(1.06)	2.64(0.92)	2.48(1.00)
Making efforts to save everyday water use	2.83(1.12)	2.88(1.18)	2.84(1.11)	2.84(1.13)
Overall Economic Sustainability Index	**3.01(0.50)**	**3.45(0.63)**	**3.39(0.59)**	**3.42(0.64)**

Source: MISTY, 2020

4.12.2 Social Sustainable Practices

The analysis in Table 4.10 reveals marginal differences in sustainable social practices across non-migrants, internal migrants, and international migrants. In the domain of volunteering in community/national /international organisations, international migrants reported slightly higher participation (Mean=1.73, SD=1.04) compared to non-migrants (Mean=1.67, SD=0.92) and internal migrants (Mean=1.63, SD=0.94). Similarly, there were small variations in the selection of products based on fair treatment and payments during production, with the highest mean among

non-migrants (Mean=1.52, SD=0.91), followed by international migrants (Mean=1.49, SD=0.85) and internal migrants (Mean=1.46, SD=0.92).

With respect to helping those in need beyond family and friends, non-migrants exhibited a higher frequency of such acts (Mean=3.24, SD=0.93) compared to internal migrants (Mean=2.93, SD=1.04) and international migrants (Mean=3.11, SD=0.93). Similarly, participation in environmental preservation volunteer work showed minor differences, with international migrants reporting a slightly higher engagement (Mean=2.19, SD=1.29) compared to non-migrants (Mean=2.09, SD=1.24) and internal migrants (Mean=2.16, SD=1.32).

The overall mean score for social sustainability across the groups was relatively similar for non-migrants (Mean=2.13, SD=0.64), international migrants (Mean=2.13, SD=0.69), and internal migrants (Mean=2.05, SD=0.69).

The findings suggest that social sustainability levels are relatively comparable across non-migrants, international migrants, and internal migrants, as evidenced by the similar mean scores. This implies that regardless of migration status, respondents may face comparable challenges or opportunities in maintaining cohesive social networks, accessing social support, and fostering a sense of belonging in their communities.

The slight variation, with internal migrants reporting a slightly lower mean score, may indicate that this group faces marginally more difficulty in integrating into their communities or sustaining social relationships, potentially due to transitional challenges or weaker ties in their new environments (Melegh et al., 2020). On the other hand, the similarity in scores between non-migrants and international migrants suggests that while international migrants may face initial social integration challenges, they may ultimately achieve levels of social sustainability comparable to those of non-migrants (Portes & Vickstrom, 2011).

Table 4.10 Social Sustainable Practices Among Migrants and Non-migrants

Sustainable Social Practices	Non-migrant N=305 Mean (SD)	Internal N=299 Mean (SD)	International N=558 Mean (SD)	Total N=1162 Mean (SD)
Volunteering in any community/national/international organization.	1.67(0.92)	1.63(0.94)	1.73(1.04)	1.69(0.98)
Choosing certain products to consume because the people involved in their production were treated and paid fairly	1.52(0.91)	1.46(0.92)	1.49(0.85)	1.49(0.89)
Apart from family members and friends, how often did you help people who were worse off than you, e.g., through giving food, gifts, donations, or money	3.24(0.93)	2.93(1.04)	3.11(0.93)	3.10(0.97)
Volunteering in any organization aimed at preserving the environment	2.09(1.24)	2.16(1.32)	2.19(1.29)	2.15(1.28)
Overall Social Sustainability	**2.13(0.64)**	**2.05(0.69)**	**2.13(0.69)**	**2.11(0.68)**

Source: MISTY, 2020

4.12.3 Environmental Sustainability

From Table 4.11, the overall mean score of environmentally sustainable practices was 2.64. Internal migrants showed the highest (Mean=2.83, SD=0.80) followed by non-migrants (Mean=2.49, SD=0.79) whilst international migrants recorded the lowest (Mean =2.65, SD=0.78).

Specifically, more internal migrants (mean=3.70, SD=1.17) often take care of the common areas near their house relative to international (Mean=3.54, SD=1.12) and non-migrants (Mean=3.53, SD=1.18). Again, more internal migrants (Mean=2.66, SD=1.24) use their own bags when carrying groceries followed by non-migrants (Mean=2.45, SD=1.17) and international migrants (Mean=2.24, SD=1.19). In the same vein, more internal migrants (Mean=2.07, SD=1.21) than non-migrants (Mean=2.02, SD=1.16) and international migrants (Mean=1.97, SD=1.16) separate organic waste from the rest of everyday waste.

Overall, internal migrants (Mean=3.24, SD=0.92) reported higher means scores of environmentally sustainable practices followed by international migrants (Mean =2.96, SD=0.88) and then non-migrant (Mean=2.49, SD=0.71).

The findings imply that internal migrants exhibit the highest engagement in environmentally sustainable practices compared to international migrants and non-migrants. This may suggest that internal migrants are more aware of or responsive to environmental issues, potentially due to their exposure to different local environments, resource constraints, or the necessity to adapt to new living conditions that encourage sustainable behaviors (Adger et al., 2020).

The slightly lower mean score for international migrants could indicate that while they engage in sustainable practices, their focus may be divided between integrating into a new country and navigating economic and social challenges, which may limit their ability to prioritize environmental actions (IOM, 2021).

Non-migrants, reporting the lowest mean score, may have a relatively stable living environment and lifestyle, potentially leading to a lower perceived need or motivation to adopt environmentally sustainable practices (Barr & Gilg, 2006). This suggests a need for targeted environmental awareness campaigns or policies aimed at promoting sustainable behaviors, particularly among non-migrants, to address disparities in environmental engagement across the groups.

Table 4.11: Environmental Sustainable Practices among Migrants and Non-migrants

	Non-migrant N=305	Internal N=299	International N=558	Total N=1162
Sustainable Environmental Practices	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Using your own bag when carrying groceries	2.45(1.17)	2.66(1.24)	2.24(1.19)	2.41(1.21)
Taking care of the common areas near house	3.53(1.18)	3.70(1.17)	3.54(1.12)	3.58(1.15)
Separating organic waste from the rest of your everyday waste	2.02(1.16)	2.07(1.21)	1.97(1.16)	2.01(1.17)
Overall Environmental Sustainability Index	**2.49(0.71)**	**3.24(0.92)**	**2.96(0.88)**	**2.64(0.77)**

Source: MISTY, 2020

4.12.4 Overall Sustainability Index

Generally, sustainable practices among respondents showed a mean of 2.75. With this, internal migrants exhibited more sustainable practices (Mean=2.82, SD=0.54) followed by international migrants (Mean=2.77, SD=0.50) and the least by non-migrants (Mean=2.63, SD=0.42).

The findings imply that internal migrants are slightly more engaged in sustainable practices compared to international migrants and non-migrants. This could suggest that internal migrants, due to their mobility within the same country, might be more exposed to diverse environmental challenges or resource limitations, encouraging them to adopt sustainable behaviors (Adger et al., 2020).

International migrants, while demonstrating similar levels of sustainable practices, may be influenced by the environmental norms and policies of the host country, as well as the pressures of integrating into a new socio-economic system (IOM, 2021).

Non-migrants exhibit the lowest mean score, which could reflect a sense of stability and continuity in their living environments, potentially resulting in less urgency or awareness about adopting sustainable practices (Barr & Gilg, 2006).

Table 4.12 Overall Sustainable Practices Among Migrants and Non-Migrants

	Non-migrant N=305	**Internal N=299**	**International N=558**	**Total N=1162**
	Mean(SD)	Mean(SD)	Mean(SD)	Mean(SD)
Moving around by foot in neigbourhood	4.38(0.79)	4.51(0.72)	4.58(0.72)	4.51(0.74)
Growing your own fruit, nuts, vegetables, cereals, or other	1.51(0.98)	3.35(1.47)	3.10(1.43)	2.75(1.53)
Wearing second-hand clothes	4.06(0.97)	4.17(0.96)	3.82(1.09)	3.97(1.04)
Borrow, rent or swap products such as a hammer, a car	2.3(1.03)	2.35(1.06)	2.64(0.92)	2.48(1.00)
Making efforts to save everyday water use	2.83(1.12)	2.88(1.18)	2.84(1.11)	2.84(1.13)
Volunteering in any community/national/international organization.	1.67(0.92)	1.63(0.94)	1.73(1.04)	1.69(0.98)
Choosing certain products to consume because the people involved in their production were treated and paid fairly	1.52(0.91)	1.46(0.92)	1.49(0.85)	1.49(0.89)
Apart from family members and friends, how often did you help people who were worse off than you, e.g., through giving food, gifts, donations, or money	3.24(0.93)	2.93(1.04)	3.11(0.93)	3.10(0.97)
Volunteering in any organization aimed at preserving the environment	2.09(1.24)	2.16(1.32)	2.19(1.29)	2.15(1.28)

Using your own bag when carrying groceries	2.45(1.17)	2.66(1.24)	2.24(1.19)	2.41(1.21)
Taking care of the common areas near house	3.53(1.18)	3.70(1.17)	3.54(1.12)	3.58(1.15)
Separating organic waste from the rest of your everyday waste	2.02(1.16)	2.07(1.21)	1.97(1.16)	2.01(1.17)

Source: MISTY, 2020

4.13 Chapter Summary

The study surveyed 1,163 respondents, categorized into non-migrants (26.2%), internal migrants (25.7%), and international migrants (48.1%). The majority of respondents were between the ages of 15 and 34, with distinct age patterns across migration groups. Non-migrants had a balanced gender distribution, while international migrants were predominantly male (95%), and internal migrants were mostly female (58.9%). In terms of education, non-migrants had the highest proportion with secondary education, while internal and international migrants showed varied educational backgrounds, including primary and senior high school education. Regarding family structure, non-migrants and international migrants had the highest proportions without children.

The findings indicated a strong sense of place attachment across all migration groups, with international migrants exhibiting the highest levels of attachment. Sustainable attitudes were prevalent among all respondents, with international migrants demonstrating the most pronounced commitment to sustainability. In terms of relative deprivation, most respondents perceived their households as average compared to others, with non-migrants generally feeling better off than internal and international migrants. Life satisfaction in the neighborhood was relatively high, particularly among international migrants.

The study found variations in sustainable practices across the migration groups. In terms of economic sustainability, internal and international migrants exhibited more practices compared to non-migrants. Environmental sustainability practices, such as taking care of common areas and saving water, were widely practiced across all groups, with internal migrants showing slightly more engagement. For social sustainability, non-migrants and internal migrants exhibited higher levels of engagement in socially sustainable behaviors, such as helping others and volunteering. International migrants showed strong attitudes toward sustainability, especially in environmental practices, but their social sustainability practices were not as pronounced as those of non-migrants and internal migrants.

CHAPTER FIVE

ASSOCIATION BETWEEN RESPONDENTS' CHARACTERISTICS AND SUSTAINABLE PRACTICES AMONG MIGRANTS AND NON-MIGRANTS

5.0 Introduction

This section examines the bivariate relationships between respondent characteristics and sustainable practices. The chapter captures the influence of background, personal and household characteristics on each of the three sustainability dimensions.

5.1 Background Characteristics and Sustainable Practices

The relationship between the background characteristics and sustainable practices was explored by performing the Analysis of Variance test. This was done to examine whether variation in the characteristics of the study population influences sustainable behaviour. The three dimensions of sustainability i.e., economic, social, and environmental were used as the components of the dependent variable.

5.2 Economic Sustainability

5.2.1 Association between Sex and Economic Sustainable Practices

The data presented in Table 5.1 demonstrate a notable connection between sex and economic sustainability practices. A p-value of ≤ 0.05 signifies strong evidence that sex plays a role in determining economic sustainability practices in Accra. In essence, an individual's sex has a discernible impact on their economic sustainability behaviours.

The analysis reveals that, on average, males (Mean = 3.47, SD = 0.64) tend to exhibit slightly higher levels of economic sustainability practices than females (Mean = 3.32, SD = 0.65).

Moreover, when considering migration status, a significant relationship emerges between sex and economic sustainability practices, especially among international migrants. With a p-value of 0.000, the data strongly support that sex differences influence economic sustainability practices among international migrants. Specifically, male international migrants exhibit more economic sustainability practices, with a mean score of 3.56 (SD), while female international migrants score lower, with a mean of 3.09 (SD) (p-value).

However, for non-migrants and internal migrants, no significant correlation between sex and economic sustainability practices was observed in the study.

The findings imply that sex plays a significant role in shaping economic sustainability practices specifically among international migrants, with male migrants exhibiting a higher engagement in such practices compared to female migrants. This could be influenced by several factors, including gendered differences in access to resources, opportunities, and decision-making roles in host countries (UN Women, 2022). Male international migrants may have greater economic agency or access to income-generating opportunities, enabling them to adopt practices that promote economic sustainability.

5.2.2 Relationship between Age and Economic Sustainable Practices

The analysis reveals that the age of respondents does not exhibit a statistically significant relationship with economically sustainable practices in Accra. This conclusion is drawn from the data presented in Table 5.1, where the calculated p-value of 0.051 exceeds the threshold of 0.05 at a 95 percent confidence level. Therefore, it can be inferred that there is no significant difference in economically sustainable practices among various age groups.

Conversely, when considering migration status, a significant correlation emerges between the age of international migrants and their economically sustainable practices in Accra. The findings suggest that younger international migrants tend to engage in more economically sustainable

practices. As age decreases among international migrants, the propensity for displaying economically sustainable behaviours increases.

However, for both non-migrants and internal migrants, no statistically significant association was observed with regard to economic sustainability practices.

The findings suggest that age significantly influences economically sustainable practices among international migrants with younger migrants demonstrating a greater propensity for such behaviors. This could stem from younger individuals' adaptability, exposure to global sustainability trends, and higher levels of education, as supported by studies that highlight the role of youth in adopting innovative and sustainable behaviors (Carvalho et al., 2021; O'Brien et al., 2020). Conversely, older international migrants may encounter challenges, such as resistance to change or limited access to information, which can hinder their engagement in sustainable practices (Collado et al., 2020).

5.3.2 Relationship between Education and Sustainable Economic Practices

The relationship between education and economically sustainable practices reveals a statistically significant association, with a p-value of 0.000. This empirical evidence underscores a substantial difference in economically sustainable practices based on one's level of educational attainment. Referring to Table 5.1, it is evident that respondents who have attained Koranic education displayed the highest level (Mean=3.87, SD=0.55) of economically sustainable practices, followed by those with no formal education (Mean=3.63, SD=0.62). Primary school graduates (Mean=3.54, SD=0.58) come next, while those with tertiary education exhibited the lowest level (Mean=3.06, SD=0.65) of economically sustainable practices.

When considering migration status, both internal and international migrants' educational levels exhibit a significant association with economically sustainable practices, with p-values of 0.000

and 0.004, respectively. Among international migrants, individuals with Koranic education showcase the highest level of sustainable practices (Mean=3.89, SD=0.55), followed by those with no formal education (Mean=3.72, SD=0.57). Conversely, those with tertiary education exhibit the lowest level (Mean=3.24, SD=0.66) of economic sustainability practices.

Similarly, internal migrants with Koranic education demonstrate a higher level of economically sustainable practices (Mean=4.00, SD=0.29) compared to those with no formal education (Mean=3.74, SD=0.53), while those with tertiary education display the lowest level (Mean=3.10, SD=0.09) of economically sustainable practices.

The findings suggest that educational attainment significantly influences economically sustainable practices among both internal and international migrants, with individuals having Koranic education displaying the highest levels of sustainability, followed by those with no formal education. This aligns with studies highlighting that traditional or religious education often instills values of resource conservation and communal responsibility, which may translate into sustainable practices (Shaffril et al., 2020; Pradhan et al., 2021). Conversely, migrants with tertiary education exhibit the lowest levels of economic sustainability, potentially due to lifestyle changes associated with urbanization, increased consumption patterns, and weaker reliance on resource-conserving practices learned in traditional settings.

5.2.4 Relationship between Place of Residence and Sustainable Economic Practices

Place of residence showed a significant association with economically sustainable practices for study respondents. With a p-value of 0.019, there exists a significant difference between economically sustainable practices based on one's place of residence. Respondents who live at Ashaiman (Mean =3.50, SD=0.63) and LEKMA (Mean=3.50, SD=0.60) exhibit high economic

sustainable practices whereas the least is practiced by those who live AMA (Mean=3.35, SD=0.68).

By migration status, there is a significant association between non-migrants and international migrants' place of residence and economic sustainable practices. The p-values depict 0.000 and 0.006 for non-migrants and international migrants respectively. This means that differences in place of residence of non-migrants and international migrants influence their economic sustainable practices. Non-migrants who live in LEKMA exhibit more economic sustainable (Mean=3.43, SD=0.49) practices, followed by those in AMA (Mean=3.12, SD=0.49), whilst the least is represented by non-migrants who live at Adenta (Mean=2.94, SD=0.59).

For international migrants, those who live at Ashaiman exhibited high economic sustainable practices (Mean=3.65, SD= 0.64) followed by Adenta (Mean= 3.52, SD=0.61), and the least is represented by those who live at AMA (Mean=3.38, SD=0.70).

These results highlight how geographical dynamics shape sustainable behavior, as supported by research emphasizing the role of contextual and spatial factors in sustainability practices (Jabareen, 2021; Guibrunet et al., 2017).

5.3.5 Relationship between the Number of Children of Respondents and Sustainable Economic Practices

In general, there is no statistically significant association between the number of children respondents have and their engagement in economically sustainable practices, as indicated by a pvalue of 0.889.

Similarly, when considering migration status, there is no substantial association between the number of children and economically sustainable practices for Non- Migrants and International

Migrants, with p-values of 0.243 and 0.712, respectively. This suggests that the number of children does not significantly impact the economically sustainable practices of these groups.

However, a significant association is observed between the number of children among internal migrants and their economically sustainable practices, with a p-value of 0.024. This implies that the number of children influences the economic sustainability practices of internal migrants. Internal migrants with four or more children exhibit a higher level of economically sustainable practices (Mean=3.80, SD=0.47), followed by those with two children (Mean=3.71, SD=0.53), while those with only one child display the lowest level (Mean=3.45, SD=0.75) of economically sustainable practices.

These results align with studies suggesting that larger household sizes often encourage sustainable behaviors as parents prioritize long-term resource management for family stability (Lopez-Ridaura et al., 2020; Carlsson et al., 2021).

5.2.6 Relationship between the Number of Partners of Respondents and Sustainable Economic Practices

The findings depict no significant association between the number of partners respondents have and sustainable economic practices showing a p-value of 0.889.

By migration status, there is a significant association between the number of partners and economically sustainable practices for international migrants showing a p-value of 0.024. However, on the part of non-migrants and internal migrants, there is no significant association. International migrants with four (4) or more partners exhibited more economically sustainable practices (Mean=3.50, SD=0.25), followed by those without a partner (Mean=3.44, SD=0.65), and the least is represented by those with three (3) partners (Mean=3.32, SD=0.57). Partners could serve as an influence for sustainable practices.

These findings highlight how social relationships and partner dynamics can shape economic behaviors, aligning with research emphasizing the role of social networks and relationships in promoting sustainable practices (Raimo et al., 2021; Kelly & Ferrara, 2020).

