## The Relationship between Migration and Development in Morocco

by **Frances Danielle Loustau-Williams** B.S. in Sociology, Hunter College, New York City, 2006 M.I.D. University of Pittsburgh, 2010

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This dissertation was presented

by

Frances Danielle Loustau-Williams

It was defended on

April 14, 2016

and approved by

Louis Picard, PhD, Professor

Sera Linardi, PhD, Assistant Professor

Beverly Peters, PhD, Assistant Professor

Dissertation Advisor: Louise Comfort, Professor

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### THE RELATIONSHIP BETWEEN MIGRATION AND DEVELOPMENT IN MOROCCO

#### Frances D. Loustau-Williams, PhD

University of Pittsburgh, 2016

The relationship between migration and development can be volatile. While movement can lead to a more appropriate allocation of human resources within an economy, an unstable population distribution can lead to toxic concentrations of people. This is a potential risk factor as many people respond to the changes inherent to societal transformation through movement. As such, excess movement can disrupt the population distribution of a country. More comprehensive models of migration in developing countries are necessary in order to understand how rural populations are affected by development. The following study explores the relationship between migration and development in Morocco, with a particular focus on movement in the interior and predominantly rural areas.

The analysis observes movement to small population centers in the rural areas. This observed phenomenon is henceforth referred to as "rural urbanization." A mixed methods, multi-level analysis was conducted. An initial geographically weighted regression was performed using macro-level data as to identify the variation unexplained by pre-existing models. The statistical analysis was followed up by a case study of an example of rural urbanization in a town called Guigou, located in the Middle Atlas Mountains of Morocco. A survey was conducted in order to identify the reasons people migrated to Guigou and from where they migrated. Finally, qualitative interviews with representatives of the various migrant types in Guigou were conducted.

The analysis observes an emergent economy in a small town in the Middle Atlas Mountains that evolved over several decades, beginning with farmers travelling short distances to take advantage of job opportunities in the agricultural sector and improved social services. The data indicate that as the economy grew and diversified, more and more people were drawn to Guigou, engaging in a variety of non-agricultural jobs. Over time the migrants came from increasingly diverse backgrounds. These origins included a large proportion of people coming from the large cities. It is concluded that migration occurs incrementally based on relative positioning in economy, leading to heterogeneous outcomes. It is asserted that migration mirrors economic patterns and should thus be treated as a complex phenomenon.

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#### 1.0 INTRODUCTION

The relationship between migration and development can be volatile. The economic transformation associated with development imposes potentially destabilizing tradeoffs upon constituents, challenging our normative ideas of economic growth. The decision to move is one of the manifestations of this tradeoff. Yet our understanding of the relationship between migration and development is typically limited to popular frameworks and phenomena such as South-to-North migration and rural-to-urban migration. While these frameworks are important, they fall short of depicting comprehensive accounts of the relationship between migration and development. Because economic development constitutes a multisectoral shift affecting various actors differently, the ensuing changes in population distribution should also be treated as multi-sectoral and diverse. The following study presents a unique framework for understanding the relationship between migration and development. The framework is based on a qualitative risk model to explain movement in the context of changing societies. The framework is subsequently applied to the investigation of population changes in rural and urban areas and how they are impacted by the societal transformation associated with development. While scholars are well aware of the phenomenon of "rural exodus" as a country develops, we are less aware of the internal dynamics of population change in the rural areas. This constitutes a hole in the academic literature, and also a blindspot in policy implementation. It is, thus, incumbent upon development researchers to 1) have more comprehensive models for understanding changing population distributions in the context of structural transformation, and to 2) understand the implications of these societal changes on the rural populations.

These objectives are pursued via the exploration of the research question: What is the relationship between migration and development in Morocco? This research question is disaggregated into multiple components of analysis. I begin by discussing what is already known about the relationship between migration and development. Next, these models are applied to the macro-level context in order to identify the variation unexplained by pre-existing research. The analysis then proceeds by examining movement in the rural areas as an under-examined topic of the migration-development literature. Finally, conclusions are drawn that can contribute to more appropriate models of migration and development.

#### 1.1 INTERNAL MIGRATION AND DEVELOPMENT: THE PROBLEM

Movement has never been as easy as it is today. Worldwide, ease of transportation is on the rise with viable roads increasingly seen as an integral part of a functioning economy and the object of massive government investment. Air travel is also transforming with smaller airlines and budget flights connecting various parts of the globe, catering to more and more sectors of society. This ease of movement challenges our historic notions of migration that are cased in the treacherous journeys made by the early Americans or pioneers. Today's migration is much more fluid. With modern technology and infrastructure, distance and geography become less and less of a constraint, rendering movement primarily a socio-economic and political phenomenon. These changes are all a part of the process of development and thus provide us with a lens through which to view a complex economy. Similarly, our understanding of a shifting economy can help predict how and where population changes may occur.

For the purposes of policymaking, shifting population distributions are increasingly a factor of concern for understanding issues related to development such as: democracy and governance, public expenditures, disease transmission, demographics, crime and poverty. The ramifications of movement can be both good and bad for development, sometimes both at the same time. If movement remains in balance with the growing, changing economy, then it leads to a more appropriate allocation of human resources.

If, however, movement does not remain in step with the occurring changes and public expenses, toxic population distributions constitute a risk factor for a country's development. Inappropriate population concentrations, such as refugee crises, the evolution of slums, the over-use of marginal lands, or the abandonment of important agricultural enterprises can lead to crisis situations that reverse the positive effects of economic growth. Put more succinctly, population movement presents both *opportunities* and *risks*. Determining a threshold for which to distinguish between the two requires a better understanding of the relationship between migration and development.

Migration is conceived of here as one of the mechanisms of societal change. It is a channel for adaptation to a shifting environment that amounts to ongoing clustering and dispersion of people around various poles of attraction. However unlike human resource development, infrastructure development and economic growth, migration is an aspect of changing societies that cannot be institutionalized and controlled. Movement can, therefore, serve as a wild card when understanding how a population will respond to the implementation of certain development policies. Policymakers, therefore, need to ask such questions as: If urban wages increase, will this perpetuate rural exodus and exacerbate urban unemployment? If roads are built to provide access to markets, will this precipitate exodus, or will it provide individuals with the flexibility to continue investing in rural lands? If schools are built in the countryside will this construction provide incentives to stay or will it provide an avenue for abandoning agriculture lands? In which direction will the movement occur? Who will move and who will stay? We know that these questions have no easy answers and a comprehensive, explanatory model will not be sought out here. Suffice to say, movement patterns are unbelievably complex, and every bit as relevant to policy-making.

The explanatory power of current theoretical frameworks for understanding migration and development tend to be undermined by an urban bias. Because the rural areas are harder to examine, they are often only understood in mainstream migration studies with respect to the major metropolitan areas (Chambers, 1983). That is, rural migration is typically only detected and studied once it affects the major

urban centers. Given that the poorest of the poor often live in the rural areas, the impact of migration on the most under-served population is therefore under-examined. The empirics in this analysis suggest that urbanization is more complex than the previous "bright lights" characterizations based on stark contrasts between the agrarian sector and the metropolitan "urban" life. It is contended here that "urbanization" occurs at many different scales and has the potential to transform the agrarian political economy.

Nevertheless, most analyses on internal migration are specifically tied to the rural-urban dichotomy, or *dualism*, which for decades has been a center-piece of development theory (Lewis, 1954). These analyses are typically driven by the assumption that there is a single destination for people living in the rural areas: the big city. There is no lack of data supporting this narrative. Basic census data can easily reveal increasing population concentrations in major urban settings. The move to the city has therefore become the prevailing point of focus of internal migration studies. Research paradigms driving these studies largely reflect decision-making and lifestyle disparities between the traditional agrarian sector and the urban industrialized sector. Fewer studies have attempted to examine other types of movement that also play a role in economic transformation of a country. Therefore, scholarship falls short of fully conceptualizing the relationship between "rural" and "urban" as a country develops.

This study takes as a starting point that movement among inhabitants of the rural areas is more diverse than the unidirectional rural exodus. We know that rural populations are both mobile (E. G. Ravenstein, 1885) and traditional. It is, thus, assumed here that individuals adapt to changes incrementally in order to preserve what they have. That is, they paradoxically *change in order to stay the same*. This is not to discount the role of innovators and risk-takers, but rather to build from the observation that the masses that move are operating in the context of a family (Oded Stark & Bloom, 1985) and/or communities, rather than as individuals whose risk/opportunity calculations are independent from their surrounding social network. It assumes a higher degree of conservatism in decision-making, noting that in Everett Rogers' (Rogers, 1995) famous "diffusion of innovations" S-curve, structural change occurs, not with the risk-taking "first movers," but with the more conservative masses that follow. We can, therefore,

presuppose that previous frameworks fixating on urban growth are insufficient in explaining agrarian transformation. It is presumed that movement is one of the mechanisms that makes rural society dynamic and complex, rendering it essential for understanding the properties of rural development. This study progresses from the perspective of inquiring into the ways in which rural populations negotiate continuity and change.

#### 1.2 "DEVELOPMENT" DEFINED

Our contemporary notion of development has a *normative* connotation with its roots in the post-World War II era where the prevailing assumptions were that foreign aid could trigger a global rise in the average standard of living. The tenets of this approach were exemplified by President Harry Truman's famous "Point 4" of his foreign policy approach, laid out in his inaugural address in 1949. Fresh from the conclusion of World War II, he stated his ambition to expand the technical knowledge around the world to countries in need in order to alleviate their suffering.

"...More than half the people of the world are living in conditions approaching misery. Their food is inadequate. They are victims of disease. Their economic life is primitive and stagnant. Their poverty is a handicap and a threat both to them and to more prosperous areas. For the first time in history, humanity possesses the knowledge and skill to relieve suffering of these people. The United States is pre-eminent among nations in the development of industrial and scientific techniques. The material resources which we can afford to use for assistance of other peoples are limited. But our imponderable resources in technical knowledge are constantly growing and are inexhaustible..." (Truman Inaugural Address 1949)

This normative base was challenged over the years, as strategies have failed, assumptions were overturned, and the reality of unintended consequences came to light. Despite extensive experience and expenditures, extreme poverty, corruption and deplorable health conditions are still prevalent throughout the world. Currently, the field of development is engaged in a careful dialogue between optimism and skepticism. While successes were observed, the development experiment presented in the post-World War II context fell far short of its expectations.

The failure of the Point 4 rhetoric should be recognized as a poor understanding of the microfoundations of societal transformation. However solid the various blueprint-like approaches appeared on paper, the results often did not live up to the expectations. The author contends that the distance between results and expectations is not due to theories being necessarily wrong, but rather incomplete. That is, beyond the basic tenets of economic growth and increasing standards of living, there are interacting elements and adaptive measures that can change and/or undermine the course of development. Neglecting to recognize these sub-elements at work likely jeopardizes development strategies. In short, if the philosophical foundation of a policy is incomplete, no amount of practitioner competence will lead to the intended results. For the purposes of this study, an effort will be made to incorporate into notions of development *the micro-foundations of structural change* to place the relevant phenomenon of migration adequately in this context. Not surprisingly, movement is considered to be one of these microfoundations.

To begin redefining the term, I consider that "development" includes a deliberate improvement of certain indicators representing an overall improvement in living conditions. Such a "deliberate improvement" constitutes the normative aspect referenced in Point 4. Governments *pursue* development, rather than observe it as a natural process. These value-laden goals, however, have presented problems in definition. An increase in income per capita may typically be the primary indicator reflecting this change. The effort to reach beyond income, however, has sparked a philosophical dialectic as to what exactly we mean by "development." Is development a matter of meeting basic needs? Human rights (Emma, 2003; Nelson & Dorsey, 2003)? Development as freedom or capabilities, rooted in education (Sen, 1999)? Is it rooted in associational life/ civil society (Edwards & Hulme, 1996; Fukuyama, 2001; Hyden, 1997)? Is it best implemented top-down or bottom-up (Sabatier, 1986)? Or is the entire idea a socially-constructed modern-day tool of Western hegemony (Escobar, 2011; Rahnema & Bawtree, 1997)? Modernization

theorists such as Walt Rostow (1990), Daniel Lerner (1964) and Arthur Lewis (1954) were blasted for equating modernity with good, and tradition with bad (Gusfield, 1967), echoing colonial-era rhetoric. Because the concept has normative roots, its meaning and identification become more subjective and value-driven. This fact poses problems for measurement. Thus, a framework absent the normative discussion is necessary in order to place the observed migration patterns accurately in theoretical context.

For the purposes of this study, I will differentiate the concept of development into its descriptive and normative terms. Beyond the normative debates, theories and distinctions that have raged over time, one consistency in the definition of development has been the implication of a multi-faceted structural transformation of a country, marked by evolving institutions. This constitutes the *descriptive* element of "development." For better or worse, development constitutes *economic and social change, corresponding with an evolving sense of organization*. The remaining question lies in *how* this change occurs. Essentially, what are the micro-foundations of societal transformation?

It is asserted here that development as structural transformation occurs through a careful balancing act of continuity and change. That is, for the sake of *stability*, certain currents and consensuses are maintained, yet for the sake of *evolution*, institutions change (Fukuyama, 2011; Huntington, 2006). The tenuous relationship that development has with stability, thus, becomes self-evident. Too much change, too quickly, such as a rapid transition to a market economy, or regime change leads to weakened institutions and subsequent chaos. However, too little change leads to stagnation. A disruption of this balance can be thought of as a state of disequilibria. Therefore, incorporating both the normative and the descriptive, we can assert that the development task around the world is the challenge of maintaining stability (or continuity), while at the same time identifying and pushing the appropriate reforms (change). At times, these two efforts contradict each other.

This task is that much more complicated in middle income countries, such as Morocco. Efficient, legitimate institutional frameworks may not always evolve at the same pace as economic complexity. Often, there is more income than an administration or a regulatory framework can manage. The result can

be black market activity, corruption and inequality matched with a general failure to live up to the most basic notions of development. A common sight in middle income countries is heavily contrasting images, one that suggests urban modernization, juxtaposed with one suggesting a "primitive" existence, for example, a donkey carrying a satellite dish. This implies that middle income countries have different properties and challenges than those of the poorest countries, thus supporting the argument that development should not be considered as a linear concept. It can be conjectured that developing the economies of middle-income countries is not typically a question of scarcity of resources, but rather a scarcity of management and an overall appropriate mobilization and investment of existing resources.

#### 1.2.1 Agriculture and Development – "Dualism"

The other key element of structural transformation specific to under-developed countries is that of agriculture. In classic development theory, there is much reference to the dual economy (Lewis, 1954), whereby a traditional agrarian sector exists alongside an industrializing sector. The conflict occurs when the latter is presumed to advance at the expense of the former. Taxation policies, subsidies, government investment and other forms of intervention are deployed in the name of economic growth, but inevitably end up favoring the more profitable industrialized sector over the farming sector. While on the whole average incomes increase, the losing sectors of these policies do not always get compensated as economic theory recommends. Small-scale farmers are not typically politically important and therefore do not reap any of the spoils of the authoritarian regimes. On the contrary, despite being the most vulnerable sector, farmers can pay into these spoils, essentially paying for the economic transition. Where this comes to a head is typically with massive rural-to-urban migration and/or food security. Many observers have cited food security as a primary determinant of the Arab Spring revolutions. This phenomenon is explored much more deeply in chapter 4 where the context of Morocco is described.

Another approach to resolving the nature of dualism that took place in the form of a debate characterized as "the moral economy" versus "the rational peasant." The moral economy literature

(Chambers, 1983; Scott, 1979) gave homage to traditional, local norms as forms of community resilience. According to this perspective, intracommunity relationships provided security and insurance to rural inhabitants. In their view, the introduction of urban capitalism destroyed these mechanisms, thus impoverishing the rural lifestyle and leading to a rural exodus. These works are criticized, however, for the romanticism with which they depict the rural lifestyle. In contrast, the rational peasant literature (Popkin 1980) argues that the introduction of urban capitalism gave rural inhabitants choices, whereby the under-served were allowed to escape virtual enslavement to the agrarian system. The point at which the two approaches agree is the fact that the rural areas undergo a significant amount of change as industrial capitalism is introduced. The outcomes of those changes constitute a clash of value-judgment. However, in both of these depictions, movement played a role in the outcome. Scott (2009) describes a rural society that is at odds with the centralized state and purposefully adapts in order to avoid "enclosure." The rural areas in this depiction are the opposite of settled society. They are constantly shifting and reorganizing, thus employing a certain degree of flexibility as a way of resisting the state. His analysis implicitly suggests that we might observe more movement in the rural areas.

To summarize and reiterate the main points of this argument, understanding "development" as a process of societal transformation implies several things. First, it characterizes the process of development as a state of flux, rather than a state of equilibrium. Second, rather than examining development in linear terms, as did modernization theory, the idea of transformation embraces the role of tradeoffs such that change incurs both positive and negative outcomes, rendering net social accounting for development initiatives subjective. Third, it implies a certain degree of instability (Huntington, 2006). The developing society is one that has great potential for growth reflected in, at times, high growth rates, but that also maintains a high degree of risk as protective institutional frameworks are not as strong. There are also rampant contradictions between rich and poor, tradition and modernity, formal and informal. Understanding the particular properties of this state of transformation is inherent in understanding the process of development.

#### **1.3 MIGRATION DEFINED**

The determinants of movement are much more impermanent than the presence of movement itself. That is, while human movement is older than history, it is not a stand-alone phenomenon, free of social context. Its existence has been a tool for human survival and adaptation as long as humankind has existed. But its determinants are embedded in a socio-economic context, changing its properties in a series of shape-shifting items as society evolves. A generic set of determinants of movement can only be described in abstract philosophical terms. For example, *people move with the expectation of improving their lot*. However, this delineation captures a broad range of realities. The differences between avoiding starvation and seeking lucrative job opportunities have significant policy and research implications, even though they both fall under the broader category of "improving their lot." The particular attributes of the various types of movement are highly context-dependent. Therefore establishing the determinants of movement is complex, not easily lending itself to universal theory-building aside from overly abstract elaborations. This observation is among the many implicit difficulties that come to light when studying movement; leading to an unwieldy amount of literature under the banner of "migration studies."

### 1.3.1 The ambiguity of "migration" as a concept

Context plays a role in how we think of different types of migration. Highly mobile societies tend to define "migration" differently than less mobile societies. In popular American language, people tend not to think of themselves as migrants when they move to another city or town to go to college, even if they end up settling down on a permanent basis. In fact, currently, the U.S. Census officially defines migrants as only those who cross international borders. In contrast, a young farmer in a developing country making a similar move to the city to go to school and settle down can be considered a migrant in development studies. Furthermore, terms are not employed consistently. In recent history we still refer to the "Great Migration," when the migration of southern blacks resulted in permanent demographic changes between

southern and northern populations. Two items may be implicated in these inconsistent distinctions. First, volume is implied. The trend is often only identified as "migration" when a significant permanent change in population distribution is observed. Therefore, one American moving to a random location to seek better employment would not be considered a "migrant." However, 50,000 people permanently moving to the same location would be considered "migration." While these distinctions may appear vague and inconsistent, they delineate between general randomized movements, which in the statistical sense would be considered "noise," (randomly distributed movement, due to chance) and movements that constitute a structural change in society, and thus, permanent shifts in settlement patterns. Industrialized countries with better infrastructure and higher mobility would likely observe higher amounts of random movement than under-developed societies.

Second, a sense of origin is implied in our popular understanding of *migration*. These "origins" can have discriminatory inferences, as they can refer to a sense of "belonging" or not, in terms of identifying the migrant. The "Great Migration" in America that started in the first half of the twentieth century, may have been influenced by the racial connotations of the move. Had the "Great Migration" been made up of primarily middle-class, white people, perhaps, it would have been viewed differently. Furthermore, the direction of the belonging seems also to matter. An American living and working in West Africa is generally considered an "ex-pat" in popular language, rather than a migrant, despite the fact that many of these ex-pats live in the destination country on a permanent basis for economic reasons. It is, observed that notions of migration are socially constructed and likely peppered with a degree of racism. This explains why the parameters surrounding the term are difficult to define. It may also explain why the discussion on migration is heavily dominated by analyses of South-to-North migration even though this movement represents only a fraction of global population movements. These are factors that are not typically accounted for in empirical work, but rather influence popular notions of "migration." More clarity in the scholarly community is needed.

#### 1.3.2 Migration in the Technical Arena

Since precision is an imperative in the technical arena, attempts have been made at classifying migration. The following are various classifications that are commonly-cited in the field.

*Migration Vs. Mobility* - In some theoretical works, a distinction is made between migration and mobility, with migration constituting longer duration and distance, and mobility accounting for short, temporary moves (Bell & Ward, 2000; R. E. Bilsborrow, 1984). On the whole, migration is typically defined by a degree of permanence (Bilsborrow 1998). In elementary schools, we learn that Native Americans are the descendants of Siberians who migrated across the Bering Strait into North America on a land mass that temporarily connected Siberia and Alaska (Stromberg, 2014). These movements could be considered permanent in the purest conception of the word, since transportation constraints were significant. More recently, the unidirectional movements of 18<sup>th</sup> century migration to North America exhibited a level of "permanence" that shaped the current world order. These are popular examples elicited when we envisage the sizable "permanent" impact that population movement has had on society. However, this type of permanence is less relevant due to the relative ease of travel. This does not imply that permanence does not exist in contemporary movement patterns. It does, however, imply that the distinction between mobility and migration is more difficult if we stick to the restricted, classical notions of permanence.

Furthermore, for methodological purposes, "permanence," as a lone qualifier for migration is impossible to measure and control for. There is no way of knowing for sure whether a migrant is indeed making a "permanent move," at least until he or she dies, which is not a feasible scenario for empirical analysis. As a proxy, one could examine the intentions of migration, thus inquiring as to whether migrants consider their move as permanent or not. Often, however, migrants begin with one motive or another, but end up changing objectives mid-course. The availability of cheap travel means that more options are available. They may either stay longer than intended or they might move back to their home country. "Return migration" has thus revealed itself as a subcategory in migration-development studies.

In this study, the "permanence" inherent to the definition of migration is dealt with loosely, implying a settled life in a destination location. An individual who has made his/her life in a destination location complete with a career, house, family and community is to be viewed with the sense of "permanence" that is inherent to the migration definition, whether or not they move back to their locations of origin at a later date. It is assumed from the outset that this broad qualifier encompasses many different migration types and narratives. In the survey conducted, the degree of settlement is defined by whether or not the individual spends more than 6 months out of the year in the destination location. This broad definition is a pragmatic concession. Of interest to policymaking are the changes in settlement patterns, not necessarily where on the continuum of permanence the act of migration lies. Because the term "movement" is even broader than migration, thus encompassing both mobility and migration, it is often employed in this analysis interchangeably with the term 'migration.'

*Types of migration* - Aside from the historical evolution of the term, migration can have different meanings and policy implications depending on the setting. The various types of migration can be defined by direction, causes, and overall context, often leading to compartmentalization, however justified, in the field of migration studies. First, a distinction is typically made between internal and international migration, determined by whether or not a country border was crossed. This distinction is largely political and typically divides the literature into two subgroups, even if separate phenomena are not necessarily implicated. For example, "internally displaced peoples" become "refugees" once they cross a national border, thus, entering new legal territory, whether or not the movement varied in any other respects. Given the political and legal implications of the move, internal and international migration are typically treated as separate phenomena, even while some calls have been made to keep the two empirically linked

(King & Skeldon, 2010). Some migration categories traverse both delineations, such as return migration and seasonal migration.

Within internal migration, it is common for typologies to be distinguished along four categories according to the rural – urban dichotomy (Bilsborrow 1998).

- 1) Rural-to-rural
- 2) Rural-to-urban
- 3) Urban-to-urban
- 4) Urban-to-rural

In the context of development, the most commonly discussed categories are rural-to-urban and urbanto-urban migration. Rural-to-urban migration is noted to occur as a country transforms from an agrarian state to an industrialized economy. Urban-to-urban migration typically represents the next stage in development, where human resources advance, specialize and concentrate around various urban poles. In the U.S. context, Silicon Valley would be the most overt example. Urban-to-rural migration, also known as "counter-urbanization," is typically observed in high-income countries, as the high costs of urban life outweigh the costs of a re-engineered rural life. Rural-to-rural migration is rarely mentioned in any of the literature (R. E. Bilsborrow, 1998). This is mostly due to the lack of empirics and the urban-bias in development literature.

#### 1.3.3 Scholarly biases

Despite the various observed distinctions, some forms of migration tend to dominate the current thinking. This has more to do with political and social implications than empirical significance. In the literature as a whole, "migration" is often taken as a synonym for international migration. Indeed, international migration is of great concern to policymakers, particularly in receiving countries. But this has resulted in an utter dominance of the field, despite the fact that internal migration is significantly more prevalent (Bell & Muhidin, 2009; King & Skeldon, 2010). While deriving accurate worldwide estimates of internal migration is an ambitious task, in 2009, the UNDP determined that there are 740 million internal migratis

worldwide. This figure can be compared to the IOM's determination that for the same year there were 200 million international migrants (King & Skeldon, 2010).

Similarly, when internal migration is discussed, it is also assumed to refer to "rural-to-urban migration," since this represents the majority of studies on internal migration with respect to development. These assumptions are understandable but problematic, since the parameters of our popular language often do not fully contain the phenomenon under study. For example, the classic theorist Sjaasted (1962) observes that rural-to-urban migration flux often occurs simultaneously in contrast with other directional patterns. He states that it is the mix of these simultaneous, contrasting patterns that make shifting population distributions complex. Therefore, all types of migration should be recognized and more strongly considered in migration studies, not just the politically popular types.

Another empirical problem with internal migration studies is that the terms 'rural' and 'urban' are rarely, if ever, overtly defined, despite their common use. Furthermore, different countries use different sets of criteria for classifying "rural" and "urban" areas, making cross-country comparative analysis difficult. In reality, "urbanness" is a subjectively-defined continuum. An 'urban center' in one context may be considered 'rural' in the next. As such, an 'urban center' could range from anything from a town of several hundred inhabitants in a remote area, to a megacity, such as Cairo or Mexico City, depending on who is talking and what context they are considering. The popular topic of 'urbanization' typically deals with the expansion and dominance of cities, yet even the term, "city" is rarely defined despite its vast use in the literature (IOM, 2015). Therefore, the lack in specificity generally required for empirical analysis is challenging. This is particularly the case when observed patterns depart from the easily identified concepts, such as migration from a quasi-rural to a slightly larger, quasi-urban area. This leads to a ripple effect of ambiguity since all the internal migration patterns are defined according to these binary terms.

In the context of the current study, the term "migration" is used lightly. More specifically of concern in this study, are the policy implications of shifting population distributions at the local level. All

movement in the context of Morocco is viewed equally. The duration of settlement is not accounted for, nor is it of particular concern since supposed "return movements" would presumably be detected and explained in further studies and treated as a separate phenomenon. This criterion thus rides on the assumption that "intentions" should not be the primary distinguishing characteristic under examination, but rather the actual movement patterns.

### 1.4 THE PUZZLE

The following study analyzes an under-examined aspect of the migration-development nexus: migration outside of the major metropolitan areas in Morocco. A large part of this investigation centers on the observation of small population centers in the remote rural areas that are increasing in size, more so than would be expected from the natural growth rate. The presence of these centers defies the rural-to-urban migration logic and suggests a kind of "rural urbanization," that is, urbanization on a smaller scale, occurring within the agrarian context. Rather than a linear depopulation towards the major cities, it is suggestive of a changing rural landscape, resulting in the emergence of semi-urban population centers in the rural areas. These towns are not usually what is highlighted in the typical discussion of rural-to-urban migration. They therefore constitute a gap in the literature, or rather, a puzzle, requiring exploratory investigation. An *intensive*<sup>1</sup> mixed methods approach is employed to answer the research question.

While the concept of rural urbanization is presented as a new approach to study internal migration, the trend itself is not new or earth shattering. Migration studies have for decades observed counterintuitive tendencies in various contexts, such as movement into impoverished areas (Sjaastad, 1962). Scholars have typically attributed these tendencies to the "complexity of movement." Other trends exhibiting non-traditional movements have also been observed. In Morocco, Hein de Haas (2005) observes what he calls a decentralizing trend to migration patterns in Morocco. He observes a shift in

<sup>&</sup>lt;sup>1</sup> See the World Bank's Road to Results discussion of *intensive* versus *extensive* research (pp. ##).

movement towards peripheral urban centers instead of the major hubs. These aberrant trends present the opportunity to understand better the relationship between migration and development, because their existence, at best, is left out of rural-to-urban migration models, and at worst contradicts them.

#### 1.5 OBJECTIVES OF THE STUDY

The overall objective of the study is to expand the general understanding of population movement and development beyond the popular silos that have dominated the literature. At the theoretical level, movement dynamics should not be conceptualized exclusively through the lens of growing cities. This study adds to the literature by identifying the weaknesses of current models and shedding light onto their under-examined elements. By zeroing in on rural urbanization, nuances in the larger process are elaborated, challenging the role of the rural-urban dichotomy, which is widely used but rarely defined. A series of narratives based on empirical evidence will be the final output of the study to explicate fully the various social realities that define contradictory movement patterns.

A mixed methods approach is being employed to answer the specific research questions listed below in Section 1.4. This set of methods involves not only a mix of qualitative and quantitative research, but also the use of triangulation to reinforce the results of both. Such an approach is essential, given the scarcity of sufficient data on the topic in addition to the inductive nature of the study that pursues the development of a new concept, 'rural urbanization.' Given the pre-eminent role of space and regional variation, quantitative analyses are supplemented with spatial analyses performed in ArcGIS. Qualitative interviews are supplemented with three years of informal ethnographic research and historical analysis. In addition to the mixed methods approach, various disciplinary traditions are cited throughout the dissertation, thus not excluding specific paradigms or giving preference to one field over another. This approach is consistent with a professional policy-oriented analysis that employs a comprehensive effort to explain reality in practical and functional terms, rather than operating within the boundaries of disciplinespecific jargon (Riccucci, 2010).

In theoretical terms, the findings will contribute to better models of migration and development. It will also contribute to an analytical framework that is sensitive to the role that the traditional agrarian sector plays in a changing economy, a reality that most developing countries face.

#### 1.6 RESEARCH QUESTIONS

The primary research question to the following study is *what is the relationship between internal migration and development in Morocco?* A comprehensive review of the migration literature and previous studies on internal migration was performed in order to establish what we already know about the relationship between movement and development (see chapter 2). Next, the context of Morocco is fully examined to place this study in the existing literature and knowledge of Morocco. A mixed methods approach is employed at multiple levels of analysis in order to identify the variation unexplained by the current internal migration models and develop better concepts to address the variation unexplained. By aggregating the results from the sub-questions, a broader understanding of the role of movement in the rural areas is elicited by matching historical, ethnographic and cultural understanding of Morocco to the *extensive* and *intensive* empirics. This will serve to develop a robust narrative that can explain movement and the rural sector in the context of changing, developing societies.