Table 5.1: Background Characteristics and Economic Sustainability
ECONOMIC SUSTAINABLE PRACTICES

Variable	International Non-Migrant Mean(SD)	Sig	Internal Migrants Mean(SD)	Sig	Total Migrants Mean(SD)	Sig
Sex	0.437	0.768		***0.000		***0.000
Male	3.09(0.53)		3.61(0.45)		3.56(0.64)	3.47(0.64)
Female	3.04(0.50)		3.58(0.66)		3.09(0.56)	3.32(0.65)
Age Groups	0.382	0.097		**0.010		0.051
15-24	3.05(0.48)		3.60(0.63)		3.63(0.64)	3.47(0.65)
25-34	3.04(0.49)		3.62(0.57)		3.48(0.65)	3.42(0.63)
35-44	3.06(0.66)		3.44(0.77)		3.41(0.57)	3.32(0.69)
45-75	3.21(0.48)		3.74(0.52)		3.34(0.64)	3.48(0.57)
Educational Attainment		0.078		***0.000		***0.004 ***0.000
No Formal education	3.00(0.67)		3.74 (0.53)		3.72(0.57)	3.63(0.62)
Pre-school/Primary	3.16(0.42)		3.68 (0.55)		3.63(0.60)	3.54(0.58)
JHS	3.15(0.51)		3.68(0.63)		3.26(0.67)	3.40(0.62)
SHS	3.06(0.54)		3.51(0.66)		3.35(0.64)	3.29(0.63)
Post Secondary	3.03(0.54)		3.26(0.50)		3.33(0.67)	3.20(0.59)
Tertiary	2.79(0.44)		3.10(0.09)		3.24(0.66)	3.06(0.65)
Koranic	3.06(0.47)		4.00(0.29)		3.89(0.55)	3.87(0.55)
Place of Residence		**0.000		0.688		***0.006 **0.019
Adenta	2.94(0.59)		3.55(0.60)		3.52(0.61)	3.40(0.65)
AMA	3.12(0.49)		3.67(0.77)		3.38(0.70)	3.35(0.68)
LEKMA	3.43(0.49)		3.63(0.67)		3.43(0.62)	3.50(0.60)
Ashiaman	3.06(0.41)		3.61(0.56)		3.65(0.64)	3.50(0.63)
Number of Children	0.243	**0.048		0.712		0.188
0	3.02(0.51)		3.54(0.67)		3.56 (0.64)	3.42(0.66)
1	3.04(0.47)		3.45(0.75)		3.48(0.66)	3.37(0.67)
2	3.14(0.56)		3.71(0.53)		3.55(0.648)	3.50(0.62)
3	3.08(0.71)		3.59(0.55)		3.40(0.610)	3.37(0.65)
4 and More	3.23(0.37)		3.80(0.47)		3.49(0.603)	3.53(0.53)

Number of Partners	0.658	0.958	**0.024	**0.889**
0	3.04(0.54)	3.58(0.57)	3.58 (0.64)	3.44(0.65)
1	3.06(0.48)	3.59(0.68)	3.53(0.65)	3.42(0.65)
2	3.16(0.67)	3.61(0.61)	3.32(0.56)	3.39(0.63)
3	3.25(0.20)	3.80(0.51)	2.90(0.49)	3.32(0.57)
4 +	0.000	3.50(0.25)	0.000	3.50(0.25)

Source: MISTY, 2020

5.3 Correlation Between Control Variables and Economic Sustainable Practices

Control variables were examined for their relationship with economic sustainable practices using the Pearson correlation coefficient. This analysis aimed to determine whether the relationship between these variables was positive or negative in direction.

5.3.1 The Correlation Between Access to Infrastructure and Economic Sustainable Practices

The association between access to infrastructure and the adoption of economically sustainable practices. The overall findings revealed a significant negative relationship between access to infrastructure and engagement in economically sustainable practices, with coefficients indicating a negative correlation (Coef=-0.22, p-value=0.000). In simpler terms, this indicates that as respondents gain more access to infrastructure, such as water, electricity, affordable housing, etc. their involvement in economically sustainable practices diminishes.

When examining this relationship across various migration statuses, access to infrastructure remained significant for all categories, including non-migrants (Coef=-0.102, p-value=0.038), internal migrants (Coef=0.218, p-value=0.000), and international migrants (Coef=-0.086, p-

value=0.021). This suggests that regardless of their migration status, individuals who have greater access to infrastructure, encompassing amenities like electricity, water, affordable housing, and more, tend to engage less in economically sustainable practices. This could be attributed to the fact that having access to such infrastructure typically signifies higher affluence, reducing the necessity to resort to practices such as borrowing, item swapping, or wearing second-hand clothing for economic sustainability. This aligns with studies indicating that affluence and access to amenities can lower the motivation to adopt sustainable behaviors, as the perceived necessity to conserve resources diminishes (Chen et al., 2022; Schanes et al., 2018).

5.3.2 The Correlation Between Place Attachment and Economic Sustainable Practices

The correlation between individuals' attachment to a place and their participation in economically sustainable practices demonstrated a positive association among respondents in general, with a highly significant p-value of 0.000 and a coefficient of 0.14. This suggests that as people develop stronger attachments to a place, they may also foster connections with others. This, in turn, could provide them with opportunities to engage in economically sustainable practices, such as borrowing or swapping items and cultivating fruits and vegetables.

A similar pattern emerged when considering migration status, where a positive and statistically significant relationship was observed for both internal migrants (Coef=-0.144, p-value=0.013) and international migrants (Coef=-0.161, p-value=0.000). However, this trend was not evident among non-migrants (Coef=-0.046, p-value=0.423). This outcome is not unexpected because nonmigrants typically already have strong attachments to their current place of residence, which may not significantly influence their engagement in economically sustainable practices. In contrast, migrants, both internal and international, are newcomers to their respective destinations and may not initially possess strong attachments. Over time, as they develop attachments to the new place,

it can influence their participation in economically sustainable practices, including activities like borrowing, item swapping, and cultivating food. These behaviors may also reflect efforts to integrate into their new communities and adapt to local socioeconomic conditions. The findings align with literature suggesting that place attachment can foster pro-environmental and resource-conserving behaviors, particularly among populations experiencing transitions or relocations (Lewicka, 2011; Scannell & Gifford, 2017).

5.3.3 The Correlation Between Sustainable Attitudes and Economic Sustainable Practices

The findings revealed a negative correlation between sustainable attitudes and the adoption of economically sustainable practices. In general, the p-value was highly significant for all respondents (0.000), with a coefficient of -0.13. This indicates that, on the whole, holding sustainable attitudes among respondents does not necessarily result in the actual implementation of sustainable practices.

This pattern was also observed among international migrants (coef=-0.160, p-value=0.000). However, it did not hold true for non-migrants (coef=-0.110, p-value=0.056) and internal migrants (coef=-0.006, p-value=0.922). Among international migrants, it's possible that they have inherited sustainable attitudes from their place of origin but face challenges in translating those attitudes into practical sustainable actions in their new location. This could be due to various factors in their current place of residence that may hinder the effective translation of sustainable attitudes into tangible practices.

Table 5.2 Controlled Variables and Economic Sustainability
Economic Sustainable Practices

	Non-migrant	Internal	International	Total
Controlled Variables	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)
Access to Infrastructure	-0.102* (0.038)	-.218** (0.000)	-.086* (0.021)	-0.22 (0.000)
Place Attachment	0.046 (0.423)	0.144* (0.013)	0.161** (0.000)	0.14 (0.000)
Sustainable Attitude	-0.110 (0.056)	0.006 (0.922)	-0.160** (0.000)	-0.13 (0.000)

Source: MISTY, 2020

5.4 Correlation Between Mediating Variables (Relative Deprivation and Subjective Well-being) and Economic Sustainable Practices

5.4.1 Correlation between Relative Deprivation and Economic Sustainable Practices

Relative deprivation, assessed by comparing household economic status to the neighbourhood and city, displays varying degrees of significance in relation to economically sustainable practices. The coefficients for comparing household status to the neighbourhood (-0.070, p=0.220) and city (0.138, p=0.016) suggest a negative relationship in the non-migrant context. However, these relationships are not statistically significant for non-migrant and internal contexts, implying a weaker association in these settings. In contrast, for international migrants, the coefficients indicate a statistically significant negative relationship for both comparisons with p-values of 0.000 (-0.0181 and -0.155, respectively). The overall assessment reinforces this significant negative association for both comparisons (-0.169 and -0.152, p=0.000), highlighting a substantial impact of perceived relative deprivation on reduced economic sustainable practices, particularly among international migrants.

This suggests that international migrants, perceiving themselves as relatively deprived, may engage less in economically sustainable behaviors, possibly due to feelings of economic disadvantage and reduced access to resources (Davis & McKnight, 2020).

5.4.2 Correlation between Subjective Well-being and Economically Sustainable Practices

Examining subjective well-being, specifically satisfaction in the neighbourhood, the coefficients (-0.029, p=0.610) indicate a negligible and statistically insignificant relationship in the nonmigrant context. Similarly, this relationship remains statistically insignificant for the internal context (-0.037, p=0.528). However, in the international context, the coefficient (-0.232, p=0.000) reveals a statistically significant negative relationship. This trend is further supported in the overall analysis, where a significant negative association is observed (p=0.000), emphasizing that international migrants who are dissatisfied with their neighborhoods tend to engage less in sustainable behaviors (Hernandez & Lin, 2021).

Table 5.3 Correlation Between Relative Deprivation, Subjective Well-Being and Sustainable Practices

	Economic Sustainable Practices			
	Non-migrant	**Internal**	**International**	**Total**
Mediating Variables	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)
Relative Deprivation				
Comparing Household to Neighbourhood	-0.070 (0.220)	-0.014 (0.814)	-0.0181 (0.000)	-0.169 (0.000)
Comparing Household to City	-0.138 (0.016)	0.028 (0.634)	-0.155 (0.000)	-0.152 (0.000)
Subjective Well-being				
Satisfaction in Neighbourhood	-0.029 (0.610)	-0.037 (0.528)	-0.232 (0.000)	-0.149 (0.000)

Source: MISTY, 2020

5.5 Background Characteristics and Social Sustainability

5.5.1 Association Between Sex and Social Sustainable Practices

The findings showed that the sex of the respondents significantly has an association with socially sustainable practices. The p-value of 0.000 showed that differences in sex influence socially sustainable practices. By this, males showed more socially sustainable practices (Mean=2.16,

SD=0.69) than females (Mean=1.99, SD=0.64). In terms of migration status, the association between sex and socially sustainable practices was significant for non-migrants and internal migrants only showing p-values of 0.000 and 0.047 respectively. For non-migrants, males (Mean=2.27, SD=0.065) showed more socially sustainable practices than females (Mean=1.99, SD=0.61). Similar to internal migrants, males exhibited more socially sustainable practices (Mean=2.14, SD=0.73) than females (Mean=1.98, SD=0.65).

5.5.2 Association between Age and Social Sustainable Practices

The results from Table 5.2 showed a significant association between the age of respondents and socially sustainable practices with a p-value of 0.040. It is evident that differences in the age of respondents in general influence socially sustainable practices. Respondents who were aged 45-75 (Mean=2.22, SD=0.67) showed more socially sustainable practices followed by those aged 25-34 (Mean=2.16, SD=0.70) whilst the least was represented by those between the ages 15-24 (Mean=2.05, SD=0.65).

With respect to migration status, age showed a significant association with socially sustainable practices for international migrants with a p-value of 0.010. International migrants who were aged 45-75 (Mean=2.57, SD=0.73) engaged in more socially sustainable practices followed by those aged 25-35 (Mean=2.21, SD=0.72). The least were aged between 15-24 (Mean=2.05, SD=0.71).

5.5.3 Association between Educational Attainment and Social Sustainable Practices

Generally, the findings showed a significant association between educational attainment and socially sustainable practices with a p-value of 0.011. There is evidence that different educational levels attained by respondents influence their socially sustainable practices. Those who have attained a higher educational level (Mean=2.25, SD=0.84) exhibit higher social sustainable

practices followed by those with post-secondary (Mean=2.21, SD=0.66) whereas those who have no education (Mean=1.91, SD=0.63) showed low socially sustainable practices. With regard to migration status, educational attainment showed a significant association with socially sustainable practices for international migrants (p-value=0.002). International migrants who have attained the post-secondary level of education were more socially sustainable (Mean=2.35, SD=0.81) followed by those who have the tertiary level of education (Mean=2.32, SD=0.82) whilst the least were practiced by those with koranic education (Mean=2.05, SD=0.66).

5.5.4 Association between Number of Children and Social Socially Sustainable Practices

The number of children a respondent has showed no significant association with socially sustainable practices. There is therefore no significant evidence that differences in the number of children of respondents have an influence on socially sustainable practices.

The same relationship is seen across migration status, for non-migrant (P-value = 0.326), internal (p-value=0.451) international migrants (p-value=0.073) which proved no significant relationship between their number of children and socially sustainable practices.

5.5.5 Association between Number of Partners and Social Socially Sustainable Practices

The relationship between number of partners and socially sustainable practices was significant showing a p-value of 0.038. This is evident that differences in the number of partners influences ones socially sustainable practices. Respondents who have 4 or more partners exhibited more socially sustainable practices (Mean=2.50, SD=0.90) followed by those who have 3 partners(Mean=2.18, SD=0.65) and the least is represented by those without a partner (Mean=2.04, SD=0.70).

By migration status, the relationship was significant for internal migrants (p-value=0.042) and international migrants (p-value =0.023). For internal migrants, the higher the number of partners, the

more socially sustainable practices are exhibited. The case is different for international migrants who have those with one (1) partner (Mean =2.23, SD=0.65), engaging in more socially sustainable practices, followed by those with no partner (Mean=2.07, SD=0.73) and the least is represented by those with two (2) partners (Mean=1.92, SD=0.72).

Table 5.4 Background Characteristics and Social Sustainablr Practices

	SOCIAL SUSTAINABLE PRACTICES						
Variable	**Non-Migrants**		**Internal Migrants**		**International Migrants**		**Total**
	Mean(SD)	Sig	Mean(SD)	Sig	Mean(SD)	Sig	
Sex		0.000		0.047		0.899	***0.000
Male	2.27 (0.65)		2.14 (0.73)		2.12 (0.69)		2.16(0.69)
Female	1.99 (0.61)		1.98 (0.65)		2.14 (0.79)		1.99(0.64)
Age Groups		0.812		0.700		**0.010	**0.040**
15-24	2.09 (0.60)		1.98 (0.61)		2.05(0.71)		2.05(0.66)
25-34	2.15 (0.64)		2.05 (0.71)		2.21 (0.72)		2.16(0.70)
35-44	2.13 (0.74)		2.05 (0.77)		2.10 (0.52)		2.08(0.68)
45-75	2.20 (0.67)		2.14 (0.63)		2.57 (0.73)		2.22(0.67)
Educational Attainment		0.251		0.889		***0.002	**0.011**
No Formal education	2.04 (0.63)		1.96 (0.59)		1.87 (0.65)		1.91(0.63)
Pre-school/Primary	1.98 (0.56)		2.01 (0.68)		2.10 (0.66)		2.05(0.65)
JHS	2.25 (0.69)		2.12 (0.64)		2.10 (0.70)		2.15(0.67)
SHS	2.07 (0.62)		2.02 (0.76)		2.25 (0.67)		2.13(0.68)
Post Secondary	2.22 (0.62)		2.00 (0.61)		2.35 (0.81)		2.21(0.66)
Tertiary	2.24 (0.84)		2.04 (0.68)		2.32 (0.82)		2.25(0.84)
Koranic	2.38 (0.52)		1.81 (0.32)		2.05 (0.67)		2.05(0.66)
Place of Residence		0.002		0.001		0.583	**0.636**
Adenta	2.12 (0.65)		1.99 (0.60)		2.16 (0.70)		2.20(0.67)
AMA	1.99 (0.62)		2.15 (0.67)		2.14 (0.72)		2.08(0.67)
LEKMA	2.55 (0.90)		1.63 (0.72)		1.96 (0.48)		2.04(0.82)
Ashiaman	2.18 (0.54)		2.21 (0.78)		2.10 (0.70)		2.14(0.68)
Number of Children		0.336		0.451		0.073	**0.493**
0	2.16 (0.65)		1.99 (0.66)		2.10 (0.71)		2.09(0.69)
1	1.99 (0.57)		2.13 (0.67)		2.24 (0.68)		2.15(0.66)
2	2.25 (0.73)		2.16 (0.71)		1.99 (0.62)		2.13(0.70)
3	2.15 (0.69)		1.96 (0.66)		2.39 (0.71)		2.14(0.75)

4+	2.03 (0.51)	0.00 (0.000)	1.98 (0.57)	2.00(0.58)
Number of Partners	0.326	0.042	**0.023**	**0.038**
0	2.05 (0.66)	1.92 (0.64)	2.07 (0.73)	2.04(0.70)
1	2.19 (0.61)	2.05(0.69)	2.23 (0.65)	2.16(0.65)
2	2.20 (0.75)	2.26 (0.69)	1.92 (0.72)	2.14(0.72)
3	1.13 (0.83)	2.45 (0.54)	1.95 (0.65)	2.18(0.65)
4+	0.00 (0.00)	2.50 (0.90)	0.00 (0.00)	2.50(0.90)

Source: MISTY, 2019

5.6 Correlation between Control Variables and Socially Sustainable Practices

Pearson correlation analysis was employed to assess the strength and direction of linear relationships between control variables such as Access to Infrastructure, Place Attachment

Sustainable Attitudes, Relative Deprivation and Subjective Well-being (and sustainable practices

5.6.1 Correlation between Access to Infrastructure and Social Sustainable Practices

Findings depict that access to infrastructure significantly influences socially sustainable practices. This is depicted by a p-value of 0.000 and a coefficient of 0.114 for respondents in general. This means that there is a positive relationship between access to infrastructure and engaging in socially sustainable practices. As respondents gain access to infrastructure at their place of residence, the more they would engage in socially sustainable practices.

In terms of migration status, a significant relationship was found among non-migrants (Coef=0.012, p-value=0.008) and international migrants (Coef=0.166, p-value=0.000). For non-migrants, the relationship was negative meaning an increase in one's access to infrastructure would lead to a decrease in socially sustainable practices. On the other hand, the relationship was positive for international migrants whose access to infrastructure leads to a decrease in socially sustainable practices.

5.6.2 Correlation between Place Attachment and Social Sustainable Practices

Place attachment was found to have a significant influence on socially sustainable practices in general. This is represented by a p-value of 0.000 and a coefficient of 0.29 signifying a positive relationship. This means that as people get more attached to a place, they are more they engage in socially sustainable practices such as helping others who are in need, volunteering in organizations, and helping people by giving food, gifts, etc.

This positive significant relationship was seen across migration status where an increase in one's attachment to place significantly influences their socially sustainable practices. As one becomes attached to a place, one is likely to make friends and know people which would lead him to be involved in socially sustainable practices such as volunteering in organizations, helping others who are worse off etc.

5.6.3 Correlation between Sustainable Attitudes and Social Sustainable Practices

Generally, the results found an inverse relationship between sustainable attitudes and socially sustainable practices. The p-value of 0.001 and a coefficient of -0.96 indicates that a unit increase in respondents' sustainable attitudes leads to a decrease in socially sustainable practices.

Unexpectedly respondents' sustainable attitudes must translate into practice. However, the reverse was the case in this study.

The same was found for internal migrants (Coef= -0.143, p-value =0.013) and international migrants (Coef=-0.96, p-value=0.001). This means that although these groups of migrants might have some sustainable attitudes probably inherited from their place of origin or other sources, they do not actually translate them into practice. Some inhibiting factors confronting them at the place of destination make them not exhibit their socially sustainable practices although they may have sustainable attitudes.

Table 5.5 Relationship between Neighbourhood Characteristics and Socially Sustainable Practices

Personal And Household Characteristics	Non-Migrants	al Sustainable Practices Inter	International	Total
	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)
Access to Infrastructure	-0.012 (0.008)***	0.086 (0.137)	0.166 (0.000)***	0.114 (0.000)***
Place Attachment	0.329 (0.000)***	0.357 (0.000)***	0.220 (0.000)***	0.29 (0.000)***
Sustainable Attitude	-.026 (0.655)	-.143 (0.013)***	-0.110 (0.010)***	-0.96 (0.001)***

Source: MISTY, 2020

5.7 Correlation Between Mediating Variables and Socially Sustainable Practices

5.7.1 Correlation between Relative Deprivation and Socially Sustainable Practices.

The results of the relationship between relative deprivation and socially sustainable practices was significantly positive specifically for respondents who compared their household to others in the neighbourhood in terms of wealth status. With a p-value of 0.000 and a coefficient of 0.222, an increase in one's household wealth compared to others in a neigbourhood results in an increase in socially sustainable practices.

A similar relationship was found by migration status where for non-migrants (Coef=0.222, p-value =0.000), internal migrants (Coef=0.237, p-value=0.000) and international migrants (Coef=0.215, p-value=0.000), there existed a positive significant relationship between comparing household to others in neighbourhood and socially sustainable practices. This means that as they feel better when they compare their households to others in their neighbourhood, they engage in more socially sustainable practices like helping others, and volunteering in organisations.

Comparison of household to others in the city, was also significantly correlated with socially sustainable practices. With a p-value of 0.000 and a coefficient of 0.346, an increase in how one feels about his household leads to an increase in socially sustainable practices. This direction was same for Non migrants, and international migrants who exhibit more socially sustainable practices when they feel better about their household compared their households to others in the city.

5.7.2 Correlation between Subjective Well-being and Socially Sustainable Practices

The overall satisfaction one feels at a place showed a positive correlation with socially sustainable practices. This implies that respondents who feel satisfied in neigbourhood engage in more socially sustainable practices. (Coef=0.192, p-value=0.000). Similarly, the relationship is same for across migration status where a significant positive relationship existed between their overall satisfaction and socially sustainable practices. With this, a unit increase in their overall satisfaction leads to an increase in socially sustainable practices such as helping others and volunteering in organizations. This means that the better one feels about his satisfaction in neighbourhood, the more they engage in socially sustainable practices such as helping others and volunteering in organizations.

Table 5.6 Correlation Between Relative Deprivation, Subjective Well-being and Socially Sustainable Practices

	Social Sustainable Practices			
Relative Deprivation	Non-Migrants	Internal	International	Total
	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)	Coef (PValue)
Comparing Household to Neighbourhood	0.220 (0.000)	0.237 (0.000)	0.215 (0.000)	0.222(0.000)
Comparing Household to City	0.301 (0.000)	0.318 (0.000)	0.387(0.000)	0.346 (0.000)
Subjective Well-being				
Satisfaction in Neighbourhood	0.215 (0.000)	0.291 (0.000)	0.120 (0.005)	0.192 (0.000)

Source: MISTY, 2020

5.8 Background Characteristics and Environmentally Sustainable Practices

The relationship between the background characteristics of respondents and environmentally sustainable practices was explored to understand how factors like age, education, sex, number of children, number of partners, and location influence the likelihood of individuals engaging in behaviours that promote environmental sustainability. By analyzing these relationships, we can gain insights into the demographic factors that might drive or hinder the adoption of eco-friendly practices.

5.8.1 The Relationship between Sex and Environmentally Sustainable Practices

The sex of respondents in general was found to have a significant relationship with environmentally sustainable practices. The overall p-value of 0.000 shows that there is a significant difference in the means of engaging in environmentally sustainable practices based on sex.

Females exhibited more (Mean=2.86, SD=0.73) environmentally sustainable practices than males (Mean=2.65, SD=0.78).

In terms of migration status, the sex of non-migrants and internal migrants showed a significant association with environmental sustainability depicting a p-value of 0.000 and 0.0029 respectively. Following the same trend, female non-migrants (Mean=2.85, SD=0.67) showed more environmentally sustainable practices compared to males (Mean=2.56, 0.69). Again, female internal migrants (Mean=2.91, SD=0.77) exhibited more environmentally sustainable practices compared to males (Mean=2.71, SD=0.83). This may be associated with gender roles that are ascribed to females such as taking care of the home, washing and cleaning the environment in the Ghanaian context which may be translated over time into environmental behaviour.

5.8.2 The Relationship between Age and Environmentally Sustainable Practices

The age of respondents showed a significant association with environmentally sustainable practices as depicted with a p-value of 0.000. The findings show that as age increases the more one engages in environmentally sustainable practices.

By migration status, the age of non-migrants (p-value = 0.023) and internal migrants (p-value= 0.037) showed a significant association with environmentally sustainable practices. An increase in age results in the engagement in more environmentally sustainable practices by both populations. This means that as people grow older, they become more concerned with the environment and then engage in environmental behaviours.

5.8.3 The Relationship between Education and Environmentally Sustainable Practices

Education showed no significant association with environmentally sustainable practices. This implies that there is no significant evidence that differences in educational level influence sustainable environmental practices.

5.8.4 The Relationship between Locality and Environmentally Sustainable Practices

The place of destination of respondents generally showed no significant association with environmentally sustainable practices. The p-value of 0.149 proved that there is no significant evidence of the influence of differences in place of residence on environmentally sustainable practices.

However, by migration status, the relationship between locality of residence and environmentally sustainable practices was significant among international migrants showing a p-value of 0.030. This implies that differences in the locality of residence of international migrants influence their environmentally sustainable practices. International migrants who live at Ashaiman (Mean=2.72,

SD = 0.76) showed more environmentally sustainable practices followed by those who live at Adenta (Mean=2.65, SD=0.79) and the least represented by those in LEKMA (Mean=2.20, SD=0.92).

5.8.5 The Relationship between the Number of Children and Environmentally Sustainable Practices

The relationship between the number of children and environmentally sustainable practices was significant showing a p-value of 0.000. Differences in the number of children therefore influence environmentally sustainable practices. The results showed that respondents who have four or more children (Mean =2.97, SD=0.93) exhibit more environmentally sustainable practices followed by those with two children (Mean = 2.78, SD=0.74), and the least is represented by those without a child (Mean=2.62, SD = 0.78).

In terms of migration status, a significant relationship was found among non-migrants and internal migrants showing a p-value of 0.032 and 0.000 respectively. For non-migrants the higher the number of children the more they engage in environmentally sustainable practices. For international migrants, the trend is different. Internal migrants with four or more children (Mean=3.08, SD=0.90) show more environmentally sustainable practices followed by those with a child (Mean=3.03, SD=0.79), and the least of them is represented by those without a child (Mean=2.58, SD=0.79).

This may be attributed to the contribution of children to environmentally sustainable practices in terms of cleaning, separating waste, etc.

5.8.6 The Relationship between the Number of Partners and Environmentally Sustainable Practices

Findings depict a significant association between the number of partners and environmentally sustainable practices. The p-value of 0.000 depicts that differences in the number of partners

influence environmentally sustainable practices. The higher the number of partners, the more one engages in environmentally sustainable practices. A significant association is also found across migration status. The same trend is found for non-migrants and internal migrants in terms of an increase in the number of partners leading to an increase in environmentally sustainable practices. However, for international migrants, the trend is different. Those with three partners (Mean=2.98, SD=0.48) showed more environmentally sustainable practices followed by those with two partners (Mean=2.88, SD=0.77), one partner (Mean=2.81, SD=0.73), four or more partners (Mean=2.58, SD=0.52) and no partner (Mean= 2.56, Mean =0.79) in that order.

Table 5.5 Association between Background Characteristics and Environmentally Environmentally Sustainable Practices

	ENVIRONMENTAL SUSTAINABLE PRACTICES						
Variable	**Non-Migrant**		**Internal Migrants**		**International Migrants**		**Total**
	Mean(SD)	Sig	Mean(SD)	Sig	Mean(SD)	Sig	
Sex		0.000***		0.029**		0.435	**0.000**
Male	2.56 (0.69)		2.71 (0.83)		2.66 (0.79)		2.65 (0.78)
Female	2.85 (0.67)		2.91 (0.77)		2.54 (0.73)		2.86(0.73)
Age Groups		0.023**		0.037**		0.503	**0.000**
15-24	2.63 (0.71)		2.68 (0.79)		2.60 (0.86)		2.63(0.80)
25-34	2.64 (0.67)		2.81 (0.81)		2.71 (0.73)		2.72(0.74)
35-44	2.82 (0.64)		2.85 90.83)		2.62 (0.74)		2.75(0.75)
45-75	2.99 (0.74)		3.12 (0.67)		2.55 (0.79)		2.99(0.73)
Educational Attainment		0.375		0.061		0.713	**0.159**
No Formal education	2.54 (0.64)		3.00 (0.79)		2.53 (0.78)		2.63(0.79)
Pre-school/Primary	2.79 (0.71)		2.97 (0.69)		2.66 (0.84)		2.77(0.78)
JHS	2.71 (0.73)		2.93 (0.76)		2.68 (0.75)		2.79(0.75)
SHS	2.71 (0.69)		2.69 (0.89)		2.67 (0.79)		2.69(0.78)
Post Secondary	2.89 (0.63)		2.53 (0.87)		2.75 (0.61)		2.75(0.69)
Tertiary	2.46 (0.67)		2.54 (0.72)		2.79 (0.66)		2.63(0.68)
Koranic	2.75 (0.74)		2.43 (0.32)		2.60 (0.85)		2.60(0.77)
Locality		0.232		0.392		0.030	**0.149**
Adenta	2.60 (0.66)		2.28 (0.72)		2.65 (0.79)		2.68(0.75)
AMA	2.80 (0.81)		2.93 (0.88)		2.59 (0.77)		2.75(0.82)
LEKMA	2.79 (0.72)		2.67 (1.02)		2.20 (0.92)		2.57(0.92)
Ashiaman	2.72 (0.59)		2.90 (0.80)		2.72 (0.76)		2.76(0.74)

Number of Children	0.032	0.000	0.675	**0.000**
0	2.61 (0.71)	2.58 (0.79)	2.64 (0.81)	2.62(0.78)
1	2.70 (0.65)	3.02 (0.79)	2.70 (0.74)	2.78(0.74)
2	2.80 (0.65)	3.01 (0.69)	2.74 (0.73)	2.87(0.69)
3	2.81 (0.76)	2.81 (0.65)	2.57 (0.83)	2.74(0.74)
3+	3.02 (0.62)	3.08 (0.90)	2.46 (0.83)	2.92(0.93)
Number of Partners	0.001	0.000	**0.017**	**0.000**
0	2.52 (0.70)	2.54 (0.81)	2.58 (0.83)	2.56(0.79)
1	2.81 (0.66)	2.92 (0.79)	2.75 (0.72)	2.81(0.73)
2	2.99 (0.67)	3.17 (0.67)	2.42 (0.79)	2.88(0.77)
3	2.94 (0.75)	2.95 (0.32)	3.05 (0.48)	2.98(0.48)
3+	---	2.58 (0.52)	---	2.58(0.52)

Source: MISTY, 2020

5.9 Correlation between Control Variables and Environmentally Sustainable Practices

This section discusses the relationship between control variables and environmentally sustainable practices. The control variables were access to infrastructure, place attachment, and sustainable attitudes of respondents.

5.9.1 Correlation between Access to Infrastructure and Environmentally Sustainable Practices

The results indicated a significant positive correlation between access to infrastructure and environmentally sustainable practices. With a p-value of 0.000 and a coefficient of 0.125, an increase in one's access to infrastructure leads to an increase in environmentally sustainable practices. This is expected because having access to some infrastructure such as garbage collection bins and separation bins could influence environmentally safe practices at the place of destination.

A significant association is also found among non-migrants (coef= 0.262, p-value= 0.000) and international migrants (coef=0.148, p-value=0.000) whose access to infrastructure positively influences environmentally sustainable practices.

5.9.2 Correlation between Place Attachment and Environmentally Sustainable Practices

Place attachment showed a positive significant correlation with environmentally sustainable practices. The p-value of 0.000 and a coefficient of 0.17 depict that an increase in place attachment will lead to an increase in environmentally sustainable practices. This means that as a person feels attached to a place, more environmentally sustainable practices are executed.

A significant positive relationship between place attachment and environmentally sustainable practices was found among non-migrants and internal migrants. For non-migrants, a unit increase in place attachment will lead to a 0.202 increase in environmentally sustainable practices whereas, for internal migrants, a unit increase in place attachment will lead to a 0.341 increase in environmentally sustainable practices. This means that these groups of populations will engage more in environmentally sustainable practices when their attachment to a place increases.

5.9.3 Correlation between Sustainable Attitudes and Environmentally Sustainable Practices

Generally, respondents' sustainable attitudes showed a positive correlation with sustainable environmental practices with a p-value of 0.045 and a coefficient of 0.059. This means that an increase in sustainable attitudes will lead to an increase in environmentally sustainable practices. Sustainable attitudes therefore translate into environmentally sustainable practices. However, by migration status, there exists no significant association between sustainable attitudes and environmentally sustainable practices. There is therefore no evidence that sustainable attitudes across migration status have an influence on environmentally sustainable practices.

Table 5.6 Correlation between Control Variables and Environmentally Sustainable Practices

	Environmental Sustainable Practices			Total
	Non-migrant	Internal	International	
Controlled Variables	**Coef (P-Value)**	**Coef (P-Value)**	**Coef (P-Value)**	**Coef (P-Value)**
Infrastructure Index	0.262**(0.000)	0.007 (0.906)	0.148**(0.000)	0.125(0.000)
Place Attachment	0.202**(0.000)	0.341(0.000)	0.082 (0.052)	0.17 (0.000)
Sustainable Attitude	0.070 (0.223)	0.060 (0.303)	0.020 (0.637)	0.059(0.045)

Source: MISTY, 2020

5.10 Correlation Between Mediating Variables and Environmentally Sustainable Practices

The mediating variable used for the analysis were relative deprivation and subjective well-being. The influence of these variables on environmental sustainability among migrants and non-migrants was explored in this section.

5.10.1 Correlation between Relative Deprivation and Environmentally Sustainable Practices

The association between relative deprivation and environmentally sustainable practices generally was found be significantly correlated. Showing a p-value of 0.000 and a coefficient of 0.116, there exists a positive relationship between respondents who compare their household wealth status with others in the neigbourhood and engagement in environmentally sustainable practices. This means that a unit increase in the perceived household wealth status compared to others in the neighbourhood, will lead to an increase in environmentally sustainable practices.

This significant relationship was found across all migration statuses showing a positive relationship for non-migrants (Coef=0.14, p-value =0.012), internal migrants (Coef=0.23, pvalue=0.000), and international migrants (Coef=0.15, p-value =0.000). This implies that as migrants and non-migrants feel better about their household status when compared to others in neighbourhood, they engage in more environmentally sustainable practices.

In terms of comparison of household wealth to others in the city, there exists also a positive significant relationship with environmentally sustainable practices. Respondents who feel better when they compare their household wealth with others in the city, they engage in more environmentally sustainable practices.

5.10.2 Correlation between Subjective Well-being and Environmentally Sustainable Practices

Subjective Well-being was also found to be significantly associated with environmentally sustainable practices among all study respondents and by migration status. Generally, a coefficient of 0.186 and a p-value of 0.000 depicts that subjective Well-being positively influence environmentally sustainable practices. This implies that as people feel satisfied about themselves in the neighbourhood, they engage in more environmentally sustainable practices. This relationship was witnessed among non-migrants (coef=0.292, p-value=0.000), internal migrants (coef=0.192, p-value=0.001) and international migrants (coef=0.119,p-value=0.005). Environmental concerns therefore become necessary when respondents feel satisfied about themselves in their neighbourhood.

Table 5.6: Correlation between Mediating Variables and Environmental Sustainable Practices

	Environmental Sustainable Practices			
Relative Deprivation	**Coef (P-Value)**	**Coef (P-Value)**	**Coef (P-Value)**	**Coef (P-Value)**
Comparing Household Wealth to others in Neighbourhood	0.140 (0.012)	0.228 (0.000)	0.152 (0.000)	0.166(0.000)
Comparing Household Wealth to Others in the City	0.078(0.174)	0.167(0.004)	0.108 (0.010)	0.116 (0.000)
Subjective Well-being				
Satisfaction in Neighbourhood	0.292(0.000)	0.192 (0.001)	0.119 (0.005)	0.186(0.000)

Source: MISTY, 2020

5.11 Chapter Summary

The findings reveal complex relationships between economic sustainable practices and several key factors, including migration status, demographic characteristics, place attachment, relative deprivation, and subjective well-being. Migration status is a significant determinant, with internal and international migrants generally engaging in more economically sustainable practices compared to non-migrants. This may be attributed to the relatively lower economic status of migrants, which could drive them to adopt more resource-conserving behaviors. Gender differences were also evident, with males exhibiting higher levels of economic sustainability, particularly among internal and non-migrants. Age was found to be a significant factor, with younger international migrants demonstrating a stronger propensity for engaging in sustainable economic practices. Educational level also plays a pivotal role, as individuals with lower levels of formal education, such as those with Koranic education, were found to display higher levels of economic sustainability compared

to those with tertiary education. Additionally, the number of children among internal migrants positively correlated with more sustainable economic behaviors.

Place attachment emerged as another critical factor, with stronger attachments to place influencing engagement in sustainable practices. Internal and international migrants who developed stronger attachments to their new places of residence were more likely to engage in sustainable practices over time. Non-migrants, who typically have stronger attachments to their established communities, did not exhibit the same pattern. Relative deprivation, assessed by comparing household economic status to the neighborhood and city, showed a significant negative relationship with economic sustainability, particularly among international migrants. Those who perceived themselves as relatively deprived were less likely to engage in economically sustainable practices, with this negative relationship being most pronounced among international migrants. Lastly, subjective well-being, specifically neighborhood satisfaction, also showed a significant negative relationship with economic sustainability among international migrants. Lower satisfaction with one's neighborhood was linked to reduced engagement in sustainable economic behaviors. These findings underscore the multifaceted nature of economic sustainability, highlighting the interplay of migration status, socio-economic factors, and individual perceptions of well-being and community attachment.

CHAPTER SIX
FACTORS INFLUENCING SUSTAINABLE PRACTICES MEDIATED BY RELATIVE DEPRIVATION AND SUBJECTIVE WELL-BEING

6.0 Introduction

This chapter presents the regression analysis of the factors influencing sustainable practices mediated by relative deprivation and subjective well-being. The mediation analysis technique was employed to explore the relationship between independent, mediating, and dependent variables. Mediation analysis was done to understand the complex and non-additive relationships between variables. It helps uncover how the effect of one variable on an outcome is modified or influenced by the presence or values of other variables.

In this analysis, the study begins by investigating the correlation between migration status and various sustainability domains, including economic, social, and environmental aspects. Following this, regression analyses are performed to examine how background and control variables individually impact sustainable practices.

Once the relationships between independent variables, background factors, and control variables in relation to sustainable practices are established, additional linear regression models are employed. These models aim to uncover the connections between these factors and the mediating variables (Relative Deprivation and Subjective Well-being).

After these establishments, the mediating variables were also regressed with sustainable practices to explore their influence.

Finally, a comprehensive linear model is developed, incorporating the independent variable, background characteristics, control variables, and the mediating variables. This holistic model aims to comprehensively analyze their collective influence on sustainable practices, providing a more thorough

understanding of how these diverse factors collectively shape and impact sustainability across economic, social, and environmental dimensions.

6.1 Relationship Between Migration and Sustainability

The presented regression analysis (Table 6.1) examines the association between migration status and three dimensions of sustainability(economic, social, and environmental) as well as overall sustainability.

In terms of economic sustainability, both internal and international migrants exhibit statistically significant positive relationships compared to non-migrants. Internal migrants display a coefficient of 0.43 (p-value=0.000), suggesting a significant positive association with economic sustainability. Similarly, international migrants show a coefficient of 0.38 (p-value=0.000), signifying a positive relationship with economic sustainability. These coefficients highlight that both migrant groups tend to positively impact economic sustainability compared to the non-migrant group.

Regarding social sustainability, the coefficients for both internal and international migrants show no significant relationships with social sustainability when compared to non-migrants. Internal migrants present a coefficient of -0.09 (p-value=0.121), while international migrants have a coefficient of -0.01 (p-value=0.922), indicating almost no substantial influence on social sustainability in comparison to non-migrants.

For environmental sustainability, both internal and international migrants demonstrate statistically significant positive relationships compared to non-migrants. Internal migrants show a higher coefficient of 0.74 (p-value=0.000), indicating a stronger positive relationship with Environmental Sustainability. Meanwhile, international migrants exhibit a lower yet still significant coefficient of 0.46 (p-value=0.000), suggesting a comparatively weaker positive impact on environmental

sustainability.

Regarding overall sustainability, internal migrants depicted a statistically significant positive relationship with a coefficient of 0.19 (p-value=0.000), while international migrants also exhibited a significant but relatively weaker relationship with a coefficient of 0.14 (p-value=0.000), compared to non-migrants. These coefficients suggest that both migrant groups contribute positively to overall sustainability, with internal migrants having a slightly stronger impact than international migrants.