The proceeding sub-questions driving this analysis corresponding with the subsequent chapters are:

RQ1: What are the determinants of internal migration in Morocco between the years 1994 and 2004? In this chapter, the analysis will be contextualized in time and space, through the visualization and statistical testing of macro-level trends. The most reflective statistical model possible will be derived and tested

based on theory and available data. With these visualizations, we can place the role of already established models, in addition to the variation unexplained.

#### RQ2: What are the determinants of movement to the rural hub, Guigou?

In the next section, a descriptive, positivist research question is necessary in order to further develop our notions of movement in the rural areas. This quest is bounded by the concept of "rural urbanization." Quantitative primary data collection seeks to answer this question in order to fully extrapolate what is distinct about rural urbanization. This analysis constitutes a demographic depiction of the observed variation. A taxonomy of migration trends leading to the evolution of a rural hub is elicited.

#### RQ3: What is 'rural urbanization'?

Moving one step beyond surface level descriptions of the rural urbanizing trend, a *thick* micro-level description is employed in order to: 1) Add context and understanding to the observed macro and meso-level patterns through the contribution of personal individual experiences; 2) To begin hypothesizing on causal patterns with respect to how changes in the economy lead to the observed trends over time; 3) To answer some of the unanswered questions that arose during the quantitative data collection.

#### 1.7 ORGANIZATION OF THE DISSERTATION

Chapter 2 discusses the literature review and theoretical framework for the study. This involves a comprehensive review on how scholars have analyzed the relationship between migration and development. Building on this previous research, a theoretical framework is developed, emanating from concepts in risk assessment. Chapter 3 builds on the framework by identifying the methodological challenges of studying migration and development that have yet to be addressed in the literature. The chapter ends by detailing how and why these challenges are addressed with the chosen methodology. Chapter 4 sets the tone for the remaining analyses by providing an in-depth description of the context of

Morocco. The chapter is organized with respect to the concepts and assumptions laid out in the theoretical framework as a way of firmly placing the framework in the real world. Chapter 5 examines the macro level migration trends between the years 1994 and 2014 in Morocco, by building the best possible statistical model given the available data and knowledge. Here, census data is used to show how the population changes are impacted by various other factors presumed to be determinants of migration. Insights are made but questions remain, thus falling short of being able to explain all of the variation. Chapter 6 analyzes the meso level by conducting a survey of a case study representing rural urbanization. Chapter 7 explores the micro level of the migration phenomenon in the rural areas, by conducting nine indepth qualitative interviews of migrants in the case study. Chapter 8 concludes the dissertation by summarizing the findings and illustrating their policy implications.

#### 1.8 CONCLUSION

Shifting population distributions are a lens through which to view a growing, evolving economy. Worldwide, the rural areas are typically home to the "poorest of the poor" and are, thus, particularly vulnerable to structural changes. It is a common occurrence for rural populations to be left behind as a country evolves economically. Not adequately accounting for equitable distribution of the gains of economic development can lead to potentially destabilizing circumstances, such as excessive rural-to-urban migration, rural mobilization against the centralized power structure and/or abject rural poverty that flies in the face of budding ambitions of a "modernizing" country. Developing comprehensive models of migration and development is thus an imperative.

Yet in examining these issues, we find a great deal of conceptual ambiguity and bias in the current literature. It turns out that our key terms, "migration" and "development" are subject to a significant degree of social construction, even when handled by academics. The following exploratory research will attempt to address this ambiguity by starting with the assumption that movement patterns

are complex, heavily embedded in economic transformation. Migration can therefore be conceived of as a demographic sorting mechanism, with flux having been observed to go in multiple, opposing directions simultaneously (Sjaastad, 1962). The elements that contribute to this complexity are influenced by nearly all social science disciplines. While economics may play a lead role, sociological, psychological and political explanations are also essential for breaking down the mechanisms that create movement patterns. The study of migration is therefore challenging, but not impossible. The following analysis contributes to an understanding of the relationship between migration and development by reducing the ambiguity imposed by the rural-urban dichotomy that dominates the current interpretation of internal movement flows.

#### 2.0 CHANGING SOCIETIES, TRADEOFFS, AND RISK FACTORS

A significant amount of scholarship depicting the relationship between migration and development already exists. These pre-existing models offer a foundation for identifying the variation observed in Morocco that remains unexplained. I do not seek to refute the scholarship described below. Each approach has either staked out an important nuance of the relationship between migration and development, or has simply developed an innovative way of articulating it. The following literature review addresses mostly general claims about the determinants of migration patterns. These claims serve as a basis for conjecturing how to frame and understand the migration patterns observed in Morocco. Some of the points discussed below will be dismissed outright by the data collected in Morocco. Some of them will be vindicated. On the whole, no models are fully rejected or fully accepted, but rather treated as building blocks that either fit or do not fit in this particular context.

#### 2.1 LITERATURE REVIEW

The first comprehensive attempt at answering the question of why people move is considered to be E. G. Ravenstein (1885) and the elaboration of his "Laws of Migration." Ravenstein provided a list of assumptions, which he referred to as "laws," that have been heavily cited in the migration literature ever since.

- 1. Most migration is over a short distance.
- 2. Migration occurs in steps.
- 3. Long-range migrants usually move to urban areas.
- 4. Each migration produces a movement in the opposite direction (although not necessarily of the same volume).

- 5. Rural dwellers are more migratory than urban dwellers.
- 6. Within their own country, females are more migratory than males, but males are more migratory over long distances.
- 7. Most migrants are adults.
- 8. Large towns grow more by migration than by natural increase.
- 9. Migration increases with economic development.
- 10. Migration is mostly due to economic causes.

This initial attempt was a systematic effort to examine the characteristics of immigration and it incites a fair amount of instinctive, universal truth about the determinants of population movement. These assumptions provide a useful starting point for all current migration theory and in particular, this dissertation. In the 100+ years that have passed since Ravenstein made his seminal contribution, many scholars have set out to dismiss his initial insights. However, many of the axioms still hold a lot of weight, despite their age, and are therefore continually referenced throughout this dissertation. The critique of Ravenstein's assumptions, by and large, pointed out the multitude of extenuating circumstances that challenge the feasibility of a universal predictive migration model with fixed inputs. Arguing for 'laws of migration,' replied one of his critics, refutes the fact "that migration was rather distinguished for its lawlessness than for having any definite law" (Lee, 1966). Over the next century, the dialogue around migration became one of unraveling this complexity, beginning with other competing attempts at overarching explanations and ending with a literature dominated by case studies. Currently, the idea of universal, explanatory models has been largely abandoned, aside from the most abstract representation. Migration theory is moving forward on a case by case basis, observing that local circumstances determine the patterns, even if there are resulting common patterns between cases. The field is thus struck by a problem of *equifinality*, whereby many different circumstances lead to a similar or the same result.

The consensus that was developed in the 1950s and 1960s was that of the economic explanation that sought more concrete, testable variables than Ravenstein offered. In this earlier period, economic models dominated development thinking. They depicted rural-to-urban migration as a function of a transitioning society between two sectors, the modern sector and the traditional sector. This approach began with Lewis (1954), and was further refined by Ranis & Fei (1961). These models held the assumptions of classical economics, depicting the decision to move as a micro-level individualistic event dependent on the rational assumptions of utility-maximizing behavior. The premise of the rural to urban shift was relatively logical. As urban wages from industrialization increase, rural inhabitants living in a wage-less agrarian sector will be drawn to the cities with the expectation of higher profits. Wage differentials are therefore the primary determinant of internal migration (Todaro, 1969). The model explains why significant rural-to-urban migration is observed in transitioning economies. Because this premise deals specifically with the context of a changing environment, these models are particularly relevant to this study. They explicitly link movement with agrarian transformation and the dual economy. Movement is thus a product of development and societal change.

However, the restrictiveness of these models reduced their explanatory power, particularly as "non-rational" behavior was observed, whereby people continued moving to the city despite deplorable urban conditions. The Harris-Todaro (1970) model sought to explain the continued urban growth despite higher urban unemployment rates than rural unemployment. Harris-Todaro explains the continuation of rural to urban migration through *expected* wage differentials, as opposed to *real* wage differentials. This elaboration introduces the often non-economic component of the perceived probability of getting a job. It also indicates that policies oriented at increasing wages and employment. This implies that migration is not actually very sensitive to unemployment rates, but driven more by *perceived* wage differentials. This

model was alarming to policymakers as it predicted a worsening of urban conditions even as investments and progress were procured. The model presents migration as a problem and prescribes investment in the rural areas in order to inhibit urban population growth. This characterization largely stuck in the minds of Moroccan policymakers who appeared to have come to the same conclusion over the years. This assertion will be examined further in later chapters.

In this same period, but somewhat departing from the strict mathematical formulations, was Lee's (1966) push-pull thesis, indicating that positive and negative elements at the origin and destination both 'push' and 'pull' migration, hindered by intervening factors. This approach presents movement patterns as a function of contrasts, needs and opportunities, but lays these out only in the most abstract terms. The "intervening factors" can be anything from "laws, life cycles, personality and perceptions," while also acknowledging significant heterogeneity within the migrant population. With regard to migration and development, Lee states that "industrialization, which has traditionally followed settlement, is a great creator of areal diversity," triggering massive migration flux. His model is useful as an abstract framework. It has served the scholarly community well by offering a fill-in-the-blanks set of references for understanding migration patterns. This model will provide a basis for the theoretical framework elaborated later in this chapter.

### 2.1.2 Behavioralist Approaches

While the neoclassical logic is sound and has managed to withstand some degree of empirical scrutiny over the years, the premise leaves many unexplained puzzles and is thus far from sufficient. The behavioralist approaches work within some of the neoclassical assumptions, but broaden the explanatory factors to include items such as human capital investment, subjectivity, and expected returns. In this same period, Schultz (1961) depicted migration as a form of investment in human capital. Sjaastad (1962) depicts migration as a function of diversification in the economy, with the objective of trying to quantify the overall returns of migration to the economy. He observes that overall effect sizes of income
differentials and the resultant migration flows, while positive, are weak, thus challenging the neoclassical assertions. Wolpert (1965) employs what he calls an ecological approach, known as a stress-threshold model that emphasizes decision-making as a function of environmental stress. People seek out living alternatives when they are unable to live harmoniously with their environment. In form with a "Place utility" model, Brown, (1970) a geographer, argued that the decision to migrate is based not only on economic decisions, but also on social and environmental characteristics. His analysis built on the previously emphasized role of geography in Wolpert's 1965 stress-threshold model. Gordon and Fawcett (1983) document the importance of subjective expectations in determining migration decisions, using a value expectancy model. These are examples of an expanding, diversifying set of determinants for explaining migration that incorporate factors often considered harder to quantify. Such factors, however, depart from the elaboration of comprehensive mathematical frameworks, by focusing on some of the individual determinants of migration instead.

## 2.1.3 New Economics of Labor Migration (NELM)

In the field of economics, around the 1980s, the assumptions around individual utility were replaced in what came to be known as the New Economics of Labor Migration (NELM). Led by Oded Stark (1985), this body of literature depicts migration as a household decision that employs diversification of income to reduce household risk. This assumption is referenced in the introduction of this dissertation as it is also held in this analysis. The assertion comes from the observation of Mincer (1978) and Sandell (1977) in descriptions of migration as an aggregation of family utilities. The assertion is that the family mediates the decision to migrate. This signifies a departure from the assumption of the individual as the unit of analysis. The thinking within this framework is more relevant to the context of rural poverty and therefore more pertinent to rural Morocco, since it incorporates the realities of agrarian society that include the need for informal insurance, income diversification, household utility, and risk aversion (Dercon, 2002). NELM also puts an emphasis on relative deprivation (Oded Stark, 1984) as a driver of migration by citing

higher out-migration in areas that exhibit more inequality. In later studies, remittances factor in and are presumed to play a key role in the perpetuation of migration (Taylor, 2001). As a theory of migration, it was an appropriate evolution in thinking, since migration is the primary phenomenon that it attempts to explain, whereas the neoclassical approaches were merely examining migration as a factor in explaining unemployment and economic development. Many of the factors of NELM will be discussed in this study.

# 2.1.4 Systems Thinking

Another branch of scholars approached the complexity of migration from a different angle. By not fixating on the use of a predictive economic model, systems theorists were able to incorporate more intervening factors. Mabogunje (1970) employed a systems approach, by emphasizing the importance of interacting elements, their attributes and relationships. By not constraining himself to a mathematical model, he was able to depict verbally a narrative emanating from the colonial era. This narrative reflected rural society as increasingly subject to centralized control and being influenced by a different set of norms and expectations. The integration of the rural and urban economies proceeded from this environment, creating a particular context for internal movement. Mabogunje also takes the liberty offered by the systems approach to consider a range of important elements including institutions, social and economic factors that permit a migration transformation. Although, not necessarily backed by empirics, he sets forth a model that appears to capture more effectively the complexity of rural-to-urban migration in a generalizable format. However, buy-in to this approach is contingent upon accepting the utility of the systems framework.

Massey (1990) makes a similarly ambitious attempt at producing a multi-level explanatory model for migration patterns. His model rests on Gunnar Myrdal's 'circular and cumulative causation' thesis (Myrdal, 1957). Massey incorporates interacting elements of household decisions in the face of evolving political, social and economic structures over time and at multiple levels of analysis that ultimately create a self-perpetuating migration pattern. The approach has been heavily influential.

## 2.1.5 Sociological approaches

Sociological approaches provide other ways with which to slice up the migration phenomenon. Taking a step back, defining migration as a function of social structure as opposed to the individual is reflective of the structure-agency debate in sociology. As we have observed, many of the earlier migration theories were rooted in the individual, or the agent. Later on, this assumption was expanded with the New Economics of Labor Migration literature claiming that migration decisions are household events. However, a sociological approach goes beyond even the household and examines the broader social structure. Goldscheider (1987) argues strongly for understanding migration as an inherently sociological phenomenon given the complex, multifaceted role it plays in society, both in the causes and consequences of migration. Sociological concepts and methods, he argues, are necessary for understanding movement. Within the same theoretical line of thinking, Portes (1993) uses the concept of *embeddedness* and *social capital* to explain migration patterns in a further attempt at departing from the neoclassical assumptions.

## 2.1.6 Social Networks

Further challenging the neo-classical assumptions of independence is the network approach. The role of networks in determining migration patterns serves to link potential migrants to already established migration paths. Rather than wage differentials, network analysts propose that the human connections people have determine whether or not they migrate and where they end up, as costs are reduced through shared information and resources (Fawcett, 1989; Haug, 2008; McKenzie & Rapoport, 2007). Networks can account for feedback mechanisms via information sharing. Networks and information are useful frameworks for understanding why migrant communities appear in some destinations and not others (Bauer, Epstein, & Gang, 2002). By incorporating the flow of information, they also more effectively account for the perceptions variable that had been cited in the past (Fawcett, 1985; Winters, De Janvry, & Sadoulet, 2001). In some instances, return migrants, trying to give the impression of success, have

skewed the perceptions of potential migrants, affecting the information received by potential migrants. Lemann (2011) effectively articulates this reality in his depiction of the Great Migration that occurred in the United States throughout the 20<sup>th</sup> century.

The role of social networks has been cited extensively in a diversity of migration literatures. Bilsborrow (1998) refers to the role of networks in perpetuating and inhibiting migration. Massey (1990) incorporates networks in his theory of 'cumulative and circular causation,' concluding that, on account of social networks, the factors that influence migration are different from the factors that perpetuate it. Skeldon (1997) incorporates social networks into his analysis of rural-to-urban migration and poverty. While not exclusive to network scholars, this approach has proven widely influential across disciplinespecific approaches.

In defining migration strictly as a social networking event, the determinants of migration can be identified by examining the properties taken from pure network theory. Wilson (1998) elaborates 5 principles of network performance based on Granovetter's (1973) premise of "the strength of weak ties," whereby the network is ultimately defined by distant relationships. In the context of migration, a weak tie would be a remote acquaintance, who would likely lend a hand to a new migrant on account of shared origins. It is through this mechanism that migrant communities emerge in inconsistent fashions across destination countries.

This approach also lays a heavy emphasis on examining migration as a dynamic phenomenon whereby the first movers of the migration flows are qualitatively different from the late movers (Thomas W, 1996). Haug (2008) added to this assertion by identifying the effects of social capital on whether or not people leave and also whether or not they come back. Social capital can draw people to destination countries. It can also, however, be a strong deterrent from leaving if social capital is strong in origin communities. Fawcett (1989) delves into the concepts yet further by distinguishing between the various types of linkages that would likely determine migration patterns. Social linkages are one type. According

to Fawcett, media linkages, trade linkages, remittance flows, job recruitment are also other types of linkages that would likely perpetuate and sustain migration networks.

### 2.1.7 Transitional Migration Theory

While the role of economic development is implicit in all of these theories, another line of thinking makes the relationship yet more explicit. Hein de Haas (2005) references this body of work in his elaboration of what he refers to as "Transitional Migration Theory," starting in 1971 with Zelinksy's mobility transition hypothesis. The process of migration is linked to the process of *modernization*, which was a popular theory of development at the time. Zelinsky (1971) articulates more thoroughly the relationship between migration and development by linking mobility with modernization theory and demographic transition in what he called his "theory of mobility transition." He summed up his theory by stating "there are definite, patterned regularities in the growth of personal mobility through space-time during recent history and these regularities comprise an essential component of the modernization process." Zelinsky characterized mobility as an inherent part of modernization and advocated a spatial-temporal approach to understanding migration, building on the spatial 'diffusion of innovations.' This theory was revised and built upon by Skeldon (1997) with his assertion that echoed that of Ravenstein (1976), who held that the relationship between migration and development was curvilinear, such that increases in development bring about increases in migration. More recently in a special issue of the Journal of Ethnic and Migration Studies entitled "Theories of Migration and Social Change" (Van Hear, 2010) the case was more clearly made for viewing migration as a dynamic process in order to account for the "complexity, interconnectedness, variability, contextuality and multi-level mediations of global change" (Castles, 2010). These scholars firmly make the case for explicitly examining migration as a function of societal transformation. Given that most migration scholars implicitly deal with development, this is hardly a controversial stance. However, these accounts are typically heavy on theory and weaker on empirics, thus leaving out a crucial component of putting the ideas to practical use.

# 2.1.8 Gravity models

One final approach lifted from other disciplines is the utilization of a gravity model. This approach uses the physics of gravity as a metaphor for explaining social patterns. In physics, gravity is defined as a function of distance and mass between two objects. The larger the mass, and the smaller the distance, the stronger the gravitational pull between them. This concept has been used extensively in describing trade relations with varying success (M. Fujita, Krugman, & Venables, 2001). In the context of migration, the gravitational pull represents a strong draw of migrants towards the cities as a function of city size and distance. Using this framework, Karemera et al. (2000) state that a properly specified model includes political, economic and demographic characteristics of both origin and destination countries. He also specifies the role of "natural and artificial factors" mitigating or enhancing the migration flows. Artificial factors refer to institutional regulations, such as visa requirements. Natural factors encompass the role of items such as distance, information and psychological cost. It is not surprising that such detailed parameters for a 'properly-specified model' become rapidly unwieldy. Karemera and his colleagues run a time series regression model with 23 independent variables and conclude that income, proximity, and population are the most significant variables that define migration flows. This outcome supports the gravity models presented by Ramos & Surinach (2013) and Lewer & Van den Berg (2008). These studies notwithstanding, gravity models in general have been criticized for their difficulty in empirical testing. They do nonetheless provide a useful metaphor for illustrating migration flows. In their defense, however, nearly all migration models aimed at explaining the developing world have problems with empirical testing, since comprehensive data usually do not exist.

# 2.1.9 Rural to rural migration

To show the shift in migration theory, it is necessary to reference the number of times that rural-to-rural migration has been cited in the literature. Included in Ravenstein's laws is the presumption that "rural

dwellers are more likely to move than urban dwellers," suggesting a more mobile existence in general. His account would agree with Scott's (2009) depiction of the rural areas. In combination with the assertion that, distance is an inhibiting factor, it could be ascertained that more movement would be observed occurring within the rural areas. Sjaastad (1962) explores the irrationality of in-migration in impoverished areas in the United States. He explains this through the existence of "streams and counterstreams."

Explicit studies of rural-to-rural migration also exist, largely found in Sub-Saharan African countries. Oucho (1984) analyzes rural-to-rural migration as a process of fields at the regional, national and international level, whereby certain poles attract these migrants. In these cases, he examined migration towards tea estates and observes that these centers are losing their migration pull to the evolving sugar plantations in Western Kenya. He therefore links rural-to-rural migration to the agricultural sector, a notion that features prominently in the current analysis. He also finds that in the case of Kenya, distance decay does not have a significant impact. Kurji (1995) explores rural-to-rural migration in Tanzania through survey research and finds evidence that contradicts many of the standard migration models. He asserts that rural inhabitants of the Serengeti are highly mobile. They move in order to survive, rather than achieve social advancement. They typically move short distances, once again echoing Ravenstein. He links the migration process to what he entitles agro-ecological systems that are based on geography, crops, distance to fields and cultivation techniques, again linking the phenomenon to agriculture. And finally Kurji notes that land ownership has a way of socially differentiating the various groups. Bhattacharya (2000) cites the role of marriage in dictating rural-to-rural migration. Spittler (1977) explores pre-independence urban-to-rural migration in Niger. This context under study predated the rural exodus of the post-independence period. However, the study observes that populations were highly mobile as a way of escaping regulation from the state which resembles Scott's assertion. Bilsborrow (2002) explores the topic based on data projections by the United Nations stating that the world's rural population in under-developed countries will continue to grow, bringing ever more relevance to insights

on rural development and management. His particular concern is the increasing pressure on fragile lands as arable land decreases.

The consensus among all these different analyses is that people move for a comparative improvement over their current status, whether it is due to 'push' factors, such as genocide or famine, or 'pull' factors, such as higher wages and better social services. These patterns are perpetuated by both real and imagined differences between origin and destination countries, injecting a role for information sharing and thus the social environment. Inhibiting factors to migration patterns can include distance, infrastructure, institutions, information, social capital and financial resources. With respect to development, mobility has a positive curvilinear relationship with development, such that after a certain poverty threshold, an increase in overall income correlates with an increase in overall movement. Where people go likely reflects economic makeup of the country in addition to how it is changing. The following research does not refute these assertions, but rather builds on them. The following section will present the theoretical framework for internal migration that builds on these assertions.

## 2.2 THEORETICAL FRAMEWORK

Pulling from the transitional migration theories, a crucial component of this research is the idea that population movement is firmly embedded in the process of societal transformation. Population movement is thus conceived as a feedback mechanism to changing circumstances. With a balanced process of development, movement should lead to a better allocation of resources and people. However, the danger implicit in this proposed cycle is when the risks and losses offset this balanced progression. For example, in the instances of shocks, such as natural disasters and/or war, the population flux becomes sudden, rapid and intense in terms of number of migrants. Less extreme forms of shock can also take place, such as a sudden increase in food prices or the elimination of subsidies. The speed at which these changes occur can overwhelm a population's ability to adapt. Under these circumstances, the tradeoffs may not be in the

country's favor, since losses can be stronger than the gains, and the risks may be larger than the opportunities.

It is at this point where economic stability becomes a factor in the change equation. A balanced process of development will bring about economic growth without destabilizing the economy. However, an unbalanced economic progression can destabilize the process of development and/or the country. Unbalanced economic progression can be signified by the extent to which the risks and losses outweigh the gains and opportunities. This can also be signified by the extent to which the losses are unfairly concentrated within a sub-population with no compensation to the losers. This discussion illustrates why, for policy purposes, movement must be analyzed with respect to a risk threshold that delineates between the productive allocation of human capital and potentially destabilizing population influx. For descriptive purposes, movement patterns should be examined with respect to the dispersion and concentration of risk and opportunity as an economy evolves.

### 2.2.1 Economic Change and Stability

The reality, however, is that most underdeveloped countries negotiate rapid change with weak institutions, further contributing to the risk-prone environment. While natural disasters and war might be extreme examples, much of the internal movement observed in developing countries are smaller degrees of crisis management that hover over a risk-threshold. Rural-to-urban migration is one example of the human response to economic restructuring. As the previously prominent traditional agrarian base is replaced by an industrial base, a large sector of the population is required to respond to these changing circumstances. In many cases, as that of Morocco, the post-colonial period saw a massive rural exodus that at various points in time strained the economic progression of the country by placing new burdens on the state. Heavy state-led industrialization, to varying degrees, was at the heart of development strategies worldwide during this era, which has led to similar urbanization patterns across the globe. As this reality

and its associated costs became evident over time, the heavy industrialization strategy in many cases, such as that of Morocco was replaced by a more balanced approach to development with a stronger role for agriculture and investment in the rural areas. This shift in strategies should be reflected in increasingly balanced population distribution patterns.

Movement is, one of the mechanisms of structural change. Under positive circumstances, movement leads to a better allocation of human resources. Under the worst of circumstances, movement leads to a toxic population distribution. The next section examines more closely this threshold between positive and negative outcomes by illustrating the decision to move on a risk-opportunity continuum.

## 2.2.2 Risk, Migration and Development

In order to establish this perspective, the macro-level risk factors of development will be explored within the context of Morocco. The great failure of modernization can be viewed in the slum neighborhoods surrounding the industrial capital, Casablanca. Some of these slums are large enough to be independent cities, evolving out of decades of unabated population growth and a massive rural-to-urban migration trend, as capital development shifted from the agrarian interior to the coastal areas. Several decades into the modernization process, the slums, known as the *bidonvilles*, maintained deplorable living conditions and minimal opportunity to escape for the hundreds of thousands of people that live there. In 2003, 12 young men, having fallen under the influence of Wahhabi extremism, blew themselves up in three different locations targeting foreigners, ultimately killing 33 civilians. It has been widely understood that this was a classic case of poverty exploitation on the part of the extremists. The trauma of the incident led the government to reconceive how poverty is managed in the country, leading to a massive investment in social services, infrastructure, and rural development with one of their strategic missions being to prevent these toxic population changes.<sup>2</sup> This incident will be discussed further in the next chapter.

<sup>&</sup>lt;sup>2</sup> See the *Initiative Nationale pour le Developpement Humain* launched in 2005.

The risk of terrorism is only one reflection of the toxicity of modernization, as it is a particular headline grabber. The more day-to-day public risks are presented when population outpaces institutions and infrastructure. Buildings collapse. Infrastructure falls apart. Hospitals become overcrowded and thus susceptible to infections and diseases. Increasing incomes lead to the growth of cars, which maxes out the transportation system, leading to transportation gridlock, pollution and accidents. On the social end, uncontrolled economic growth leads to corruption and subsequent actions that weaken the enforcement of regulations, sidelining efficient and effective practices. The black market responds to corruption and lawlessness by imposing its own extralegal sense of order that does not typically take into account equitable redistribution.

While Morocco has observed major advances in development since independence in 1956, the advances came with significant tradeoffs and potential risk factors. With respect to risk analysis, each of these potential crisis events would be examined separately and reduced to a specific likelihood of its occurring, given certain inputs. Yet, taking a step back, all of these events are secondary to larger societal transformation, population growth, and an inability to align resources with changing population distributions. Fischhoff and Kadvany (2011) state in their discussion of risk perception and society that "... struggles over risk definitions reflect how slowly and sometimes tragically, societies develop rules for newly recognized dangers." Fischhoff and Kadavny go on to cite many tragedies in American society that could have been averted with faster updating mechanisms and risk communication. There are important implications of their statements for the context of countries undergoing rapid changes. The evaluation and detection of risks evolving out of shifting circumstances is of crucial importance. Fischhoff and Kadvany add, "When new dangers emerge, society must learn their causes and controls, weigh their demands, and give meaning to the choices that follow. The study of risk offers systematic, imperfect approaches to these perennial questions, grounded in probability and decision theory." A country with weaker institutions and scarce resources will no doubt have a harder time adjusting to evolving risk factors. The weight of this

insight can go a long way toward explaining instability in middle-income countries that are navigating a tenuous balance between continuity and change.

The penultimate risk factor is a total breakdown of legitimacy and political stability, as we are currently observing in Syria and much of the Middle East North Africa region. Yet, scholarship has not been successful at predicting catastrophic events, such as regime change and political unrest. In 2011, scholars were baffled by the Arab Spring which started in Tunisia, a country known to be among the most stable in the region. Syria was cited as a country that would surely withstand the popular movement, given the strength of the regime. Instead, Lebanon was thought to be vulnerable. These predictions turned out not to be true. As we know well, Syria is facing a total collapse, Tunisia has barely managed to regain a sense of stability in the five years since, while Lebanon has escaped largely unscathed (Taleb & Treverton, 2015).

Much of the variation in the outcomes of the Arab Spring had to do with decision-making and perceptions of the leaders in terms of how they viewed the impending risks and what they chose to do about them. This inability to predict draws mostly from the difficulty (and subsequent refusal) of applying concepts of actuarial science to the context of complex political systems. Risk calculations using quantitative probabilistic reasoning are typically reserved for discrete events with relatively fixed inputs and few conditions, such as food safety or organizational management. However, as inputs increase and begin to interact in a dynamic fashion, outcomes become harder to predict. This observation should not, however, preclude the use of basic risk concepts to understand better the components of societal transformation, such as population movement and its potential for instability. Being able to properly dissect and characterize the implications of population movement requires appropriate frameworks. What, where, and how people move in response to economic changes can be considered a lens through which an evolving economy can be viewed and understood.

The classic risk formula involves the identification of a potential event occurring, the probability of it occurring, times the impact of the event (Fenton & Neil, 2012).<sup>3</sup> This leads to an assessment of the consequences of an event. As will be demonstrated, this formula can be used to understand decision-making around migration to classify the type of migration. This classification can, in turn, contribute to an understanding of the accumulated risk generated by the population as a whole, when controlling for environmental factors, time, and absorptive capacity.

## 2.2.3 Risk – Opportunity Framework

The risk-opportunity framework proceeds by emphasizing three main criteria through which migration patterns can be analyzed from the policymakers perspective to determine whether the population flux is problematic or not. The three main points are listed and discussed below:

- 1) Migration volume
- 2) Absorptive capacity
- 3) Type of migration

*Migration volume* can be a simple calculation of the number of migrants divided by the population of the destination location, with respect to time. The results of his calculation show simply how many people are coming in proportion to the current size of the town and, how fast the migrants are coming in. This calculation is a variation on other assessments of migration volume, such as Stillwell and Cingdon's (1993) discussion of migration flow that incorporates considerably more variables.

Second, calculating what the *absorptive capacity* is for a specific location determines whether or not the destination location has sufficient resources to avoid scarcity when migrants arrive. Resources could include infrastructure, social services and housing. In crisis situations, such as the refugee situation in Europe, this calculation could include the provision of food and other basic needs. Assessing the

<sup>&</sup>lt;sup>3</sup> R= P(e)\*I(e)

absorptive capacity of the destination location is not a new concept. As early as 1947, Jules Issac (Issac, 2013) discussed the role of absorptive capacity, which he defines specifically in economic terms. "The capacity of absorbing immigrants is therefore at any time limited to that volume of immigration whose demand for goods can be satisfied without upsetting the price system of the community." Issac proposed a careful investigation of the price system to evaluate the absorptive capacity of a country. The concept of absorptive capacity is also used in other fields, such as organizational management (Zahra & George, 2002) to describe the process of adaptation and learning amidst changing markets. More recent uses of the term have also pointed to the absorptive capacity of labor markets (O. Stark, 1991). However, incoming migrants are not exclusively dependent on pre-existing employment opportunities. Migrants can develop their own labor markets, depending on the resource-base with which they are starting. It is hard to parse out at what point economic integration of migrants depends on the migrants themselves versus the pre-existing labor market. In order to avoid a problem of endogeneity, in this analysis, the term will be used specifically to refer to infrastructure and social services per 1,000 inhabitants, all the while recognizing that the concept could embody more variables.

Finally, the *type of migration* should be considered. It is with respect to this classification that the remainder of this dissertation will focalize. Establishing a migration type serves a descriptive function. To understand what the implications of movement are on society, analysts need to know *who* the migrants are and *what* are their circumstances? Typologies of migration are quite prevalent. Often, the topic is disaggregated according to international versus internal, forced migration versus voluntary migration, circular migration versus permanent migration, among other classifications. Many of these distinctions were elaborated on in the previous chapter. However, the shortcomings of the established migration taxonomies are that they are largely superficial. For example, the migrant category of refugees does not distinguish between a refugee who is an experienced doctor and a refugee who has no education or experience. They are both refugees and are both treated the same way with respect to both policy and

empirics. However, the different types of refugees have different implications for the kind of movement they represent and the implications of that movement on the destination society.

In this study, the type of migration is considered a function of risk and opportunity. That is, it should be determined to what extent migrants are driven by risk and to what extent they are driven by opportunity. This risk-opportunity distinction loosely corresponds with Lee's (1966) "Push-Pull thesis." In the context of a stable middle income country, risk does not pertain so much to threats to physical safety, but rather can be defined as the social ills associated with economic risk. That is, the risk of famine, poverty, drought or other losses with respect to assets, earning power, and the ability to meet basic needs. Opportunity-seeking behavior, in contrast, is more driven by the lifestyle differential between point A and point B. That is, it reflects people who are seeking marginal gains to their status quo. In both instances, we are dealing with perceptions, information and bounded rationality (Fischhoff & Kadvany, 2011; Simon, 1982). That is, assessments of risk and opportunity are not driven by acute utility maximization strategies, but by emotions, experience, and information.

Risk and opportunity are considered in this context to be the inverse opposites of one another and should be seen as a continuum, such that individual migrants can be considered a proportional blend of both. Overall, risk-driven migrants are likely to be coming from scarcity and/or otherwise desperate situations. Opportunity-driven migrants presumably have a resource-base which they are seeking to maximize further. Risk-driven migrants may present more of a burden to society than opportunity-driven migrants would likely be responding to new policies by which they are adversely affected, environmental catastrophes such as flooding and drought, or changing market conditions, such as changes in supply and demand.

The distinction between risk and opportunity can be further illustrated through a basic decision tree, utilizing a classic risk calculation, probability times impact (Fenton & Neil 2012), see figure 1. In the option, "Go," we have the probability of the opportunity event, "O" associated with the decision to go,

"g." We multiply that by the anticipated impact of this "opportunity" event that is associated with the decision to go, "g". Quantitatively, this might be the probability of getting a desired job times the wage increase of the offer over previously earned wages. Wage differentials and unemployment have been modeled as primary determinants of migration for decades (Todaro, 1969). However, there are qualitative factors that could also be employed in the model, albeit less conveniently. The migrant may be driven by the "bright lights" ideas of urban excitement and sophistication, but nervous about the risk of losing one's social network. The potential migrant would presumably evaluate this set of choices according to the payoffs that each equation line produces. In the stay option, we have the same equation, only instead of a "g" subscript, we have an "s" to signify the opportunity associated with staying, versus the risk associated with staying. An opportunity event in this instance would be potential resources in the location of origins, such as potential financial gains of being a landowner minus the risk event, which could be the potential for drought or economic failure times the impact that the event might have on the individual or his/her family.



Figure 1 Migration decision-making as a function of risk and opportunity

## Risk

x		High
tunit	High	Risk takers/ Innovators
noda	Low	Crisis movement
õ		

Low

Migration patterns leading to structural change Statistical noise

For the purposes of determining the implications of the risk-driven migration versus opportunitydriven migration, we can start by presupposing the classification presented in Figure 1. The following table is a reduction of what a complete framework would entail. In this table, the risk – opportunity factors for "go" and "stay" are collapsed into one table for simplicity purposes. A full accounting as represented in the decision-tree above involves 4 different factors, leading to 16 different migration types. In the interest of time and space, the model will be simplified and used generically. In the instance of high risk and high opportunity, migrants would be exclusively risk takers and innovators. They would exhibit the personality traits and demographic traits of risk takers. In Expected Utility Theory, these would be individuals with "convex indifference curves" (Starmer, 2000). In the instance where risk is low and opportunity is high, costs of migration are lower and uncertainty is lower. In these instances, massive movements would both emanate from and contribute to structural change. This kind of demographic shift can occur in growing economies. Diffusion models based on network effects could illustrate the relationship between the above-mentioned types of migration in a dynamic fashion. If migration trends follow the renowned S-curve (Rogers, 1995), innovators and risk takers make up the "first movers" until a critical threshold is crossed (Thomas W, 1996). Subsequently, costs of moving are reduced through the network effect and the passage of information or "social remittances" (Levitt, 1998). At this point, large numbers of people move, creating a steep differential until presumably saturation sets in and the marginal gains begin to decrease.

Where risk is high and opportunity is low, we are observing crisis movement. This could be considered refugee situations, driven by conflict, environmental crisis, such as droughts or natural disasters, or economic crises, such as economic collapse, depression, or recession. The key characteristic of these migrant flows is that they are sudden, substantial, and need-based, imposing a potentially significant burden on the destination location. The risk factor in the destination location is therefore linked to the risk factors that the migrant is fleeing. If the migrant is fleeing economic deprivation, then this deprivation will subsequently be transferred to the migrant destinations. The question is whether or not the destinations can absorb the deprivation, or if it will become a burden on the recipient society. This burden would constitute large concentrations of people whose basic needs are not being met, whether it is from under-employment or a strain on public services.

Finally, where risk is low and opportunity is low, the movement in this category constitutes essentially statistical noise. That is, while there will always be random movements from any number of locations to other locations, this kind of movement does not necessarily constitute a trend. As with all statistical analyses, care must be taken to separate random movement from patterned movement associated with structural shifts.

With respect to development, this categorization also makes an important distinction between movement emanating from structural change and crisis migration. Crisis migration is risk-driven, leading to potential population imbalances. Movement emanating from structural change dictates that opportunities reside elsewhere, coinciding with a resource-allocation framework. Transitioning societies no doubt experience a mix of both, which explains the unresolved debate around whether movement should be considered good or bad for development. Developing better criteria to distinguish between these two types of movement assists us in resolving the question and in identifying the point at which movement becomes a risk factor.

## 2.3 CONCLUSION

In sum, movement is conceived as being particularly relevant to development due to the variability it can impose on the implementation of policy. Individuals react to changing environments. The subsequent shifting population distributions can have significant implications on an economy by either providing a more appropriate allocation of labor, or by creating toxic population distributions, leading to overcrowding and strained public resources. The framework provided for making sense of this complex set of circumstances is to differentiate between these two outcomes by more appropriately understanding what constitutes the migrant flow. The risk-opportunity framework can be utilized to facilitate this task, by categorizing migrants according to where they lie on a risk-opportunity continuum.

## 3.0 METHODS, METHODOLOGY AND DATA

In the previous two chapters, the problem under study and the terms of use were defined. Research questions were stated. An exploration of the pre-existing literature was conducted, followed by a presentation of the chosen theoretical framework for the remainder of the study. The current chapter builds on this foundation in order to present and defend what is considered to be the most appropriate methodological approach for examining the research questions. In order to address the complexity and ambiguities discussed in the previous chapters, a mixed methods approach is employed at the macro, meso and micro levels of analysis, incorporating space and time. The logic of each of these components is explored below, followed by a step-by-step explanation of the methods that were employed. The research design was chosen with respect to the framework and assumptions laid out in chapter two, in addition to the inherent methodological and ontological difficulties presented in chapter one.

#### 3.1 METHODOLOGY

### 3.1.1 The Logic of Multi-level analysis

Given the ontological shortcomings illustrated in the first chapter, it is important to examine migration as a multi-level phenomenon. The term "migration" is sometimes reserved exclusively for pattern-shifting behavior. That is, we tend only to think in terms of "migration" when there is a massive influx of people in a destination location that changes its' demographic structure. We do not always think of migration when only one or two people move. This, therefore, distinguishes between individual movement and movement en masse. Individual movement could be randomly distributed with minimal policy implications, therefore constituting statistical noise. Migration, on the other hand, refers to permanent changes in population distribution. A multi-level approach, therefore takes into account the relationship between movement decision-making at the individual level and changing demographics at the macro level. Migration scholars regularly cite this distinction and the importance of multi-level analysis (RichardE Bilsborrow, McDevitt, Kossoudji, & Fuller, 1987; Findley, 1987). Kulu (2004) outlines the logic of multi-level analysis by citing the intellectual progression of migration thinking from early macro-level economics models, to the behavioral movement that considered primarily micro-level decision-making. More recently, the social context has been increasingly implicated, reflecting the meso-level. Kulu states it is a mistake to fixate on one level and makes a pitch for applying multi-level models or utilizing hierarchical data. He subsequently presents such a model based on the case of Estonia. Migration heavy-weight Massey (1990) also presents his model of cumulative causation incorporating the elements of the micro, meso and macro.

Migration scholars are not the only ones to explicate a multi-level approach in understanding social phenomena. Fligstein and McAdam (2012) make the ambitious attempt to explain stability and change through interacting "fields" that occurs at each level of analysis. The theory of emergence also links micro level behavior to pattern shifting behavior, by referring to macro level phenomena as emergent, thus distinguishing them from the micro-level "components and processes from which they arise" (Goldstein, 1999 p1; Holland, 2000). While there are many more scholars and theories to cite that could be deemed relevant, suffice it to say that multi-level approaches have been regularly noted as important for understanding the existence of certain social phenomena.

The following research design addresses these issues by conducting data collection at each level of analysis. The macro level is examined from a quantitative stand point with the commune as the unit of analysis. The meso-level is then analyzed as a case study, using a mix of qualitative and quantitative data, with the household as the unit of analysis. Finally, the micro-level is analyzed qualitatively with the

individual as the unit of analysis. Each section builds on the findings of the previous section with the conclusion chapter reflecting the findings of all of them, thus establishing an emergent phenomenon.

# 3.1.2 The Logic of a Mixed Methods Approach

Corresponding with the multi-level analysis, mixed methods is used as an appropriate method for applied and policy-oriented research (Burch & Heinrich, 2015). The fundamental principle of mixed methods as stated by Clark & Ivankova, (2015) is, "The belief that research methods should be integrated or mixed building on their complementary strengths and non-overlapping weaknesses" (Clark & Ivankova, 2015) p. 3. In this research context, this multi-pronged approach is used for the purposes of exploring new concepts against what is already known. While largely inductive in its objectives, this study's approach does not shy away from deductive model testing and quantification. The research begins with classic model testing as a way of determining the extent to which an explanatory model can explain patterns in Morocco based on already-established relationships. This tool is used for the purposes of identifying the variation unexplained by pre-existing data and knowledge. Since migration in the rural areas is seldom mentioned in the literature and rural areas in general are under-examined, it would not be appropriate to attempt to use quantitative methods to explain movement in the rural areas. Qualitative methods allow for the identification of unanticipated or previously unknown constructs (Strauss & Corbin, 1998) and is thus more appropriate. Qualitative analysis is therefore incorporated into the second two sections of the research, which have the objective of further defining the concept of "rural urbanization." In this second section, qualitative and quantitative are employed together in a cast study in order to identify the overall trend that takes place in the town of Guigou. In the last section, pure qualitative methods are employed as to probe further into the meaning of the data and the concept under investigation. This mixed methods approach is appropriate for this study because it provides "multiple ways of seeing and hearing," (Greene, 2007). Triangulating between the various methods increases the robustness of the results.

## 3.1.3 A Spatial Analysis of Migration

The chosen research design also takes into account the role of space in the analysis of movement. Migration is primarily a geographic phenomenon since space is an inherent part of the definition of migration (the act of moving from one location to another). As such, it should go without saying that a proper geographic component should be incorporated into any migration analysis. There is no shortage of support for this contention in the literature. Ravenstein (1885) cites the importance of geography in his "Laws of Migration." Zelinksy (1971) refers the "geographic axiom" as being "so basic and instinctive as to be seldom articulated." He states that "there is genuine significance in the spatial patterning of physical and social events on and near the surface of the earth." Migration studies is not the only field to emphasize the importance of space. Voss (2007) refers to spatial demography as only a recently reemergent interest in the social sciences, constituting a refinement of spatial analysis tools. The discipline of economics has also incorporated a spatial element to many of its analyses (Aoyama, Murphy, & Hanson, 2010; M. Fujita et al., 2001; Ron & Sunley, 1996). There is no question that space should be accounted for in a study of migration. Typically, data constitute the fundamental constraint in accounting for geographic location. However, the increasing utility of GPS systems have facilitated the collection of geographically referenced data. In the following study, every section incorporates geography to one extent or another. This is done by visually examining the variables and relationships through the use of maps created in ArcGIS in addition to controlling for spatial relationships. While maps are not incorporated into the qualitative study, inquiries tend to fixate on the geographic importance of the destination location.

#### 3.2 METHODS

Four chapters are committed to answering the primary research question: What is the relationship between migration and development in Morocco? The methods and data for each of the four chapters is described briefly in the following sections. The first section presents a historical narrative that examines the conflicting forces of development within which the observed phenomenon takes place. This consists of a broader understanding of the context. Public documents, statistics, informal qualitative interviews and secondary sources are used to formulate a historical progression of migration and development in Morocco. Section two analyzes migration patterns in Morocco at the macro level, utilizing an estimated net migration rate. This analysis includes the identification of "rural urbanization" from the macro perspective. Statistical analyses are used in order to develop the best possible model, given the available data, to explain macro-level movement patterns. The third section begins to explain the concept of rural urbanization by documenting how it contributes to current notions of internal migration. This is done by seeking out the necessary conditions of rural urbanization and quantifying them. To achieve these goals, a case study is chosen of a growing population center in a rural area. The selected case is a town called Guigou, located in the Middle Atlas Mountains. A focus group, informal interviews and a representative survey were conducted in order to elicit a descriptive, quantifiably-backed understanding of why individuals chose to move to Guigou in this particular case. Finally, in section four, follow-up, in-depth qualitative interviews were conducted among the same migrant population as a way of exploring explanations and meaning for the trends observed in the initial survey. This section seeks a more in-depth understanding of what is 'rural urbanization?'

# 3.2.1 Section 1: A Contextual Narrative of Economic Change in Morocco

The first section constitutes an in-depth documentary analysis and qualitative exploration of the context. Government reports, expert analyses, informal interviews, participant observation, newspaper articles and census data are analyzed to form the setting in which the study takes place. Process tracing is the primary method cited for this analysis (George and Bennett, 2005; Bennett and Checkel, 2013). Process tracing is a descriptive method that uses *causal-process observations* as evidence allowing the researcher to construct how an event or phenomenon came about (Collier, 2011). Rather than fixating on one particular variable or aspect related to the phenomenon, process tracing provides the flexibility to connect multiple intervening factors over time. It is used in this case as a way of embedding the subsequent analyses inside a process of societal transformation as to increase the inferential leverage of the research study. Prior to the running of analyses, the relationship between migration and development in Morocco is explored in this descriptive manner, taking into consideration many intervening factors.

# 3.2.2 Section 2: Macro level patterns of migration in Morocco

In this section, analysis is based on the calculation of an estimated net migration rate (ENMR). Migration patterns are explored through the ENMR at the level of the lowest administrative division in Morocco, which includes communes (both urban and rural), municipalities and urban neighborhoods (arrondissements). For simplicity sake, these categories will be collectively referred to as "communes." After a thorough exploration of migration trends over time, a geographically weighted regression is conducted as to identify an appropriate model incorporating the determinants of migration patterns. Currently, there are 1,537 communes in Morocco, accounting for a sufficiently sized N. Data were collected by the Moroccan census bureau, the Haut Commissariat au Plan for the years 1994, 2004 and 2014. A migration rate per commune was estimated by employing the following equation:

Net migration rate = Rate of population change - Rate of Natural Increase

While this is a standard method of analyzing migration patterns, it is an indirect method measuring a residual as opposed to actual migrants. Furthermore, inconsistent information is collected with regard to the rate of natural increase. Typically the rate of natural increase is calculated as the crude birth rate minus the crude death rate. However, in Morocco, these figures are not collected at the level of the commune. The HCP calculates its own natural increase estimate based on the rural and the urban areas. Based on these figures, a rate of natural increase was estimated at the level of the commune.

There are several weaknesses with the ENMR. In order to incur a population reduction, outmigration must exceed the high population growth. Specifying that we are only examining net figures is an important qualification. These data do not examine direct flows. These weaknesses aside, to my knowledge this is the first time that such an indicator has been calculated at the commune level.

3.2.3 Section 3 – Meso-level analysis

In the third section, a case of rural urbanization was identified from examination of the original maps. The case under study was chosen based on local knowledge of the region. Informal interviews identified the town of Guigou as a town that was rapidly increasing on account of a growing economy. A representative survey was conducted in Guigou in order to get a better sense of who was migrating there and why.

<sup>&</sup>lt;sup>4</sup> Calculation of the DV:

ENMR = Rate of Population Increase (RPI) – Rate of Natural Increase (RNI);

RPI = [(Populationt1 – Populationt)/Popt]\*100;

RNI= (Crude births1994 through 2004 - Crude Deaths1994 through 2004)/10

<sup>1</sup> Crude birth and death figures do not exist by commune. What does exist is an estimated crude birth and death rate by thousand inhabitants for rural areas and urban areas.

RNI by commune = (%popRural\*RNIRural)+(%PopUrban\*RNIUrban)

The HCP estimated birth and death rates only existed at select years. The following equation was used to interpolate the missing years. t+(t+1)/(t1-t)Crude birth and death figures do not exist by commune. What does exist is an estimated crude birth and death rate by thousand inhabitants for rural areas and urban areas.

*Initial qualitative research* - A focus group was conducted among second generation migrants in the town of Guigou. Nine men attended the focus group in order to provide primary insights into migration to Guigou. In addition to the focus group, informal interviews were conducted in Guigou with various state employees and inhabitants. From these initial qualitative interviews, a survey questionnaire was drafted and implemented.

*Sampling Strategy-* A multi-stage sampling strategy was used to obtain as close to a representative sample as possible. Given the absence of a sampling frame or any kind of population registry, alternative methods were required in order to provide an equal likelihood of each migrant in Guigou of being in the sample. The target population was migrants, defined as anyone who lives in Guigou more than 6 months out of the year and who has moved there from another location at some point in their lives.

Data collection occurred over the course of three days. Ten trained enumerators set out along a random route determined by randomly selecting a starting point and randomly determining which direction to start out on. They were advised to only contact residential homes, as opposed to businesses, since the household was the unit of analysis. Along their random route, they systematically counted the number of houses according to a pre-defined interval, k, which they collectively agreed upon prior to going into the field. Upon reaching the  $k^{th}$  house, they knocked on subsequent doors until they found a migrant respondent. Any member of the household was allowed to respond. However, only one individual per household was allowed respond, even if the responses varied among members of the household.

The neighborhoods were determined based on qualitative accounts of local officials about the migrant concentrations in the town. In these introductory sessions, a map of Guigou with the different neighborhoods delineated and defined was presented. The enumerators then collectively estimated, based on their local knowledge, what percentage of migrants live in each neighborhood. Once percentages were established, data collection in each neighborhood proceeded until the percentage of the n reflected the percentage of migrants living in the neighborhood, thus following the logic of a stratified sample. For

example, if a neighborhood has been identified as being home to 50% of Guigou's migrants, data collection proceeded until .5\*n responses were collected. This mix of sampling strategies was used in the absence of any record or registry of migrants that could serve as a sampling frame. These initial contacts involved a standard procedure of getting local authorization to perform the study through the *caid*, or local administrator.

*The Survey* - The survey consisted of 12 simple questions asked on a single page (see Appendix B). The objective of keeping the survey short and simple was to easily pass the scrutiny of the authorities. It was also intended to increase the number of potential respondents as much as possible without putting too much burden on both the enumerators and the respondents. This simplification made the questioning conservative, thus, avoiding sensitive topics. Since such activities are rare in the region and thus difficult to explain, this simplification facilitated the inquiries.<sup>5</sup>

Questions regarding their reasons for coming to Guigou were asked in order of importance. The year of their arrival in Guigou in addition to where they moved from was also collected. Demographic information was kept to a minimum in order to avoid sensitive questions and keep the questionnaire as short as possible. Only questions about languages spoken were asked in order to serve as a proxy for education level. Inferences on education level can be made from these answers based on local knowledge. For example, a strong command of French typically indicates higher education levels and a higher social status. Similarly, if the indigenous language, *Shilha* is spoken at home, with no command of Arabic, a minimum education level can be inferred, since the education system is entirely arabicized. An estimated age bracket was also filled out by the enumerator based on observation rather than questioning, since

<sup>&</sup>lt;sup>5</sup> It is important to note political sensitivity in Morocco. While compared to its neighbors, Morocco is relatively free, people are still extremely wary of getting in trouble with the state. All interviews that were performed were therefore cited as anonymous by request of the interviewee. Also the survey was designed as to take into account the degree of suspicion that such a questioning process by an outsider might inspire.

people in this region often do not know their age. Experience has shown that often people can very poorly estimate their own age. Gender was also recorded.

Interviews were conducted with the use of a smartphone app isurvey. GPS coordinates were recorded, however, these were not be connected to their responses as to ensure confidentiality. This information served as a check on the enumerators to ensure they were effectively performing their tasks.

*Sample Size* - The questionnaire continued until 398 responses were collected. Based on the initial quantitative analysis, it was estimated that between 1994 and 2003, approximately, 510 migrants came to Guigou. The population size n was therefore determined by multiplying this figure by 3 time periods, giving us an estimated population size of 1530. For a population of 1500, at a 95% confidence interval, a sample size of 230 is required.

# 3.2.4 Section 4 – Qualitative Follow-up Interviews

Nine qualitative interviews were conducted among willing respondents in order to explore unanswered questions from the survey. These interviews sought out personal narratives to explain a person's decision to move to Guigou. This included perceptions of migration in addition to perceptions held about other experiences in migrating. The interviews were conducted and recorded by two Amazigh - Moroccan interviewers who subsequently translated the transcripts from Arabic/Shilha into English (see Appendix C for the interview questionnaire).

#### 3.3 CONCLUSION

The research design uses mixed methods, taking place at multiple levels of analysis. In the first two sections, the macro perspective is used to track country-wide movement trends. In the third section, the

meso perspective is analyzed in order to identify local trends. In the final section the micro perspective provides individual meaning to the trends. While no research design is perfect. The above set of methods attempts to answer the research question in a manner that addresses the inherent difficulties of migration studies. By utilizing multiple approaches, the strengths and weaknesses of each approach can be weighed against one another, leading to a robust set of conclusions.

## 4.0 A CONTEXTUAL NARRATIVE OF MOROCCO

The following chapter takes a broader perspective on the relationship between migration and development by qualitatively examining economic, political and demographic changes in the Moroccan context over time. The research question driving this section is, "What is the broader, historical context of migration and development in Morocco?" This question is examined through the lens of "continuity and change," thus referencing the broader theoretical framework which builds on the paradox that "entities change in order to stay the same." The context is also examined through the comparative perspective, reflecting on the following questions: How is the context in Morocco unique in the region? How is it similar to its regional neighbors?

The time period in question is roughly 1956 until the present, which corresponds with Morocco's post-colonial era, although occasional references are made to the pre-colonial and colonial era. The chapter begins by discussing political stability in Morocco since independence and the process of modernization that follows. Incorporated into this discussion is how the human geography has subsequently changed throughout this period. Finally, the symptoms of disequilibria and the implications of Arab Spring in the region are discussed. Tracing the evolution of modern Morocco along these broader terms allows dissection of the social and power structures that currently define society. It is within this context that the subsequent observed migration patterns can be understood.

## 4.1 THE PHENOMENON OF MOROCCAN STABILITY

Morocco is known to be a stable country in a region of uncertainty, most particularly since the 2011 Arab Spring protests resulted in regime changes in three out of five North African countries. While Morocco saw significant protests, the regime remained intact, and minimal violence ensued. Even prior to Arab Spring, Morocco managed to steer clear of the destabilizing forces of civil war occurring in neighboring Algeria throughout the better part of the 1990s. While arguably up to 150,000 Algerians died in this period, the violence did not spill across the border. Remnants of this Islamist insurgency remain in the southern Algerian provinces, fueling Islamist insurgencies throughout North and West Africa. Yet Morocco has managed to maintain a relative calm, despite sharing many of the corrosive characteristics that have unsettled these other North African countries. Morocco is unique in this regard. Some of this pattern of stability is explained by the interplay between political culture, geography and demographics. These factors contribute to explaining Moroccan stability, beginning with its political foundations as a constitutional monarchy and the subsequent trajectory of economic growth.

The post-independence period of any country is marked by significant potential for instability. The achievement of independence requires an instantaneous redefinition of political legitimacy in the midst of a vacuum of interests, resources and stakeholders. In the Arab world, this instability was typically resolved through the logic of total domination, resulting in authoritarian regimes across the map, albeit of various classes. In Morocco, this negotiation was particularly turbulent due to the number of actors and cleavages, but its ultimate resolution created a foundation for a multi-party system unmatched in the region.

Like in most other post-colonial contexts, the actors at play during this initial negotiation were largely carry-overs from the French protectorate. Central to this conflict was a showdown between the Independence Party, known as the *Istiqlal*, and the monarch, who at the time was Mohamed V. Both played essential roles in the independence struggle and thus felt they were the rightful bearers of the new regime. The monarch, however, outmaneuvered the *Istiqlal* by effectively recruiting the allegiance of a "newly approved" political party, constituting the Amazigh elites, *Mouvement Populaire*. The Amazigh are the native North Africans, also known as *Berbers* that have traditionally occupied the rural areas. The king also subtly subverted rivaling Istiqlal, by facilitating the break-away of extreme socialists with an approved party called *Union Nationale des Forces Populaires* (UNFP). Politicians were individually given a minimal sphere of influence in exchange for their allegiance, which served as a counterweight against the voices that sought to establish an Arab Republic. Prominent members of various political parties across the board received plots of expropriated land in the rural areas in exchange for their loyalty.

While this strategy of coopting allies and exploiting internal divisions among rivals is typical for the region, in Morocco a diversity of political entities was formalized, complete with a legitimate opposition that in 1998 actually ran the government. This strategy is in contrast with Tunisia where the traditional monarch, known as the Bey, was not as powerful or politically savvy during the postindependence negotiation, nor did he have any symbolic importance in the independence movement. The leader of the Tunisian independence party outmaneuvered the Bey, declaring Tunisia an Arab Republic and a one party state. This framework laid the groundwork for the future inequalities and unrepentant use of police force that were at the heart of the 2011 revolution (Willis, 2012). The initial negotiation that took place in Morocco not only ensured the maintenance of a political equilibrium, but it also staged the trajectory of the development process over the next few decades.

### 4.2 MODERNIZATION AND AGRICULTURAL TRANSFORMATION

Historically speaking, Morocco was mostly rural, agrarian-based and relatively poor. It is estimated that at the turn of the 20<sup>th</sup> century, only 10% of Moroccans lived in the urban areas. These pre-colonial urban centers for the most part constituted the traditional spheres of economic and political influence, which were Fes, Marrakech, Oujda, Tangier, Tetouan, Rabat and Meknes (C. d. E. e. R. Demographiques,

1998). Throughout precolonial history, most of the inhabitants of Morocco occupied the periphery of these prominent cities and engaged in traditional, largely subsistence agriculture. This marks the agrarian legacy of Morocco that is still evident, even in 2015. At the beginning of the French Protectorate, the capital was moved to the coastal city of Rabat, which is in the vicinity of Casablanca. This move signified the launch of the coastal development that has been emphasized ever since (C. d. E. e. R. Demographiques, 1998).

Agricultural transformation began during this same period under French control<sup>6</sup>, leaving a powerful imprint on the rural areas in Morocco. The agricultural motive played a strong role in the colonization of Morocco. The French saw Morocco as having more productive potential than their other North African colonial endeavors, Algeria and Tunisia, and were driven by ambitions of recreating the "granary of Rome" (Swearingen 2014). Development trajectories over the last century can be traced along the lines of what the French considered, "Maroc utile" (useful Morocco), which referred to the fertile plains in the North. And presumably, but not explicitly stated, "Maroc inutile" (useless Morocco), that is, the mountainous areas. This delineation was intended to identify the zones that presented the most economic potential. These were the areas in which France invested. The rest were largely ignored (Swearingen, 2014). These same boundaries more or less continue to exist and have perpetuated stark discrepancies in standards of living between the urban and rural sectors. The mountainous areas, with a harsher terrain and climate, are mostly made up of small-scale subsistence agriculture. They are poorer regions, often inhabited by the Amazigh, becoming ever more dispersed as the population moves higher up in the mountains (C. d. E. e. R. Demographiques, 1998).

The coastal plains with milder climatic conditions represented the stakes in the earlier colonial scrambles to create a viable export agriculture industry that would serve the economic interests of France. However, French administrators quickly came to the realization that the colonial agricultural enterprise in Morocco was not going to succeed without large public expenditures, and thus significant centralization.

<sup>&</sup>lt;sup>6</sup> Morocco was a protectorate of France, not a full-fledged colony. The protectorate lasted from 1912 – 1956.

By and large, the French legacy in the rural sector was the creation of agribusiness. Developing sufficient water resources meant the construction of sizeable dams and the expropriation of the land necessary for cultivation. While lip service was paid towards not undermining native Moroccans, the colonial administration was able to take advantage of relatively loose communal landholding standards to the benefit of colonizers, all the while citing the benefits of private property for development as a justification. In short, French settlers ended up with the best lands with the intention of creating large, irrigated landholdings and rendering Morocco more productive (Swearingen, 2014). It is around this time, approximately the 1940s, that the phenomenon of urbanization began to factor significantly in the demographic distribution of the country (C. D. E. e. D. R. Demographiques, 1999).