Table 6.1 Relationship Between Migration and Sustainable Practices

Migration Status	Economic Sustainability	Social Sustainability	Environmental Sustainability	Overall Sustainability
	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)
(Constant)	3.016 (0.000)	2.13(0.000)	2.49(0.000)	2.63(0.000)
Non-Migrant (RC)				
Internal	0.43 (0.000)***	-0.09(0.121)	0.74(0.000)***	0.19(0.000)***
International	0.38 (0.000)***	-0.01(0.922)	0.46(0.000)***	0.14(0.000)***

Source: MISTY, 2020

6.2 Relationship Between Background Characteristics and Sustainable Practices

Table 6.2 provides regression analysis by taking into account the background characteristics of respondents in the relationship between migration and sustainable practices across economic, social, and environmental dimensions.

The constant values serve as crucial baseline indicators of sustainability. Across all dimensions, these constants exhibit statistically significant values and coefficients (economic: 3.18, $p < 0.001$; social: 1.87, $p < 0.001$; environmental: 2.66, $p = 0.000$; overall: 2.57, $p < 0.001$). These coefficients

highlight the presence of underlying factors influencing sustainability beyond those explicitly considered in the analysis.

Taking into consideration the background characteristics of respondents in the model, Internal migrants demonstrate positive coefficients for economic (Coef = 0.51, $p < 0.001$) and overall sustainability (0.17, $p < 0.001$), but a non-significant coefficient for social sustainability (Coef = 0.07, $p = 0.196$). International migrants also exhibit positive coefficients for economic (Coef0.32, $p < 0.001$) and overall sustainability (Coef=0.12, $p = 0.003$). However, neither group significantly affects social sustainability and environmental sustainability, These findings underscore the complex interplay between migration and sustainability, with variations across different dimensions.

In terms of sex male respondents display statistically significant positive coefficients for economic (Coef =0.11, $p = 0.018$) and social sustainability (Coef=0.19, $p < 0.001$) but a negative significant coefficient for environmental sustainability (Coef = -0.15, $p = 0.009$) compared to females. These findings highlight the sex-based variations in economic, social and environmental sustainability scores. These sex-related differences suggest that sex plays a role in shaping sustainable practices, across the three dimensions.

For age, the coefficients for different age groups vary across dimensions, with many of them failing to reach statistical significance. The analysis reveals that respondents in the 15-24 age group exhibit a statistically significant negative (Coef = -0.021, p-value=0.0.39) impact on social sustainability compared to the reference group (45-75). The other significant coefficients observed were in the age group 35-44, which exhibits negative coefficients for social (Coef = -0.23, p-value

= 0.011), environmental (Coef = -0.21, p = 0.036), and overall sustainability (Coef = -0.18, p-value = 0.005). This imply that compared to older ages, younger age groups engage less in social and environmentally sustainable practices.

Education was found to be another influential factor. Respondents who have attained Junior High School (JHS) education have a statistically significant positive impact on both Economic and Social Sustainability compared to those with no education. Similarly, Senior High School (SHS) education positively affects Economic and Social Sustainability. However, higher levels of education (Post-Secondary and Tertiary) negatively impact Economic Sustainability but positively impact Social Sustainability. These findings suggest that education can have varying effects on different dimensions of sustainability

The locality of residence, compared to Adenta, does not exhibit statistically significant impacts on sustainability dimensions. This suggests that geographical location, at least in the context considered, does not play a significant role in influencing sustainability practices.

Lastly, the number of children has a statistically significant positive impact on Economic Sustainability, while the number of partners positively affects Social and Environmental Sustainability but negatively affects Economic Sustainability.

Table 6.2 Relationship Between Background Characteristics and Sustainable Practices

	Economic	**Social**	**Environmental**	**Overall Sustainability**
	Coef (P-Value).	Coef (P-Value)	Coef (P-Value)	Coef (P-Value)
(Constant)	3.18 (0.000)***	1.87 (0.000)***	2.66 (0.000)	2.57 (0.000)***
Migration Status				
Non-Migrant (RC)				
Internal	0.41 (0.000)***	-0.07 (0.196)	0.66 (0.000)***	0.17 (0.000)***
International	0.26 (0.000)***	-0.02 (0.753)	0.49 (0.000)***	0.12 (0.003)***
Sex of Respondents				
Female (RC)				
Male	0.11 (0.018)**	0.19 (0.000)***	-0.15 (0.009)**	0.05 (0.201)
Age Group				
45-75 (RC)				
15-24	0.05 (0.575)	-0.21 (0.039)**	-0.14 (0.205)	-0.10 (0.168)
25-34	-0.01(0.937)	-0.14 (0.113)	-0.14 (0.172)	-0.10 (0.143)
35-44	-0.10 (0.184)	-0.23 (0.011)**	-0.21 (0.036)**	-0.18 (0.005)***
Education				
No Education (RC)				
Pre-school/Primary	-0.05 (0.459)	0.16 (0.061)	0.13 (0.159)	0.08 (0.197)
JHS	-0.17 (0.020)**	0.29 (0.000)***	0.17 (0.078)	0.10 (0.113)
SHS	-0.25(0.000)***	0.27 (0.001)**	0.14 (0.132)	0.05 (0.366)
Post Secondary	-0.30(0.002)**	0.35 (0.002)**	0.18 (0.153)	0.08 (0.333)
Tertiary	-0.42(0.000)***	0.37 (0.001)**	0.09 (0.433)	0.01 (0.864)
Koranic	0.22 (0.006)**	0.12 (0.183)	0.05 (0.637)	0.13 (0.051)
Locality of Residence				
Adenta (RC)				
AMA	0.00 (0.935)	-0.02 (0.735)	0.02 (0.728)	0.00 (0.995)
locality=LEKMA	0.09 (0.255)	-0.02 (0.863)	-0.13 (0.192)	-0.02 (0.762)

locality=Ashiamman	0.05 (0.265)	0.06 (0.233)	0.08 (0.124)	0.06 (0.074)
Number of Children	0.05 (0.013)**	-0.02 (0.488)	0.02 (0.461)	0.02 (0.294)
Number of Partners	-0.05 (0.094)*	0.11 (0.003)**	0.13 (0.001)**	0.06 (0.019)**

Source: MISTY, 2020

6.3 Relationship Between Background Characteristics, Control Variables, and Sustainable Practices

Table 6.3 presents the regression analysis to examine the relationship between respondents' background characteristics, control variables, and multiple dimensions of sustainable practices, encompassing economic, social, environmental, and overall sustainability.

Regarding Migration Status, both Internal and International migrants exhibit positive coefficients for Economic Sustainability (Coef = 0.41, $p < 0.001$ and Coef = 0.23, $p < 0.001$ respectively), Environment (Coef = 0.65, $p < 0.001$ and Coef = 0.46, $p < 0.001$ respectively) and Overall Sustainability (Coef = 0.19, $p < 0.001$ and Coef = 0.10, $p < 0.01$ respectively). However, their impact on Social and Environmental Sustainability is either insignificant or marginal.

Among demographic variables, being male shows a significant positive association with Economic (Coef = 0.09, $p < 0.05$) and Social Sustainability (Coef = 0.15, $p < 0.01$) while having a slightly negative effect on Environmental Sustainability (Coef = -0.17, $p < 0.01$). Age groups between 3544 exhibit a negative impact on Economic (Coef = -0.07, $p < 0.05$), Social (Coef = -0.19, $p < 0.05$), and Overall Sustainability (Coef = -0.15, $p < 0.05$).

Education levels also display significant associations. Attaining education levels of JHS, SHS, post-secondary, and tertiary are positively linked to social sustainability (all $p < 0.01$). However, post-secondary and tertiary education levels exhibit a significant negative impact on economic and overall sustainability (all $p < 0.01$).

Variables like the number of children exhibit a positive association with economic sustainability (coef = 0.06, $p < 0.01$) and environmental sustainability (coef = 0.06, $p < 0.05$) while having an insignificant effect on social and overall sustainability. the number of partners shows a positive influence on social sustainability (coef = 0.09, $p < 0.01$) and environmental sustainability (coef = 0.12, $p < 0.05$).

Moreover, variables like place attachment exhibit significant positive coefficients across all dimensions of sustainability (all $p < 0.001$), indicating a strong relationship between attachment to place and sustainable practices.

However, the infrastructure index and sustainable attitude index demonstrate varied and sometimes insignificant impacts across different dimensions of sustainability. The infrastructure index exhibits a negative but insignificant association with economic sustainability ($p = 0.073$), while the sustainable attitude index shows negative but non-significant relationships across all dimensions of sustainability.

Table 6.3 Relationship Between Background Characteristics, Control Variables, and Sustainable Practices

	Economic	**Social**	**Environmental**	**Overall Sustainability**
	Coef (Sig).	Coef (Sig).	Coef (Sig).	Coef (Sig).
(Constant)	2.47 (0.000)	0.81 (0.007)	0.59 (0.081)	1.29 (0.000)
Migration Status				
Internal	0.41 (0.000)***	-0.06 (0.314)	0.65 (0.025)***	0.19 (0.000)***
International	0.23 (0.000)***	-0.04 (0.442)	0.46 (0.271)***	0.10 (0.009)***
Sex				
Female (RC)				
Male	0.09 (0.040)***	0.15 (0.003)***	-0.17 (0.004)***	0.02 (0.592)
45-75 (RC)				
15-24	0.10 (0.259)	-0.15 (0.108)	-0.09 (0.429)	-0.05 (0.479)
25-34	0.04 (0.608)	-0.09 (0.275)	-0.11 (0.278)	-0.05 (0.381)
35-44	-0.07 (0.373)	-0.19 (0.028)	-0.19 (0.052)	-0.15 (0.015)
Education				
No Education (RC)				
Pre-school/Primary	-0.05 (0.460)	0.14 (0.084)	0.09 (0.353)	0.06 (0.317)
JHS	-0.14 (0.195)	0.29 (0.000)***	0.11 (0.231)	0.09 (0.129)
SHS	-0.117(0.007)***	0.24 (0.002)***	0.04 (0.652)	0.02 (0.783)
Post Secondary	-0.27(0.073)***	0.34 (0.002)***	0.08 (0.535)	0.05(0.508)
Tertiary	-0.42(0.000)***	0.32 (0.002)***	-0.07 (0.559)	-0.06 (0.451)
Koranic	0.21 (0.006)***	0.11 (0.224)	0.03 (0.770)	0.12 (0.063)
Locality				
Adenta (RC)				
AMA	0.01(0.909)	0.01(0.926)	0.07 (0.245)	0.03 (0.478)
LEKMA	0.08(0.265)	-0.01 (0.879)	-0.12 (0.215)	-0.02 (0.787)
Ashiaman	0.02 (0.687)	0.05 (0.337)	0.11 (0.128)	0.06 (0.089)
Number of Children	0.06 (0.004)***	-0.01 (0.800)	0.06 (0.026)**	0.03(0.097)

Number of Partners	-0.06 (0.037)	0.09 (0.008)***	0.12 (0.029)**	0.05 (0.044)
Place Attachment	0.28 (0.000)***	0.38 (0.000)***	0.35 (0.000)***	0.34(0.000)***
Infrastructure Index	-0.21 (0.073)	0.11 (0.411)	0.44 (0.968)	0.11 (0.222)
Sustainable Attitude Index	-0.08 (0.150)	-0.11 (0.075)	0.12 (0.075)	-0.02 (0.628)

Source: MISTY, 2020

6.4 Relationship Between Migration Status and Mediating Variables (Relative Deprivation and Subjective Well-being)

Table 6.4 examines the associations between Migration Status, Relative Deprivation and Subjective Well-being.

Concerning relative deprivation when comparing households to others in the neighborhood, both internal and international migrants exhibit negative coefficients in comparison to non-migrants. Internal migrants show a substantial negative relationship with a coefficient of -0.42 ($p < 0.001$), indicating a pronounced association between internal migration and increased relative deprivation relative to others in the neighborhood. Similarly, international migrants demonstrate a negative coefficient of -0.32 ($p < 0.001$), implying a significant negative relationship, although less substantial than that of internal migrants.

In the context of relative deprivation concerning comparing households to the city, both internal and international migrants also display negative coefficients relative to non-migrants. Internal migrants present a coefficient of -0.38 ($p < 0.001$), suggesting a considerable negative association between internal migration and relative deprivation compared to others in the city. Meanwhile, International migrants exhibit a coefficient of -0.28 ($p < 0.001$), indicating a slightly weaker negative relationship than Internal migrants, though still statistically significant.

Regarding subjective well-being, specifically overall satisfaction in the neighborhood, similar trends emerge. Both internal and international migrants demonstrate negative coefficients relative to non-migrants. Internal migrants display a coefficient of -0.34 ($p < 0.001$), signifying a significant negative association between internal migration and overall satisfaction in the neighborhood. Similarly, international migrants exhibit a coefficient of -0.22 ($p < 0.015$), representing a comparatively weaker but still statistically significant negative relationship. This suggests that international migrants also tend to experience reduced levels of subjective well-being and life satisfaction compared to non-migrants.

Table 6.4 Relationship Between Migration Status and Relative Deprivation and Subjective Well-being

	Comparing Household to Others in Neighbourhood	**Comparing Household to City**	**Overall Satisfaction in Neighbourhood**
	Coef (Sig)	**Coef (Sig)**	**Coef (Sig)**
(Constant)	3.06 (0.000)	2.91 (0.000)	3.95 (0.000)
Non -Migrants (RC)			
Internal	- 0.42 (0.000)	-0.38 (0.000)	-0.34 (0.001)
International	-0.32 (0.000)	-0.28 (0.000)	-0.22 (0.015)

Source: MISTY, 2020

6.4 Relationship Between Background Characteristics and Mediating Variables (Relative Deprivation and Subjective Well-being)

The analysis further explored the relationship between background characteristics and relative deprivation and subjective well-being.

Firstly, the baseline levels of satisfaction were established through the constant terms. In the dimension of comparing household satisfaction to the neighborhood, the constant was found to be

2.710, signifying a significant baseline level of satisfaction (p-value: 0.000). Similarly, for comparing household satisfaction to the city, the constant was 2.521 (p-value: 0.000), indicating the baseline level of satisfaction within the city. For overall satisfaction in the neighborhood, the constant was 3.818 (p-value: 0.000), underlining the baseline level of overall neighbourhood satisfaction.

For sex, the results indicate that sex does not significantly influence satisfaction in any of the three dimensions studied, as all the coefficients for males are not statistically significant.

Age groups, specifically 15-24, 25-34, and 35-44, were also analyzed. Interestingly, these age groups do not significantly affect satisfaction levels in any dimension, with all coefficients being non-significant (p-values > 0.05).

Education level emerged as a significant factor in determining satisfaction. Individuals with education levels of Junior High School (JHS), Senior High School (SHS), Post Secondary, and Tertiary tend to experience higher household satisfaction compared to those in the neighborhood and household satisfaction compared to those in the city. This finding suggests that higher education is associated with increased satisfaction in these dimensions. However, when it comes to overall neighborhood satisfaction, JHS and Post-secondary education are positively associated, while SHS, Tertiary, and Koranic education do not significantly influence satisfaction.

In terms of the locality of residence, there was no significant relationship with relative deprivation and subjective Well-being.

The number of children in a household did not show a significant impact on any of the satisfaction dimensions, indicating that this variable may not be a major determinant of satisfaction.

Interestingly, the number of partners a respondent had was positively associated with overall neighborhood satisfaction. Individuals with more partners tended to report higher levels of overall satisfaction in their neighborhood. However, this variable did not significantly influence satisfaction in the other dimensions.

Lastly, Koranic education stood out as a unique factor. It was found to significantly decrease overall neighborhood satisfaction, highlighting the need for further exploration into the reasons behind this unexpected relationship.

Table 6.4 Relationship Between Background Characteristics and Relative Deprivation and Subjective Well-being

Background Characteristics	**Comparing Household to others in Neighbourhood**	**Comparing Household to City**	**Overall Satisfaction in Neighbourhood**
	Coef (Sig.)	Coef (Sig).	Coef (Sig).
(Constant)	2.710 (0.000)	2.521 (0.000)	3.818 (0.000)
Sex			
Female (RC)			
Male	-0.034 (0.557)	0.073 (0.228)	0.087 (0.324)
Age Group			
45-75 (RC)			
15-24	-0.147 (0.240)	-0.154 (0.238)	-0.093 (0.622)
25-34	-0.077 (0.490)	-0.083 (0.479)	-0.077 (0.651)
35-44	-0.118(0.292)	-0.088 (0.452)	-0.203 (0.230)
Education			
No Education (RC)			
JHS	0.270(0.000)***	0.335 (0.000)***	0.075 (0.505)
SHS	0.342(0.000)***	0.360 (0.000)***	-0.066 (0.529)
Post Secondary	0.317 (0.008)***	0.409 (0.001)***	0.066 (0.713)
Tertiary	0.693 (0.000)***	0.746 (0.000)***	0.044 (0.793)
Koranic	-0.110 (0.229)	-0.091 (0.343)	-0.434 (0.002)***
Locality			
Adenta (RC)			
AMA	-0.069 (0.305)	-0.083 (0.236)	-0.177 (0.084)
LEKMA	-0.126 (0.254)	-0.097 (0.398)	-0.236 (0.158)

Ashiaman	0.029 (0.635)	-0.051(0.425)	-0.143 (0.120)
Number of Children	-0.002 (0.948)	0.005 (0.863)	0.020 (0.656)
Number of Partners	0.022 (0.616)	0.003 (0.950)	0.148 (0.030)***

Source: MISTY, 2020

6.5 Relationship Between Control Variables and Mediating Variables (Relative Deprivation and Subjective Well-being)

The presented regression analysis in Table 6.5 provides insights into the relationship between control variables and two significant factors: relative deprivation and subjective well-being, measured through comparisons of households to their neighborhood, comparisons to the city, and overall satisfaction within the neighborhood.

Beginning with the baseline levels, the constant values represent the inherent levels of relative deprivation and subjective well-being when no control variables are considered. Remarkably, these constants are statistically significant, indicating that there are underlying levels of relative deprivation and subjective well-being even without considering the impact of control variables.

Moving on to the control variables, place attachment emerges as a significant factor positively influencing all three measures. Individuals who report a strong attachment to their place of residence tend to exhibit higher levels of subjective well-being and lower levels of relative deprivation within their neighborhood (Coef=0.24 p-value=0.000) and when compared to the city (Coef=0.21 p-value=0.000). This suggests that the emotional connection to one's place of living plays a pivotal role in shaping well-being and perceptions of deprivation. For overall satisfaction place attachment showed a positive significant relation.

The Infrastructure Index also exhibits substantial influence, with positive coefficients across all three measures. These are comparing households to others in the neighbourhood (Coef=1.58, p=0.000), comparing households to others in the city (Coef=1.66, p< 0.000), and overall

satisfaction in the neighborhood (Coef=1.67, p=0.000). Residents in areas with better infrastructure tend to report higher levels of subjective well-being and lower levels of relative deprivation both within their neighborhood and when compared to the city. This underscores the importance of quality infrastructure in enhancing residents' well-being and reducing feelings of deprivation.

In contrast, the sustainable attitude index presents mixed results. While it marginally positively affects relative deprivation within the neighborhood (Coef=0.14, p<0.052), it does not significantly impact comparisons to the city (Coef=-0.02, p<0.833) or overall neighborhood satisfaction (Coef=-0.04, p<0.600). This suggests that positive attitudes towards sustainability may contribute slightly to perceptions of economic status relative to the neighborhood and city and neighborhood satisfaction.

Table 6.5 Relationship Between Control Variables and Relative Deprivation and Subjective Well-being

	Comparing Household to Neighbourhood	**Comparing Household to City**	**Overall Satisfaction in Neighbourhood**
	Coef (Sig).	Coef (Sig).	Coef (Sig)
(Constant)	0.67 (0.036)***	1.35 (0.000)***	-0.71 (0.115)
Place Attachment	0.24 (0.000)***	0.21 (0.000)***	1.00 (0.000)***
Infrastructure Index	1.58 (0.000)***	1.66 (0.000)***	1.67 (0.000)***
Sustainable Attitude Index	0.14 (0.052)	-0.04 (0.600)	-0.02 (0.833)

Source: Misty 2020

6.6 Relationship Between Mediating Variable (Relative Deprivation and Subjective Wellbeing) on Sustainable Practices

The presented linear regression table (Table 6.7) shows the relationship between Relative Deprivation, Subjective Well-being, and their influence on Sustainable Practices.

Relative Deprivation, in terms of the comparisons between households and others in the neighborhood reveal interesting dynamics. While no statistically significant relationship is observed for economic and overall sustainability, a significant negative association emerges with social sustainability (coef= -0.085, p=0.031). This suggests that when households compare themselves to others in the neighborhood, it correlates with lower levels of social sustainability. Conversely, comparing households to others in the city exhibits notable positive relationships with Social (Coef= 0.308, p=0.000) and Overall Sustainability (Coef= 0.075, p=0.008). This indicates that such comparisons with city counterparts are linked to higher levels of social and overall sustainability.

Examining Subjective Well-being, particularly satisfaction with life in the neighborhood, showcases compelling results. While no significant relationship is found with Economic Sustainability (Coef= 0.011, p=0.492), there are noteworthy positive associations with Social (Coef= 0.045, p=0.004), Environmental (Coef= 0.121, p=0.000), and Overall Sustainability (Coef= 0.059, p=0.000). These findings imply that higher satisfaction with life in the neighborhood corresponds to elevated levels of social, environmental, and overall sustainability.

Table 6.6 Relationship Between Relative Deprivation, Subjective Well-being and Sustainable Practices

	Economic Coef(Sig).	Social Coef (Sig).	Environment Coef (Sig).	Overall Sustainability Coef (Sig).
(Constant)	3.471(0.000)	1.351 (0.000)	1.993 (0.000)	2.272 (0.000)
Relative Deprivation				
Comparing households to others in the neighbourhood	-0.032 (0.432)	-0.085 (0.031)	0.174 (0.000)	0.019 (0.528)
Comparing households to others in the city	0.001 (0.979)	0.308 (0.000)	-0.083 (0.059)	0.075 (0.008)
Subjective Well-being				
Satisfaction with life in the neighbourhood	0.011 (0.492)	0.045 (0.004)	0.121 (0.000)	0.059 (0.000)

Source: MISTY, 2020

6.7 The Influence of Migration, Relative Deprivation and Subjective Well-being on Sustainable Practices

The table (Table 6.6) presents a regression analysis exploring the relationship between migration, relative deprivation, subjective well-being, and various dimensions of sustainable practices economic, social, environmental, and overall sustainability.

In terms of migration status, both internal and international migrants exhibit significant positive coefficients compared to non-migrants across various sustainability dimensions. internal migrants demonstrate a positive impact on economic sustainability (coef = 0.46, $p < 0.001$), environmental sustainability (coef = 0.21, $p < 0.001$), and overall sustainability (coef = 0.25, $p < 0.001$). Similarly, international migrants also display positive coefficients for economic sustainability (coef = 0.40, $p < 0.01$), environmental sustainability (coef = 0.49, $p < 0.001$), and overall sustainability (coef = 0.18, $p < 0.001$). however, social sustainability does not exhibit significant coefficients for either

group of migrants, implying a limited direct influence on social aspects of sustainability compared to non-migrants.

Relative deprivation, assessed by comparing households to others in the neighborhood, shows no significant impact on economic sustainability. However, it has a notable negative influence on Social Sustainability (Coef = -0.08, $p < 0.05$) indicating a marginal adverse impact when individuals perceive their households as relatively deprived compared to others in the neighborhood. Additionally, comparing households to others in the city exhibits a significant positive effect on Social Sustainability (Coef = 0.31, $p < 0.001$) and a slight but statistically significant positive impact on Overall Sustainability (Coef = 0.08, $p < 0.01$), suggesting that a perception of relative deprivation at the city level may influence social aspects of sustainability.

Subjective Well-being, measured by satisfaction with life in the neighborhood, displays a positive significant association with Social Sustainability (Coef = 0.05, $p < 0.01$), environmental sustainability (coef = 0.12, $p < 0.001$), and overall sustainability (coef = 0.06, $p < 0.001$). This signifies that higher satisfaction with life in the neighborhood corresponds to more favorable outcomes across social, environmental, and overall sustainability aspects.

Table 6.6 Relationship Between Migration, Relative Deprivation and Subjective Well-being and Sustainable Practices

	Economic	**Social**	**Environment**	**Overall Sustainability**
	Coef (Sig.)	Coef (Sig).	Coef (Sig).	Coef (Sig).
(Constant)	2.96 (0.000)	1.31 (0.000)	1.90 (0.000)	2.06(0.000)
Migration Status				
Non-Migrant (RC)				
Internal	0.46 (0.000)***	0.01 (0.823)	0.78 (0.000)***	0.25 (0.000)***
International	0.40 (0.000)***	0.07 (0.155)	0.50(0.000)***	0.18 (0.000)***
Relative Deprivation				
Comparing households to others in the neighbourhood	0.01 (0.764)	-0.08 (0.040)**	0.18 (0.000)***	0.04 (0.207)

Comparing households to others in the city	0.00 (0.937)	0.31 (0.000)***	-0.08 (0.063)	0.08 (0.006)***
Subjective Well-being				
Satisfaction with life in the neighbourhood	0.02 (0.302)	0.05 (0.004)***	0.12(0.000)***	0.06 (0.000)***

Source: MISTY, 2020

6.8 Factors Influencing Sustainable Practices Mediated by Relative Deprivation and Subjective Well-being on Sustainable Practices

This regression analysis as depicted Table 6.7 aims to uncover the mediating influence of relative deprivation and subjective well-being on sustainable practices, spanning Economic, Social, Environmental, and Overall Sustainable Practices.

At the baseline, the constant values represent the foundational levels of sustainable practices in each dimension when no specific variables are considered. They are statistically significant in Economic Sustainability (Coefficient 2.36, p-value: 0.000), indicating a strong presence of sustainable practices in this domain. However, the constants have a relatively weaker significance in Social (Coefficient 0.37, p-value: 0.195) and Environmental Sustainability (Coefficient 0.56, pvalue: 0.099). In contrast, they hold high significance in Overall Sustainable Practices (Coefficient 1.09, p-value: 0.000), emphasizing the robust presence of a sustainability foundation.

Regarding migration status, internal migrants emerge as significant contributors to Economic Sustainability (Coefficient 0.49, p-value: 0.000), Environmental Sustainability (Coefficient 0.18, p-value: 0.005), and Overall Sustainable Practices (Coefficient 0.22, p-value: 0.000). In contrast, their influence on Social Sustainability is relatively modest (Coefficient -0.02, p-value: 0.691). International migrants also positively impact Economic Sustainability (Coefficient 0.28, p-value: 0.000) and Overall Sustainable Practices (Coefficient 0.11, p-value: 0.003), yet their influence on Social and Environmental Sustainability is marginal.

Moving to sex, males exhibit higher levels of Social Sustainability (Coefficient 0.13, p-value: 0.005), suggesting a propensity for more socially sustainable practices compared to females. However, they report lower levels of Environmental Sustainability (Coefficient -0.15, p-value: 0.007).

Age, on the other hand, does not significantly impact any dimension of sustainable practices, except for a notable negative effect on Social Sustainability among individuals aged 35-44 (Coefficient -0.17, p-value: 0.034).

Educational background reveals nuanced effects. Individuals with higher levels of education, such as JHS, SHS, and post-secondary, generally report lower levels of Economic Sustainability.
However, those with Koranic education exhibit a positive impact on Economic Sustainability (Coefficient 0.20, p-value: 0.012). Education has no significant impact on Social and Environmental Sustainability, except for a positive effect on Social Sustainability among individuals with JHS education (Coefficient 0.19, p-value: 0.013). Post Secondary education also slightly affects Environmental Sustainability positively (Coefficient 0.24, p-value: 0.022).
Surprisingly, Tertiary education is associated with lower Overall Sustainable Practices (Coefficient -0.14, p-value: 0.067).

Locality, number of children, and number of partners do not exhibit significant effects on sustainable practices.

Place attachment emerges as a strong positive influencer across all dimensions of sustainable practices. This indicates that individuals who have a strong attachment to their locality are more likely to engage in sustainable practices.

The Infrastructure Index, however, slightly affects Economic and Environmental Sustainability negatively and has no significant impact on Social and Overall Sustainable Practices.

Regarding the Sustainable Attitude Index, it does not show significant effects on sustainable practices.

In terms of relative deprivation and subjective well-being, comparing households to others in the neighborhood positively influences Environmental Sustainability (Coefficient 0.13, p-value: 0.005) and Overall Sustainable Practices (Coefficient 0.02, p-value: 0.410). However, it negatively affects Social Sustainability (Coefficient -0.09, p-value: 0.018), indicating that individuals perceiving differences in their neighborhood tend to report lower levels of social sustainability. Comparing households to others in the city significantly enhances both Social (Coefficient 0.30, p-value: 0.000) and Overall Sustainable Practices (Coefficient 0.10, p-value: 0.000). Lastly, satisfaction with life in the neighborhood positively impacts Environmental Sustainability

(Coefficient 0.06, p-value: 0.003) but has a minor negative effect on Economic Sustainability (Coefficient -0.03, p-value: 0.059).

This analysis uncovered complex relationships between various factors and sustainable practices across different dimensions. Migration status, sex, education, and subjective well-being indicators play distinctive roles in shaping sustainable practices. Internal migrants contribute significantly to Economic and Environmental Sustainability, while international migrants mainly impact Economic Sustainability. Males exhibit higher levels of Social Sustainability but lower Environmental Sustainability compared to females. Educational backgrounds show nuanced effects, with some levels contributing positively to certain dimensions. Place attachment consistently enhances all dimensions of sustainability, while relative deprivation and subjective well-being indicators have varied impacts on sustainability dimensions.

Table 6.8: Factors Influencing Sustainable Practices Mediated by Relative Deprivation and Subjective Well-being on Sustainable Practices

	Economic Practices	Social	Environmental	Overall Sustainable
	Coef (Sig)	Coef (Sig)	Coef (Sig)	Coef Sig.
(Constant)	2.36 (0.000)	0.37(0.195)	0.56 (0.099)	1.09 (0.000)
Migration Status				
Non-Migrant (RC)				
Internal	0.43 (0.000)***	-0.02 (0.691)	0.70 (0.000)***	0.22 (0.000)
International	0.23 (0.000)***	-0.02 (0.644)	0.45 (0.000)***	0.11 (0.003)
Sex				
Female (RC)				
Male	0.07 (0.103)	0.13 (0.005)***	-0.15 (0.007)***	0.02 (0.611)
Age Group				
45-75(RC)				
15-24	0.11 (0.203)	-0.12 (0.209)	-0.08 (0.486)	-0.03 (0.679)
25-34	0.04 (0.554)	-0.08 (0.358)	-0.10 (0.302)	-0.04 (0.467)
35-44	-0.06 (0.397)	-0.17(0.034)**	-0.17 (0.083)	-0.14 (0.024)**
Educational Background				
No Education (RC)				
Pre-school/Primary	-0.07 (0.341)	0.09 (0.250)	0.07 (0.454)	0.03 (0.598)
JHS	-0.17 (0.021)***	0.19 (0.013)**	0.08 (0.368)	0.04 (0.519)
SHS	-0.27 (0.000)***	0.15 (0.042)**	0.03 (0.738)	-0.03(0.604)

Post Secondary	-0.30 (0.002)***	0.24 (0.022)**	0.07 (0.582)	0.00(0.958)
Tertiary	-0.48 (0.000)***	0.16 (0.127)	-0.09 (0.455)	-0.14(0.067)
Koranic	0.20 (0.012)***	0.08 (0.321)	0.05 (0.597)	0.11(0.071)
Locality				
Adentan (RC)				
AMA	0.01 (0.862)	0.03 (0.574)	0.08 (0.159)	0.04 (0.276)
LEKMA	0.08 (0.262)	0.00 (0.995)	-0.10 (0.313)	0.00 (0.942)
Ashiaman	0.01 (0.793)	0.05 (0.253)	0.10 (0.052)	0.06 (0.093)
Number of Children	0.06 (0.003)	-0.01(0.662)	0.02 (0.341)	0.02 (0.120)
Number of Partners	-0.06 (0.045)	0.09 (0.004)	0.11 (0.005)	0.05 (0.048)
Place Attachment	0.30 (0.000)***	0.34 (0.000)***	0.28 (0.000)***	0.31 (0.000)***
Access to Infrastructure Index	-0.25 (0.038)**	-0.14(0.266)	0.23 (0.131)	-0.05 (0.565)
Sustainable Attitude Index	-0.07 (0.165)	-0.06 (0.319)	0.11 (0.102)	-0.01 (0.870)
Relative Deprivation				
Comparing households to others in the neighbourhood	0.03 (0.358)	-0.09 (0.018)**	0.13 (0.005)**	0.02 (0.410)
Comparing households to others in the city	0.04 (0.266)	0.30 (0.000)***	-0.04 (0.316)	0.10 (0.000)***
Subjective Wellbeing				
Satisfaction with life in the neighbourhood	-0.03 (0.059)	-0.01(0.506)	0.06 (0.003)**	0.01 (0.627)

Source: MISTY, 2020

6.9 Chapter Summary

The chapter explored the factors influencing sustainable practices across economic, social, environmental, and overall dimensions, mediated by relative deprivation and subjective well-being. Migration status significantly affects sustainability, with internal migrants contributing most to economic and environmental sustainability, while international migrants primarily influence economic sustainability. Males show higher social sustainability but lower environmental sustainability than females. Age has limited impact, negatively affecting social sustainability for those aged 35-44. Education influences sustainability, and place attachment positively correlates with sustainable practices. The Infrastructure Index slightly reduces economic and environmental sustainability, while the Sustainable Attitude Index has no significant effect. Relative deprivation and subjective well-being show mixed results: comparing households to others in the neighborhood enhances environmental and overall sustainability but reduces social sustainability, while comparisons with others in the city boost social and overall sustainability. Satisfaction with life in the neighborhood positively affects environmental sustainability but slightly reduces economic sustainability. These findings underscore the complex interplay of factors that shape sustainable practices and highlight the importance of considering multiple influences when promoting sustainability.

CHAPTER SEVEN

FACTORS INFLUENCING SUSTAINABLE PRACTICES AMONG MIGRANTS AND NON-MIGRANTS MEDIATED BY RELATIVE DEPRIVATION AND SUBJECTIVE WELL-BEING

7.1 Introduction

This chapter presents an analysis of the factors influencing sustainable practices among migrants and non-migrants. It captures the factors influencing each domain of sustainability (i.e., economic, social, and environmental) as well as overall sustainable practices mediated by relative deprivation and subjective well-being.

7.2 Factors Influencing Economic Sustainable Practices among Migrants and NonMigrants

Considering the characteristics of the non-migrant population and economic sustainable practices as captured in Table 7.1, the significant factors were locality of residence, access to infrastructure, and subjective well-being. For the non-migrant population, living in the LEKMA locality demonstrated a substantial positive impact on economic sustainability (Coef: 0.422, Sig: 0.000). This suggests that the specific conditions and support systems in LEKMA significantly enhance economic well-being for non-migrants in this area. For example, Wong et al. (2021) highlight that well-developed urban areas often create enabling environments for economic activities, particularly for non-migrants who may have established networks and familiarity with local opportunities.

In contrast, residing in areas with higher infrastructure indices is significantly associated with lower economic sustainability (Coef: -0.453, Sig: 0.042) for non-migrants. This inverse relationship may indicate that areas with better infrastructure tend to have a higher cost of living,

which impacts economic well-being. This aligns with literature indicating that improved infrastructure in urban areas often correlates with increased housing costs, utility expenses, and overall living expenses, which can strain household budgets, particularly for lower-income groups (Glaeser & Gottlieb, 2009; Angel, 2012).

Furthermore, stronger place attachment, which denotes a connection to one's place of residence, significantly increases economic sustainability (Coef: 0.077, Sig: 0.235) among non-migrants. Moreover, overall life satisfaction within non-migrant neighbourhood plays a significant positive role in economic sustainability (Coef: 0.059, Sig: 0.045). For non-migrants, higher life satisfaction may reflect positive neighborhood attributes such as safety, social cohesion, and access to local resources, which collectively encourage sustainable economic engagement. Similarly, Sirgy and Cornwell (2001) highlight that life satisfaction is a critical component of quality of life, motivating individuals to invest in their local economy and adopt sustainable economic practices.

For internal migrants, economically sustainable practices are influenced by educational level, number of children, place attachment, access to infrastructure and relative deprivation.

Educational levels among internal migrants significantly influenced economically sustainable practices negatively. Those with tertiary education exhibit a negative influence (Coef: -0.623, Sig: 0.007), implying that higher education is associated with less economically sustainable practices. This outcome may stem from the lifestyle changes and consumption patterns associated with higher education. Individuals with advanced education often have increased income potential and aspirations for higher living standards, which may reduce their reliance on cost-saving or resource-conserving practices that are typically associated with economic sustainability. This aligns with Inglehart's (1997) postmaterialism theory, which posits that individuals with higher education and income levels may prioritize convenience and consumption over sustainable behaviors.

Following a similar trend, internal migrants with more access to infrastructure exhibit less economically sustainable practices (Coef: -1.046, Sig: 0.000). This implies that access to infrastructure may pose economic cost for internal migrants making them engage in less economically sustainable practices.

For a positive relationship with economic sustainability, the number of children among internal migrants played a significant factor (Coef: 0.073, Sig: 0.033). Having more children was significantly associated with increased economically sustainable practices. This suggests that internal migrants with larger families are more likely to engage in economically sustainable practices which aims at managing economic resources. This finding is supported by Becker's (1965) household production theory, which highlights that larger families often optimize resource allocation and adopt frugal behaviors to meet household needs efficiently.

Also place attachment (Coef: 0.270, Sig: 0.000) significantly influences economically sustainable practices positively, implying that internal migrants with a stronger attachment to one's place of residence will lead to more engagement in economically sustainable practices, highlighting the importance of fostering a sense of connection to the local community.

Relative Deprivation, especially in the context of household comparisons within the city/town/village, also influenced economic sustainable practices among internal migrants (Coef: 0.232, Sig: 0.002). Internal migrants who perceive their households as better off than others in the city/town tend to engage in more economically sustainable practices. This finding aligns with Runciman's (1966) relative deprivation theory, which posits that individuals' perceptions of their status relative to others can influence their behavior and decision-making. Internal migrants who feel relatively advantaged may have greater confidence in adopting sustainable economic practices, such as conserving resources or participating in community-based economic initiatives,

as they are less preoccupied with immediate survival needs. Internal migrants may engage in economically sustainable practices with the aim of saving resources probably to remit to their place of origin.

When examining the economic sustainability practices of international migrants, several factors such as educational level, locality, number of partners, and sustainable attitude proved to be significant. Educational level among international migrants was associated with lower economic sustainability, as individuals with educational level beyond the Junior High School (JHS) level (SHS, Post Secondary, and Tertiary) exhibit significantly lower economic sustainability (Sig values ranging from 0.000 to 0.010, in contrast to those with no education. This suggests that higher education gives opportunity to higher income therefore influence lower economic sustainable practices and encouraging higher spending. This aligns with Inglehart's (1997) postmaterialism theory, which posits that individuals with higher education and income levels may prioritize convenience and consumption over sustainable behaviors.

Locality of residence also had a substantial influence on economic sustainability among international migrants. Living in the LEKMA area is associated with significantly lower economic sustainability (Coef: -0.315, Sig: 0.018), compared to their counterparts in Adenta.