Ironically, the system changed very little after Morocco received its independence in 1956. The first king, Mohammed V felt strongly about maintaining ties with the French and therefore did not put forth the symbolic and extreme policies such as expropriation, expulsion and land redistribution that occurred in other countries (see Algeria). French investment remained, as did trade relations. Colonial lands transferred to Moroccans only over the course of many years through various mechanisms, most importantly through the sale of land. However, the king inherited a degree of centralization and control that had never before existed in independent Morocco, involving the regulation of public lands, public works and irrigation projects. The king used some of these lands as tokens to purchase loyalty as he was consolidating his rule. Whatever the mechanism, the result was a landholding class, constituting both urban Arabs and Berber elites that essentially replaced the colonizers (Swearingen, 2014).

Support of the landholding class was crucial for regime legitimacy. In Morocco's first few decades as an independent country, pleasing the landholding class played more of a role for the regime than issues of equity and rural development. Agricultural policy was subsequently marked by *la politique des barrages* (dam policy) and mechanization, to increase the productivity of the agricultural sector via the large landholdings. Over the long-run, the Moroccan regime, in fact, proved successful, more so than the French, in building this export-oriented, industrialized agricultural sector. However, the strategy did

not address the needs of the small-scale farmer. The result has been an increase in the rural-to-urban discrepancies, whereby huge swaths of the mountainous areas are still living in significantly underdeveloped conditions, while the coastal plains are largely mechanized, cultivated areas. This discrepancy is at the heart of the rapid demographic shifts toward the urban centers that occurred in these early years. At independence, 73% of the country's population lived in the rural areas. Currently, only 42% live in the rural areas ("Haut Commissariat au Plan," 2015). It is only in more recent times under the current king, Mohammed VI, enthroned in 1999, that this vision has changed to become more inclusive. It is now more reflective of the reality that a huge portion of the country still lives in an economy based on traditional small-scale agriculture. This shift has corresponded with a decrease in the urbanization rate of change. As depicted in Table 1, while the urbanization trend is ongoing, the rate of change has decreased over time. Furthermore, destinations have diversified, so migrants do not only look to Casablanca for the promise of a better life. Some of the increase in the rural to urban rate comes from small towns being reclassified as urban centers, rather than the centrifugal draw of the large metropolitan centers. This rural urbanization is further explored in subsequent chapters.

Year	% Living in the urban areas	Rate of change by decade
1960	29.2	
1970	34.6	0.184932
1980	41.1	0.187861
1990	48.6	0.182482
2000	54.2	0.115226
2010	57.8	0.066421

#### Table 1: Rate of Urbanization by decade

\*Source: Haut Commissariat au Plan
# 4.2.1 Managing Tradeoffs

The history of policies towards equitable distribution should be viewed through the lens of pragmatism, rather than the mythology of dictatorship. Transitioning economies have to navigate a sensitive tradeoff when developing agricultural policy. There is the demand to feed the country, i.e. food security. This necessity requires the ability to either produce or import cheap food, an objective that can undermine small farmers if no significant government involvement exists. There is also the demand to promote the economy based on trade and comparative advantage. This involves the creation of large landholdings and mega-farms that can export enough to maintain a healthy balance of payments. Finally, there is the need to promote rural development among the poorest of the poor that typically depend on a local agricultural economy. Furthermore, these competing sets of demands tend to occur in the background of the political fight to maintain legitimacy and stability in highly vulnerable arrangements. The rural poor are typically not active constituents in the political process and therefore get strategically sidelined, whether or not political will exists to address their plight. Navigating this transformation is often at the heart of development and modernization and therefore the subject of tradeoffs that affect the process. Significant rural-to-urban discrepancies are common place in middle income countries.

In Morocco, depending on the era, different evolving goals have defined the agricultural policy. In the early post-independence period, efforts were made to assist the small-scale farmer. With the launching of "operation plow" in 1957, Mohamed V himself symbolically rode a tractor through a small tract of land to mobilize peasant support for the initiative intended to modernize the traditional smallscale sector. However, peasant support did not materialize. Due to multiple other confounding factors, the plan fell far short of its expected payoff and was quietly abandoned in 1963 (Swearingen, 2014). In 1962, the first power transition occurred in post-colonial Morocco when Mohamed V died and his son, Hassan II took the throne, constituting a significant test to political legitimacy and stability. The stability imperative thus became a priority taking attention away from rural development. However, over time, excessive urbanization brought the reality of rural poverty and subsequent exodus to the forefront of political initiative, forcing the current regime to find ways in which to promote equitable development.

# 4.2.2 Morocco's Industrialization Model

While agriculture is known to be a sensitive topic in developing economies, it is often undermined by the move towards industrialization, which has been the key to development throughout the post-colonial period. What has differed between countries is the guiding ideology behind this industrialization. Many African countries adopting a socialist or communist orientation engaged in exhaustive state management in the country's economic and social affairs. All African countries to one degree or another were driven by the principles of state-led development. While Morocco was considered to be on the liberal end of this spectrum, their economic policies did not translate to liberalization and privatization as we know it today. Economic development in Morocco was characterized more by a preservation of the status quo, i.e. trade relations with France, rather than the introduction of any radical new approach. This meant that colonial investments were gradually bought by or left to domestic actors, thus essentially replacing the French in the economic hierarchy. This occurred through careful manipulation by the state (Sater, 2010). Therefore, in Morocco the private and the public sector have always been deeply intertwined, both formally and informally. While it is unfair to say that the importance of rural development was completely ignored in the early years after independence, economic policy in Morocco mostly amounted to a continuing expansion of the coastal areas between Rabat and Tangier, particularly around Casablanca.

Casablanca is the largest industrial center in Morocco that evolved out of the protectorate and epitomizes 20<sup>th</sup> economic development in Morocco. Today Casablanca is a far cry from the romantic image that Hollywood bestowed onto it in the hit 1942 Humphry Bogart film. Its colonial past is evident in the urban layout, with hardly any *medina* (pre-colonial city) remaining, its urban core is made up of French-style architecture. The subsequent urban development is relatively disorganized with large slums and expansive industrial centers. While it is currently the center of much of the country's wealth, it seems

also to have no shortage of slums or under-served neighborhoods. Up until the 1970s, there was a rapid concentration of the population in and around Casablanca and its neighboring industrial centers. However, by 1994, it was perceived to have been saturated (C. d. E. e. R. Demographiques, 1998), no longer exerting the gravitational pull it once had. The observed demographic patterns then began to shift towards other industrial centers such as Tangier. Some migrant flows tended towards mid-sized cities, in addition to the evolution of rural urbanization. This becomes apparent in the demographic studies of the time that highlight these shifting patterns (C. D. E. e. D. R. Demographiques, 1999).

## 4.2.3 Morocco, an Arab country?

With a unique history comes a unique ethnic identity. Historically-speaking Morocco is arguably more of an Andalusian-Amazigh country than anything else. The Amazigh, also known as *Berbers* are the indigenous North Africans that have been in Morocco since prehistoric times. Currently, it can be presumed that the majority of Moroccans have at least some Amazigh ancestry. Yet, at independence in 1956, the Sultan declared Arabic the official language of Morocco, consolidating the country and its borders as distinctly Arab. Morocco's Arab origins come from religious migrants from the Arabian Peninsula in the 7<sup>th</sup> century who brought with them Islam. Over time, the Amazigh tribes accepted Islam, but not Arabic. A series of subsequent competing Amazigh and Arab dynasties, at times stretching into current Spain and Portugal, procured for Morocco a distinct Andalusian heritage. The Arab *Sharifian*<sup>7</sup> dynasties ruled Morocco from the 16<sup>th</sup> century to the current day, solidifying its current leadership of Arab descent. Encroachment of the centralized authorities over modern-day Morocco over the course of many centuries has resulted in a gradual *arabization* of the countryside that got a boost after colonization. This process is still underway, although not through any formal mechanism. Currently, officially, 27% still cite Tamazight as their first language, although this number is disputed by Amazigh activists (""26.7 % of Moroccans Speak Tamazight"," 2015). Mostly, however, these pure Amazigh holdouts exist in the

<sup>&</sup>lt;sup>7</sup> The title sharif refers to the descendants of the prophet.

rural landscape, where modernity and centralization have yet to dominate. The shifting ethnic identity of the country therefore has been folded into the process of modernization.

It should be noted that, unlike other countries with significant ethnic divisions, minimal overt tension exists between the Arabs and the Amazigh in contrast to what is experienced in neighboring Algeria.<sup>8</sup> The current King's mother is Amazigh, reflecting a long tradition of intermarriage at the highest levels. Furthermore, The Amazigh party, Mouvement Populaire served as instrumental in garnering the necessary support for the survival of the monarchy. The decision to be an officially Arabic-speaking country was not made to slight Morocco's Amazigh roots as much as it was to deny being "French." The only problem is that Moroccans typically do not speak Arabic very well. Their Arabic dialect is incomprehensible to other Arabic speakers, oftentimes even in neighboring Algeria. There is no written form of their dialect and therefore it cannot be standardized and taught. They must then rely on Modern Standard Arabic in the education system. However, people are typically more comfortable with French, despite the fact that the protectorate has been over longer than it lasted and the national curriculum has been fully Arabicized since 1991 (Redouane, 1998). Despite the efforts to not be French, it is irrefutable that French influence still lingers in the politics, mindset, culture and institutions. The Moroccan elite emulates the French. The political system and the judicial framework are essentially photocopied from the French. Even popular French culture seems to have a direct route to Morocco, more so than influences from the Arab Middle East. Morocco is not, therefore, an exclusively Arab country. Its multiple linguistic layers reflect a more complex ethnic identity that is also in flux. Social class and geography tend to dictate languages spoken. Yet as people move to new locations, and standard education increases, a conformism takes hold.

<sup>&</sup>lt;sup>8</sup> See Bruce Maddy-Wietzmann's book "The Berber Identity and the Challenge to the North African States."

## 4.2.4 Symptoms of disequilibria

In 2003, 12 young men blew themselves up in crowded spaces, killing 33 people, marking the most significant terrorist attacks on Moroccan soil. While the attacks were stated as part of the global jihad, aimed at international and Jewish institutions, Moroccan policy circles rapidly understood them as the consequence of poverty and exploitation by foreign actors. That is, the urban slums were fueled by an explosive population growth and rural-to-urban migration, but underserved by economic progress. The World Bank 2004 Poverty Report for Morocco stated among its observations:

"The need for improved monitoring and understanding of poverty took on heightened urgency in Morocco after May 16, 2003, when the country confronted the shock and horror of multiple terrorist attacks in the city of Casablanca. The eight suicide bombers involved in the attack were homegrown citizens and residents of Morocco living in the squalor conditions of Casablanca slums. The government reacted to this violent wake-up call by both tightening security and intensifying its resolve to reach marginalized and vulnerable groups in rural, periurban and urban areas throughout the country." ("Kingdom of Morocco Poverty Report: Strengthening Policy by Identifying the Geographic Dimension of Poverty," 2004)

The over-burdened cities, emanating from modernization, led to the emergence of slum villages, known as the *bidonvilles* that in the case of the one that housed the suicide bombers, were small cities, with several hundred thousand inhabitants, living in close proximity with extremely limited public infrastructure such as access to electricity and modern plumbing ("Sidi Moumen : La poudriere," 2003). Allegedly, some of the suicide bombers had never left their *bidonville*. The lack of opportunity in these neighborhoods, the abysmal living conditions, the ruthlessness of the authorities, and the obstinacy of the political system that would normally provide individuals with some sense of voice were cited as ingredients of a toxic environment that has been discussed continually ever since.

The presumed linkage between urban poverty and "rural exodus" became a talking point, making rural development an ever more prominent feature on the political map. But the event could just as well be understood as the risk factor that comes along with the tradeoffs of economic growth. An intense concentration of people who have been underserved by the advances in development is likely to create toxic environments. The risk of terrorism is a risk to which much of the world can relate, due to the indiscriminant nature of its victims. However, these environments are even more likely to become hotbeds for drugs, organized crime, and other detrimental illegal activity. However, in a political environment that sustains itself through patronage, those who pay get the most attention. Usually, this does not include the urban slums or the unproductive, traditional rural sector until it spills over into a public problem. The disequilibria inherent to non-egalitarian systems, therefore, proved explosive.

The 2003 terrorist attack was not the only event that brought attention to the problem of equitable distribution. The rural poor drags down health and human development indicators leaving Morocco with a 2013 HDI ranking of an embarrassing 129 out of 188 (UNDP, 2013). Furthermore, as the country achieves increased politically stability, it can more afford to invest in a constituency that, for the most part, has been historically apolitical.<sup>9</sup> The 2003 attacks, however, serve as a symbolic reminder of the vulnerability presented by Morocco's underserved. That vulnerability feeds on the dysfunction and intractability of the current system giving easy kindling to Islamist elements seeking to subvert the current order. The threat is ever-present throughout the region.

In the decade plus since this terrorist attack shook the country, pro-poor policies have become much more prominent. In the last 15 years, a long list of programs oriented towards various forms of redistribution have been implemented, starting even before the terrorist attacks. Morocco signed on to the Millennium Development Goals in 1999. Investment in infrastructure in the rural areas has been remarkable with schools being built, roads being winterized, a massive expansion of water infrastructure, electricity, and even more recently internet capabilities. In 2004, against the will of many conservative elements in society, a new family code was passed, giving women more rights. In 2005, the *Initiative Nationale pour le Developpement Humain* (INDH) was launched, committed to correcting the abysmal human development record in large part through promoting grassroots organization. In 2008, an innovative rural development and agricultural strategy called *Maroc Vert* (Green Morocco) was

<sup>&</sup>lt;sup>9</sup> This is not to say that local politics do not exist. On the contrary, the rural areas have remarkable activity.

implemented that integrated agricultural industrialization strategy with poverty alleviation and the development of a rural economy. This was a policy that has been presented as a model to other African countries.

Despite all the initiatives in recent years, spatial equality is still a distant dream in Morocco. Much of the country still lives in underdeveloped conditions. While inequality is a complex topic and difficult to measure, according to UNDP calculations, Morocco's 2013 Gini coefficient was 40.9, ranking an abysmal 128, the worst of any Arab country. The implementation of all the recent pro-development policies has sparked a significant amount of criticism (which notably would not have been possible two decades earlier). Accusations have been made that these have been empty initiatives solely for the purposes of image control and the development of empty desirable statistics, regardless of whether or not the problem is solved (anonymous 2014). But shortcomings aside, changes have been undeniable. The primary school completion rate has gone from 58% in 2000 to 89% in 2011. Rural electrification has risen to 97% in 2011 from 56% in 2000. The mortality rate for children under 5 dropped from 50 in 2000 to 27 in 2014. Between 2004 and 2011, the adult literacy rate rose from 52% to 67% ("World Development Indicators," 2014). Changes have been visible in the cities as well. Boulevards have been turned into walking parks frequented by Moroccan families. Public parks are being restored and built. Cultural initiatives are being funded. During a tour of Oujda, a major city near the Algerian border, which seemed to turn into a sophisticated city over night, one Moroccan noted, "Now Moroccans wonder, where was all this money before Mohammed VI became king?"

# 4.2.5 Arab Spring through the framework of Continuity and Change

Morocco's uniqueness stood out more recently during the 2011 Arab Spring Revolutions that saw three regime changes out of the five North African countries. Morocco was not one of these countries despite sharing many of the alleged causes leading to the uprisings: high youth unemployment, limited freedom of speech, rampant corruption, and a rising cost of living. But while Morocco shares many of these characteristics, the divergent outcome illustrates how it is also unique in the region. This stability is largely observed to be due to the overwhelming popularity of the current monarch. Disgruntlement aside, it is widely believed that the King is mostly benevolent. Early in his reign, he was even deemed "The King of the Poor" (Howe, 2005), due to his advocacy of development programs. Furthermore, it is widely contended that he is the only entity strong enough to overcome the divisions and disagreements within Moroccan society. He is commonly cited as a "mediator" or "referee," rather than a government head. As illustrated above, this is a reputation that has been earned over decades of careful negotiation between opposing forces pushing for both continuity and change.

Ground zero of the Arab Spring was in a small interior town called Sidi Bouzid, in Tunisia when a fruit vendor, named Mohamed Bouzizi set himself aflame after being subjected to persistent injustice by the authorities with no responsive outlet. Tunisia never shared the diverse geographical and demographic landscape that Morocco has. It is a small, homogenous country with few Amazigh, and a small underutilized agriculture sector relative to its budding, export-oriented coastal industries. Few voices in the agricultural sector represented anything but the prominent landholding elites that were well-served by Tunisia's protectionist food security policies. As such, the interior, including the town of Sidi Bouzid, was largely left out of the modern advancements of the rest of the country. Regional disparities have been highly cited among the grievances that plagued the country ("The Unfinished Revolution: Bringing Opportunity, Good Jobs and Greater Weath to All Tunisians," 2014), leading to the uprising. Rural unrest was commonplace for years leading up to the massive demonstrations.

Mohamed Bouzizi's self-immolation was not likely intended to take down the Ben Ali regime. But the uncompromising system of control with no accountability was both the creation of the regime and the source of Bouzizi's frustration. It was a frustration with which the people widely identified, leading to a rapid contagion that spread to the cities and took down the regime. The irony is that Tunisia has always been the most developed country of North Africa, often presenting itself as an extension of Europe, rather than part of Africa. In contrast to Morocco, Tunisia had a 2013 HDI ranking of 90, placing one spot above China (UNDP, 2013). Yet one can qualitatively observe that while the people evolved, the regime did not. Ousted President Ben Ali and his surrounding officials became complacent in their power, resisting any imperative to change the status quo. In short, the Tunisian regime did not respond to changing circumstances. It engaged in the promotion of modernization and rising incomes, but it did not respond to demands for increased accountability, distribution, and representative government. As the fervor spread to other countries, eventually devolving into ongoing warfare, Algeria and Morocco were the only North African countries that were spared. Protests occurred, but the regimes stayed intact.

In Morocco, upon witnessing the gravity of the protests, the King declared the elaboration of a new constitution, overwhelmingly passed by a national referendum that gave more powers to the leader of the government, the prime minister, and also made him a popularly elected figure. Activists who wanted to see more overt changes were disappointed and once again accused the regime of trafficking in cosmetics. Yet others observed that the swiftness with which the Monarch responded implied that the reforms were shelf-ready. While significant, this was not the first sign of political reform in the country. Upon taking the throne, Mohamed VI declared himself a democrat (Howe, 2005). Prior to his death, the previous king, Hassan II put in place a system of *alternance*, whereby the opposition party led the government in 1998, for the first time in the entire MENA region. Some observers understood this concession as insurance for a peaceful power transition and the preservation of the current regime. All of these initiatives were emblematic of the incremental changes that define Moroccan political culture. It is quite likely that these efforts were what preserved the legitimacy of the monarchy during democratically-minded Arab Spring revolutions.

## 4.3 CONCLUSION

In sum, Moroccan leadership can be described as an old regime, dating back to the mid-17<sup>th</sup> century, making for an entrenched traditional legitimacy. Its perseverance lies in its ability to adapt

incrementally to evolving threats. While many of the changes are surface-level, some are substantial, and it is oftentimes difficult to disaggregate the two. In some ways Morocco is a budding modern Arab-African pseudo-European society. In other ways, it is a cesspool of stagnant parochialism. It is, therefore, a society of contradictions: a democratic monarchy, where donkeys pull satellite dishes and one of the most articulate, outspoken Islamist leaders is a woman.<sup>10</sup> Morocco is unique, but inextricably linked to the world around it.

There is no question that Morocco has been facing significant changes over the years. Many parts of the country are unrecognizable to what it was even 20 years ago much less 70 years ago. Those who fought for independence are seeing a country that is ten times the size of what it used to be with the thrust of the Moroccan economy lying in the urban areas. Decades of emigration have brought in remittances and influences from around the world. But part of "Unique Morocco" is that some of it has appeared not to have changed at all since the Middle Ages. The winding foot paths of the medinas (old cities), travelled only by donkeys and inhabited by traditional craftsmen are authentic. Similarly, the rural areas are still marked by nearly inaccessible villages of non-Arabic speakers, living purely off the land. It is a surreal contrast with the high speed train that is currently being finished; one of the world's largest solar thermal power plants launched in February of 2016; the state-of-the-art system of highways that make U.S. roads look pitiful; and the newly constructed Tangier Port that aims to turn Morocco into a major export center.

Morocco is delicate, though not because it is weak. On the contrary, Morocco is quite strong, maybe even too strong. It is delicate because it is walking a tightrope through heavy winds. Its incremental approach to navigating potential threats has saved it many times throughout the years. The current King has a PhD from France. He is well-versed in the principles of modern governance. He is also not oblivious to the rampant corruption that ill-serves the population and legitimacy of the regime and administration. Change is an imperative, yet change also comes at a huge risk. The King has a significant window of maneuvering because he is widely trusted in the country, currently more so than the average

<sup>&</sup>lt;sup>10</sup> See Nadia Yassine of the Justice and Charity Party.

politician. However, that window could shrink as demands increase. It leaves something to observe in the years to come whether incrementalism can steer the country around the traps that have consumed its neighbors. Will the systemic corruption transition to a functional administration? Will urban unemployment find an outlet? Will the rural areas develop a sustainable economy? The author leans towards optimism, seeing Spain as the example to follow, if by proximity alone.

#### 5.0 MIGRATION IN MOROCCO AT THE MACRO LEVEL

Thus far, the previous chapters have illustrated the case for examining the relationship between migration and development in Morocco. Migration-development theory and the context of Morocco, have been presented in chapters two, three and four. The following chapter proceeds in two sections. First, a broad overview of the ENMR trends that occurred between 1994 and 2014 will be displayed. Second, statistical analysis on a subset of communes will be performed in order to begin answering the question, "What are the determinants of migration in Morocco?" The objective of this chapter is to examine the overall trends and to develop the best statistical model possible, given the available data. Since household level data are only currently available from the 2004 census, the statistical model will only represent the 1994 – 2004 time period.

All of the data come from the Moroccan census bureau, *Haut Commissariat au Plan* (HCP). Discrepancies were found between datasets, mostly with respect to the naming of communes. A fair amount of labor went into resolving those discrepancies needed to merge the datasets. The HCP does not yet provide centrally-located, web-based mechanisms for data delivery. They do, however, provide Excel files upon request.

#### 5.1 OVERALL ENMR TRENDS 1983 - 2014

An estimated net migration rate (ENMR) was calculated in order to compare movement between communes, which are the lowest administrative units in Morocco. The data come from the HCP for the years 1994 and 2014. The analysis years have been chosen due to availability. The Moroccan census is the most comprehensive dataset that reflects population changes in the country. It is performed every ten years. The 2014 census was conducted but not all the data has been publicized. The primary indicator in this analysis, *estimated net migration rate (ENMR)*, was calculated according to the following equation:

Rate of Population Change – Rate of Natural Increase = Net Migration Rate

The HCP estimated their own figures for the rate of natural increase based on whether an area is classified as rural or urban (2014).<sup>11</sup> Since population data also has a percent-rural and a percent-urban classification by commune, an estimated rate of natural increase was possible to calculate.<sup>12</sup>

# 5.1.1 Western Sahara ("Moroccan Sahara")

It is important to note that the boundaries of Morocco are disputed internationally. The southern territory known as either "Western Sahara" or "Moroccan Sahara" is claimed by Morocco, but not internationally

<sup>&</sup>lt;sup>11</sup> Expert interviews have indicated that significant variability exists between communes, both urban and rural with regard to the rate of natural increase. Such variability could throw into question the validity of the ENMR. However, because precise data does not exist in the rural areas, this analysis must operate on the assumption that the variability that does exist will cancel itself out leaving us with a mean that is indeed a valid representation. Furthermore, given that the rate of natural increase does not hugely impact the ENMR, the assumption is that this weakness in the dependent variable does not constitute a fatal flaw.

<sup>&</sup>lt;sup>12</sup> Calculation of the DV:

ENMR = Rate of Population Increase (RPI) – Rate of Natural Increase (RNI);

RPI = [(Populationt1 – Populationt)/Popt]\*100;

RNI= (Crude births1994 through 2004 - Crude Deaths1994 through 2004)/10

<sup>1</sup> Crude birth and death figures do not exist by commune. What does exist is an estimated crude birth and death rate by thousand inhabitants for rural areas and urban areas.

RNI by commune = (%popRural\*RNIRural)+(%PopUrban\*RNIUrban)

The HCP estimated birth and death rates only existed at select years. The following equation was used to interpolate the missing years. t+(t+1)/(t1-t)Crude birth and death figures do not exist by commune. What does exist is an estimated crude birth and death rate by thousand inhabitants for rural areas and urban areas.

recognized. The issue is one of the most politically sensitive issues that exists in Morocco, involving significant censorship. This territory roughly doubles the size of Morocco, making a substantial difference in how country-wide trends are depicted. However, these southern communes are significantly larger than the communes located in Morocco proper. This poses a problem for spatial analysis which typically requires units of analysis to be close in size. Furthermore, the calculated ENMR shows extreme outliers in the Sahara region. The top 14 ENMR values for the years 1994 – 2004 range from 2.07 to 19.64. After excluding these outliers, a relatively normal distribution is observed with a mean of -.0645, a median of -.1152, and a standard deviation of .269. The reason the southern territories are outliers with respect to migration is because significant investments are being made into the region to encourage development. In the most extreme case, the population went from 290 in 1994 to 6,036 in 2004. For these reasons, the southern territories will not be included in the analysis. It is not the author's intention to make any political commentary on the question of the Sahara. For the sake of showing deference to the Moroccan case, a map is shown below that includes the Sahara in figure 2. The visualizations throughout the remainder of the chapter will depict only the areas of Morocco proper that incorporate the major large cities.



Figure 2: Morocco including the disputed territories of the Sahara in the South

# 5.1.2 ENMR 1994 – 2004



#### Figure 3 Est. Net Migration Rate 1994 - 20014

After outliers and missing values were removed, the new N representing communes equals 1524. Figure 3 depicts the ENMR trends from 1994 to 2004. In this time period, we can observe the well-known rural exodus, by noting that large swaths of the interior zones appear to be experiencing a net migration loss. These areas are represented by the various shades of yellow and red. The major cities indicated by a black dot all appear to be in the vicinity of dark green communes which indicate migrant inflows. This, however, is far from the complete story. What we can also observe in this time period are a number of interior zones that are experiencing migrant inflows, represented by the light green communes. To the North is a particularly defined cluster of light green communes in a region that is known for producing hashish. There are also zones in the eastern interior that were experiencing net migration inflows. These zones appear to be the eastern side of the Atlas Mountain ranges, suggesting that this geographical barrier may be a factor in determining the migrant routes.

# 5.1.3 ENMR 2004 – 2014

Following up with these trends in a dynamic fashion, the next census period is also depicted. Figure 4 shows the ENMR for the years 2004 – 2014. The trends in this period show some remarkable differences. We still observe dark green communes in and around the major cities, and in the coastal metropolis zones. However, aside from these known migrant magnets, there appears to be fewer communes experiencing inflows in the western zones, with quite a few communes losing significant amounts of people, represented by dark red. The minimum ENMR value decreased in this time period to -1.14 from -.81 in the earlier period. This indicates that the movement, or more specifically, exodus became more pronounced in this period. The communes in the areas in between the major cities appear to have run consistent losses.



Figure 4 Est. New Migration Rate 2004 - 2014

In contrast, the Eastern interior zones continue to show inexplicable migrant inflows. Again, this appears to correspond with the mountainous barrier which while not visible on this map runs roughly through the center of the country, running south to north. Furthermore, the communes exhibiting migrant inflows do not appear to be the same as those in the previous decade. This could be suggestive of rural mobility as migrants come and go throughout the region. It is only in the past three generations that these populations have become sedentary. With a history of nomadism, it is not a stretch of the imagination to consider that mobility still plays a strong role in the rural existence even while "permanent" settlements are being constructed.

## 5.1.4 The Mountainous Interior

The mountainous region provides one of the explanations for the long-running Moroccan sovereignty, which predates the Ottoman Empire<sup>13</sup> and was maintained up until the French protectorate started in 1912. It is said that the mountains served as a protective barrier from potential invaders. For this reason, all of the traditional centers of power lie toward in or to the Western side of the mountain range. Marrakech and Fes are located inside valleys that provided look-out posts from the surrounding mountain peaks. The eastern areas are not exclusively rural, however. Two major cities lie in this Eastern area, Ouarzazate and Oujda. Ouarzazate is known as the "Hollywood of Morocco." Due to its desert landscape, it is the shooting location for many American-made films that take place in the Middle East. Oujda is a major city on the edge of the border with Algeria. Currently, these borders are officially closed but much of the illicit cross-border activity occurs in this region. There are other smaller cities as well, such as Errachidia, which was historically a desert oasis town. It is not necessary to go into detail about each of them. While these urban zones exist, they show little resemblance to the budding metropolitan centers of the Western coastline.

# 5.2 STATISTICAL MODEL

The subsequent model, while far from perfect, is a start at quantitatively examining the determinants of these macro-level trends. While a fully robust model is not obtained, by exploring geographical relationships between variables, insight is developed that will help in guiding the analysis through the remainder of the chapters.

<sup>&</sup>lt;sup>13</sup> Morocco was never a part of the Ottoman Empire.

The variables were chosen based on what the literature explains in addition to what exploratory regressions and visualizations indicate about linearity between the independent and the dependent variables. Much of the weakness of the model comes from a lack of available data, which is an everpresent reality in middle income countries. This factor tends to limit our options for testing explanatory variables. The alternative is to rely on proxies and estimates based on what is known. As such, the current analysis is not intended to be conclusive, but rather *indicative* or *suggestive* of larger trends that will be further explored in the analyses to follow.

The analysis utilizes basic statistics in addition to spatial statistics in order to incorporate the geographic component to the relationship between migration and development which is cited as an important factor (Goodchild, Anselin, Appelbaum, & Harthorn, 2000; E.G. Ravenstein, 1976). Spatial statistics is a set of tools offered by ArcGIS to address the problem of spatial dependence. One of the assumptions of regression analysis is independence of cases. This can refer to temporal, social or geographical independence. That is, individual data points cannot influence other data points, or else the assumption does not hold. For example, if phenomena are determined by the spread of information and communication, then the impact of human relationships would cancel that assumption, since people would essentially be clustered. Furthermore, if they are grouped geographically, then spatial independence cannot be assumed. In the social realm, this is a particularly difficult assumption to meet given the classic axiom of geography, known as Tobler's first law of geography is, "everything is related to everything else, but near things are more related than distant things" (Tobler, 1970).