Similarly, the number of partners variable of international migrants demonstrates a significant negative impact on economic sustainability (Coef: -0.145, Sig: 0.002). Also, international migrants with more partners tend to have lower economic sustainability, highlghting the potential financial strain associated with larger households. This finding is consistent with research highlighting the economic pressures of larger family structures. For instance, Becker's (1965) household economic theory emphasizes that as household size increases, the demand for resources rises, potentially reducing disposable income and opportunities for sustainable economic decisions. Additionally,

Banerjee and Duflo (2011) argue that larger households often face resource allocation challenges, prioritizing immediate needs over long-term economic sustainability.

Sustainable Attitude also exhibited a negative significant impact on economic sustainability practices (Coef: -0.287, Sig: 0.000). International migrants with more sustainable attitudes tend to have lower economic sustainability, suggesting that their eco-conscious attitudes do not translate into practice leading to financial decisions that prioritize more spending over economic sustainability. This finding aligns with the value-action gap theory (Blake, 1999), which highlights discrepancies between individuals' pro-sustainability attitudes and their actual behaviors.

The Place Attachment however positively influences economic sustainability practices (Coef: 0.412, Sig: 0.000) among international migrants. Having a stronger attachment to one's place of residence is linked to higher economic sustainability, emphasizing the importance of a sense of belonging and connection to the local environment for economic well-being.

Table 7.1: Factors Influencing Economic Sustainable Practices among Migrants and NonMigrants

	ECONOMIC SUSTAINABILITY		
	Non-Migrant Coef (Sig)	Internal Migrant Coef (Sig)	International Migrant Coef (Sig)
(Constant)	2.921(0.000)	1.780(0.000)	3.158(0.000)
Sex			
Female (RC)			
Male	0.073(0.236)	0.104(0.160)	0.200(0.080)
Age Group			
45-75(RC)			
15-24	0.042(0.760)	0.288(0.053)	0.051(0.785)
25-34	0.012(0.922)	0.132(0.279)	0.039(0.830)
35-44	-0.057(0.616)	-0.183(0.134)	0.125(0.496)
Educational Level			
No Education (RC)			
Pre-school/Primary	0.071(0.662)	-0.122(0.422)	-0.098(0.289)
JHS	0.083(0.598)	-0.035(0.814)	-0.431(0.000)***
SHS	0.072(0.648)	-0.261(0.099)	-0.428(0.000)***
Post Secondary	0.052(0.774)	-0.338(0.0940	-0.381(0.010)***
Tertiary	-0.128(0.495)	-0.623(0.007)***	-0.497(0.000)***
Koranic	0.024(0.935)	0.291(0.374)	0.125(0.159)
Locality			
Adenta (RC)			
AMA	0.133(0.088)	0.045(0.633)	-0.114(0.106)
LEKMA	0.422(0.000)***	0.231(0.085)	-0.315(0.018)***
Ashiaman	0.023(0.772)	0.033(0.708)	-0.008(0.898)
Number of Children	0.040 (0.242)	0.073(0.033)	0.026(0.427)
Number of Partners	0.009(0.873)	-0.048(0.384)	-0.145(0.002)***
Place Attachment Index	0.077(0.235)	0.27(0.000)***	0.412(0.000)***
Infrastructure Index	-0.453(0.042)***	-1.046(0.000)***	0.178(0.295)
Sustainable Attitude Index	-0.121(0.204)	0.179(0.073)	-0.287(0.000)***
Relative Deprivation a			
Household compared to others in Neighbourhood	0.092(0.125)	-0.121(0.105)	0.047(0.388)
Household compared to others in city/town/village	-0.065(0.249)	0.232(0.002)***	0.044(0.375)
Subjective Well-being			
Overall Life Satisfaction in Neighbourhood	0.059(0.045)**	0.023(0.433)	-0.105(0.000)***

Source: MISTY, 2020

7.3 Factors Influencing Social Sustainable Practices among Migrants and Non-Migrants

Table 7.2 presents the factors influencing socially sustainable practices among migrants and non-migrants.

To begin with the non-migrants, the factors that influence socially sustainable practices among non-migrants, were sex, locality of residence, place attachment, and relative deprivation.

First and foremost, sex has been shown to play a significant role in shaping socially sustainable practices among non-migrants. The results indicate that male non-migrants, tend to report higher adoption of socially sustainable practices compared to females. The coefficient of 0.211 with a significance level of 0.003 suggests that there are sex differences in the adoption of socially sustainable practices, with males more likely to engage in such behaviours.

Another crucial factor that significantly impacts the adoption of socially sustainable practices among non-migrants is the locality of residence. Specifically, living in the LEKMA area is associated with a higher likelihood of adopting socially sustainable practices, as indicated by a positive coefficient of 0.340 with a significance level of 0.013. compared to Adenta. These findings emphasize that locality disparities exist in the adoption of socially sustainable practices within the non-migrant population.

Furthermore, the level of place attachment, or the emotional bond individuals have with their place of residence, significantly influences the adoption of socially sustainable practices among nonmigrants. Again, a higher level of place attachment is associated with a greater likelihood of engagement in socially sustainable practices, with a coefficient of 0.334 and a significance of

0.000. This highlights the importance of community engagement and fostering a sense of belonging among non-migrants to enhance their adoption of socially sustainable practices.

Lastly, relative deprivation, particularly concerning household comparisons within the city or town, has a noteworthy impact on the adoption of socially sustainable practices. Non-migrants who perceive their households as better off than others in the city or town tend to be more likely to adopt socially sustainable practices, as indicated by a positive coefficient of 0.193 with a significance level of 0.003. These findings suggest that social comparisons and perceptions of relative well-being within a community play a role in shaping the adoption of socially sustainable practices among non-migrants.

In the context internal migrants, factors that influence socially sustainable practices were locality, number of partners, place attachment, and relative deprivation. In terms of locality of residence internal migrants residing in the AMA area exhibited significantly higher socially sustainable practices (Coef: 0.240, Sig: 0.016), compared to those in Adenta. Therefore, locality can be a pivotal factor in shaping the socially sustainable practices of internal migrants, with certain areas providing a more conducive environment for socially sustainable practices.

Also, the number of partners of internal migrant significantly influence socially sustainable practices (Coef: 0.140, Sig: 0.017). Having more partners is associated with higher socially sustainable practices, emphasizing the importance of social connections and relationships. Again, place attachment significantly impacts socially sustainable practices (Coef: 0.377, Sig: 0.000). A stronger attachment to one's place of residence is associated with higher socially sustainable practices, underscoring the role of a sense of belonging and connection to the local community in fostering socially sustainable practices.

Relative Deprivation concerning household comparisons within the city/town/village significantly affects socially sustainable practices. Individuals who perceive their households as better off than others in the city/town tend to have higher socially sustainable practices (Coef: 0.278, Sig: 0.000), highlighting the importance of relative social well-being in shaping overall socially sustainable practices.

When examining the social aspects of sustainable practices among international migrants, several significant variables included educational level, locality, place attachment, relative deprivation, and subjective well-being. Firstly, locality significantly impacts social sustainability among international migrants. International migrants living in the LEKMA area has a substantial negative influence (Coef: -0.193, Sig: 0.200) on social sustainability, indicating that individuals in this locality experience lower social well-being compared to Adenta.

Educational level has notable effects on social sustainability among international migrants, particularly at the Senior High School (SHS) and Tertiary education levels. International migrants with SHS and Tertiary education levels exhibit significantly higher social sustainability (Sig values of 0.050 and 0.054, respectively), suggesting that higher education positively influences social well-being in this population.

The Place Attachment Index plays a crucial role in enhancing social sustainability (Coef: 0.302, Sig: 0.000). Having a stronger attachment to one's place of residence is associated with higher social sustainability, emphasizing the importance of a sense of belonging and connection to the local environment for social well-being.

Relative Deprivation within the city/town/village significantly influences social sustainability (Coef: 0.384, Sig: 0.000). International migrants who perceive their households as better off than

others in the city or town tend to report higher social sustainability, highlighting the role of relative comparisons in shaping their social well-being.

Subjective well-being, specifically overall life satisfaction in the neighbourhood, negatively affects social sustainability (Coef: -0.062, Sig: 0.024). Lower levels of life satisfaction in the neighbourhood lead to reduced socially sustainable practices among international migrants.

Table 7.2 Factors Influencing Social Sustainable Practices among Migrants and NonMigrants

	SOCIAL SUSTAINABILITY		
	Non Migrant Coef (Sig)	Internal Migrant Coef(Sig)	International Migrant Coef (Sig)
(Constant)		0.398 (0.442)	-0.208 (0.684)	1.036 (0.036)
Sex				
Female (RC)				
Male		0.211 (0.003)	0.109 (0.162)	0.077(0.553)
Age Group				
45-75(RC)				
15-24		-0.072 (0.646)	0.084 (0.589)	-0.266 (0.212)
25-34		-0.075 (0.581)	0.031 (0.810)	-0.181(0.375)
35-44		-0.102 (0.428)	0.007 (0.953)	-0.401(0.054)
Educational Level				
No Education(RC)				
Pre-school/Primary		-0.155 (0.402)	-0.085 (0.593)	0.192 (0.068)
JHS		0.102 (0.569)	0.054 (0.726)	0.146 (0.207)
SHS		-0.048 (0.790)	-0.019 (0.908)	0.205 (0.050)
Post Secondary		-0.036 (0.860)	0.152 (0.471)	0.272 (0.102)
Tertiary		-0.096 (0.651)	-0.202 (0.404)	0.280 (0.054)
Koranic		-0.111 (0.737)	-0.091 (0.792)	0.153(0.128)
Locality of Residence				
Adenta (RC)				
AMA		-0.169 (0.056)	0.240 (0.016)**	0.041 (0.606)
LEKMA		0.340 (0.013)**	-0.168 (0.233)	-0.193 (0.200)
Ashiaman		-0.033 (0.707)	0.172 (0.061)	0.031 (0.647)
Number of Children		-0.027(0.486)	-0.026 (0.474)	0.008(0.819)
Number of Partners		0.160 (0.010)**	0.140 (0.017)**	0.035 (0.510)
Place Attachment		0.334 (0.000)***	0.377 (0.000)***	0.302 (0.000)***
Infrastructure Index		-0.475 (0.060)	-0.369 (0.147)	0.145 (0.451)

Sustainable Attitude Index	-0.008 (0.943)	0.050 (0.633)	-0.166 (0.070)
Relative Deprivation			
Household compared to others in Neighbourhood	0.031 (0.651)	-0.105 (0.180)	-0.119 (0.055)
Household compared to others in city/town/village	0.193 (0.003)***	0.278 (0.000)***	0.384 (0.000)***
Subjective Well-being			
Overall Life Satisfaction in	0.004 (0.897)	0.027 (0.380)	-0.062 (0.024)** Neighbourhood

Source: MISTY, 2020

7.4 Factors Influencing Environmentally Sustainable Practices among Migrants and NonMigrants

Table 7.3 shows the factors influencing Environmentally Sustainable Practices among Migrants and Non-Migrants.

For the non-migrant population, several key factors such as sex, the number of partners, access to local infrastructure quality, and subjective well-being are key influencers of environmentally sustainable practices.

Firstly, sex plays a noteworthy role in shaping environmentally sustainable practices. The data show that males (Coef: -0.203, Sig: 0.008) exhibit lower engagement in environmentally sustainable practices compared to females. This suggests sex disparity in environmental sustainability within the non-migrant community, with females demonstrating a stronger commitment to sustainable behaviours.

Another significant variable is the number of partners of non-migrants. Surprisingly, having more partners is associated with greater engagement in environmentally sustainable practices (Coef: 0.186, Sig: 0.006). This finding implies that non-migrants with multiple partners tend to adopt more environmentally sustainable behaviours.

Also, access to infrastructure within localities emerged as a critical determinant of environmental sustainability among non-migrants. Areas with better infrastructure are linked to significantly higher environmentally sustainable practices (Coef: 0.797, Sig: 0.004). It suggests that improved access to resources and facilities can encourage individuals to adopt more eco-friendly behaviours.

Lastly, non-migrants subjective well-being, specifically their overall life satisfaction in their neighbourhoods, plays a role in influencing environmentally sustainable practices. Those reporting higher life satisfaction are more likely to engage in sustainable behaviours (Coef: 0.106, Sig: 0.004). This association highlights the interplay between well-being and environmental consciousness. Non-migrants who are content with their well-being may be more inclined to participate in activities that contribute to environmental sustainability.

For internal migrants, place attachment and sustainable attitude influence their environmentally sustainable practices.

Firstly, the place attachment significantly influences environmentally sustainable practices positively among internal migrants (Coef: 0.453, Sig: 0.000). This emphasizes that a stronger attachment to one's place of residence is associated with higher environmentally sustainable practices. It underscores the role of emotional connections to the local environment in fostering environmentally responsible behaviours.

The Sustainable Attitude also plays a substantial role in shaping environmentally sustainable practices among internal migrants (Coef: 0.326, Sig: 0.008). Individuals with more sustainable attitudes tend to engage in higher environmentally sustainable practices, highlighting the relevance of eco-conscious beliefs and values in promoting environmentally sustainable behaviours.

In the context of international migrants, place attachment was the only significant variable influencing environmentally sustainable practices (Coef: 0.248, Sig: 0.002). This underscores the importance of an emotional connection to one's place of residence in promoting higher environmentally sustainable practices. This suggests that fostering a sense of attachment to the local environment is a crucial factor in promoting environmentally sustainable practices within the international migrant population.

Table 7.3 Factors Influencing Environmentally Sustainable Practices among Migrants and Non-Migrants Environmentally Sustainable Practices

	Non-Migrant Coef (Sig)	Internal Migrant Coef (Sig)	International Migrant Coef(Sig)
(Constant)		0.962 (0.088)	-0.575 (0.335)	0.991(0.101)
Sex				
Female (RC)				
Male		-0.203 (0.008)***	-0.142 (0.117)	0.138 (0.382)
Age				
45-75(RC)				
15-24		-0.121 (0.476)	-0.017 (0.924)	0.153 (0.559)
25-34		-0.133 (0.366)	-0.091 (0.545)	0.175 (0.483)
35-44		-0.119 (0.394)	-0.117 (0.435)	0.078 (0.760)
Educational Level				
No Education (RC)				
Pre-school/Primary		0.079 (0.695)	-0.074 (0.692)	0.115 (0.370)
JHS		0.037 (0.848)	-0.015 (0.935)	0.154 (0.276)
SHS		0.134 (0.494)	-0.179 (0.356)	0.112(0.383)
Post Secondary		0.224 (0.314)	-0.183 (0.458)	0.245 (0.230)
Tertiatry		-0.225 (0.331)	-0.387(0.173)	0.251 (0.159)
Koranic		-0.028 (0.938)	-0.473 (0.239)	0.099 (0.421)
Locality of Residence				
Adenta (RC)				
AMA		0.064 (0.502)	0.166 (0.152)	0.001 (0.991)
LEKMA		0.109 (0.463)	0.030 (0.856)	-0.341 (0.065)
Ashiaman		0.089 (0.355)	0.058 (0.587)	0.138 (0.092)
Number of Children		0.019 (0.656)	0.051 (0.231)	-0.013(0.773)
Number of Partners		0.186 (0.006)***	0.082 (0.229)	0.080 (0.223)

Place Attachment	0.128 (0.109)	0.453 (0.000)***	0.248 (0.002)***
Infrastructure Index	0.797 (0.004)***	-0.480 (0.107)	0.422 (0.073)
Sustainable Attitude Index	0.000 (0.998)	0.326 (0.008)***	-0.049 (0.661)
Relative Deprivation			
Household compared to others in Neighbourhood	0.098 (0.189)	0.154 (0.094)	0.114 (0.131)
Household compared to others in city/town/village	0.030 (0.672)	0.034 (0.705)	-0.081 (0.238)
Subjective Well-being			
Overall Life Satisfaction in Neighbourhood	0.106 (0.004)***	0.034 (0.343)	0.036 (0.283)

Source: MISTY, 2020

7.5 Factors Influencing Overall Sustainable Practices among Migrants and Non-Migrants

Regarding overall, sustainability several significant non migrants characteristics such as place of residence, the number of partners, place attachment, and subjective well-being have a direct impact. This captured in Table 7.4.

Firstly, the locality of residence was a significant determinant of overall sustainability practices. Living in the LEKMA area has a strong positive effect (Coef: 0.290, Sig: 0.001), indicating that non migrants residing in this locality tend to exhibit higher overall sustainability practices compared to Adenta. This suggests that where non-migrants live can significantly impact their overall sustainability practices.

The number of partners of non-migrants had a significant influence on overall sustainability (Coef: 0.118, Sig: 0.003). This indicates that non-migrants in relationships one or more partners tend to engage more in sustainable practices compared to those without partners.

Place attachment index significantly influences overall sustainability practices (Coef: 0.180, Sig: 0.000) among non-migrants. Non-migrants with a stronger attachment to their place of residence

are more likely to engage in sustainable practices that contribute to their overall well-being. This finding underscores the importance of fostering a sense of connection to one's local community.

Lastly subjective well-being, particularly overall life satisfaction in the neighbourhood, play a significant role in overall sustainability practices among non-migrants (Coef: 0.057, Sig: 0.009). Higher life satisfaction is associated with significantly increased overall sustainability practices. This indicates that non-migrants who are more satisfied with their neighbourhood tend to engage in practices that enhance their overall well-being.

When considering overall sustainability practices among internal migrants, several significant variables including locality, place attachment, infrastructure, and sustainable attitudes have a direct impact on their overall well-being and sustainable practices.

Locality, specifically the AMA area, significantly influences the overall sustainability practices among internal migrants (Coef: 0.150, Sig: 0.045). This suggests that living in the AMA area is associated with higher overall sustainable practices and well-being compared to Adenta. Conversely, other localities like LEKMA and Ashiaman do not have significant effects on overall sustainability, with Sig values of 0.769 and 0.205, respectively.

Place attachment also emerges as a significant influencer of overall sustainability practices (Coef: 0.370, Sig: 0.000). A stronger attachment to one's place of residence is associated with higher overall sustainable practices, emphasizing the importance of a sense of belonging and connection to the local environment for overall well-being.

The Infrastructure Index and Sustainable Attitude Index are also crucial factors affecting overall sustainability practices. The Infrastructure Index exhibits a significant negative influence on

overall sustainability (Coef: -0.631, Sig: 0.001), while the Sustainable Attitude Index positively impacts overall sustainability practices (Coef: 0.185, Sig: 0.020). This implies that better infrastructure is associated with lower overall sustainability, and individuals with more sustainable attitudes engage in higher overall sustainable practices.

Also, relative deprivation among internal migrants significantly influences overall sustainability showing a positive significant influence (. Interna migrants who compare their households to others in the city and feel better exhibits the likelihood of engaging in overall sustainable practice.

For international migrants, locality of residence, place attachment, sustainable attitudes and relative deprivation significantly influence their overall sustainability.

Locality significantly impacts overall sustainability practices among international migrants. Living in the LEKMA area demonstrates a substantial positive influence (Coef: -0.283, Sig: 0.011), indicating higher overall sustainability. Conversely, residing in the Adenta area does not significantly affect overall sustainability practices (Coef: -0.024, Sig: 0.682).

The Place Attachment Index is a significant influencer of overall sustainability practices (Coef: 0.321, Sig: 0.000), emphasizing the role of attachment to one's place of residence in promoting sustainable behaviours.

The Sustainable Attitude Index significantly impacts overall sustainability practices negatively (Coef: -0.167, Sig: 0.013), implying that an increase in sustainable attitudes leads to a decine in overall sustainable practices. This means that, although international migrants may posses positive sustainable practices, they do not translate these into practices.

Relative Deprivation in the city/town/village (Coef: 0.116, Sig: 0.005) also significantly influences overall sustainability practices among international migrants (Coef:0.182, Sig:0.002). This implies that international migrants who feel better at their place of destination compared to others in the city are likely to engage in more sustainable practices.

Lastly subjective Well-being of international migrants significantly influences overall sustainability negatively. This means that international migrants who feel satisfied about their condition are less likely to engage in sustainable practices at place of destination. This may be that, they engage in sustainable practices as a means of satisfying their worse condition which may cease when their subjective well-being improves.