Tests of spatial and social dependence are not part of the classical tests for assumptions protocol laid out in basic statistics. In many studies in the social sciences, these assumptions are not met, yet no effort is made to address them. Doing so requires a different kind of data collection. Currently, scholars and newer forms of analyses seek to address these unmet assumptions through various data collection techniques. Social network analysis models human interactions in defining broader patterns (Granovetter, 1973). Spatial statistics begins to address Tobler's law. In this analysis, it is assumed from the outset that migration is a phenomenon that depends largely both on space and social interactions. These assumptions change the analysis possibilities and are thus dealt with in each subsequent analysis chapter. In the current chapter, social dependence is addressed by utilizing the unit of analysis of the commune, which is large enough to transcend individual social interactions. Also, a proxy for information will be used as one of the terms in the model. Spatial dependence is addressed by incorporating a geographically weighted regression.

#### 5.2.1 Variables

*The Dependent Variable* - While the initial maps covered the entire country, the HCP calculates certain household variables differently, according to urban and rural designations. For example, infrastructure according to different criteria in the "urban" versus "rural" areas. The two designations could therefore not be easily aggregated. As such, the N was reduced from 1537 communes, representing the whole country, down to a sample (n) of 308 communes, representing only the "urban" populations by commune. These "urban" populations by commune range from 1,151 inhabitants to just short of 400,000, constituting a significant amount of variation. In any commune determined to have both urban centers and rural centers, the population figures are disaggregated. Therefore, in this analysis, only communes with urban populations are examined. It is important to note, however, that the HCP is not very forthcoming with how they define "urban populations" and their designations are often inconsistent across datasets.

By using a sample of urban centers, the inferences that can be made are adjusted. While the sample is not randomly selected to represent trends throughout the entire country, it does reflect what are considered to be urban spaces, broadly defined, in Morocco. These urban spaces include small population centers throughout the rural areas. This is appropriate given that the particular puzzle at hand is to understand "rural urbanization," that is, small urbanizing centers located in the rural interior that are increasing in population. This reduction simplifies the analysis by examining exclusively the urban areas so we can draw comparisons between the major urban populations in the coastal areas and the small urban

populations in the interior. Including largely uninhabited areas into the analysis introduces a degree of unnecessary variability that could serve to mute the overall trends. Figure 5 depicts a map showing the ENMR in our updated sample. It is worth observing that visually, it appears that most, but not all, of the urban populations in these selected communes appear to be losing people albeit at a low rate. The mean in this sample is .1269, indicating that, overall, this selection of communes is experiencing net inflows. However, the median is .03 and the standard deviation is .387 which indicates a slight positive skew.



Figure 5 Est. Net Migration Rate for "rural" areas

Due to the positive skew in the distribution of the ENMR, a log transformation was performed on the dependent variable creating a better distribution. Figure 6 provides a visualization of the distribution of the variable prior to be transformed in addition to after its transformation.



Figure 6: (Left) Distribution of the ENMR; (Right) Distribution of the logged ENMR

#### 5.2.2 The Independent Variables

The next task was to identify the most appropriate independent variables for the regression. Before discussing the variables that were chosen, it is important also to discuss the variables that were dropped. Commune level data on household characteristics was obtained with the expectation that various development indicators would serve as effective determinants for explaining patterns. While linear relationships between the ENMR and development indicators no doubt existed and were relatively well-defined, the effect sizes were so small that they did not contribute to building the overall model. Among these excluded variables were: paved roads, poverty rate, education indicators, inequality, and household amenities, such as running water and electricity. This result was surprising, given the literature that lays such an emphasis on movement as a function of development. Many of these variables were cited throughout the literature review as important determinants of migration patterns. These initial explorations indicate that these variables are related to the migration phenomenon but not necessarily important determinants.

Inclusions and exclusions were also made on account of an exploratory regression performed in ArcGIS. Exploratory regressions are a statistical function that analyzes the relationships between many different potential variables and models and produces an output with the results of all the different models for comparison. It also provides a final count of the number of passing models. It is a recommended step in preparation for running spatial statistics.

The most appropriate model that the exploratory regression identified included the variables: 'Public infrastructure and social services per 1000 inhabitants,' 'percent private property,' 'Housing less than 10 years old,' 'Percent households with satellite dishes.' While other potential variable combinations were also identified, some did not make sense, nor were they grounded in the literature. The above listed variables are those that will be used throughout the remainder of the chapter. Since each variable is intended to serve as a proxy for larger concepts, each one will be described below. Furthermore, conclusions about causality are not drawn from this model. Rather, correlations are simply observed and speculated upon.

'*Public infrastructure and social services per 1000 inhabitants*'- The infrastructure variable was calculated from a separate HCP dataset called '*equipements*' that listed the number of schools, health centers and other public utilities by commune.<sup>14</sup> These numbers were summed, then divided by the population, to obtain a per capita value, and subsequently multiplied by 1,000, in order to obtain a more reasonable scale. After missing values were excluded, the n for this variable was 308 communes. The values are relatively normally distributed with a slight potential positive skew. The logic behind using this variable could go in two ways. In one explanation, people move in order to obtain better social services.

<sup>&</sup>lt;sup>14</sup> The variable was created using all of the items included in the HCP infrastructure dataset entitled, "Données communales- Résultats de l'enquête sur les équipements communaux (Milieu Urbain)." Complete list of included items: Post office, Slaughterhouse, Gas station, Driving school, Bank, Insurance agency, Religious institution, private school, public primary school, private middle school, public middle school, private high school, public high school, dispensary, health center, hospital, clinics, doctor specialists, doctor general practitioners, orthodontists, blood laboratory, pharmacy, library, youth center, organizational plan, development plan, industrial zone, tourist zone, network of sewers.

Therefore, we would expect a positive relationship to exist between this variable and the ENMR. However, we could also consider that the places with the most incoming migrants could have the higher strains on the local infrastructure and social services.

'*Percent private property*' - This variable represents the percentage of people that own their homes. While property is not a factor that is cited in the current literature review, it is known to be an important factor in determining behavioral outcomes. Several case studies have been conducted examining the impact of property rights on migration patterns around the globe. In this instance, it is logical that property would have an impact on movement, but such an impact could be multifaceted, leading to coinciding trends and counter-trends. Initial exploration indicates that the relationship between the ENMR and property ownership appears very linear. However, in and of itself, this correlation is quite weak. The Pearson correlation was -.266 with a p-value of .000. The negative relationship implies that the higher the ENMR, the lower the property ownership. One interpretation of this could be that ownership quells mobility.

'Housing less than 10 years old' - This variable exhibited a positive linear trend with a Pearson correlation of .499 and a p-value of .000. The relationship is evidently strong and it echoes somewhat the revelation of the property rights variable. It indicates that the higher the amount of new housing, the higher the in-migration. This is almost a self-evident relationship. It makes sense that an influx of people corresponds with new construction. What we do not know is the direction of the relationship. Do people move into areas and then build new homes or do they move into an area because new construction is available? It is important to note, that the construction industry is unique in Morocco. As in other developing contexts, the sector is often used as a tool for stimulating development. Massive contracts have been negotiated and delivered on the part of the government with the stated objective of eliminating

slums. However, corruption has also led to over-exploitation of these contracts. The result appears to be endless rows of unfinished and/or empty new housing in many towns and cities. The yet bigger puzzle in the industry lies in the fact that housing prices remain stable, possibly even inflated, despite its excess in the market. An informal discussion with an economist at Al Akhawayn University indicated that data does not exist to explore this phenomenon, and that thus far, there are no logical economics-based explanations for this. This anecdote is important only to suggest that construction is a unique sector that due to its role in the black market may not follow normal market rules. Despite its strong relationship with the ENMR, it may be harder to fully interpret.

'*Percent households with satellite dishes*' - The presence of satellite dishes could be interpreted in various ways. It could be seen as a sign of income. It could also be seen as a source of information. Assuming that these two explanations coincide, they will be considered equally. The Pearson correlation between ENMR and Satellites is .226, with a p-value of .000, and a distinctly visible positive linear relationship. Because information and perception are known to be a strong determinant in dictating migration patterns, it is not surprising that the more exposure individuals have to the world beyond their own home, the more likely they may be to move. Similarly, higher income would likely make such a move more possible.

#### 5.3 INITIAL OLS REGRESSION

5.3.1 Results

The model being tested with the OLS Regression is the following:

 $ENMR = b_0 + b_1 Property + b_2 New Housing + b_3 Satellite + b_4 Public Resources + e$ 

The overall model summary results indicate a relatively strong model (see table 1). An adjusted R-squared of 62% indicates that a majority of the variance is explained by the model. However, the Koenker (BP) statistic is significant, indicating that regional variation exists. For this reason, the stricter Joint Wald Statistic will be used as the overall test of model significance, and when interpreting the coefficients, we will use the "Robust Probabilities." The Joint Wald Statistic is also statistically significant showing that the overall model works. However, a significant Jarque Bera test, indicates that the error term is NOT normally distributed, which throws into question the results of the analysis. It should be noted however that the Jarque Bera test is particularly strict. To explore this problem further, I will spend significant more time examining the residuals.

Table 1: Summary results for OLS regression

DV	ENMR_lg10	Joint Wald Statistic	.000000*
Ν	308	Koenker (BP) p-value	.000137*
Adj. R-Squared	.615641	Jarque-Bera Statistic	.000000*

When examining the coefficients (see table 2), it appears that "satellite" and "public resources" are not in fact significant in this particular model. They will be left in the model, but the coefficients will not be thoroughly discussed. "New housing" proves to have the strongest effect and a positive relationship. As expected, "Property ownership" has a negative relationship, suggesting that property ownership inhibits movement.

#### Table 2: Coefficients for OLS Regression

Variable	Coefficient	StdError	t-statistic	Probability[b]	Robust_pr[b]	VIF
Intercept	005479	.011623	471408	.637700	.302343	
Property	00297	.000197	-6.587519	.000000*	.000002*	1.487999
"New	.007990	.000389	20.554129	.000000*	.000000*	1.515646

Housing"						
Satellite	004804	.002178	-2.205791	.028136*	.050858	1.861895
Public	003727	.002669	-1.396255	.163671	.116263	1.238665
Resources						

Since, we know that there is a distinct possibility that the residuals are not normally distributed, I examined them as a histogram (see figure 7). While the distribution appeared relatively normal, few minor outliers were present, which likely explains the significant Jarque Bera test.



**Figure 7: Distribution of the residuals** 

Next, I visualized the residuals as a scatterplot (see figure 8), which suggested homogeneity of

variance.



Figure 8: Scatterplot of the residuals for the OLS

The next test was to examine for spatial autocorrelation of the residuals. Moran's I test looks for geographic clustering of the residuals. A quick examination of a map (see figure 9) of the residuals suggests possible clustering in the middle. The formal test of Spatial Autocorrelation Moran's I was used to test for spatial clustering. A p-value of .000038 was the result, indicating that spatial clustering does indeed exist.



Figure 9: Mapped residuals of the OLS

## 5.4 GEOGRAPHICALLY WEIGHTED REGRESSION (GWR)

Given the regional variation identified by Keonker's B and the spatial autocorrelation that was detected, the next step of the analysis is to perform a geographically weighted regression (GWR). The GWR will let us know where the model fits and where it does not. GWR was developed as a way of incorporating space into the regression model. A geographically weighted regression uses the following equation:

#### $ENMR = b_0 + b_{1i}Property + b_{2i}NewHousing + b_{3i}Satellite + b_{4i}PublicResources + e_i$

The subscript 'i' signifies that every data point is given a spatial reference. The importance of geography in a given model can be explored by comparing the adjusted R-squared from the initial OLS with that of the GWR. The amount with which it increases constitutes the variation explained by geography. We can

also get a sense of the spatial relationships by mapping the residuals of the model. This provides us with a geographic overview of where the model fits and where it does not fit. Finally, we can interpret where the variables are important to the model and where they are not, thus determining localized regression equations. In the context of policymaking, GWR provides a useful tool for making predictions that are sensitive to regional variation.

# 5.4.1 GWR Output

The results of the GWR are simpler than those of OLS regressions. For this reason, it is important to always begin with an OLS as to perform robustness checks before running the model with a GWR. The new adjusted R-squared was .72. It therefore increased by .11, which is a substantial amount. In order to make sense of this increase, we must first examine the spatial distribution of the adjusted R-squared (see figure 10). What we can observe that ArcGIS might not necessarily know is that the adjusted R-squared appears to be significantly higher in the coastal areas. The interior on the other hand, appears to be predominantly blue, marked by significantly lower variation explained by the model. This is a firm indication that different processes likely affect migration based on the geographic location, dividing the interior and the coastal areas. A logical breakdown of this distinction would be along the lines of what is articulated in the previous chapter as "Maroc Utile" and "Maroc Inutile." This geographic barrier separates the fertile, flat coastal areas that have received preferential treatment in development investments since the colonial era. The interior, characterized by mountainous dry landscape remains the more impoverished under-developed regions of the country. It is reasonable to speculate that the regional variation identified by the GWR model is related to these socio-geographic differences. As such, migration in the interior will be further explored in the next two chapters with the objective of understanding what distinguishes the two with respect to migration patterns.



Figure 10: Spatial distribution of the adjusted R-squared

When examining the geographic distribution of the coefficients for individual variables, we observe similar trends. For example, when examining "property ownership," the coefficients range from negative values to positive values in a pattern that appears to be along similar geographic tendencies as the adjusted R-squared (see figure 11). Although visibility is constrained, given the small size of the map, it is observed that in the coastal, urban areas, private property ownership has a positive relationship, meaning that the higher the property ownership, the higher the in-migration. In the interior regions, a negative relationship is observed meaning that the higher the property ownership the property owned, the lower the in-migration. The data, unfortunately, do not tell us why these relationships exist. However, one can speculate that other region-specific factors or confounding variables are responsible for this odd trend. For example, it is a possibility that higher property values in the interior brought on by a decrease in supply inhibit migrant inflows. This explanation is logical and it implies that property values would have been a more appropriate variable had it been available. However, in the city, the relationship reverses.

This could be explained by an influx of migrants purchasing houses. Again, given the available data we cannot know for sure. Were these explanations to be correct, the main implication would be that migrants to the coastal areas constitute a different population then migrants to the interior. What can be concluded, however, is that regional variation is an important factor for which to control. Further exploration is necessary to understand fully these results.



Figure 11: Property ownership coefficient

The other variable that proved significant in the model was "new housing" (see figure 12). When this coefficient was mapped, a somewhat different trend is observed. The areas where the coefficient was weaker (the blue areas) appear to be in the southern interior and on the primary coastal areas, mainly Rabat, Casablanca and Tangier. The southern interior is where the High Atlas Mountain range lies, and it mostly is home to some of the most isolated villages in the country. The areas where the variable had more of an impact (meaning that the more new housing existed, the higher the in-migration) were the northern interior and the most southern regions. To interpret the meaning effectively from these results, more research is needed since the relationships are not readily obvious. It is once again, most likely the case that multiple different processes are occurring at the same time. Rabat and Casablanca are old industrial and administrative centers that have become more or less saturated over the years. It is possible that the construction boom is not having as big an impact on these areas as it is in some of the growing mid-sized cities that lie in the metropolitan periphery and in the northern zones. Similarly, new construction is likely pretty limited in the impoverished southern interior, which would not lead to many population changes.



Figure 12: Spatial distribution of the "New Housing" coefficient

### 5.4.2 Limitations

Primarily, the largest weakness of this analysis is that of the data. First, the ENMR is a residual rather than a direct count of migrants. However, it is contended that from the policy perspective, changes in population distribution are an adequate proxy because it is the policy-relevant manifestation of migration patterns. With that said, there is always the risk that by calculating a *net* migration rate, we are not observing the actual inflows and outflows, and thus cannot distinguish between a commune that has zero movement activity and a commune that has a net zero migration rate. The literature reports that migration constitutes streams and counter-streams that would ultimately aggregate to create either a net exodus or a net influx (Sjaastad, 1962). Furthermore, a factor to keep in mind regarding this variable is that the scale ranges from a net exodus, depicted by negative values, to a net influx, depicted by positive values. While these are arguably two different events, they are inherently related. The same people will move out of one area and move into another area. The variable, therefore, does not capture these nuances, but only an overall trend.

Furthermore, the natural increase is usually calculated by subtracting deaths from births in a given year. However, these data are not available in Morocco, at the level of the commune. Due to underreporting of births and deaths in the rural areas, figures would be suspect if they were to exist.

While the data are imperfect, currently no other datasets exist that estimate internal migration patterns at the level of the commune. Therefore, the intent is to capture trends rather than report exact figures. Based on the results, there is no reason to suspect that the calculated variables do not accurately depict the stated migration trends as known patterns are observed in the data. Furthermore because the equation is relatively simple, the possibility of employing cross-country comparisons using this method presents itself.

#### 5.5 CONCLUSION

The chapter concludes with a discussion of what is deemed to be an imperfect model, that none-the-less gets closer to understanding broader trends. While our model was a strong predictor of migration patterns, there appeared to be irregular variation in the residuals suggesting an incomplete picture. Regardless, it is worthwhile to note that the two significant variables accounting for the high adjusted R-squared were "new construction" and "property ownership." Even though no multicollinearity was detected, it is possible that these two variables are linked to the same phenomenon, which is the relationship between land tenure/housing and movement patterns. Even as such, when accounting for spatial variation, our logical explanations for the observed trends became much more complicated and less obvious. Therefore, more exploration would be necessary to make any determinations about the relationship between land/tenure/housing and migration.

The most illuminating result of the above analysis is the role that geography likely plays in determining migration patterns. The significant variation observed between the interior and the coastal areas suggests that different factors may be at play that correspond to geographic variations. As discussed earlier, these two regions have experienced starkly different development trajectories, with the interior lagging significantly behind the coastal areas in all development indicators. The macro-level data analysis suggests that different types of migration correspond to these different geographical zones. Therefore, in order to develop comprehensive models of the relationship between development and migration, this variation needs to be accounted for. While there is plenty of pre-existing literature discussing movement to the industrial cores that lie largely in the coastal areas, little examination has been undertaken into movement patterns within the interior. The systems models, neoclassical models and behavioralist models discussed in the literature review deal with rural to urban migration, not accounting for any geographical divide. The one set of literature that may be useful is the New Economics of Labor Migration. This literature depicts movement as a household insurance mechanism. It also cites relative deprivation as a

driving factor. While inequality was rejected early on as a potential determinant, relative positioning is a factor that will be discussed further in the chapters to come. The remaining chapters will subsequently examine this question by trying to determine how migration in the interior is qualitatively different from the metropolitanization trends observed throughout the developing world.
#### 6.0 MOVEMENT IN THE RURAL AREAS

In the previous chapters, the relationship between migration and development was reflected in the following ways. Chapter 4 noted the tenuous relationship between economic development, structural change, and agricultural transformation. Chapter 5 illustrated spatial discrepancies in migration patterns with respect to the mountainous interior and the coastal industrialized zones. In the next chapter, a closer look will be given to migration in the interior zones to understand why small towns in the rural areas might be experiencing migrant inflows. The next objective is to begin examining "rural urbanization" as a concept. It is evident from the geographical depiction of the ENMR that certain small rural zones experience migrant inflows. However, it is not enough to know that population expansion in some non-metropolitan areas exists. To understand what distinguishes movement in the interior zones, we must know why rural urbanization exists.

The question is therefore asked, "What are the determinants of movement to a rural hub?" To answer this question, a case study of an example of a rural hub was chosen based on exploratory informal qualitative interviews. The town of Guigou was selected as it was identified locally as a migrant destination. Census data also reveal an increasing population in the commune of Guigou. A representative survey was conducted among migrant populations in Guigou with the aim of identifying the determinants of rural urbanization. The chapter proceeds by, first, providing sufficient background information on Guigou. Second, the results of the survey are explored. Third, a typology is derived using statistical analysis.

## 6.1 THE TOWN OF GUIGOU

The route from Fes to Guigou has long stretches of road through the region of Fes-Boulemane where scarcely a tree is in sight. A cold winter brings regular snow fall, giving a moonlike feel to the winter landscape. It is understandable why this region is considered part of *Maroc Inutile*. It is rocky, mountainous, gets an average of 44.5 mm<sup>15</sup> of rain per year and harbors all the signs of encroaching desertification: drying riverbeds, frequent floods and only the hardiest of vegetation. Despite these factors, the region is home to nearly 200,000 people as of 2014<sup>16</sup>, many of whom have ancestral roots in the region going back further than recorded history. The population in the region overall is no doubt experiencing an exodus, but the exodus is roughly equivalent to its natural rates of increase, making the population more or less stable as of 2014. The question of what makes people leave?' To this day, the region is littered with villages that are almost entirely cut off from the modern world, inaccessible by roads, lacking any modern infrastructure such as electricity and running water, much less schools and clinics. There are no easy answers for development of the region, which is why the policy history has been made up a mixture of neglect and failed/aborted development initiatives.

The town of Guigou is located in a plateau inside a crater of an ancient volcano, the soil is therefore known to be rich in minerals, making the region ideal for agriculture. Regionally, the town is widely recognized as a migrant destination due to its ideal conditions for agriculture. Initial focus group interview statements claimed that every month, four new families come to Guigou. It has grown from 5,448 in 1982 to 10,129 in 2014, which is in stark contrast with the stable population figures for the region. Adjusting for an estimated natural growth rate, net migration inflows for 2004 to 2014 are likely to be approximately .1475. Urban population rates were not tabulated in the commune of Guigou prior to 2004, therefore we cannot unfortunately calculate an ENMR prior to 2004. For perspective, the national

<sup>&</sup>lt;sup>15</sup> http://www.climatedata.eu/climate.php?loc=moxx0003&lang=en

<sup>&</sup>lt;sup>16</sup> Haut Commissariat au Plan 2014

average for this same period was .027. Focus group interviews with second generation migrants cited growing problems between different migrant groups and a lack of respect for a cohesive culture of Guigou. In the fall of 2014, land disputes between neighboring migrant groups turned violent, requiring the Moroccan equivalent of the National Guard to step in and restore order.

As of 2014, the town of Guigou had 10,129 people living it, classifying it as a small urban center. As of 2000, the commune had two public elementary schools, one middle school, one health center, and 1 doctor. Since infrastructure and social services data have not been released since 2000, it is hard to get an update. However, inhabitants state that one high school exists, in addition to two middle schools and five elementary schools. In 2004, the commune as a whole had a human development index of .47, compared to the country-wide HDI of .53. In 2013, ninety-three percent were purportedly of Amazigh descent. Only .5% had a college level education and 53% were illiterate. These figures contrast with the countrywide figures of 2.4% and 30% respectively for the same year.

#### 6.1.1 Survey

After implementing a series of informal interviews in the region in addition to a formal focus group, a representative survey was conducted among the migrant population of Guigou. The following close-ended questions were asked:

- 1. Do you live here more than 6 months out of the year?
- 2. What year did you come to Guigou?
- 3. Where did you come from?
- 4. How did you come?
- 5. Why did you come to Guigou?
- 6. Of the answers that you checked, please rank the top 3 in the order of importance.
- 7. Please check all of the languages that you speak well enough that you can discuss complex topics such as politics, culture or religion.
- 8. Which of these languages do you speak at home?
- 9. Which of these languages do or did your father grow up speaking?
- 10. Which of these languages did your mother grow up speaking?
- 11. (estimated age)
- 12. (observed gender)

The survey was intended to be short and simple as to avoid complications with the authorities in addition to navigating a distrustful disposition of the intended population towards outsiders. Informal interviews and focus groups served to provide all the potential responses to each question, as to ensure close ended questions and to simplify the analysis. Income questions were not asked because they could be deemed sensitive. A proxy for income was inquired about within the focus group, however, the overall response was that there is no way to observe income in the region because it is fairly common for relatively wealthy people to live in what outsiders would observe to be poor conditions. Therefore, the closest indicator in this dataset involves languages spoken, which is typically a reflection of education and ethnicity. Education and ethnicity can also be assumed to be loosely correlated with income. However, since this correlation is not sure, income is only considered as a side note.

A training session was conducted among members of a local organization, many of whom were enumerators for the Moroccan National Census conducted in 2014. The enumerators were exclusively male and were all residents of Guigou. Almost all were bilingual in Amazigh and Arabic. The training consisted of an explanation of the study, including the previous research that had been performed including the maps presented in the fifth chapter and the results of the informal interviews. Next an explanation of the logic of sampling was provided. Finally, description of the current survey was provided, including the objectives of the survey, the protocol and sampling procedures. The enumerators were provided handheld devices. They spent the evening prior running the survey as practice. These practice-runs in addition to their input served as a pre-test for the survey. Decisions about stratification were made qualitatively as a group since minimal data exist on the demographic distribution in the town.

Reliability concerns lie in moral hazard with regard to the administration of the survey. Enumerators used handheld devices that were tracked online as they were conducting the questionnaires. While oversight was maintained as much as possible, there is no way to ensure that survey implementers followed the prescribed protocol for deriving a random sample. Since the enumerators were all residents of Guigou, they could have simply interviewed people they knew without our knowing. Failure to follow the protocol would weaken the representativeness of the survey. To offset this risk, an n of 398 was collected, with a confidence level of 95% corresponding to a confidence interval of 4.22. The migrant population in Guigou is estimated to be approximately 1,510. Also, given that all of the enumerators were male, this could have led to disproportionate number of male respondents, given that women would not be as willing to answer questions at the door with a strange man.

#### 6.2 DESCRIPTIVE STATISTICS

Descriptive statistics and chi-square analysis are used to understand the data, given that nearly all of the variables are categorical in nature. The analysis examines the following variables in a crosstab fashion: reasons for moving to Guigou, gender, origins (population size, distance from Guigou), ethnicity, age, decade of arrival and approximate level of education as a way of getting a sense of the relationships and trends. They are subsequently used to get a sense of the data before running a cluster analysis in order to derive a typology.

## 6.2.1 Aggregated trends

In this first section, the data and trends are evaluated together. The first question, "do you live here more than 6 months out of the year" served to filter out seasonal migrants. All of the respondents answered "yes" indicating adequate screening procedures for the interview.

Questions 2 and 3 will be visited later in the chapter. Question 4 was, "how did you come to Guigou?" This was a close-ended question with the following choices as responses:

- With multiple families
- With my immediate family
- With my extended family
- With multiple non-family members
- By myself

Seventy-five percent reported coming as a household, ("with my immediate family"). Sixteen percent reported having come by themselves, while only 8% reported having come with extended family members. This outcome echoes the New Economics of Labor Migration thesis that migration decisions are made as a household. It also challenges notions that migrants are typically young individuals with higher risk thresholds. The unit of analysis in this study is thus reaffirmed to be the household. This result implicitly refers back to earlier discussions in chapters one, two and three about what should be assumed with respect to the type of migration.

*Most commonly cited reasons for coming to Guigou* - The principal questions of the survey were #5 and #6, ("why did you come to Guigou?" And, "Of the answers that you checked, please rank the top 3 in the order of importance," respectively). Respondents were asked to select all that apply. The frequency of selection of items follows in table 3.

#### Table 3: Reasons for moving to Guigou

Reason for moving to Guigou	Frequency	Percent of total
To engage in non-agricultural commerce	166	42%
Because somebody I knew or am related to came here	135	34%
To work in agriculture	133	33%
Because the land here is cheap	127	32%
Because Guigou has better schools, clinics or other social services	105	26%
Other	67	17%
Because I was assigned to work here as a government employee.	58	15%
I don't know	3	1%

The most prominent response was to engage in non-agricultural commerce. This was followed by three options of roughly equivalent significance: 'because somebody I knew or am related to came here,' 'to work in agriculture,' and 'because the land is cheap.' This initial response supports preliminary qualitative interviews suggesting that agriculture was a prominent reason, yet at the same time challenges this assertion by suggesting that non-agricultural commerce and the role of networks are yet more important reasons. It is important to note that "non-agricultural commerce" could include the informal market in addition to the formal market. Because inquiring about black market activity would be considered a sensitive question, it could not be included in the questionnaire, therefore these two categories cannot be disaggregated.

## 6.2.2 Potential for missing explanations

Also of interest are the residual categories, "I don't know" and "other." The "I don't know" category will be subsequently disregarded. "I don't know" was included as a result of focus group responses, but did not factor very heavily into the survey. The "other" category is a potential threat to validity as it can suggest missing explanations. The question is whether or not there are 'other' migration explanations that were left out of the questionnaire, or does the category simply consist of randomly distributed noise? To make this determination, potential 'other' explanations are considered below.

One possible explanation and potential weakness of the survey is that two categories were left out of the questionnaire due to human error. The first is the category of marriage. That is, women who come to Guigou because they married someone in Guigou.<sup>17</sup> There is literature identifying this factor as a prominent determinant of rural to rural migration (Bhattacharya, 2000). While the category should have been included in the questionnaire, it was overlooked due to a gender bias in the focus group and initial interviews. Women in Guigou are difficult to reach as they tend not to lead public lives. Those who do are typically foreigners and are not representative of women in the area. This is an undeniable challenge of working in the region and a weakness of the survey. However, the responses to question #3, "How did you come to Guigou" indicate that the overwhelming majority of migrants reported coming as households, not individuals. Seventy-five percent of respondents (300 respondents) reported having come as a household, while only 16% (64 respondents) percent reported having come by themselves. Chapter 2 laid out the logic of using the household as the unit of analysis as opposed to the individual. This is an insight that comes out of the NELM literature that identifies the decision to migrate as a household decision (Oded Stark & Bloom, 1985). This factor mutes the importance of the gender variable since a household is presumed to include both males and females. In the case of the migrant household, marriage would not then be considered the primary reason for moving. The reason that brought the entire

<sup>&</sup>lt;sup>17</sup> Local tradition dictates that the woman moves to the man's home upon, not vice versa.

household to Guigou would subsequently be identified as the primary reason. Furthermore, women do not appear to be more represented in the "other" category than men, supporting the notion that marriage is not a significant determinant inadvertently left out of the survey. Finally, correlations revealed that gender did not have a significant relationship with any other explanatory variable. Gender, therefore, is mostly disregarded throughout the remainder of the analysis.

Another human error that was identified was that the response "to retire" was inadvertently eliminated during the English – Arabic translation. This group makes up a portion of what is also known as "return migrants," whereby an individual or family will have spent a substantial amount of their life, possibly their entire life, in the urban centers, only to return to their ancestral village for retirement. In Morocco, a heavy emphasis is placed on ancestral origins, making connections to ancestral villages stronger. Given the literature, this response is potentially important and may make up some of the "other" category. In order to redress this problem, special attention was given to the category of migrants who are of advanced age, yet came relatively recently. This group can be assumed to be made up of retirees. However, the majority of responses reflect the migration to Guigou is largely made up of people between the ages of 18 - 60, that is, non-retirement age, having come in the last three decades. The largest bloc is represented by the bracket 41 - 50, having come over the last three decades.

Only eight respondents over the age of 60 reported having come to Guigou in the last decade. Eighteen respondents reported having come over the last two decades. This figure casts the net for retirees very wide, yet only amounts to about 5% of the respondents. This suggests that retirement or return migration is not an important determinant of migration to Guigou, but possibly something to control for. However, it should be noted that age was not inquired directly, but observed in the questionnaire which leaves room for reliability issues. Many older people in the region do not know their age because recordkeeping of births has only relatively recently been introduced. Therefore, the interpretation of this variable should be considered only in terms of the broad trends.

#### 6.2.3 Ranked reasons for coming to Guigou

The next step is to examine these responses with respect to question #6, "Of the answers that you checked, please rank the top 3 in the order of importance." Weights of 3, 2 and 1 were applied to each of the responses when they were ranked in the first, second and third positions, respectively. The cumulated weights change the outcomes slightly, provided in the following table, listed according to their level of importance.

#### **Table 4: Reasons for moving to Guigou**

	Rank 1	Rank 2	Rank 3	Total
	Weight = 3	Weight = 2	Weight = 1	
To engage in non-agricultural commerce	128x3=384	37x2=74	2x1=2	460
To work in agriculture	100x3=300	29x2=58	3x1=3	359
Because somebody I knew or am related to came here	62x3=186	44x2=88	24	298
Because Guigou has better schools, clinics or other social services	16x3=48	79x2=158	27	233
Because the land here is cheap	15x3=45	50x2=100	39	184
Because I was assigned to work here as a government employee.	60x3=180	1x2=2	0	182
Other	13x3=39	20x2=40	32	111

When accounting for rank, "engaging in non-agricultural commerce" pulls ahead significantly in terms of importance. A distinction also reveals itself between "working in agriculture" "social services" "networks" and "cheap land," all of which were rather close in the preceding analysis. Following nonagricultural commerce is "working in agriculture," with a value of 359. Next, "somebody I know" (networks) scores 298. "Social services" scores 233. "Cheap land" and "government employee" are nearly tied in last place followed by the "other" category. The apparent insignificance of "other" in this analysis addresses somewhat its potential threat to validity. The noted insignificance of "cheap land" adds to the puzzle presented in the previous. The analysis in chapter 5 suggested a negative relationship between property ownership and migration in the interior zones. This, therefore, adds to the survey results indicating that opportunities for purchasing land were not a primary factor in establishing Guigou as a rural hub.

Visualizations displaying the results of "rank 1 and rank 2" are shown in figures 13, 14 and 15, respectively.

Figure 13: Rank 1 Distribution



Figure 14: Rank 2 Distribution

It is first notable that the majority of the respondents did not select a second rank that presumably indicates a degree of satisfaction with their first line of reasoning represented in rank1. Among those that did, disaggregating the components of rank 2 presents a structure to the decision-making. Here it is revealed that the cheap land, the social services and the network effect are the most prominent choices, thus constituting a second tier to the decision-making process. This makes sense since these are the opposite choices from what was reflected in rank 1.



Figure 15: Rank 3 Distribution

The overwhelming non-response of rank 3 indicates that the reasoning behind the decisionmaking was largely captured in the first two ranks. Aside from the non-response, government employees and 'don't know' did not register at all and are thus not included in the chart. "Better social services" features most prominently, followed by "other." The fact that "other" only begins to register prominently at this level in the decision-making indicates not the inadvertent omission of a significant variable, but rather suggests that it consists of randomized noise, thus constituting the error term.

This section suggests that the local economy is the primary stimulant of this migratory hub, followed by the role of agriculture. A second layer of the decision-making was made up by factors most importantly the role of networks, which featured relatively strongly at all three ranks. 'Cheap land,' 'better social services' appeared to make up the final tier. The last category was that of government employees, which is not reflective of the phenomenon under study, but is important to control for as it constitutes a significant number of people. It also may be a reflection of government investment in the area.

The migrants were asked to specify from where they migrated. The coordinates of these locations were identified using Google Maps and categorized according to approximate population size<sup>18</sup> and approximate driving distance. Twenty cases were dropped due to illegibility or an inability to locate the village on Google maps. The new n was *379*. Most of these were likely obscure villages.

The average distance each migrant traveled was 129 kilometers. The shortest was 1 km and the longest distance was 565km. The frequency distribution of distance traveled was the following figure 16<sup>19</sup>:



Figure 16: Distance travelled

<sup>&</sup>lt;sup>18</sup> When official population figures were not available in the case of smaller population centers, estimates were made based on satellite visualizations.

<sup>&</sup>lt;sup>19</sup> In most instances people named a town or city. One weakness with the survey is that in the case of

large cities, it is unknown as to whether or not migrants came from the actual city or from the surrounding areas.

According to these figures, 52% of the migrant population came from within a hundred km radius. This is the equivalent of 62 miles and is the approximate distance between Guigou and the closest major city, that is, Fes. This confirms the original *maxim* from the classical migration literature that *distance matters* (Ravenstein, 1889). After 100 km, we observe a substantial amount of 'distance decay,' that is, that the further the distance, the less likely the migration. This conclusion refutes the observations of Oucho (1984) of rural-to-rural migration in Kenya, but confirms Kurji's (1995) observation in Tanzania.

## 6.2.5 Population Size

While the term "urbanization" typically implies more than just straight population size, it is a sufficient proxy as to whether or not people are moving from less urban or more urban areas. Categories were established for approximate population size of origins. For a point of reference, in 2014 the town of Guigou had 10,129 inhabitants, thus, on the border between the first grouping and the second grouping.<sup>20</sup>

1 = 0 - 10,000 2 = 10,001 - 50,000 3 = 50,001 - 200,0004 = 200,001 +

Fifty percent of the migrants came from areas that were smaller in population size than Guigou. Eleven percent came from areas that were grouped in the same category as Guigou. However, since Guigou is on the border between group 1 and group 2, this category is likely also made up of population centers larger than Guigou. The remaining 39% of the respondents reported coming from larger

<sup>&</sup>lt;sup>20</sup> This variable assumes that households came from a population center as opposed to from a lone house in the rural area. While this assumption would be more difficult to hold in industrialized societies, the rural landscape in Morocco is mostly made up of small villages and not isolated homes, albeit with some exceptions.

population centers (see table 5). The notion that migrants would move to a smaller population center challenges the rural to urban migration phenomenon and thus warrants follow-up.<sup>21</sup>

Table	5:	Popula	tion	size	category
I ubic	•••	I opulu	uon	Sinc	cutegory

	Frequency	Percentage of total
1	191	50%
2	43	11%
3	70	18%
4	70	18%
Total	374	97%

6.2.6 The role of ethnicity and approximate level of education

Ethnicity and approximate level of education were accounted for indirectly in questions 7 through 10 that inquire about languages spoken. This indirect measure was employed to make the questionnaire as simple and non-controversial as possible. It is also a way of accounting for the apparent fluidity of ethnic identity in Morocco. As already described in previous chapters, the *Amazigh*, also known as *Berbers* are the indigenous North Africans, while the ruling Arabs have been in Morocco since the 700s BC. Because the title "Arab" is typically a linguistic distinction, it is hard to account for the Arabness of Moroccans when many Amazigh have intermarried and adopted Arabic as their first language over the generations. Over time, this has given a complex, mixed identity to arguably the majority of Moroccans and in some ways sets the country apart from other Arab countries in the MENA region. Currently, there are still significant socio-economic differences between the pure Amazigh, who often live in the rural areas, and the Arabs, who traditionally occupy the cities and some of the rural areas.

The questionnaire addresses this problem from a sociological standpoint by distinguishing between degrees of ethnicity via languages spoken at the individual level, household level and among

<sup>&</sup>lt;sup>21</sup> One possible explanation could be due to reporting error. That is, respondents may have simply identified the closest known major city. This would likely be the case if they were coming from regions that are mostly unknown to local Guigou residents.

parents. Conveniently, no overlap between Arabs and Amazigh occurred when controlled for at the level of the parents (languages spoken by both mother and father were inquired). That is, every respondent either selected Arabic OR Shilha (the language of the Amazigh from this region) as the language their parents spoke. There were no instances where the parents spoke both Arabic and Shilha, providing a clean ethnic breakdown. Since these results were the same for the mother and father, it does not appear that mixed marriages played a role in the origins of our migrants.

In contrast with languages spoken by parents, respondents reported more mixed results which is likely reflective of the modernization and Arabization that has been inherent to development over the past few generations. The first question, "list all languages you speak..." attempts a first level of ethnic identity. The following crosstab (table 6) shows the relationship between Arabic and Shilha spoken by respondents. Shilha slightly outnumbers Arabic 298 to 292. However, significant overlap is observed with nearly half of the respondents reporting to be bilingual. Ninety-eight respondents (25%) reported speaking Arabic and not Shilha. While 104 respondents spoke Shilha but no Arabic.

## Table 6: Languages spoken

		Speaks Shilha		Total
		0	1	
Speaks Darija	0	2	104	106
	1	98	194	292
Total		100	298	398

It is also interesting to note that 17 respondents reported to speak Shilha, but whose fathers spoke only Arabic, indicating that some Arabs have moved to the area and subsequently learned Shilha. This question also inadvertently reflects the level of education of respondents. Because the formal education system was exclusively in Arabic until relatively recently, if no Arabic is spoken, then it can be assumed that the respondent has received minimal to no education. Furthermore, French is considered the language of the highly educated in Morocco. University studies are conducted in French, therefore anyone who speaks French can be assumed to have a higher level of education. However, only 25 respondents (6.3%) reported that they spoke French. This places the observed type of migration within the education demographics of Morocco: In this instance, migrants constituting the "rural urbanization" in Guigou are overwhelmingly made up of those with at most a basic education, and therefore likely from a poorer socio-economic class of the population.<sup>22</sup>

## 6.2.7 The role of time

Time was accounted for in question #2 that asks in what year the migrant arrived in Guigou. For the purposes of analysis, the years were grouped according to the following classification:

Group 1: 2004 – 2014 (10 years) Group 2: 1994 – 2003 (9 years) Group 3: 1982 – 1993 (11 years) Group 4: All years prior to 1981 (41 years)

In this grouping the first year reported was 1940, therefore group 4 includes a much longer time span than the other groups. The other groups also have slight variations. These first three groups were chosen in order to correspond with the census years and their primary periods of analysis. All other decades of arrival were grouped because they are significantly smaller and they are not part of the primary years of analysis. The frequencies of each group are listed in table 7.

<sup>&</sup>lt;sup>22</sup> Speaking French does not in any way signify that the respondent went to the university. But not speaking confirms that they did not go to the university.

Table 7	7: Y	ear of	arrival
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Years of arrival	Percentage of respondents
Group1: 2004 – 2014	27%
Group 2: 1994 – 2003	26.2%
Group 3: 1982 – 1993	25.4%
Group 4: 1940 – 1981	21.4%

The trajectory represented in the data matches what was suggested in the preliminary focus group, that in-migration into Guigou has steadily increased over the years. However, the data suggests that after 1981, the increase has not been particularly significant. Since economic advances have taken place since 1981 in Morocco, this revelation supports the notion that serves the basis of this dissertation that structural transformation brings about a significant amount of population changes.

## 6.2.8 Age and Gender

Only 13.4% of those interviewed were female. Because the selection process had no inherent gender bias, this significant imbalance is likely due to cultural norms. Because enumerators were all male, and the region is relatively conservative, a woman would be less likely to respond to his questions at the door, even if he was known to her. With regard to the validity of the survey, the question is whether or not this introduces a bias into the data. Because 75% of the respondents reported coming as a household, it can be presumed that gender is less of a factor since the traditional household consists of both men and women. As stated earlier in the chapter, the variable is seldom considered throughout the rest of the analysis.

The age of the respondents follows a perfectly normal distribution. The largest category of respondents was the age bracket, 41 - 50, which constituted 37% of the respondents. The smallest groups were ages 61+ accounting for nearly 10% of the respondents, and the youngest age bracket, 18 - 30 which accounted for nearly 11% of the population.

## 6.2.9 Cross variable correlations

As a final summary, correlations were run between all of the variables to determine which had the most weight. According to table 8 below, distance travelled appeared to correlate more commonly with the other variables, indicating its' pre-eminence in determining "migration types."

## **Table 8 Correlations**

	Rank1 (DV)	Ethnicity (09)	Age (Q12)	Decade of arrival (IV)	Distance	Gender (Q11)	Population size of
Rank1 (DV)	X	**.003	**.018	.095	**.039	.131	**.001
Ethnicity (Q9)	**.003	X	.319	.427	**.000	.784	**.000
Age (Q12)	**.018	.319	X	.185	.536( ?)	.725	.359
Decade of arrival (IV)	.095	.427	.185	X	.000	.813	**.000
Distance	**.039	**.000	.536	**.000	X	**.040	**.000
Gender (IV)	.131	.784	.725	.813	**.040	x	.257
Population size of origin	**.001	**.000	.359	**.000	**.000	.257	X

## 6.2.10 Spatial relationships

Judging from the correlation tables in table 4, it is evident that "distance travelled" appears to correlate with almost all other factors. This suggests spatial relationships may exist which would indicate that cases are not spatially independent of one another. This assertion is echoed not only in the literature, but also in

the preliminary macro-level analysis. To analyze this, the variables were mapped. Those with apparent spatial relationships are depicted and discussed.

Three variables appeared to show geographic trends, aside from the very obvious "distance travelled" variable which will not be discussed as it is self-explanatory. Population size of origin, ethnicity, and decade of arrival all appear to show spatial trends. Figure 17 shows migrants by the population size of origin. We know from the correlation table that this variable does indeed correlate with distance travelled, so it is not surprising to observe that the further away from Guigou, the larger the origin town appears to be. At the largest level, migrants appear to come only from the coastal areas. Since we know that the coastal areas are where most of the large cities are located, this is not surprising. It is important to note, however, that this could be due to reporting bias, whereby people simply cite the largest closest city when referring to longer distances, knowing that a small town will not be recognized. This potential error will be explored in the follow-up interviews.



**Figure 17: Population size of origin** 

Ethnicity, also correlated with distance travelled, appears to show a similar trend (see figure 18). Amazigh migrants appear more concentrated around Guigou. The further the distance from Guigou, the more of an Arab presence begins to reveal itself in the data. This corresponds with the above groupings that reflect an increase in Arab migrants, the further the distance travelled.



Figure 18: Spatial distribution of Ethnicity

Finally, the 'decade of arrival' is depicted as a series of maps as to clearly illustrate the trend (see figure 19). The observed trend appears to suggest an initial westward orientation of the migration patterns. That is to say that Guigou received migrants initially from the East. At each decade, the origins gradually moved westward. In the final decade 2004 - 2014, the origins became significantly more dispersed. Decade of arrival correlates only with distance travelled. With a correlation coefficient of .119, however, it is not likely a strong explanatory factor. It is therefore not readily obvious why such a trend exists, given the available data.



Figure 19: Spatial distribution of "Decade of arrival"

## 6.3 MIGRATION TYPES

A two-step cluster analysis was conducted in SPSS in order to statistically determine group patterns and develop a taxonomy of migrants to Guigou. Three groups were extracted with a relatively equal distribution among them (See figure 20). The summary model concluded the categorization to be "fair."

This indicates that some variation outside these groups exists. A discriminant analysis was performed to check the accuracy of the independent variables in predicting group membership. Eighty-four percent of the cases in the model were accurately predicted. While this is not an excellent result, it is significant with a p-value of .000. However, since not all the assumptions were met for a discriminant analysis, this result is to be taken with a grain of salt and thus under-emphasized.

The cluster analysis produced three groups of relatively equal size. The following pie chart in figure 20, depicts the breakdown between groups.



**Figure 20: Cluster sizes** 

The most important predictor of group membership was population size of origin. Predictor importance is displayed in figure 21. The smallest predictor was rank1, that is, respondents' top ranked reasons for coming to Guigou.



**Figure 21: Predictor Importance** 

In table 9 below, each category is depicted as a group including the two largest resulting responses:

# Table 9: Migration typology

Cluster	1	2	3
# of respondents	149 (40.2%)	111 (29.9%)	111 (29.9%)
Population size of origin	0 - 10,000 (100%)	50,001 - 200,000 (58.6%)	200,000+ (60.4%)
Decade of arrival	1982 – 1993	1994 – 2003 (38.7%)	2004 - 2014 (60.4%)
	(40.9%)		
Ethnicity	Amazigh (100%)	Amazigh (55.9%)	Amazigh (50.5%)
		Arab (44.1%)	Arab (49.5%)
Average distance	77.67 (km)	118.48 (km)	204.39 (km)
travelled			
Top ranked reason for	Agriculture	Agriculture (30.6%)	Non-agricultural
coming to Guigou	(35.6%)	Non-agricultural	commerce (36.9%)
	Non-agricultural	commerce (28.9%)	Somebody I knew
	commerce		(21.6%)
	(31.5%)		

The first group was the largest. It contained 149 respondents, or 40.2% of the population. All of the respondents came from a town that was either smaller or the same size as Guigou. All of them were also Amazigh. The largest category among them with respect to their decade arrival which was between the years of 1982 – 1993. Among them, 35.6% cited agriculture as their primary reason for coming to Guigou.

The second group included 111 respondents. Nearly 60% came from mid-sized cities from 50,001 to 200,000 inhabitants. The largest group of them, nearly 40% came between the years of 1994 – 2003. They travelled an average distance of 118.48 km., slightly more than half were Amazigh. A third of them cited agriculture as their primary reason for coming.

The last group consisted of 111 respondents, 60.4% of whom came from major cities. A majority (60.4%) came between the years of 2004 and 2014. The ethnic breakdown was nearly half and half Amazigh-Arab. They travelled an average distance of 204.39 km. A plurality consisting of a little more than a third cited non-agricultural commerce as their main reason for coming.

## 6.3.1 Nomenclature

Since the strongest predictor of these groupings is the population size, the different groups are classified according these categories. However, in developing nomenclature for the different groups, we run into the ambiguity of the rural – urban distinction. Degrees of urban-ness and rural-ness clearly define these relationships. Yet it is difficult to draw coherent boundaries given the lack of agreement about what constitutes urban and what constitutes rural. They can perhaps be better understood as centripetal movement, horizontal movement and centrifugal movement. Centripetal movement implies moving towards a more centralized (thus larger) population center. Horizontal movement would imply moving to a comparably sized location. Centrifugal movement implies moving away from the center, therefore, moving to smaller locations. The types elicited from the data employ the first and the third terms.

Horizontal migration, that is, people moving from similarly sized locations, only represented 12% of the movement, compared to 46.3% centripetal movement and 41.7% centrifugal movement. While the categorizations are not perfect, there is a strikingly small amount of people coming from towns similar in size to Guigou.

For the purposes of the current taxonomy, the different types will be referred to as the following: 1) centripetal 2) moderate centrifugal 3) significant centrifugal. A brief narrative will characterize each of these different types, taking into account some of the error or variance unexplained by the types. The next chapter will explore these narratives more deeply.

## 6.3.2 Government employees

A final category that is not part of the model, but most likely contributes to the variation is that of government employees, who are not considered true migrants in the sense that we are examining here, because their reason for being in Guigou is not a matter of personal choice. Government employees are stationed in different regions as part of their contract and therefore are not reflective of the phenomenon under study. Because they are relatively numerous, it is important to control for them. Furthermore, the increased presence of government employees can be indicative of an increased investment by the state. As a group, they are therefore included in the model but not in terms of explanatory variables, since we already know why they are there. They are thus assumed to be part of the error term.

## 6.3.3 Analysis: Migration types and Development

The particularly relevant variable that can suggest the drivers of these different types is the element of time, which places this study as a dynamic analysis. People from more rural areas are observed to be the majority of migrants throughout time. However, it was not until after 1982 that this trend exploded. These migrants tended to be Amazigh and most often claimed agriculture as their primary reason for migrating.

They tended to travel moderate distances to get to Guigou. The 1990s, saw an increase in people coming from category 3, urban centers constituting larger towns and small cities. A slight majority of these migrants were Amazigh, with yet a substantial Arab minority. This period also observed the occurrence of more local migration as Guigou began to absorb migrants from nearby large towns. The 2000s saw an increase in people coming from distinctly large urban centers. People coming from the larger population centers tended to be made of non-agricultural merchants. They came from further away in a more dispersed fashion. About half were Arabs.

Interpreting this trend suggests that the urbanization of Guigou is an emergent phenomenon, such that its popularity as a destination location has evolved over time. It likely began as a destination for farmers due to its geographical advantage and its status as a more developed town, compared to the surrounding areas. We know from qualitative interviews that Guigou currently has the largest regional *souk* (weekly market). Once becoming an agricultural hub, the non-agricultural commerce likely started expanding, ultimately presenting broader opportunities for a more diversified local economy.

Currently, commerce reigns supreme in attracting migrants, but agriculture is still important. There are also undoubtedly interacting mechanisms that contributed to the emergence of this pattern. The diffusion effect through social networks of migrating to Guigou appeared particularly prominent among farmers. That is, farmers often cited moving because they knew someone in Guigou, more so than the merchants. Improved social services also played a role, appealing to farmers by offering better institutions, such as schooling and health services for families. On display is the emergence of urban life in the context of a rural setting as the overall economy changes. It begins with farmers and ends with a diversified economy in an urbanized (albeit small) setting.

## 6.4 CONCLUSION

In sum, the trend appears to indicate that the Amazigh, from surrounding local small towns were first movers to Guigou. This particular trend began after 1982 and was driven predominantly by agriculture. They were followed by a mix of predominantly Amazigh, but also Arabs from a broader radius and from larger towns, signifying the start of urban-to-rural migration. Finally, after 2004, an increasing number of urbanites, both Arabs and Amazigh, began appearing, having come from longer distances and largely pursuing non-agricultural commerce.

## 7.0 THE MAKINGS OF A RURAL HUB

The final analysis of this study executes qualitative follow-up interviews with migrants of Guigou in order to obtain a fuller understanding of why people moved there, and what this tells us about the context of shifting demographics. In the previous chapter, three different categories of migration to Guigou were identified that took into account multiple factors, including where they came from, the distance they travelled, ethnicity and reason for moving. For the current chapter, nine semi-structured (see protocol in appendix xx) interviews were conducted by a native Arabic/Shilha speaker, with three interviews loosely representing each category. The respondents were chosen by their willingness to participate in addition to the degree of fit that they represented with respect to the elaborated types. While the criteria did not always match perfectly, researchers did the best they could. The interviews were recorded, translated and transcribed so that a formal process of coding could be performed starting with open codes and ending with axial codes (see appendix E for the translated version of the interview transcripts). From these axial codes, inductive and deductive analyses are performed after triangulating with the results of the survey in order to present the themes identified in this chapter (Strauss & Corbin, 1998).

The research question guiding this chapter is, "What is 'rural urbanization'?" The interviews are intended to fill in the gaps in understanding left by the *extensive* survey performed. Interviews provide the space, time and depth to understand why the trends observed in the survey exist. Similar questions to those asked on the survey were asked during the interviews, only with the follow-up probing questions, such as 'why?' as to *thicken* the descriptions.

## 7.1 OVERALL THEMES

#### 7.1.1 The centrality of family

The first theme to be discussed is that of the role of family in determining movement patterns. In our interview set, every respondent stated that they moved in some form or other as a function of the family. In the survey 75% of respondents identified having moved with their families, demonstrating that this is indeed an important trend. According to our interviews, the family narrative was not always the exact same story. Some moved right from the beginning with their families. Some came by themselves initially until they managed to find employment and housing, after which their families joined them. Some had children prior to coming to Guigou, some right after and some had grown children. In referring to their families, this included both immediate family members and extended family members: parents, brothers and sisters, with their respective families. Below illustrates the trend found in nearly all of the cases.

"I: When you got here and found a job, did you ask other people to join you? Someone from your family?
P: Yes. They followed me. A few of my family members. They got here and then they found a job and they stayed here.
I: Did they ask you how was Guigou before they decided to come?
P: Yes they asked a few questions. But when they moved, I already found them a job. When they came they were pretty much set up. So they had something to do."

The numbers of affected family members, therefore, grew to be rather large. In some instances, these were cohabitating households, in others the various family branches established their own homes. The role of family is thus deemed to play an important role in the type of migration observed in Guigou.

Identifying this role is important because it responds to questions and assertions in the literature. First and foremost, the importance of families contradicts the neoclassical assertions of rational choice modeling that utilizes the individual as the unit of analysis. These individual-oriented migration models use as illustrative cases, migrants as single men and women seeking out opportunities elsewhere, often in the big city in in another country. There may be some truth to these models, but it is not what is on display in Guigou. The migration in Guigou appears to centralize around the family unit. This echoes more the assertions of NELM<sup>23</sup> which state that migration decisions are made as a household. This NELM contribution served as the basis for choosing the household as the unit of analysis early on in this study. However, according to NELM claims, the decision to migrate is taken by a member of the household to serve as household insurance, whereby one member of the household will migrate in order to send money home (Oded Stark & Bloom, 1985). Again, this narrative may have some real-world applications, but it is not what is on display in Guigou. In Guigou, entire families moving together seems to be the pre-eminent form of movement. This was shown to be the case in the results of the survey and again in the interviews.

One can suppose that the characteristics of movement as a family as opposed to the individual are somewhat different. When contrasted with the individual, families are likely to be more risk-averse and stability-seeking. The incremental marginal gains of moving to Guigou as opposed to a larger city might seem more appropriate for a family. Building on this discussion is the following discussion of permanence.

## 7.1.2 Permanence versus mobility

A paradoxical relationship exists between the idea of permanence and that of a mobile lifestyle. In the beginning of this dissertation the role of permanence in migration was under-emphasized given the increasingly mobile world that we live in. A broad definition of migration was therefore utilized. Furthermore, it was hypothesized from the outset that the rural populations in Morocco, with their nomadic past, may continue to maintain highly mobile existences. Macro-level migration patterns showed a diverse set of migrant destinations throughout the rural interior, which did not stay consistent from decade to decade. Mobility is therefore a prominent concept under examination in this study.

<sup>&</sup>lt;sup>23</sup> The New Economics of Labor Migration was discussed in chapter 2.

Throughout these discussions, however, the idea of permanence as opposed to mobility was regularly invoked when asked if they would ever leave Guigou. One respondent stated,

- "If I go to another place, for sure it will be my grave yard."

Other respondents expressed similar sentiments.

- "For me there are no doubts. I will stay in Guigou."
- "For me, I'm not leaving anywhere. I bought a house here. My kids are here. I'm working. I'm doing what I'm doing. That's the truth. I'm not moving."

The only respondent who did not project an air of certainty about staying in Guigou was the one respondent who was born in Guigou, therefore, not technically a migrant. His father had moved to Guigou before he was born. This is a case that will be discussed later in the chapter in the section entitled, the generational component.

This degree of permanence contradicts the notion of step-wise migration, which is a type of migration that claims that people make consecutive moves migrating to ever more urban environments (Conway, 1980). It also conflicts with ideas of constant mobility (Scott, 2009). However, the sense of a mobile identity was not entirely absent. One respondent stated:

- "We feel like we're home in the entire country. From Tangier to Laguira. Wherever you go, you are home so you don't feel like you are a stranger or an outsider. There are no borders. We feel like we're home wherever we go. As long as we're not looking for problems, nobody is going to bother you or ask you what you're doing here or to go home. If the person is a good person, you are never going to have problems. You will always find something to do here in Guigou or wherever else."

His statement reflects an extraordinary amount of optimism and cohesion in a culture that has been regularly described by others as a tribal society (Hart, 2000). Furthermore, not a single respondent cited having had any problems moving to Guigou with respect to being an outsider. Nearly all respondents described having been welcomed and even assisted extensively by the residents of Guigou, never being made to feel like they did not belong.

- "We had no problems. I mean, wherever you go in Morocco, people are going to welcome you. That's a good thing. We never felt like we were strangers or anything."

This was the case even among the Arabs who did not speak the local language.

- "For us, we never had problems. No. Not even small ones. Everybody treated us well. Everyone was good to us. It was fine."

This is suggestive of a population that is indeed accustomed to adapting, but that also lays a premium on settlement.

- "I mean once you build your house you don't think of moving somewhere else. That's it. I'm here. I'm not moving anywhere."

What this type of movement likely indicates builds on the first theme pertaining to the centrality of family. It indicates that this type of movement is conservative. It is not made up of bold risk-takers, such as those we read about in the paper having gone to slightly insane measures to migrate to where they wanted to go. The moving of families has an inherent stability-seeking component to it, which might explain why a small town in the middle of nowhere would be deemed attractive by so many people.

# 7.1.3 Cost of living

The cost of living was cited as one of the attractors of migration to Guigou. One of the respondents stating to have moved from the city gave an extensive breakdown of the cost of living in Guigou through the illustration of an anecdote,

- "One of the gendarme told us that one of the homeless people told him 'why do you want me to leave if I can spend the night here for 3 dirhams a night.' The café owners let them sleep in their café for 3 dirhams a night. Then he eats dinner for 3 dirhams. Why would he think of leaving Guigou if the cost of living is so low? Now the homeless they sleep in the cafes for 3 dirhams a night. He eats dinner for 3 dirhams. He has lunch for 3 dirhams. He can have breakfast with 2 eggs for 3 dirhams. Do you understand?" <sup>24</sup>

When later asked about whether or not he would consider leaving Guigou, he responded,

<sup>&</sup>lt;sup>24</sup> 3 dirhams is roughly equivalent to 30 cents USD.

"To go now from Guigou to the city, it's too expensive. I'm not doing that. I'd have to go and look for a place to rent. It's going to be expensive. Then I would need to rent another space for my convenient store which would be even more expensive."

Another respondent claimed that one could buy a piece of land in Guigou for 500 dirhams, which is roughly the equivalent of \$50. A retired military man, he also cited the cost of living as the primary reason he chose to go to Guigou and not the closest city called Sefrou. Among the 9 respondents, there were two who moved from the city to Guigou. There was additionally one who moved from just outside the major city of Meknes to Guigou. Our survey cited 18% moving from a large city to Guigou. This trend runs overtly contradictory to the established rural-to-urban migration models. Yet the trend seems logical when accounting for the differences in cost of living, particularly among retirees.

## 7.1.4 Lifestyle Discrepancies

While, only a few of the respondents discussed the differences in cost of living between the cities and Guigou, many described how Guigou compared to their town of origin. We learned from the survey that the majority of migrants came from smaller towns, therefore the cost-of-living differential between Guigou and the major cities might not have been as known to them. Small differences in lifestyle, however, could make a difference. These differences are particularly evident given the stark rural-urban discrepancies in Morocco described in some of the earlier chapters. Many of the major Moroccan cities resemble European cities with theatres and boulevards and fancy-looking cafes. This is in stark contrast to the rural areas, many of which still exist without electricity or running water. In the Amazigh language, the word for foreigner is "aromi," which comes from the days of the Roman Empire, when all the foreigners were Romans. This illustrates the degree to which much of the land still lives in the past. Upon attending a wedding in one of these villages accompanied by two urban Arabs, I observed that the urban Arabs were just as foreign to this rural lifestyle as I was.