Table 7.4 Factors Influencing Overall Sustainable Practices among Migrants and NonMigrants

	OVERALL SUSTAINABILITY		
	Non Migrant Coef (Sig)	Internal Migrant Coef(Sig)	International Migrant Coef(Sig)
(Constant)	1.427(0.000)	0.332(0.388)	1.728 (0.000)
Sex			
Female (RC)			
Male	0.027(0.548)	0.023(0.690)	0.138 (0.144)
Age			
45-75(RC)			
15-24	-0.050(0.620)	0.118(0.315)	-0.021 (0.895)
25-34	-0.065(0.457)	0.024(0.803)	0.011 (0.941)
35-44	-0.093(0.267)	-0.097(0.313)	-0.066(0.665)
Educational Level			
No Education (RC)			
Pre-school/Primary	-0.002(0.989)	-0.094(0.436)	0.069(0.366)

JHS	0.074(0.524)	0.002(0.989)	-0.044(0.603)
SHS	0.053(0.652)	-0.153(0.222)	-0.037(0.632)
Post Secondary	0.080(0.547)	-0.123(0.440)	0.045(0.710)
Tertiary	-0.149(0.279)	-0.404(0.028)***	0.011(0.916)
Koranic	-0.038(0.858)	-0.091(0.726)	0.126(0.088)
Locality of Residence			
Adenta (RC)			
AMA	0.009(0.869)	0.150 (0.045)	-0.024(0.682)
LEKMA	0.290(0.001)***	0.031(0.769)	-0.283(0.011)***
Ashiaman	0.026(0.649)	0.087 (0.205)	0.054(0.274)
Number of Children	0.011(0.675)	0.033 (0.229)	0.007(0.792)
Number of Partners	0.118(0.003) ***	0.058 (0.188)	-0.010(0.806)
Place Attachment	0.180(0.000)***	0.370 (0.000)***	0.321(0.000)***
Infrastructure Index	-0.044(0.790)	-0.631(0.001)***	0.248(0.078)
Sustainable Attitude Index	-0.043(0.540)	0.185 (0.020)***	-0.167(0.013)**
Relative Deprivation			
Household compared to others in Neighbourhood	0.074(0.097)	-0.024 (0.683)	0.014(0.753)
Household compared to others in city/town/village	0.052(0.210)	0.182(0.002)****	0.116(0.005)***
Subjective Well-being			
Overall Life Satisfaction in Neighbourhood	0.057(0.009)***	0.028(0.228)	-0.044(0.032)**

Source: MISTY, 2020

7.6 Chapter Summary

The study identifies key factors influencing sustainable practices among non-migrants, internal migrants, and international migrants, mediated by relative deprivation and subjective well-being. For non-migrants, economic sustainability is influenced by locality, with the LEKMA area

enhancing economic well-being. However, better infrastructure is linked to lower economic sustainability, and place attachment and life satisfaction are important for fostering economic sustainability. Education, gender, and other factors did not significantly affect economic sustainability in this group.

Among internal migrants, factors such as age, education, number of children, place attachment, and infrastructure significantly affect economic sustainability, with younger individuals and those with more children engaging more in sustainable practices. A stronger attachment to place and better infrastructure also enhance sustainability, while relative deprivation plays a role. For international migrants, higher education is associated with lower economic sustainability, and living in LEKMA negatively affects it. Place attachment has a positive impact, while a more sustainable attitude lowers economic sustainability.

Social sustainability is influenced by factors like sex, locality, place attachment, and relative deprivation. Non-migrants, especially males, report higher social sustainability, with LEKMA fostering these practices. For internal migrants, locality, number of partners, place attachment, and relative deprivation are significant, while for international migrants, education and place attachment play important roles in social sustainability.

Environmental sustainability among non-migrants is influenced by sex, number of partners, access to infrastructure, and subjective well-being. Female non-migrants and those with more partners engage more in environmentally sustainable practices. For internal migrants, place attachment and a sustainable attitude are key factors, while other variables do not significantly impact environmental sustainability.

Overall sustainability practices are shaped by locality, place attachment, and subjective well-being. Non-migrants in LEKMA show higher overall sustainability, with multiple partners also contributing to sustainable behaviours. Among internal migrants, locality, place attachment, and sustainable attitudes are crucial, but better infrastructure may reduce overall sustainability. International migrants' sustainability practices are impacted by locality, place attachment, and alignment of attitudes with sustainable actions. These findings provide valuable insights for enhancing sustainability, particularly among migrant populations

CHAPTER EIGHT

DISCUSSIONS

8.1 Introduction

This chapter presents a discussion of the findings of the study. Findings of the regression model establishing the mediating influence of relative deprivation and subjective well-being on each domain of sustainable practices as well as overall practices are discussed. It also takes into consideration discussions on the disparities in the factors influencing the various sustainable practices among migrants and non-migrants.

8.2 Discussion of Findings

8.2.1 The Mediating Role of Relative Deprivation and Subjective Well-being on the Relationship between Migration and Sustainable Practices

The objective of this study was to examine the mediating role of relative deprivation and subjective well-being in the context of migration sustainability relationships. Interaction between independent and mediating variables (relative deprivation and subjective well-being) reveals statistically significant negative coefficients for relative deprivation and subjective well-being for both internal and international migrants compared to non-migrants. These indicate that both internal and international migrants are more deprived and exhibit lower overall life satisfaction compared to non-migrants. These findings consistent with literature (Chen et al., 2019; Yu et al., 2019; Li & Rose, 2017; Mulcahy & Kollamparambil, 2016; Wang et al., 2010; Wen & Wang, 2009; Zhang, Li, Fang, & Xiong, 2009), that establish that both internal and international migrants are more deprived relative to their reference group (non-migrants) and have lower subjective wellbeing compared to non-migrants. Having established that migrants exhibit lower subjective wellbeing and higher deprivation, the study moved further to explore the influence of independent,

background characteristics and control variables on sustainable practices and how these relationships is mediated by relative deprivation and subjective well-being.

The findings underscores that both migration status and mediating variables, particularly relative deprivation and subjective well-being, play vital roles in influencing sustainable practices. These findings illuminate the intricate dynamics of sustainability behaviours, indicating that migration status alone does not offer a comprehensive explanation. Instead, an interplay of factors, including mediating variables, contributes to shaping the sustainability practices of both internal and international migrants.

The significance of relative deprivation and subjective well-being in influencing positive sustainable practices is a central theme in this analysis. In the context of both internal and international migration, a noteworthy observation is that as migrants assess their households in comparison to those in their destination city and neighbourhood, and concurrently experience an elevated level of overall life satisfaction, there is a discernible improvement in economic sustainable practices for both internal and international migrants, as well as in the domain of environmental sustainability for internal migrants, in contrast to non-migrant populations.

This alignment with a pro-sustainability trajectory is consistent with findings by Kasser et al. (2004) that individuals experiencing relative deprivation may tend to engage in conspicuous consumption patterns, often characterized by unsustainable behaviours driven by the aspiration to "keep up" with their reference group. Specifically in the context of migrants, extant research has established that migrants may benefit from financial education and support provided by local organizations, government agencies, or non-governmental organizations (Aker and Mbiti, 2010). Such financial literacy initiatives encourage responsible financial management and foster economically sustainable behaviours among migrants. Moreover, as articulated by Adams (2011),

migrants frequently engage in economically sustainable behaviours due to their practice of remitting funds to their home countries, which serves as a pivotal source of income for many households in developing nations. The awareness of their familial responsibilities acts as a potent incentive for migrants to actively participate in economically sustainable practices. Furthermore, many migrants embark on their journey in search of improved economic prospects, driven by the allure of higher wages and enhanced living standards in their destination countries. As substantiated by studies (Dustmann et al., 2013), migrants often exhibit a strong work ethic and a propensity to save diligently, aligning their financial behaviours with the pursuit of these economic goals, thereby engaging in more economically sustainable practices.

8.2.2 Factors Influencing Sustainable Practices Mediated by Relative Deprivation and Subjective Well-being among Migrants and Non-migrants.

On the factors influencing sustainable practices mediated by relative deprivation and subjective well-being (Table 6.8), the sex of respondents generally had a notable influence on sustainable practices, particularly in the domains of social, and environmental sustainability. The analysis revealed that males exhibit a more robust association with social and environmental sustainability compared to females. Males were found to engage in more socially sustainable practices and less environmentally sustainable practices compared to females. By migration status these relationships were witnessed among non-migrants only, demonstrating that male non-migrants exhibited more socially sustainable practices (Table 7.2) and less environmentally sustainable practices compared to their female counterparts(Table 7.3). These findings associated with male involvement in social sustainability align with a study by Hoffman & Borders, 2001 which asserts that differential socialization of boys and girls becomes apparent from an early age, with boys being encouraged to partake in group activities and assertiveness, which can align with

involvement in social organizations. Other studies indicate that men prioritize networking and building connections through participation in social organizations, thereby enhancing their professional opportunities (Kossek & Zonia, 1993). This can be a key driver behind their heightened participation in socially sustainable practices. Furthermore, studies suggest that males perceive certain benefits within social organizations that resonate with their interests and values, encompassing personal growth, skill development, and opportunities for driving change (Rudman et al., 2012). These perceived benefits contribute to their greater involvement in socially sustainable practices, such as volunteering in social organizations, among other activities. Concerning environmental sustainability and fewer male engagement compared to females, one plausible explanation for this gender disparity is rooted in the notion that women often exhibit a heightened awareness and concern for the environment (Smith, 2018). Empirical research conducted by Johnson (2016) supports this idea, revealing that women frequently possess a stronger environmental identity and are more inclined to prioritize sustainable behaviours. Additionally, various studies indicate that women tend to demonstrate a more pronounced sense of responsibility toward future generations and are more likely to adopt pro-environmental attitudes and behaviours (Brown, 2014; Thompson et al., 2017).

In the context of the age of respondents, the findings (Table 6.8) indicate distinct effects on social, and overall sustainability when compared to the reference group (45-75 years old). There existed no significant relationship taking into consideration differences in age among migrants and non-migrants. Generally, respondents in the 35-44 age group negatively influence social, and overall sustainability when compared to the reference group (45-75). This implies that individuals in the age group of 45-75 demonstrate a higher engagement in both social and overall sustainable practices. The results suggest that as individuals age, they are more likely to establish social

connections. The active participation of older adults in practices that promote social sustainability is consistent with research emphasizing that they often get involved in various community activities like volunteering, mentoring, and joining local organizations. This community engagement is a crucial part of social sustainability as it helps build social bonds, create a sense of community, and strengthen social connections in neighborhoods (Wenger, 1998; Putnam, 2000). Other studies highlight that older individuals tend to have strong support networks, including family, friends, and social groups. These social connections are essential for their well-being and for reducing feelings of loneliness and isolation (Antonucci, Akiyama, & Lansford, 1998). Moreover, older adults often take an active role in civic and community organizations, which are vital for social sustainability. They participate in local governance, community development projects, and advocacy efforts, all of which contribute to the overall well-being of their communities (Musick & Wilson, 2008; Verba, Schlozman, & Brady, 1995). In addition, old age provides an opportunity for individuals to build and maintain relationships with younger generations. Older people often act as mentors and sources of wisdom for younger individuals. These interactions promote social sustainability by passing down knowledge, skills, and cultural traditions (Kaplan et al., 2003). Active participation in socially sustainable activities, such as environmental volunteer work, not only fosters social integration but also offers potential health benefits, particularly for older individuals. Past studies have demonstrated that environmental volunteering often involves physical activities, contributing to improved health (Librett, Yore, Buchner, & Schmid, 2005; Pillemer, Fuller-Rowell, Reid, & Wells, 2010). Research has shown positive impacts for older individuals, including better self-rated health, fewer functional limitations, enhanced psychological well-being, and a potential decrease in the risk of dementia (Anderson et al., 2014). Furthermore, volunteering may offer protection against certain diseases and health issues, such as hypertension (Burr, Tavares, & Mutchler, 2011) and hip fractures

(Warburton & Peel, 2008), ultimately reducing the risk of mortality (Jenkinson et al., 2013; Okun, Yeung, & Brown, 2013).

Educational background reveals nuanced effects for economic and social sustainability (Table 6.8). Individuals with higher levels of education, such as JHS, SHS, post-secondary, and tertiary generally report lower levels of economic sustainability. However, those with Koranic education exhibit a positive impact on economic sustainability. Education and social sustainability had a positive significant impact for individuals with JHS, SHS, and post-secondary education. By migration status the relationship between education and economically sustainable practices was specifically witnessed among international migrants with any form of education except Koranic which significantly influencing economic sustainability negatively compared to those with no education (Table 7.1). Meanwhile, for social sustainability the relationship showed no significance by migration status (Table 7.2). One reason for the observed lower levels of economically sustainable practices among the educated is their potential for increased consumption. Studies have shown that highly educated individuals may earn more and have higher levels of disposable income. This can lead to greater consumption and spending on goods and services that may not be economically sustainable (Dietz, Gardner, Gilligan, Stern, & Vandenbergh, 2009). Education can also contribute to consumerism, where individuals place a higher value on material possessions and a lifestyle associated with high consumption. This can lead to behaviours that are less economically sustainable, such as buying new clothes instead of second-hand clothes or excessive spending on luxury goods (Verain, Herpen, Dagevos, Sijtsema, & Antonides, 2015).

In terms of social sustainability, studies have shown that education, particularly at the JHS and SHS levels, often involves interaction with peers, teachers, and extracurricular activities. These experiences can enhance social skills and the ability to engage in group activities (Ladd & Dinella,

2009). Schooling exposes individuals to a more extensive network of peers, which can lead to greater involvement in social group activities. This can include participation in school clubs, sports teams, and other organized activities (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Educational institutions provide structured environments for social engagement, encouraging students to collaborate, work in teams, and participate in group projects. This exposure to structured social activities can carry over into participation in other social groups (Huang, Zhou, & Nguyen, 2017). Attaining a certain level of education can boost an individual's self-confidence and sense of social integration, making them more willing to engage in social group activities (Diemer, Li, & Klima, 2010).

The locality of residence, compared to Adenta, generally exhibit statistically significant impacts on environmental sustainability for those who live at Ashaiman (Table 6.8). Residents of Ashaiman engage in more environmentally sustainable practices compared to Adenta. Taking into consideration differences in migration status, this relationship was significant for non-migrants who live at LEKMA showing a positive influence on both economic (Table 7.1) and social dimensions of sustainability (Table 7.2) as well as overall sustainability compared to those who live at Adenta. For internal migrants, those who live at AMA positively influence social sustainability (Table 7.2) compared to Adenta whereas international migrants who live at LEKMA showed lower economic sustainability practices (Table 7.1) and well as overall sustainability (Table 7.4).

The number of children positively influenced economic sustainable practices among the respondents in general (Table 6.8). As the number of children increases economic costs also increase leading to engagement in economically sustainable practices (Lundberg, 2010). This is primarily because the cost of raising children is substantial, and families with more children often

need to engage in economic sustainability practices to manage their expenses. These practices may include wearing second-hand clothes and borrowing items when necessary to save money for the upbringing of their children. Research confirms that larger families, with more children, tend to experience increased financial strain due to the additional expenses associated with raising children (Grunewald & Roland-Lévy, 2019). These expenses encompass various aspects, including education, healthcare, and daily living costs. In response to these financial challenges, families often find motivation to adopt economically sustainable practices, such as saving money and reducing waste (Goldman & Lovasi, 2011). These practices help them balance their budgets and provide for their children's needs. Furthermore, the presence of children in a household can significantly affect the distribution of income and wealth. This influence plays a crucial role in shaping decisions related to investments, savings, and consumption (Lundberg, 2010). Families with more children may prioritize saving money and adopting sustainable consumption practices to cope with their financial responsibilities. Additionally, parents, particularly those with children, are often motivated to engage in economically sustainable practices not only to manage the financial burden but also to set a positive example for their offspring (Poortinga, Steg, & Vlek, 2004). They recognize the importance of ensuring a stable financial future for the family and understand that adopting sustainable practices is a responsible and forward-looking approach.

When considering the number of partners, the study observed a significant relationship with different aspects of sustainability (Table 6.8). Specifically, there is a notable negative relationship with economic sustainability while a positive relationship is evident for social and environmental sustainability. The negative relationship with economic sustainability was significant among international migrants (Table 7.1) while the positive relationship with social sustainability was found among non-migrants and internal migrants (Table 7.2) and with environmental sustainability (Table 7.3) as well as overall

sustainability among non-migrants (Table 7.4). In terms of its negative influence on economic sustainability, having multiple partners can lead to increased consumerism and higher consumption patterns, as individuals may feel pressure to meet the expectations of their partners. This can result in excessive spending and lower economically sustainable practices (Dew, 2007). Complex relationships may lead individuals to prioritize immediate financial needs over long-term sustainability. In situations where financial stability is a concern, individuals may focus on short-term economic goals, such as meeting expenses, rather than engaging in sustainable practices (Mintz, 2020). Interdependence in complex relationships can affect economically sustainable practices. Economic interdependence with multiple partners may limit an individual's ability to engage in practices such as saving and investing for sustainability (Grunewald & Roland-Lévy, 2019). For social sustainability, the number of partners an individual has may not directly impact socially sustainable practices if all partners share similar social values and goals. In such cases, individuals with multiple partners may collectively engage in social sustainability activities, such as community involvement or volunteering (Smith & Wilson, 2020). Other studies have shown that, individuals with multiple partners may engage in resource sharing for social sustainability. They may collectively support community projects or participate in group activities, which can enhance social sustainability (Gatersleben & Griffin, 2017).

The positive relationship between the number of partners and environmentally sustainable practices is consistent with research which shows that individuals with multiple partners may have their partners share their eco-friendly values and concerns for the environment with them. This alignment of values can lead to a greater emphasis on environmentally sustainable practices within the relationships (Hartikainen-Saari, 2013). Also, studies have shown that multiple partners may choose to engage in collective environmental efforts. This can include activities such as recycling, reducing waste, and conserving energy as a joint effort, potentially leading to increased

environmentally sustainable practices (Gatersleben & Griffin, 2017). Again, sharing resources with partners can lead to more efficient and sustainable use of those resources. For instance, individuals with multiple partners may collectively purchase eco-friendly products or engage in communal gardening and resource-sharing practices (Hank, 2010). Additionally environmental education and awareness can be enhanced in relationships with multiple partners. Partners may exchange knowledge about sustainable practices, introduce each other to eco-friendly habits, and jointly participate in environmental initiatives (Beck & Rossetto, 2019).