These discrepancies were not absent in the interviews. While people did not necessarily talk about how life in the major cities compares to life in their villages, they did reference the lifestyle improvements that came from living in Guigou. In explaining why he moved to Guigou, one respondent described conditions in his home town,

- "At that time, you see, it was tough, we had no food pretty much, no onions, it was tough to find food there, like onions, potatoes."

This statement was echoed by another respondent who while explaining why Guigou was a migrant hub stated,

- "A lot of them, they came for food reasons because sometimes the authorities distribute bags of flour. Then the authorities are organized, they give them a receipt. A lot of people came at one time."

In answering the same question, another respondent stated:

"Compared to their villages and where they live, Guigou is much better. Guigou has lots of migrants. If you compare Guigou with Ait Hassan, it's like you're comparing Guigou and Casablanca. In Ait Hassan, there's nothing of what people need. There's nothing. People just live. They eat and they sleep. There's nothing else to do. At that point, Tarjda, just to explain... Tarjda is a mountain here in Guigou. It's way better than Ait Hassan. But there's nothing. There's no rain. Even the land. They don't really have good land. It's just rocky. They're just building houses and living. They don't really have something else to do."

These discrepancies indicate that Guigou is attractive relative to the origins of potential migrants in the surrounding areas. In the case of the former city residents, this relative improvement is in the cost of living. For the more rural migrants, this involves the increased possibility of farming and/or finding a job. These discrepancies are also reflected in the infrastructure and social services which will be discussed below.

## 7.1.5 Social services and infrastructure

Social services and infrastructure were presumed to play a role in the evolution of Guigou as a migrant town, which was reflected in the survey. This inclusion was based on the logical assumption that as stated
above, an improvement in the availability of infrastructure and social services such as schools, roads and health clinics might attract migrants. However, a more dynamic relationship was revealed through the course of these interviews. While the initial survey revealed that improved infrastructure and social services played a role in attracting migrants, it was only secondary to the economic incentives. It was also noted in the survey that the available infrastructure and social services were particularly important among people coming from the very rural areas. However, we learned in the interviews that Guigou has not always had sufficient social services. One of the respondents stated that when he first moved to the town, jobs were plentiful but there was not a middle school or a high school in Guigou, so the kids were forced to move to a neighboring town at a young age in order to go to school. According to our statistics, as of 2000, there was a middle school. Currently, according to first-hand reports, there are two middle schools, and one high school. There is currently, however, no university and not surprisingly not a single interview respondent had either a high school diploma or a university education. This appeared to be the case throughout the survey as well.

The second major issue pertains to the infrastructure, specifically, that of the sewer system. When asked if there were any reasons people might leave, several cited problems with the sewer system in the city that apparently leaks and is insufficient. One respondent stated it was so bad, that it was the only thing that would make him want to leave.

- "If you at least have a sewer, I might stay. (He points to the sewer outside). Look at the situation. It smells and there's dirt."

As is discussed several times throughout this dissertation, the ability of social services and infrastructure to keep pace with a changing population is a crucial task. Therefore social services and infrastructure might serve as an attractor of migrants. They may also push people to leave.

### 7.1.6 Employment

During the preliminary interviews and focus group, it was almost unanimously stated that the reason Guigou attracts migrants is because with its flat terrain and fertile soil, it offered many lucrative possibilities in the agricultural sector. This presented both investment opportunities and a demand for labor. These commonly-held beliefs were vindicated in the survey where working in the agricultural sector was cited as the second-most prominent reason for people moving to Guigou. When asked why Guigou was a migrant hub, like the preliminary interviews, nearly all of the interviewees stated this as the primary explanation. One even claimed that it was the only thing to do in Guigou,

- "... There's enough jobs for laborers that are easy to find in agriculture. That's all they have here pretty much are agricultural jobs."

Ironically, none of our interviewees worked in agriculture. Only one of them worked indirectly in agriculture as a pump repairman. All of the others had staked out other niche markets: A watch repairman, a welder, a manager of a public bath, an owner of a convenient store, a taxi driver, a construction worker. This reality was also reflected in the survey which showed that non-agricultural commerce was the most commonly cited reason for coming to Guigou, not agriculture.

The implications of this observation are that this type of migration exists in distinct contrast to the specialization-driven migration that is observed in the more industrial stages of development. Silicon Valley was the example provided in this dissertation, whereby a particular industry draws people with a specialized skillset or a particular contribution. Factories attract low-wage labor. Engineering firms attract skilled labor. What is on display in Guigou is not necessarily a particular specialization, but a growing local economy. While agriculture still stands as the largest single industry, this does not imply that everyone living in Guigou is employed in agriculture, or that it is in and of itself the primary attractor of migrants. On the contrary, the majority of migrants are employed in a diversity of other sectors that constitute the local economy. Agriculture might be thought of as a stimulator, but the thrust of the local

economy is elsewhere, not in any one field, but in a diversity of goods and services. Furthermore, none of our respondents had much of a formal education, but rather they managed to develop their own specialized skillset. Perhaps this phenomenon would not be observed in a large city, where competition is stricter as it is dominated by companies with economies of scale.

This is an important observation, because migrants are often viewed as a drain on an economy. However, in almost every one of our interviews, the respondent eventually created his or her own job, or they developed their own unique skillset that had nothing to do with either having a formal education or the heavily-cited agriculture industry. The fact that such a local rural economy can not only sustain itself but grow and attract migrants challenges the narrative of "rural exodus" which cites a depleted rural sector as the driving force of emigration. It also challenges the heavily emphasized role of education in stimulating economic development.

### 7.1.7 Social Networks

Many of the interview respondents came from the same village of Enjil. Enjil is a small town approximately 45 minutes from Guigou. It is not known as to whether or not our interview respondents from Enjil were connected in some way but nearly all of them cited having influenced others in coming to Guigou, so it is a distinct possibility.

- "It's like a chain pretty much. One brings one after another. Like the guy who works here with me, I brought him. I told him to come here, there's more jobs. He works for me. He's from Meknes. It's like a chain."

On display is the role of social networks. The survey demonstrated that a handful of small towns surrounding Guigou featured strongly among origin towns cited by migrants. These towns were also cited throughout the interviews.

- "People came from the south, the Saharawi because of the work, a lot of them came here. People from Marmoucha, a lot of them are here. People from Ait Hassan. And even people from les Rifi. A lot of people from a lot of places come here to Guigou."

- "There are a lot of people from Immouzzer Marmoucha and Elmiss and Ait Hassan. A lot of people from there, they moved here."
- "I needed people that I know to work with me. Then they come and they work for me and then they liked it and they liked the place and they decided to stay here. They came from Enjil and Ashluge. 6 or 7 of them they came from these places."

This network effect seemed to occur primarily within the extended family, then it appeared to branch out. One respondent stated having brought 10 to 12 family members over time. When asked why he brought his brother, he stated,

- "Yeah, he found a job. A job was available. He found a place to live with his family. It's about job availability pretty much. Then he opened his grocery store."

These accounts suggest that the network effect lies largely around the employment network. One of our migrants who came from a distant city cited having come because he found a job. He did not state how he found that job, but one can presume that it was due to the social network. This is not a surprising finding, given that in Morocco, even in the highly skilled sectors, the social network is still the primary mechanism for obtaining employment, more so than the distribution of resumes or CVs. Those that did not cite having influenced others in coming to Guigou were a retired military man and the family from Sefrou who were also retirees. These were the two respondents that were drawn to Guigou by the cost of living, rather than job opportunities.

While the role of social networks appeared to be on prominent display, the survey suggested that the social network played a secondary role to the objectives of obtaining employment, primarily for the farm workers. According to the survey, the urban Arabs who came seemed to be less influenced by the social network. This assertion appeared to be consistent with the interview responses and may be explained by those seeking employment versus those coming to buy cheaper land. These differing objectives may be significant in determining divergent migration patterns, not only in Guigou but elsewhere as well.

### 7.1.8 Generational component

Another potential factor that inadvertently revealed itself is the possibility of a generational component to migration trajectories. The initial focus group discussion that launched this fieldwork had an unintentional bias that revealed itself only as the rest of the fieldwork was conducted. During the initial focus groups, a much more negative perspective was expressed about the realities of being a migrant town. Ethnic tensions between various tribes were cited. Strained infrastructure and social services were also cited. It is now believed that this bias occurred because the initial focus groups were conducted exclusively among second generation migrants of Guigou.

The follow-up interviews were conducted almost exclusively among first generation migrants who provided a very different account of the situation. Every single one of the interview respondents stated having had zero problems being welcomed into the community. Several in-depth descriptions were provided describing the degree to which tensions did not exist.

- "I had no problems. The people here welcomed me. And they're still welcoming me. They're like brothers and sisters to me. They're like family. I never felt that there were any problems. I'm satisfied."
- "When I was working in construction... Then my kids they were born, the people that I was working for, they used to carry my kids like they were their own kids. Even the guy I used to work for said, if you want I can make you a family book. Like now, you're not going to find that. Nobody is going to tell you to take them in their family book."

The theme of permanence was discussed earlier in this chapter, implying that migrants were not so much inherently mobile, as inherently stability-seeking. This was reflected in a strong commitment to staying in Guigou. However, this commitment to staying in Guigou might not transcend to the next generation or to people born in Guigou. One respondent cited having observed many people leaving.

- "I know other people, they're young. They're from Guigou but they decided not to stay. I know at least 30 people that left."

He did not know why they left, but stated that possibly they did not find a job in their fields. Another respondent who was himself the son of a migrant, born in Guigou was the only one who expressed any doubts about staying.

- "If I have enough strength to move, I'm not going to stay here. I'll move... It's not safe. There are fewer jobs. It's getting tougher."

What this suggests is that the positive prospects observed in Guigou by potential migrants might only be relative to where they started. In an above section, the relative situations of the migrants were discussed as a potential driving factor. The generational component contributes to this discussion by illustrating that someone growing up in Guigou might seek marginal improvements over their standard of living elsewhere.

### 7.2 CONCLUSION

This contention that relativity matters may be supported by the fact that the survey revealed that migrants coming to Guigou were almost exclusively either those coming from more rural areas, moving towards an urban center, what I called "centripetal migration," or those coming from more urban areas, such as large cities, thus, "centrifugal migration." Very few migrants reported coming from a town of comparable size with Guigou. So far, we have similarly explained these two phenomena as being driven by assessments of relative positioning.

Relative positioning with respect to the risk-opportunities tradeoffs can explain the trends observed in this chapter. For an individual living off the land in a highly arid region, the risk factor of staying in their home town may be high. They may starve. For this reason, they are likely to leave. While moving to a large city might entail great opportunities based on the increase in wages and availability of jobs, these opportunities would be offset by the economic risk associated with the higher cost of living. The higher such a risk is perceived to be, the more likely a migrant would be to settle in a town like Guigou that presents moderate opportunities and minimal risk.

An urban-rural migrant would face the same calculation. With a high urban cost of living and moderate job opportunities, the move to Guigou provides the opportunity to buy a house, which is a prospect that would be unheard of in the large cities where property values are high. Pure opportunity-driven migrants, in this instance, would likely be the Arab investors that were cited in the interviews. These were outsiders who began their own non-agricultural commercial enterprises. While cheap was cited in the interviews as an important deciding factor, this was not, however, highlighted in the survey or in the macro-level analysis. It is likely that the determinant may only be significant for a certain sector of migrants, such as the wealthier urban Arabs.

In sum, relative positioning and a risk-opportunity tradeoff likely go a long way in determining migration patterns. While from an urban perspective, Guigou might appear to be an insignificant town in the middle of nowhere, with weak social services and little social advancement, from the perspective of agrarian farmers coming from yet smaller under-served villages in the more remote areas, Guigou is an industrial center beaming with opportunity.

### 8.0 CONCLUSION

The study of migration has always faced methodological challenges. Some of these challenges are induced by biases or ontological blinders. Some are inherent properties to the complexity of "migration." The chapters leading up to this point attempted to advance our understanding of the relationship between migration and development by addressing the weaknesses of previous models and expanding on already-known constructs. Qualitative and quantitative data were collected and analyzed at the macro, meso and micro levels in order to answer the question, "What is the relationship between migration and development in Morocco?" This chapter concludes this study by first reviewing the weaknesses of the current theoretical frameworks. Next, the highlights of the study are noted. Finally, a discussion is presented in order to suggest ways in which the migration discussion should evolve as to establish more constructive models. This discussion is concluded with a bulleted list of policy-relevant findings.

### 8.1 WEAKNESSES OF THE CURRENT LITERATURE

First and foremost, the discussion of internal movement as a result of development has been largely fixated on the causes and consequences of rural-to-urban migration, as opposed to examining the diverse trajectories based on varying circumstances. The urban bias presented in much of the literature has reduced the analytical lens, thus overlooking many factors that should be deemed important to understanding the relationship between migration and development. First, the population group that may be the most adversely affected by structural transformation is those who are living in poverty in the rural areas. While they are likely the most vulnerable, they get left out of migration models until they move to

the major urban settings. Second, the urban-rural dichotomy serves as a defining feature of most of the internal migration taxonomies. However, the terms 'rural' and 'urban' are almost never defined. This is problematic because this universal lack in precision makes us incapable of fully defining the features under study. Yet more importantly, these are often applied as static binary concepts. By referring to only two categories as the defining features of migration trends, we lose all of the activity that occurs within these levels, such as 'rural to less rural migration,' or 'urban to more urban.' Furthermore, by overlooking the element of time in establishing migration patterns, we lose the transition between areas classified as "rural" to those being classified as "urban." In Morocco, inconsistency in labelling and a lack of definitions render such a study all the more problematic.

Due to these shortcomings in the migration literature, scholarship fails to capture the full extent of the relationship between migration and development. Many of the changes that occur in developing countries are functions of the transition from a traditional agrarian economy to a centralized industrial economy. Given the tradeoffs that such a transition is expected to incur, overlooking the agrarian sector should be considered a fatal flaw when examining migration patterns and development.

Attempting to address some of these weaknesses, the determinants of migration patterns were observed over the course of the preceding chapters at multiple levels of analysis through the use of a diverse set of tools. This concluding chapter gathers and highlights the most important insights of all of the chapters to begin developing a cohesive theory that includes more of the societal elements impacted by structural change and movement.

### 8.2 THE PHENOMENON OF "RURAL URBANIZATION

The primary insight of this dissertation is the existence of "rural urbanization." This observation brings to light the fact that migration scholars should put more emphasis on how rural society changes as a function

of migration and development. Currently, the term "urbanization" usually refers to the metropolitanization and expansion of industrial urban cores of a country. It does not usually conjure up images of small towns in the rural areas. Yet, what is observed in the rural areas is the presence of growing population centers with growing economies and social infrastructure, thus constituting a 'rural hub.' While this revelation may initially be considered as a possible alternative for the overly burdened urban cores, it is observed that rural urbanization can exhibit similar risk factors as those of major cities. Qualitative interviews inadvertently stumbled on many of the problems that likely face these growing towns. In Guigou, the sewer system was not up to date with the population changes that had occurred. The problem was significant enough that one of our participants cited this as the only reason he might consider leaving. Focus group interviews with second generation migrants tended to fixate on the problems associated with multiple different tribes settling in one town, causing land disputes and mutual distrust. However, these perceptions were limited to those of the second generation migrants. The first generation migrants cited a welcoming atmosphere.

Furthermore, given the combination of the literature and the findings in the data, we have significant reason to believe that a majority of migration is made up of short, incremental movements as opposed to the extreme journeys such as that which South to North migration often entails. Given that the majority of rural movement is assumed to occur in short increments, there is a distinct possibility that a significant proportion of the movement that is occurring in the rural areas is going largely undetected. James Scott (2009) describes the rural populations in Southeast Asia as being highly adaptive and mobile in a deliberate attempt to evade the centralized state. While there is no indication that the populations are mobile.

The mobility on display has characteristics of its own. It is typically made up of movement that marginally improves on the migrants' current lifestyle conditions. Movement occurs in the context of the family and the community. Social relationships serve as the conduit for people to find employment. Rural

areas are likely made up of dispersed links on the centripetal chain. While risk-taking individuals might move directly to the major cities, the more conservative trend-making families will relocate incrementally to the next largest population center. As these shifts occur, a new economy evolves, bringing with it a different set of economic actors and migrants. This mechanism will be further detailed as a function of risk and opportunity in a later section.

### 8.2.1 The Case of Guigou

In the case of Guigou, movement contributed to the emergence of a rural hub. A rural hub can be defined as an important economic center amidst a region of small towns and rural establishments that is marked by a growing economy. The question throughout this dissertation has been why did this small, local economy emerge? According to the data collected, the urbanization of Guigou evolved over time. It was found that most migrants coming to Guigou travelled short distances to get there. They also came from towns that were smaller than Guigou. What this implies is that Guigou served as the "urban destination" for the surrounding mountainous villages, that were smaller and more cut off. Most of these people were attracted to the prospects of working in Guigou whether it be agriculture or otherwise. Some of these people came from impoverished conditions in their home villages. Over time, urban migrants became attracted to the cheaper cost of living and the potentially lucrative opportunities. This diversified the migrant pool, contributing further to a growing economy. As Guigou became a rural hub by attracting local migrants, the increase in demand, likely caused the economy to expand at which point, more migrants were attracted to the town from a broader diversity of origins. As time went on, wealthier individuals began investing in Guigou. Even Arabs began migrating to Guigou to invest in either agriculture or other industries. The case is significant with respect to understanding how a diversified economy evolves at the rural level. Furthermore, it may constitute a significant contribution to our notions of rural sustainability.

The evolution of Guigou as a rural hub was likely due in part to some of its initial conditions, making it appealing to potential migrants looking for work in the profitable local agricultural boom. Guigou is located in a plateau of a mountainous region. The soil in Guigou is known to be rich in nutrients, making it ideal for agriculture.

### 8.3 RISK VS. OPPORTUNITY IN MIGRATION

To understand better the decision-making process leading to the evolution of this rural hub, the riskopportunity framework is revisited. In figure 22, the decision tree illustrated in chapter 2 is presented. The decision tree has two competing equations used to calculate the payoff structure. Each equation calculates the probability of the opportunity-associated event times the impact of this event, minus the probability of the risk-associated event times the impact of the risk-associated event. Presumably, a migration decision would be made according to whichever branch provided the higher pay-off. Rendering the framework yet more complex, the same decision-branch would exist for each potential destination location. In the contexts within which data were collected throughout the dissertation, various applications of the framework could be observed, all of which contribute to an understanding of why a small seemingly insignificant town would evolve into a rural hub.



**Figure 22: Risk-Opportunity Framework** 

As stated in the previous chapter, risk-opportunity calculations are made with respect to relative positioning. Individuals living in the far reaches of the mountains may face economic risks associated with these remote areas. Prospective life in Guigou offers marginally lower risks and marginally higher opportunities. The qualitative interviews described the fertile land and the job opportunities as the primary reasons why people migrated to the more rural interior. Moving to a large city might present higher opportunities with respect to wages, but the economic risk would also be higher. Taking into the account the conservative disposition of the rural populations, by nature of either tradition or of operating as a family household, one can assume a degree of risk aversion. Furthermore, factors such as social networks, ethnicity and the implicit disadvantage of having no formal education could push the risk of moving to a large city even higher. Subsequently, the payoffs of moving to Guigou prove to be higher, resulting in multiple families making this same decision.

*Centripetal movement* – The above description constitutes what is referred in this dissertation as "centripetal movement." Figure 23 demonstrates this movement as a graph. At the center is the major urban center, such as Fes. Beyond the center lies smaller urban centers, and beyond those lie even smaller

population centers. When making centripetal movements based on relative positioning, migrants would move to the next level up. They may do this on a generational basis, such that each generation of migrants moves one step closer to the center. In the aggregate, we still observe significant rural-to-urban migration. However, what is hidden within the rural-urban dichotomy are the many steps in between a purely rural area and a purely urban area. While this figure represents only three levels, there could be more levels, and they are not necessarily similar. Each rural hub might have their own sets of conditions and characteristics that allowed them to emerge as a commercial center.



**Figure 23: Centripetal Migration** 

These incremental movements are taken by a population that has a natural risk aversion. The more risk-prone individuals would likely move straight to the city since their payoff structure associated with moving to the city would constitute lower perceived risk, with a higher perceived value put on the potential opportunities. These individuals would not likely be moving as families. A bias is therefore

introduced into studies that evaluate internal migration solely on the basis of migrants moving to major cities.

*Centrifugal movement* - In the case of centrifugal movements, we would observe people moving in the opposite direction. Applying the data to the decision-tree, these individuals would see Guigou as an economic opportunity that would offset the economic risks of being destitute in a major city. This opportunity event could include the opportunity to buy land or a house, and it could include the opportunity to make a business investment.



Figure 24: Centrifugal movement

Centrifugal movement would therefore operate moving outwards in a decentralizing fashion (see figure 24). Aggregated figures would reflect whichever movement exceeded the other. In most middle-income countries, aggregated figures reflect a net rural exodus indicating that centripetal movement is more common. The data presented in this dissertation suggest that both exist, even though centripetal is higher.

There is no evidence, however, of people moving from semi-urban areas to the yet more rural areas. All of our interviewees had no intention of moving back to their villages. For this reason, these lines are dotted.

#### 8.4 THE RELATIONSHIP BETWEEN MIGRATION AND DEVELOPMENT

The final question to be asked is, how do the observations from the case study contribute to what we know about the relationship between migration and development and what are the policy implications?

1) The first overall observation is that *origin matters* in determining the migration pattern. In defining the clusters in chapter 6, 'population size of origin' was deemed the most important factor in defining the different groups. This implies that more than the stated reasons for coming to Guigou, the conditions of their town of origin determined at what point in time migrants were likely to come and what kind of migrant they represent. This observation was supported by the qualitative interviews where respondents discussed the positive elements of Guigou in relation to where they were coming from. For the more rural migrants, this translated to available jobs, infrastructure and social services. For the urban migrants this relative advantage lay in the cost of living and the cost of land. The implications of this finding are that a diverse population will translate to diverse migration trajectories.

This variable may very well mask other factors including infrastructure, employment opportunities, poverty, social services and accessibility. The correlation table in chapter 6 demonstrated that 'population size of origin' correlated with nearly all other variables except for age and gender. Given what we know about the geography and population dispersion throughout these mountains, we can, therefore, presume this variable to be a proxy for development indicators. Therefore, while individual development indicators, such as poverty and education did not demonstrate strong relationships with the

ENMR when aggregated at the level of the commune, these indicators may be significant at the individual level, and are likely incorporated in the population size of the towns of origin.

2) Secondly, the *resilience* of migrants should be factored into migration equations. Resilience is an important concept which Pelling (2003) defines as the "capacity to adjust to threats and mitigate or avoid harm." This definition is directly relevant to the context at hand, which is to evaluate how people respond to changing circumstances, given the risk-opportunity tradeoffs present. In another relevant context, Walsh-Dilley (2013) apply the concept of reliance to rural development, utilizing a rights-based framework, stating that, "achieving resilience is a process of learning, organization, and adaptation taking place across scales that enables people to respond to and cope with internal and external stresses and build and defend healthy, happy, and meaningful lives and livelihoods." Berkes and Turner (2006) also claim the components of this ability to rebound absorb shock and recover in productive ways to be learning, self-organization and adaptation.

There are ranges within which to describe resilience. There is the ability to rebound after an unexpected extreme but rare event, such as a natural disaster. There is also a broader application of the term, referring to the ability to adapt to changing circumstances (Comfort, Boin, & Demchak, 2010). It is closer to the latter use of the term that applies extensively in the realm of development studies as economic restructuring brings about costs and tradeoffs for various sectors of the population. People living in the rural areas face increased systematic and idiosyncratic risk because they lack the protections that a centralized administration can offer. Because of this increased risk, their resilience is tested on a regular basis. As such, from the outset, these populations can be presumed to be highly adaptive, as Scott (2009) suggests. What this means for destination markets is that migrants may not present a drain on the labor market and infrastructure in the ways that urbanization fear-mongers have claimed. Migrants bring their own market for supply and demand with them.

Among the migrants interviewed in Guigou, dominant trends were expressed with the agricultural sector playing an important role, but the most common reason provided for migrants coming to Guigou

was 'to engage in non-agricultural commerce.' This category was a catch-all for a local economy that included both formal and informal activities. In the follow-up interviews, agriculture was continually cited as the primary reason migrants came to Guigou, but respondents represented a wide diversity of employments, including construction worker, taxi driver, and watch repairman, among others. None of the migrants were educated in their field, but rather learned the trade on their own. The implication is that the influx of migrants likely generated the economic activity. It was not necessarily the pre-existing labor market, but rather a willingness on the part of the migrant to fit into whatever economic role was deemed lucrative, that is, to demonstrate *an ability to adapt*. In economics terms, this can also be explained by the multiplier effect, whereby an injection of demand into the economy stimulates growth. As such, with increased migration, economic growth begets economic growth.

In line with the concepts of resilience and the multiplier effect, the evolution of a rural economy over a small period of time should not be a surprising phenomenon. This is an important factor for policymakers to consider, since more recently migration is often treated as a burden to destination locations, rather than an engine of development. Therefore, the policy implications of this finding are that migrants can be a resource for stimulating a local economy, if effectively integrated into the community. Furthermore, the implication is that a local economy can be independently sustainable without being linked to the industrializing core.

3) Related to the idea of resilience and the multiplier effect, is the factor of timing. This refers to the role of feedbacks in the evolution of a migrant town. In the case of Guigou, The more recent migration would not have occurred without the earlier waves of migration. The role of feedbacks is cited extensively in the literature, mostly from those who operate within a systems framework (Hein De Haas, 2010; Mabogunje, 1970; Massey, 1990; Massey et al., 1993). In this sense, the relationship between migration and development resembles the following causal flow over the long-run. Where M = Migration; D = Development; and t=Time; Migration leads to development in time zero. Development in time zero leads to more migration in time one, which leads to more development.

# $M_{t0} \rightarrow D_{t0} \rightarrow M_{t1} \rightarrow D_{t1} \rightarrow M_{tk} \rightarrow D_{tk}$

This cycle may continue until migration begins to undermine development as the economy and infrastructure become overly strained, thus reducing the perceived opportunity of moving to the migrant destination. The mediators of this relationship might be the items cited in the survey as the second order to migration decision-making: social networks, social services and land prices. They may also include the role of information. The impact of information and the multiplier effect are important when transitioning between different time periods. That is, from  $D_{t0} \rightarrow M_{t1}$ . If the multiplier effect is downward, that is development or economic growth slows, it should lead to a reduction in migration. If the multiplier effect is positive, that is development increases, it should lead to an increase in migration in the next time period, assuming that information that is spread is consistent with the reality. The assumption of accurate information is likelier to hold over the long-run. This multiplier hypothesis warrants more investigation.

There are other similar conceptualizations of this phenomenon that could also be useful. 'Preferential attachment,' and 'path dependence' are concepts cited in the networks and economics literature, illustrating essentially the same concept. In the networks literature, preferential attachment refers to choices made according to personal preferences observed by participants, allowing a node to increase disproportionately in size in comparison to other connections, creating a scale-free network (Barabási, 2009). The concept is echoed by that of 'path dependence,' used more frequently among economists, whereby current patterns are created via historically-established decision-making and pathways (W Brian Arthur, 1988). In the case of Guigou, previous migrants, in a sense, created a pathway to Guigou that later migrants utilized based on the increased information and positive perceptions of Guigou. This led to Guigou becoming a prominent destination location. Both of these phenomena are examples of 'positive feedback' cycles, or to utilize economics terminology, "increasing returns' (W.B. Arthur, 1994). As long as information and perceptions of migrating to Guigou remain optimistic, migration leads to more migration. Also in the economics literature, the determinants of urban concentration are discussed in terms of 'agglomeration effects,' citing the exponential growth rates of certain cities in developing countries (M. Fujita et al., 2001; Masahisa Fujita & Mori, 1996). Agglomeration effects are simply another characterization of the same phenomena.

4) At the macro-level, migration should be viewed as a sorting mechanism, subject to laws of supply and demand, as opposed to being defined by single trajectories, such as rural-to-urban migration. Heterogeneous societies will migrate in heterogeneous ways. As economic factors reign supreme in defining migration trajectories, migration patterns should be treated as complexly as economic patterns. Therefore, explanations of internal migration should never be reduced to single explanatory variables such as wage differentials. Sectors of the economy are impacted by development in different ways. By accounting for heterogeneity among mobile populations, one can much more effectively understand demographic restructuring and distribution. More tools are thus available for understanding the supposedly illogical observed movement patterns, such as movement into impoverished areas with high unemployment rates. Those that are moving into these areas are not likely the same types of movers as those who are moving out. As such, it is not enough to note that people are simply moving. Policymakers need to understand 'who' is moving 'where' and 'why' as to comprehend what the changes imply for society at large.

Related to this notion is the importance of the rural sector in both developing theory and policy. The analysis in this dissertation suggests that assuming heterogeneity across rural and urban areas can lead to false conclusions and potentially ineffective policies. This distinction also extends itself across the coastal/interior divide. Movement patterns to, from, and within the coastal areas represent different social phenomenon than movement to, from, and within the interior. Development investments with respect to these delineations should be implemented with these behavioral distinctions in mind.

### 8.5 IN CONCLUSION

The primary conclusion is that migration patterns should be understood with respect to a heterogeneous society and regional variation. There is a strong degree of consensus in the scholarly community backed by the current work, that economic factors are the primary drivers of movement. However, while diversity is accepted as an inherent reality to all functioning economies, scholars tend not to treat migration with the same appreciation. Simple rules are sought out that can apply universally. However, in the same way that not everyone in a country is going to have the same consumption patterns, not everyone is going to have the same preference structure about movement and the implications of movement will not be the same. Scholars should not be overwhelmed by this complexity any more than they are of economic complexity. It is sufficient to break the population apart into various segments and to understand their behavior as such, all the while acknowledging that migration patterns mirror economics. Patterns that correspond with the various sectors should emerge. Migration patterns follow similar economic principles. The evolution of a migrant town should be considered complex with interacting components.

Movement is one of the contributing factors to social complexity since populations react with their feet to changing economic structures. In 1970, Harris and Todaro highlighted the counter-intuitive outcome whereby investment in the low wage sector may actually increase unemployment because it would trigger more rural-to-urban migration. Harris and Todaro were not entirely off the mark, but as it turns out, rural-to-urban migration rates are sensitive to many other factors. Furthermore, the choices in destination for rural inhabitants can range significantly. The metropolitan industrial core is not the only option for rural inhabitants seeking to improve their lot. However, the Harris-Todaro model is important in the sense that it highlights how changes in population distribution can impact the results of development initiatives.