Place attachment emerges as a strong positive influencer across all dimensions of sustainable practices (Table 6.8). This indicates that individuals who have a strong attachment to their locality are more likely to engage in sustainable practices. Whereas this relationship was the same for both internal and international migrants with all dimensions of sustainability (Tables, 7.1, 7.2,7.3,7.4), with non-migrants the significance was with only social (Table 7.2) and overall sustainable practices (Table 7.4). The positive relationship with economically sustainable practices aligns with Devine-Wright (2013), who found in his study that place-attached individuals tend to be more conscientious about resource management. According to the study sense of place attachment can lead to responsible resource management practices, which have economic benefits in terms of cost savings and sustainable resource use (Devine-Wright, 2013). With social sustainability, place-attached individuals often exhibit higher levels of community engagement and social cohesion. Their strong emotional connection to their locality can drive them to participate in community activities, volunteer work, and neighborhood improvement projects. This active involvement contributes to the social sustainability of the community (Vaske & Kobrin, 2001). Strong place attachment is also associated with increased civic participation. Individuals who feel deeply connected to their community are more likely to take part in local governance, community

decision-making, and advocacy for social justice, all of which contribute to the social sustainability of the area (Hernández et al., 2010). In terms of environmental sustainability, place-attached individuals often display higher levels of environmental awareness. Their attachment fosters a deeper understanding of local ecosystems and the impact of human activities on the environment. This awareness can lead to more eco-conscious behaviours (Brown & Raymond, 2007). Also, individuals with a strong place attachment tend to be more committed to the conservation and protection of their local environment. Their emotional connection to the place drives them to engage in behaviours that preserve natural resources, reduce waste, and minimize environmental harm (Scannell & Gifford, 2010). Other studies have confirmed that people with strong place attachment are more likely to engage in responsible resource management practices. This includes sustainable agriculture, efficient energy use, and reduced consumption of finite resources. Their commitment to the wellbeing of their local environment drives these sustainable practices (Hidalgo & Hernández, 2001)

Access to infrastructure was found to generally affect economic sustainability negatively (Table 6.8) and has no significant impact on social and overall sustainability. Taking into consideration differences in migration status, the negative relationship between infrastructure and economic sustainability is witnessed among non-migrants and internal migrants (Table 7.1). Meanwhile, there exists a positive significant relationship with environmentally sustainable practices for non-migrants (Table 7.3). The negative relationship between access to infrastructure and economic sustainability implies that as people have access to more infrastructure such as electricity, tap water, garbage separating bins, affordable housing, affordable public transport, etc., they tend to engage in less economically sustainable practices. Having access to infrastructure comes with economic costs. Therefore, one's ability to afford these infrastructural items may negatively influence the management

of economic resources. Consistent with (Browning & Lusardi, 1996; Khandker, 2012), the cost of accessing water electricity, and other infrastructural items can be high posing a strain on disposable income. This limits the financial resources available for economically sustainable practices like saving for the future, investing in education, or starting a business. Other studies also emphasize that excessive household expenditure can lead to debt accumulation, particularly if individuals rely on loans to maintain their spending levels. High-interest debt can be a significant financial burden, diverting resources from economically sustainable practices (Agarwal et al., 2015). High household expenditure can shift resource allocation away from economically sustainable practices due to limited funds available for savings, investments, or debt repayment (Kumar & Asish, 2011). Sustaining high levels of household expenditure can lead to financial stress and anxiety. This can negatively impact overall well-being and hinder the pursuit of economically sustainable practices, as individuals may prioritize addressing immediate financial challenges (Prawitz, Garman, Sorhaindo, O'Neill, & Kim, 2006). In terms of environmentally sustainable practices access to to infrastructure that includes separate bins for different types of waste (e.g., recyclables, organic waste, and general waste) supports recycling and waste diversion efforts. It encourages people to sort their waste properly and participate in recycling programs, reducing the amount of waste sent to landfills. Studies suggest that factors such as limited access to resources, transient living situations, and socio-economic vulnerabilities may affect migrants' ability to engage in environmentally friendly behaviours (Choguill, 2008; IOM, 2018).

Sustainable attitudes were not found to be significantly associated with all dimensions of sustainability in general. However, by migration status, sustainable attitudes positively influence environmental (Table 7.3) and overall sustainability (Table 7.4) among internal migrants and negatively influence economic and overall sustainability among international migrants. As it is

expected, having positive attitudes must be reflected in practices. Bamberg and Möser (2007) found that pro-environmental behaviour is influenced by various psychosocial determinants, including attitudes, norms, and personal beliefs. Positive attitudes towards sustainability are associated with increased pro-environmental behaviour. Kollmuss and Agyeman (2002) discussed the barriers to pro-environmental behaviour, indicating that despite having positive attitudes, individuals may not always translate these attitudes into action. This suggests that external factors and contextual influences play a significant role in determining sustainable practices

For relative deprivation, comparing households wealth to others in the neighbourhood negatively affects social sustainable practices but positively influences environmental sustainability (Table 6.8). This relationship is not significant taking into consideration disparities in migration status. This means that in a narrower scope, when individuals generally perceive differences in their neighborhood in terms of having higher wealth status, they tend to report lower levels of social sustainability. Meanwhile, as individuals feel better in this regard, they tend to engage more in environmentally sustainable practices. In a broader scope in terms of comparison of households to others in the city, there exists a significant relationship with both social and overall sustainable practices. This relationship was found among migrants and non-migrants. This means that people tend to engage more in socially sustainable practices when they feel better comparing their households to others in the neighbourhood and the city but engage in environmentally sustainable practices when they feel better compared to households in their neighbourhood. The findings are consistent with a study by Stouffer et al. (1949) on relative deprivation found that perceived inequalities can negatively affect social bonds and community sustainability. Its positive impact on environmental sustainability is consistent with a study by Kim and Lee (2013) who found that

relative deprivation can be a motivating factor for pro-environmental behaviours. This is confirmed by a study by Pickett and Wilkinson (2015) "The Spirit Level" which explores the connection between income inequality and various social and health issues, including environmental sustainability. The results suggest that an improvement in relative deprivation can be associated with more pro-environmental attitudes and behaviours. Therefore, when individuals perceive their socioeconomic status or resource access as rising in comparison to others, they may become more inclined to engage in sustainable practices.

The study highlights the crucial role of neighborhood life satisfaction in promoting environmental sustainability (Table 6.8). However, when considering migration status, subjective well-being has distinct effects. For non-migrants, higher well-being is associated with positive impacts on economic (Table 7.1) and environmental sustainability (Table 7.3). In contrast, international migrants, despite feeling more satisfied with their neighborhoods, tend to engage less in economically sustainable practices (Table 7.1). This may indicate a preference for increased spending over resource management. Additionally, higher subjective well-being among international migrants is linked to lower levels of social sustainability practices. This could be attributed to their initial intention to volunteer for personal well-being, leading to reduced engagement in such activities once that aspect is fulfilled. Studies have shown that subjective wellbeing plays a pivotal role in motivating individuals to adopt and adhere to sustainable practices. Those individuals who experience a heightened state of happiness and contentment in their lives tend to exhibit a greater propensity for engaging in behaviours that contribute positively to environmentally sustainable practices. This inclination towards environmental sustainability is substantiated by the findings of Capaldi et al. (2014), whose research highlights that individuals experiencing elevated subjective well-being are more likely to be intrinsically motivated to partake

in activities that bolster environmental sustainability. In essence, the contentment and well-being that individuals derive from sustainable actions serve as an internal reward, reinforcing these environmentally beneficial behaviours. Furthermore, the correlation between subjective wellbeing and pro-environmental attitudes is corroborated by Gatersleben and Griffin (2017). Their research establishes a positive association between high levels of subjective well-being and a more favorable disposition towards environmental concerns. In practical terms, individuals who experience contentment and emotional security are more likely to develop positive attitudes towards the environment, translating these attitudes into tangible, pro-environmental behaviours.

CHAPTER NINE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

9.1 Introduction

This chapter presents the summary of the analysis of this study, with conclusions and recommendations to inform policy.

9.2 Summary of Findings

9.2.1 Background Characteristics of Respondents

The study's demographic composition reveals three distinct categories of individuals: nonmigrants, internal migrants, and international migrants. Among the 1,163 survey respondents, international migrants made up the largest group at 48.1 percent, while non-migrants accounted for 26.2 percent, and internal migrants constituted 25.7 percent. Furthermore, the majority of respondents, were aged between 15 and 34. A closer look at age distribution reveals specific patterns within each migration group. Non-migrants included a higher percentage of individuals in the 15-24 age group, while internal migrants had a significant representation in the 25-34 age range. In contrast, international migrants primarily consisted of individuals in the 15-24 and 2534 age groups, with very few respondents aged 45-75 in this category. By sex, non-migrants showed a roughly equal distribution of males and females, while international migrants had a significant majority of males (95 percent), and internal migrants had a predominance of females (58.9 percent). Educational levels varied, with non-migrants having the highest proportion with secondary school education. Internal migrants included a substantial number who completed primary and senior high school education, while international migrants had significant representation among those with senior high school education.

Residence locations varied among the groups, with Adenta being a common location for nonmigrants and internal migrants, while international migrants were prevalent in both Adenta and Ashaiman. When it came to the number of children, non-migrants had the highest proportion with no children, while international migrants had a substantial majority without children.

The study revealed a strong sense of place attachment across all migration statuses, with international migrants showing the highest mean score for place attachment. They were

particularly attached to their neighbourhoods, with a sense of belonging and emotional connection. Sustainable attitudes were also apparent among the respondents, with a consensus on the importance of environmental stewardship and social responsibility. International migrants displayed particularly strong attitudes in certain areas, but non-migrants and internal migrants also exhibited positive sustainable attitudes.

Relative deprivation showed that most respondents felt their households were about average when compared to others in the neighbourhood. Non-migrants generally felt better about their household status compared to internal and international migrants. Life satisfaction in the neighbourhood was relatively high, with international migrants having the highest proportion of rather satisfied individuals.

Economically sustainable practices, such as walking on foot and using second-hand clothing, were more common among internal and international migrants compared to non-migrants. Environmentally sustainable practices included taking care of common areas near the house and saving everyday water use, which was practiced by a majority of respondents. Socially sustainable practices, like helping those worse off and volunteering, exhibited variation among the migration groups.

9.2.2 Factors Influencing Sustainable Practices Mediated by Relative Deprivation and Subjective Well-being

The study unravels various factors influencing sustainable practices mediated by relative deprivation and subjective well-being across Economic, Social, Environmental, and Overall dimensions.

Migration status delineates distinct impacts with internal migrants significantly contributing to Economic and Environmental Sustainability, while international migrants predominantly influence

Economic Sustainability. Males display higher Social Sustainability but lower Environmental Sustainability compared to females. Age exhibits limited influence, notably showing a negative effect on Social Sustainability among individuals aged 35-44.

Educational backgrounds unveil nuanced effects with various education levels impacting different sustainability dimensions. Place attachment consistently emerges as a positive influencer across all sustainability dimensions, indicating a link between attachment to locality and engaging in sustainable practices. Surprisingly, the Infrastructure Index slightly affects Economic and Environmental Sustainability adversely, whereas the Sustainable Attitude Index shows no significant impact on sustainable practices.

Relative Deprivation and Subjective Well-being introduce complexity. Comparing households to others in the neighbourhood impacts Environmental and Overall Sustainable Practices positively but diminishes Social Sustainability. Contrarily, comparing households to others in the city significantly boosts Social and Overall Sustainable Practices. Satisfaction with life in the neighbourhood displays a mixed effect, positively impacting Environmental Sustainability but showing a minor negative impact on Economic Sustainability.

This comprehensive analysis underscores the multidimensional nature of factors influencing sustainable practices. Migration status, gender, education, subjective well-being indicators, and place attachment emerge as influential determinants across various sustainability dimensions. These findings illuminate the diverse interplay of factors shaping sustainable practices, underscoring the importance of considering multifaceted factors when devising strategies to enhance sustainability across economic, social, and environment dimensions.

9.2.3 Factors Influencing Sustainable Practices Mediated by Relative Deprivation and Subjective Well-Being among Migrants and Non-Migrants

In terms of economic sustainability, the locality of residence plays a pivotal role, with living in the LEKMA area significantly enhancing economic well-being for non-migrants. Conversely, areas with higher infrastructure indices are associated with lower economic sustainability, possibly due to the increased cost of living in regions with better infrastructure. Place attachment and overall life satisfaction in the neighbourhood are essential in fostering economic sustainability, underlining the importance of both local conditions and residents' well-being in this regard. Factors like gender, education, relative deprivation, the number of children, the number of partners, and having a sustainable attitude do not significantly impact economic sustainability in this group.

In the context of internal migrants, significant variables have been identified that play a crucial role in shaping their economic sustainable practices. For economic sustainability among internal migrants, age group, educational level, number of children, place attachment, infrastructure, and relative deprivation were found to be significant factors. The younger age group tends to engage more in economically sustainable practices, while higher education is associated with less economic sustainability. Having more children is linked to increased economic sustainability. A stronger attachment to one's place of residence and better infrastructure positively influence economic sustainability, while relative deprivation plays a role in shaping economic practices.

International migrants' economically sustainable practices are influenced by various factors. Education level plays a significant role, with higher education beyond the Junior High School level associated with lower economic sustainability. Locality also matters, as living in the LEKMA area negatively affects economic sustainability, while having more partners reduces it. A stronger place attachment positively influences economic sustainability, but a more sustainable attitude leads to lower economic sustainability.

Social sustainability practices among non-migrants, sex, locality of residence, place attachment, and relative deprivation emerge as critical determinants. Male non-migrants tend to report higher adoption of socially sustainable practices, with living in the LEKMA area promoting such practices, while residing in the Adenta locality is linked to a lower likelihood of engaging in them. A higher level of place attachment and a sense of relative well-being within the community are also found to significantly influence the adoption of socially sustainable practices among nonmigrants. These results highlight the significance of understanding the influence of these factors on promoting social sustainability practices among non-migrants.

In the realm of social sustainability practices among internal migrants, locality, number of partners, place attachment, and relative deprivation were significant factors. The AMA area is associated with higher social sustainability while having more partners promotes socially sustainable practices. A strong attachment to one's place of residence is essential for fostering social sustainability, and relative deprivation within the community also plays a significant role.

In terms of socially sustainable practices for international migrants, locality again plays a crucial role. Living in the LEKMA area negatively affects social sustainability, while higher educational levels at Senior High School (SHS) and Tertiary levels enhance it. Place attachment significantly improves social sustainability, as does perceiving one's household as better off than others in the city or town. However, lower neighbourhood life satisfaction negatively impacts social sustainability.

The factors influencing environmental sustainability among non-migrants were sex, number of partners, access to local infrastructure, and subjective well-being. Female non-migrants exhibit a stronger commitment to environmentally sustainable behaviours while having more partners is also associated with greater engagement in environmentally sustainable practices among

nonmigrants. Improved local infrastructure also positively correlates with higher environmentally sustainable practices, highlighting the role of access to resources and facilities in fostering ecofriendly behaviours. Subjective well-being, particularly life satisfaction in the neighbourhood, is another critical factor, indicating a positive relationship between well-being and environmental consciousness.

Concerning environmentally sustainable practices among internal migrants, the key factors are the Place Attachment Index and the Sustainable Attitude Index. A stronger attachment to one's place of residence and a more sustainable attitude are associated with higher environmentally sustainable practices. However, variables like age, gender, education, and subjective well-being do not significantly impact environmental sustainability.

For overall sustainability, several significant non-migrant characteristics influence were found. The locality of residence, especially living in the LEKMA area, strongly impacts overall sustainability practices, with non-migrants in this locality exhibiting higher overall sustainability practices compared to Adenta residents. The number of partners plays a significant role in promoting sustainability practices, suggesting that individuals with multiple partners tend to be more engaged in sustainable behaviours. Place attachment and subjective well-being continue to be crucial factors in shaping overall sustainability practices, emphasizing the importance of fostering a sense of connection to one's local community and enhancing residents' well-being.

For internal migrants factors influencing overall sustainability practices were locality, place attachment, infrastructure, and sustainable attitudes were the significant variables among internal migrants. The AMA area is linked to higher overall sustainability practices, while a stronger place attachment positively influences overall sustainability. However, better infrastructure is associated

with lower overall sustainability, and individuals with more sustainable attitudes engaged in higher overall sustainability practices.

Among international migrants, overall sustainability practices are significantly impacted by locality, with LEKMA demonstrating higher overall sustainability. Place attachment, alignment of attitudes with sustainable actions, and relative deprivation also play essential roles in shaping overall sustainability practices among international migrants. These findings are crucial for policymakers and communities seeking to enhance the well-being and sustainability of international migrant populations.

9.3 Conclusion

The study of sustainable practices among non-migrants, internal migrants, and international migrants reveals a complex interplay of various factors that influence their economic, social, environmental, and overall sustainability. Understanding these key findings can inform policy decisions and community strategies aimed at enhancing the well-being and sustainable practices of these diverse populations.

For non-migrants, locality of residence, access to infrastructure, place attachment, and subjective well-being significantly impact their sustainable practices. Addressing local conditions and fostering a sense of attachment and well-being is crucial to improving economic, social, and environmental sustainability among non-migrants.

Internal migrants exhibit different patterns, with factors like age, educational level, number of children, place attachment, infrastructure quality, and relative deprivation shaping their sustainability practices. Policymakers and communities should consider these variables when designing strategies to enhance the well-being and sustainability of this group.

International migrants' sustainable practices are influenced by education, locality, number of partners, place attachment, and sustainable attitudes. Fostering a sense of attachment to the local environment and aligning attitudes with practical sustainable actions are essential for promoting sustainable practices among this population.

Therefore, promoting sustainable practices among non-migrants, internal migrants, and international migrants requires a tailored approach that considers the unique characteristics and factors at play in each group. These insights can guide efforts to enhance the well-being and sustainability of these diverse populations, ultimately contributing to a more sustainable future for all.

9.4 Recommendations

Based on the key findings related to sustainable practices among non-migrants, internal migrants, and international migrants, The following recommendations are made:

1. **Localized Interventions for Infrastructure and Community-Based Initiatives**

   To address disparities in subjective well-being and promote sustainability, policymakers should focus on localized interventions. Investments in infrastructure should prioritize areas with lower indices of economic sustainability, particularly in marginalized urban neighborhoods, to reduce disparities. For instance, targeted initiatives could involve improving access to affordable housing, basic utilities, and transportation networks. Additionally, community-based programs should aim to foster social cohesion and place attachment by engaging residents in neighborhood improvement projects, cultural activities, and participatory planning. Such localized efforts can not only enhance subjective well-being but also motivate residents to adopt sustainable practices, particularly in cities like Accra and other urban areas in sub-Saharan Africa.

2. **Broader Regional and Global Implications**

   Although this study focuses on Accra, the findings have broader implications for urban centers across sub-Saharan Africa and other developing regions experiencing rapid urbanization and migration. Policymakers and urban planners should recognize the potential for replicating these insights in similar contexts. Regional strategies could involve establishing a platform for sharing best practices among cities to address urban inequalities, relative deprivation, and sustainability challenges. Furthermore, global migration policies should consider the interplay between subjective well-being and sustainability by incorporating these factors into international development agendas like the UN Sustainable Development Goals (SDGs).

3. **Targeted Educational Interventions**

   The negative association between tertiary education and economic sustainability practices, particularly among internal and international migrants, underscores the need to recalibrate educational policies. Curricula at all levels should incorporate sustainability education, emphasizing the interconnections between environmental, social, and economic sustainability. Specifically, vocational training and adult education programs should integrate practical lessons on resource management, eco-conscious decision-making, and financial planning. These targeted interventions could help internalize sustainable attitudes and practices across diverse populations, particularly migrants who may face challenges in balancing educational achievements with economic realities.

4. **Family-Centered Social Policies**

   Family size emerged as a significant predictor of economic sustainability practices among internal migrants. This finding suggests that family-centered social policies could play a critical role in enhancing sustainability outcomes. Programs such as parental support services, family

financial planning workshops, and child-focused sustainability initiatives can help larger families manage resources more efficiently. Policymakers could also introduce incentives for families to adopt sustainable practices, such as subsidies for renewable energy use, waste management, and sustainable transportation.

5. **Collaborative Efforts Between Stakeholders**

   Sustainable development requires a multi-stakeholder approach involving governments, non-governmental organizations (NGOs), development partners, and local communities. Collaborative campaigns should aim to leverage sustainable attitudes and promote environmentally conscious decisions, especially among international migrants. Governments could partner with NGOs to implement public awareness programs, while development partners could support research and pilot programs to test innovative sustainability interventions in urban areas. Such collaborations could also foster an exchange of knowledge and resources to ensure the long-term success of sustainability initiatives.

6. **Enhancing Place Attachment to Promote Well-Being and Sustainability**

   Given the significant role of place attachment in fostering economic and environmental sustainability, urban planning policies should emphasize creating inclusive and vibrant public spaces. Urban planners could focus on improving green spaces, recreational facilities, and cultural landmarks to enhance residents' connection to their neighborhoods. Moreover, integrating participatory governance mechanisms, where residents actively contribute to decision-making processes, could strengthen their sense of belonging and investment in sustainable community development.

7. **Building on Sustainable Predictors for Policy Development**

   The study highlights specific predictors such as educational attainment, family size, and sustainable attitudes that can guide policy development. Governments should leverage these

insights by creating targeted social and educational policies that address specific needs. For instance, subsidies for sustainable housing or child care facilities could alleviate financial pressures on larger families, enabling them to engage more in sustainable practices. Additionally, sustainability campaigns tailored to various educational levels could address gaps in understanding and promote actionable change among diverse demographic groups.

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