The relationship between migration and development does not fit squarely into the cause-andeffect paradigm prevalent in the social sciences. Migration affects development and development affects migration. Both causal directions are implicated. Migration is therefore complex, subject to significant regional variation. The above analysis makes the bold attempt of simplifying slightly this complexity.

# 9.0 APPENDIX A

# 9.1 FOCUS GROUP INTERVIEW PROTOCOL

# 9.1.1 English

### Introduction:

1. Since we're doing research about migration patterns can each person introduce themselves and list briefly the different places they have lived.

- 2. In general, who currently lives in Guigou?
- 3. When people move, where do they go and why?
- 4. In your opinion, how has the population of Guigou changed over the last twenty years?
  - 4.1. How do you think these changes will play out in the future?
- 5. What do you think are the main drivers of migration in and out of Guigou?
- 6. Are there any issues with regards to migration that you would consider too sensitive to ask?
- 7. When people in this village begin to earn more money, how do they spend it?

9.1.2 French

### Introduction

Merci à tous d'être venus. Je m'appelle XXXX et ce sont mes associés XXXX. Je suis une étudiante en doctorat aux États-Unis. J'étudie la relation entre la migration et le développement. Maintenant, on est en cours de préparer une étude de recherche ici a Guigou afin de comprendre les rythmes migration et les raisons derrière la décision de migrer. Notre but aujourd'hui, c'est d'avoir une discussion informelle avec vous pour tester notre sondage et pour nous aider à déterminer si oui ou non nos questions demandent ce que nous avons l'intention de demander. En plus de

Enfin, nous aimerions que vous nous aidiez à déterminer des moyens précis pour deviner les niveaux des revenus des ménages.

Cette discussion est entièrement volontaire. Vous pouvez quitter à tout moment ou tout simplement choisir de ne pas participer. Nous visons à avoir les plus hauts niveaux de confidentialité. Par conséquent, nous demandons à chacun de vous de ne pas répéter ce qui est dit dans ces discussions à l'extérieur de cette salle afin de préserver leur caractère confidentiel. Cette discussion ne sera pas enregistrée. En outre, aucune des déclarations que vous faites ne sera liée à votre identité. Etes-vous tous prêts à participer?

Initialement, nous allons poser chaque question de l'enquête. Nous espérons que vous nous disiez si la question est sensible ou si vous pensez qu'il s'agit d'une question inappropriée.

- 1- Puisque nous faisons des recherches sur les modèles de migration, est ce que chacun de vous peut se présenter et citer brièvement les différents endroits où ils ont vécu.
- 2- Généralement, qui vit actuellement à Guigou?
- 3- Quand les gens se déplacent, où vont-ils et pourquoi?
- À votre avis, comment la population de Guigou a changé au cours des vingt dernières années?
  4.1 Comment pensez-vous que ces changements vont influencer l'avenir?
- 5. Quels sont à votre avis les principaux moteurs de la migration vers et hors Guigou?
- 6- Y a-t-il des questions en ce qui concerne la migration que vous considéreriez trop sensible à poser?

7-Quand les gens de ce village commencent à gagner plus d'argent, comment ils le dépensent?

Darija (Moroccan Dialect)

- 1. Bima anana tandiro ba7et 3la achkal al hikra; wach yemken l kol wa7ed fikom y3raf brasso wey9olina bikhetissar lblayess li 3ach fihom
- 2. chekon tay3ich hena f Guigou ?
- 3. Mnin nass taysafro fin taymchiw ?
- 4. F nadarkom ; kifach sakina dyal Guigou tbedlat f 20 3am lakhera ?
  - 4.1 Kifach taybalikom had tagheyeerat radi ye2atro 3la lmosta9bal
- 5. Fnadarkom chnahoma dawafe3 l2assassiya lelhejra min wa ela Guigou ?
- 6. wach kayenin chi As2ela khassa belhejra li taybalikom 7assassin bzaf bach nswlohom?
- 7. Mnin nass dyal had Village taybdaw yrb7o bzaf dlflooss kifach taysarfohom?

# 10.0 APPENDIX B

# 10.1 SURVEY

# 10.1.1 English

1.	Do you live here more than 6 months out of the year?	Yes	No
2.	What year did you come to Guigou?		
3.	Where did you come from?		
4.	How did you come? (Please check only one.)		
	With my immediate family.		
	With my extended family.		
	With multiple non-family members.		
	By myself.		
	□ With multiple families.		
	□ <i>Other</i>		
5.	Why did you come to Guigou? (Check all that apply.)		
	□ To work in agricultural.		
	□ Because the land here is cheap.		
	Because Guigou has better schools, clinics or other	er social services.	
	□ Because somebody I knew or am related to came I	here.	
	□ Because I was assigned to work here as a govern	nent employee.	
	□ To engage in non-agricultural commerce.		
	$\Box$ I don't know.		
	□ <i>Other</i>		
6.	Of the answers that you checked, please rank the top 3 in the order of importance		
	1.		
	2.		
	3		

# 7. Please check all of the languages that you speak well enough that you can discuss complex topics such as politics, culture or religion.

- □ French
- 🗆 Darija

- □ Shilha
- □ English

### 8. Which of these languages do you speak at home?

- □ French
- 🗆 Darija
- □ Shilha
- □ English

## 9. Which of these languages do or did your father grow up speaking?

- □ French
- 🗆 Darija
- □ Shilha
- □ English

## 10. Which of these languages did your mother grow up speaking?

- □ French
- 🗆 Darija
- □ Shilha
- □ English

Thank you for participating in the survey. If you would like to make yourself available for in-depth follow-up interviews, please provide a way in which we can contact you in the future.

10.1.2 Darija (Moroccan Dialect)

## Introduction:

Salam smiyeti XXXX w hada el mossa3ed dyali XXXX. tandir ba7et 3la l3ala9a mabin lhijera w ta9adom. Tandiro daba wa7ed lba7et fel village. Ila sma7to, brina nhadro m3akom chwiya bach nchofo Te9ado tcharko.

Lghaya men had lba7et hwa bach nfahemo l asbab li tatkheli lmgharba yra7lo wla yeb9aw fblassa fin saknin. Hadchi 3lach tanswelo 13a2elat 3la 12afa r dyalhom 3la lhejra. Yela konto msta3edin bach tcharko, radi nswlokom 3la nass li tayskno m3akom, chkon r7al, fin ra7elo w 3lach ra7elo. O Radi nswelokom 3la chkonahoma el anwa3 dyal lhijra li taybanolikom kaynin, wechno taybalikom f sokna fblayess okherin.Matanchofo 7ta chi adrar kayena fhad lba7et. Wmakayen 7eta chi rba7 likom men wrah. Hadchi raykon majhol ya3ni 7ta chi ma3loma men lma3lomat li radi te3tiwna maradi tessema 3likom. Lmocharaka dyalkom ratkon bel2erada dyalkom o yemken likom tensa7ebo felwe9et li britoh.Wach taybalikom beli te9edo tcharko ?

3. من أين أتيت؟ 4. كيف أتيت ؟ ( يرجى اختيار جواب واحد فقط ). 🗆 مع أسرتي . 🗌 مع عائلتی الکبیرة . 🗌 مع عدة أعضاء من خارج العائلة . 🗆 بنفسی . 🗆 مع أسر متعددة. \_\_\_\_5. لماذا أتيت الى جيجو ؟ ( 🗌 اختيارات أخرى\_\_ تحقق كل ما ينطبق ). 🗆 للعمل في الزراعة . 🗌 لأن الأراضي هنا أقـل كـلفـة. □ لأن جيجو يتوفر على أفضل المدارس والعيادات و غيرها من الخدمات الاجتماعية . 🗌 لأن شخصا أعرفه أو على صلة به أتى إلى هنا. 🗌 لأنه تم تعييني هنا كموظف حكومي. 🗌 لـلانـخراط فـي أعمال لـيس لـها علاقـة بـالـزراعة 🗆 لا أعرف . 🗌 لأغراض أخرى\_\_ 6. يرجى ترتيب اجاباتك السابقة حسب أهميتها, أهم 3 اختيارات. \_. 1 \_\_\_\_\_. 2 \_\_\_\_. 3 7. يرجى اختيار جميع اللغات التي تتقنها بما فيه الكفاية لمناقشة مواضيع معقدة مثل السياسة أو الثقافة أو الدين. 🗆 الغرنسية 🗌 الدارجة 🗌 الأمازيغية 🗌 العربية الفصحى 8. أي من هذه اللغات تتحدث بها فى المنزل؟ 🗆 الغرنسية 🗆 الـدارجة 🗌 الأمازىغىة 9. أي من هذه اللغات ترعرع عليها والدك ؟ 🗆 الفرنسىة 🗆 الدارجة 🗆 الأمازيغية 🗌 الإنجليزية 10. أي من هذه اللغات ترعرعت عليها والدتك ؟ 🗆 الغرنسية 🗆 الدارجة

الأمازيغية
 الإنجليزية

شكرا لـك على الـمشاركة فـي هذا الاستطلاع . إذا كنت تـرغب الـمشاركة فـي مقـابـلات مـتعمقـة الـمرجو متابعتنا، يـرجى تقـديم طريقة تـمكننا من الاتصال بـك فـي الـمستقبل .

### 11.0 APPENDIX C

### 11.1 FOLLOW-UP INTERVIEW PROTOCOL

### 11.1.1 English

Hello. My name is XXX and this is my associate, XXXX. We're here today because you said that you would be willing to participate in this research study that will provide us with an in-depth understanding of the reasoning behind decisions to migrate. This research study is intended to examine how the rural areas are changing as a result of population movement and development. While there are no direct gains for you for participating in the research, we will, be offering a phone card for 50 dirhams from either Maroc Telecom or Meditel. Are you still interested in participating?

... (Respondent must say yes before proceeding)

Before we get started, we have to let you know that this interview is voluntary and you may choose to stop participating at any time. Also, this interview is anonymous, which means that none of the information that you share with us will be linked to your identity. However, with your permission, this interview will be recorded in order to help us capture all that you are telling us. We will ask you a series of questions regarding the ways in which members of your household have migrated. We welcome you to share as many details as you feel comfortable sharing to help us with our research study to better understand the decision to migrate in your household. Are you still willing to participate?

... (Respondent must say yes before proceeding)

- 1. How long have you lived in Guigou?
- 2. Where did you live prior to living in Guigou?
  - a. They must indicate precisely where they lived. We have to know if it's an urban center or a rural area. In addition, we must know the approximate population size)
- 3. Can you tell us why you decided to move to Guigou?
  - a. Why did you choose Guigou instead of major nearby urban centers, such as Fes or Sefrou?
  - b. Would you tell us what some of the circumstances were in your previous town that made you want to leave?
- 4. Did you move here with your family, or by yourself or with others?
- 5. Would you or have you ever recommended to others from your previous home to come to Guigou?
  - a. If so, would you explain why?
- 6. Guigou has been described by many to be a migrant destination, in your opinion, why is that so?
- 7. Do you feel that there are any drawbacks to living in Guigou?
  - a. If so, would you explain what they are.
- 8. At this point in time, do you plan on staying in Guigou?

- a. If so, would you explain why.
- 9. When you moved to Guigou, did you receive any assistance from family members, other community members, the government or other entities?

A few final demographic questions...

- 10. Have you passed the baccelaureat exam?
- 11. Can you tell us what your current occupation is?
- 12. Please check the languages that your parents spoke to you while you were growing up.
  - a. French
  - b. Darija
  - c. MSA
  - d. Shilha

13. Please indicate approximately what age bracket you are in.

- a. 18 30
- b. 31 40
- c. 41 50
- d. 51 60
- e. 61 70
- f. 71+

14. Is there anything else that you would like to add on the topic of migration to Guigou?

Thank you very much for your participation!

### French

Bonjour. Je m'appelle XXXX et ceci est mon collègue, XXXX. Nous sommes ici aujourd'hui parce que vous avez indiqué que vous vous intéressez à participer à une étude de recherche qui nous permet à mieux comprendre le raisonnement derrière les décisions à migrer. Cette étude vise à examiner comment le monde rural change en raison du mouvement de la population et le développement. Quant il n'y a pas de bénéfices directs pour vous à participer dans l'étude, on vous offre une carte téléphonique de 50 dirhams soit de Maroc Telecom ou Meditel pour votre participation. Est-ce que vous vous intéressez toujours à participer?

... (Il faut qu'ils disent oui avant de continuer)

Avant de commencer, nous devons vous informer que cet entretien est complètement volontaire et que vous pouvez arrêter de participer à n'importe quel moment. De plus, cet entretien est anonyme, c'est à dire qu'aucun détaille que vous partagez avec nous ne sera liées à votre identité. Cependant, avec votre permission, cet entretien sera enregistré afin de mieux comprendre ce que vous nous racontez. Nous allons demander plusieurs questions sur les façons dont lesquelles les membres de votre ménage ont migré. Vous êtes libres à partager autant de détailles que vous voulez. Est-ce que vous voulez toujours participer?

... (Il faut qu'ils disent oui avant de continuer)

- 1. Ca fait combien de temps que vous vivez à Guigou?
- 2. Ou viviez-vous avant de venir à Guigou?

- a. (Il faut qu'il/elle précise exactement ou. Il faut qu'on sache si c'est un centre urbain ou rural. Et à peu près quelle taille de la population.)
- 3. Pourriez-vous nous expliquer pourquoi vous avez décidé de déménager à Guigou?
  - a. Pourriez-vous nous expliquer pourquoi avez-vous choisi Guigou et pas une grande ville comme Fès ou Sefrou?
  - b. Pourriez-vous nous décrire les circonstances dans votre ancien domicile qui vous ont donné envie de partir ?
- 4. Est-ce que vous avez déménagé ici tout seul, avec votre famille, ou avec d'autres personnes?
- 5. Est-ce que vous avez recommandé ou bien est-ce que vous envisagez de recommander aux autres de venir vivre à Guigou?
  - a. Pourriez-vous nous expliquer pourquoi.
- 6. Guigou a été décrit par les autres comme une destination des migrants. A votre avis ceci est dû à quoi?
- 7. Est-ce que vous trouvez qu'il y a des inconvénients en vivant à Guigou?
  - a. Si oui, pourriez-vous nous expliquer lesquels.
- 8. En ce moment, est-ce que vous comptez rester à Guigou?
  - a. Pourriez-vous nous expliquer pourquoi.
- 9. Quand vous avez déménagé à Guigou, avez-vous reçu de l'aide de la part des membres de familles ou de la communauté, le gouvernement ou d'autres organismes?

Quelques dernières questions démographiques...

- 10. Avez vous passé le bac?
- 11. Quelle est votre profession actuelle?
- 12. Pourriez-vous nous indiquer les langues parlés dans votre ménage pendant votre enfance.
  - a. Shilha
  - b. Darija
  - c. Français
  - d. Foos-ha
- 13. Pourriez-vous nous indiquer approximativement votre âge.
  - a. 18 30
  - b. 31 40
  - c. 41 50
  - d. 51 60
  - e. 61 70
  - f. 71+
- 14. Est-ce qu'il y a d'autres choses que vous voulez partager sur le sujet de la migration vers Guigou ?

Merci beaucoup pour votre participation !

# 12.0 APPENDIX D

# 12.1 PERMISSION LETTER TO THE CAID OF GUIGOU

1/12/2014

Frances D. Loustau-Williams Doctorante d'Université de Pittsburgh

# A Mr. Le Caid de Guigou:

# Objet : Demande de permission pour faire un sondage sur l'immigration à Guigou

Je suis doctorante de l'Université de Pittsburgh aux états unis. J'ai aussi une affiliation avec Al Akhawayn Unviersity. Je fais actuellement la recherche sur la relation entre le développement et la migration. Je suis venu une fois chez vous pour poser les questions en ce qui concerne la situation à Guigou, car ça présente un cas très intéressant qui mérite une enquête.

Afin de mieux connaitre qu'est-ce qui se passe a Guigou, on a décidé de faire un sondage des migrants pour mieux comprendre les déterminants de la migration interne. Pour faciliter ce travail l'association Houda sous la direction de Mr. Hassan El Karakhi a offert leur aide pour mettre en œuvre le sondage. Je vous demande votre permission pour continuer avec cette enquête.

Cordialement,

Frances D. Loustau-Williams

## 13.0 APPENDIX E

### **13.1 INTERVIEW TRANSCRIPTS**

Interview transcripts February 4, 2016 P = Participant I= Interviewer

### Participant 5 (Group 1): 11:30 am

I: We're here because my wife is doing her dissertation. We picked a few people to participate with us. It's completely voluntary. These people that we chose, we're going to ask questions about their life, how they came to Guigou...

P: What kind of questions, for example?

I: Like you can tell us, how long you've been in Guigou...

P: Since 1978.

I: Where did you come from? From what area? Why did you come? What reasons brought you here?

P: I'm from Elmiss. Wherever you find bread, you go work there. We were just looking for work. Wherever you find work you go there. At that time you see it was tough, we had no food pretty much, no onions, it was tough to find food there, like onions, potatoes. Here, I mean, we came here and then we used to work. Find any kind of work. People plant corn and potatoes and onions. Then we find work from one to one. Sometimes you finish one job and then find another one. Here you can find bread, milk. Then the kids they were born here. We left our land and home but we're finding our home and land here. Wherever you go here, it feels like home. This is my home, even though I left my native village. We're not thinking to go back there. We're staying home because we feel like it's our home. We built our house here. So we're staying here and staying here. We're not leaving.

I: The first time that you came here did you come by yourself or did you come with your family?

P: The first time I came just with my wife but then I didn't find a job, but she went back and then when I found a job in construction do any kind of daily job with construction and whatever, then she came back. Then the kids they were born here.

I: For how long did you stay here by yourself looking for a job until your wife came back?

P: It took me 5 months until I start to find a place and then got a job. Then my wife came back.

I: When you got here and found a job, did you ask other people to join you? Someone from your family?

P: Yes. They followed me. A few of my family members. They got here and then they found a job and they stayed here.

I: Did they ask you how was Guigou before they decided to come?

P: Yes they asked a few questions. But when they moved, I already found them a job. When they came they were pretty much set up. So they had something to do.

I: A lot of people they say that Guigou brings more people to it. What do you think about that?

P: Yes its true because people have more chances to find a job because of agriculture and farming. Potatoes and farming. That was before because people worked the land in the traditional way so they needed a lot of workers and laborers. But now with tractors and equipment, just God helps people who are looking for jobs because there's not a lot of jobs like there were before.

I: Do you think there are a lot of problems in Guigou that would push people to leave Guigou?

P: For people like us who are not looking for problems, who come here to work, they don't look for problems. Everything is fine. Nobody is going to bother you, none of the authorities. You're living your life, you're working, you're fine. And people who are looking for problems are going to find problems. When I came here, I rented for 12 years. I rented a small house. I still have a good relationship friendship with the people. I never had any problems or felt like it's not a good place. That's why we never try to look for problems.

I: But what about infrastructure and authorities and all?

For example, for somebody who has kids, when they grow up and go to high school and they go to the university and then there's no university here, which means they have to leave.

I: That's the kind of problems we meant.

P: Yes of course, at that time, we had no middle school and no high school and a lot of people sent their kids to Boulemane. They stayed here in Guigou, but their kids go to school in Boulemane. It was tough because it's cold. That's one of the problems. But when they get to high school, they're old enough and big enough to go the university by themselves. We feel like we're home in the entire country. From Tangier to Laguira. Wherever you go, you are home so you don't feel like you are a stranger or an outsider. There's no borders. We feel like we're home wherever we go. As long as we're not looking for problems. Nobody is going to bother you or ask you what you're doing here or to go home. If the person is a good person, you are never going to have problems. You will always find something to do here in Guigou or wherever else. Thanks be to God. Now the kids they were born here. Now they've grown up. Now they've gotten jobs here pretty much all of them. They got jobs. Here you work, a man finds a job and he can work until he is 75 or until his body is not capable of working.

I: So you're 75 years old?

P: I'm 75 years old. I'm not sure about my age because at that time we didn't have the family book. This just from my parents. That's what I have in my current family book. God knows how old I really am.

I: So you're not really thinking about moving somewhere else? You're not going to sell your house for example to move somewhere else?

P: If I go to another place, for sure it will be my grave yard. When something is meant for you, wherever you go, you're going to find it. It's God's will.

I: When you moved to Guigou for the first time, did people welcome you?

P: Oh yeah, so much. They were really... When I was working in construction... Then my kids they were born, the people that I was working for, they used to carry my kids like they were their own kids. Even the guy I used to work for said, if you want I can make you a family book. Like now, you're not going to find that. Nobody is going to tell you to take them in their family book. But I said, yes, I already have one in my home. I left it in my village. If somebody, see that's proof of how good people were. Who is going to propose putting our name in their family book? That shows how good people were here. Sometimes like if you have 2 of the same thing, he can give you one and keep one for himself. That's how life was. But now it's really hard and really difficult. May God help us all.

I: Did you go to school?

P: No. I went to the mosque when I was a kid just to learn some of the Koran.

I: What languages do you speak at home with your kids? Tamazight or something else?

P: My kids speak Tamazight and Arabic, but pretty much at home inside the house, we speak Tamazight.

I: Sorry for taking your time.

P: Would you like to stay for tea?

# **Participant 6 (Group 1)**

Introduction...

I: When did you move to Guigou?

P: 34 years ago.

I: Where did you move from?

P: I came from Enjil.

I: What were your reasons for coming here?

P: It was just a question of jobs. At that time There were more jobs here than in Enjil. There were enough jobs for everybody. In reality, when I came here, I wasn't really looking for a job. I used to fix bikes in Enjil. Then when I tried agriculture jobs they were really tough and hard. Then I started fixing radios and watches.

I: So when you moved here for the first did you come by yourself, or did you come with your family?

P: No, the first time I came, it was just me. I came here and it took me less than one year to set up everything and get everything ready. Then my family joined me.

I: Did you tell other people about Guigou? That in Guigou there were jobs?

P: No, but me, the reason I came to Guigou was because of a woman. Her name was xxxx. It's because of her that I moved here. But I didn't really push somebody else to come. I brought a few people, but they didn't want to stay. So they left. A few came when they were building the dam. But they didn't want to stay. They left. They went back to Enjil.

I: A lot of people say that people are moving to Guigou. What do you think about that?

P: Yes, it's true. People from the south, the Saharawi because of the work, a lot of them came here. People from Marmoucha, a lot of them are here. People from Ait Hassan. And even people from les Rifi.

A lot of people from a lot of places come here to Guigou, even the Arabs. Its not their origins, but a lot of Arabs too. They all came to Guigou. A long time ago, when they came you're going to be scared because a lot of people came at the same time, and you think something is going on. It's like a souk. A lot of people they came. A lot of them, they came for food reasons because sometimes the authorities distribute bags of flour. Then the authorities are organized, they give them a receipt. A lot of people came at one time. Even a lot of Arabs came here to invest of course, because some of them, they had money. They came, they opened stores, they had farms. People from Jadida, people from Abda. They're Arabs but they came here to invest. They opened stores and small businesses. From Beni Mellal. A lot of them came to invest in agriculture. And then of course, it was really because agriculture at that time, you sell it for 5dirhams a kilo. So the business was really good. You have one then when you plant one small onion. And then when it's ready for harvest you sell it for 6 dirhams. It was a really good business. That's why a lot of them came here to invest. What do you think? Of course it's a good business. A lot of them came to invest. But last year, it was tough in agriculture. They didn't make a lot of money. It was tough. Those who sold their harvest in the first of the season, it was not okay, but some of them made it. And then the price went up to 5 dirhams again in whole sale, then it was okay.

I: Do you think in Guigou there are problems that would push people to leave Guigou? Like roads, infrastructure, hospitals?

P: Yes, for a long time. For a long period, there was nothing in Guigou pretty much. No roads, no good infrastructure. But now I think the new president of the commune, I mean you see him driving, walking around. There is a different.

I: Well, we were talking about not necessarily political issues but hospitals or something that's not related to elections.

P: I'm going to tell you if somebody comes to Guigou I think the only thing if somebody is going to move from Guigou, the only thing that would make him move is the sewers because we have everything here, food, stuff, but the only thing that would make people move is the sewer because it's a big town. It's a tough issue.

I: What about the weather? Do you think the weather is going to push somebody to leave Guigou?

P: No. I think the weather is fine. I love the weather here. For me, I'm not leaving anywhere. I bought a house here. My kids are here. I'm working. I'm doing what I'm doing .That's the truth. I'm not moving.

I: Did people welcome you when you came here? When you moved here you had no problems?

P: No. When I moved. Not at all. Everything was fine. We didn't have problems. And even the people here when somebody new moves here and opens a business or a store or for example a doctor, everybody is happy because it shows that there is economic growth.

I: Did you go to school? Did you pass the bac?

P: No. I just studied a little bit in the mosque when I was a kid. I just learned by myself how to fix old radios and watches. My job they said it's somebody who fixes watches on my ID, it's "souaji."

I: But your job's title is "saati"

P: No, on my ID, whoever made it, he put "souaji" as the profession.

I: Your kids, what language do you speak at home?

P: We speak only Tamazight. Xxxx they all speak just Tamazight. We don't talk to them in Arabic. We speak only in Tamazight at home.
I: How old are you?

P: In my ID, it says I was born in 1954, but I'm older than that. (he counts on his fingers how old he is) 60, 62, I think I'm 64 years old.

I: I'm recording now just to be able translate when we get home.

## **Participant 9 (Group 1)**

Introduction...

I: How long have you been in Guigou?

P: Now we've lived here more than 50 years. We moved from Laksabi. (he reaches for his ID)

I: No, we don't need to see your ID.

P: We came from Laksabi. I was born in Guigou and my dad came here because his mom moved here. I was born in 1964.

I: So you moved from Laksabi?

P: Yes, my dad moved from Laksabi but I was born here.

I: Can you tell us why your dad moved here?

P: Yes. He moved here because his mom moved here and she stayed here for a long time in Haj XXX's house. And then my dad moved here. Then my dad stayed in their house and he stayed in Guigou. And then my aunt xxxx moved too. She stayed here. And then they built a small house where they lived. Then all the family came and they stayed here in Guigou. His mom got here and then my dad got here and then my aunts, that's how it happened.

I: A lot of people say Guigou is a migrant town....?

P: Yeah, they come here for work. There's always the possibility of finding a job in farming and agriculture. And even in transportation, because I do transportation. That's another kind of job that people can do here.

I: Do you think there are infrastructure problems that might push people to move from Guigou?

P: I think it's the sewers. It's one of the biggest issues that we have here in Guigou. There's a hospital too but sometimes you go to the hospital and you find no one there. If a woman goes to a hospital, they're not going to do anything. They'll have her fill out a form and then send her to Sefrou or Boulemane. Even if they have medicine, they don't give it to people. They hide it.

I: Do you the idea to stay in Guigou or go somewhere else?

P: It depends on where we're staying. If I have enough strength to move, I'm not going to stay here. I'll move. If you at least have a sewer, I might stay. (he points to the sewer outside). Look at the situation. It smells and there's dirt. It's not safe. There are fewer jobs. It's getting tougher.

I: When your dad was telling you about moving here. Did he tell you why Guigou and not another place?

P: He said he was happy about Guigou because it was the closest one to Laksabi and because his mom was here. That's why he came to Guigou and not another place. He was happy because he worked with the French. He was happy with that.

I: Did you get a bac?

P: No. I went through the 4<sup>th</sup> year of elementary school. I do transportation.

I: What languages do you speak in the house?

P: We speak darija and Tamazight.

I: How old are you?

P: I was born in 1964.

Participant 10 (Group 2)

Introduction:

I: For how long have you been in Guigou?

P: At least 20 years.

I: Before you came to Guigou, where did you used to live?

P: Before Guigou we used to live in Enjil.

I: What were the reasons that your husband and you decided to come to Guigou?

P: We followed a family member named xxx. He came first and he stayed with one of his family members and we followed him. Since there really was nothing to do in Enjil we decided to move. Then we came here.

I: Did you move all of you at once or did your husband move first?

P: No. We moved all of us. All of us, we came here at once. XXX is part of the family. We know him. Pretty much he prepared everything for us here.

I: Did somebody move to Guigou after you? Or did you push someone else to come here?

P: We know someone who came after us. I mean, yeah, because he talked to us about it. We encouraged him to come. I don't know if we were the reason he came. But we told him that Guigou was a better place than Enjil at that time. Then he came and I think we still have contact with him. He liked it. He works in agriculture.

I: Do you think that Guigou is a place where people want to move?

P: Yeah, there's a lot of people that we know who came to Guigou for agriculture jobs. There are a lot of people from Immouzzer Marmoucha and Elmiss and Ait Hassan. A lot of people from there, they moved here.

I: Are there any kinds of difficulties that you think people will face once they move to Guigou?

P: I don't know because when I moved with my husband. Everything was fine. Even my husband is thinking to sell everything he has in Enjil like his old house in order to stay here. For us, I don't think there are any problems that might push us to leave.

I: So how old are you?

P: I don't really know. We didn't register at that time, so I don't really have a date when I was born. I don't have even an ID. I think I'm about 40 years old.

I: There's no way you can be 40.

P: 50?

- I: No more than that. Well, I think you're more than 61. I know you. I know your family.
- P: I don't know. Maybe. If you say so.
- I: What about schooling. Do you have any schooling?
- P: No. I never went to school.
- I: Do you work?
- P: No. But I make some stuff at home and I sell them.
- I: What languages do you speak in your house?
- P: We speak just Tamazight. I don't even speak darija very well.

Participant 8 (Group 2)

Introduction...

I: How long have you been in Guigou?

P: I mean like 14 or 15 years.

- I: Where were you before you moved to Guigou?
- P: Enjil. We were in Enjil.
- I: Can you explain to us why you decided to move to Guigou?
- P: I chose Guigou because it's good for me for my field. That's my job.

I: What is it? What do you do?

P: My job is to fix the pumps for the wells. For agriculture. Install the pumps. You know fix them. For irrigation.

I: Did you move by yourself or did you come with someone else?

P: The first time I moved with my family.

I: Did you influence anybody else in coming to Guigou?

P: Yeah. A lot of people. At least 6 or 7 people that I influenced to come here to work

I: Why did you tell them to come?

P: I needed people that I know to work with me. Then they come and they work for me and then they liked it and they liked the place and they decided to stay here. They came from Enjil and Ashluge. 6 or 7 of them they came from these places.

I: A lot of people consider Guigou to be a migrant town. Why do you think that is?

P: I cannot really tell you the exact reason because there are all kinds of different reasons for each person. Each person has its own reason. For example the people I know, you have, they came here. They worked

a few months and then they liked and so they stayed. I know other people, they're young. They're from Guigou but they decided not to stay. I know at least 30 people that left.

I: So why do you think they left?

P: I don't really know exactly. Maybe they didn't find a job. Maybe what they do isn't here in Guigou. Most of them they leave around December January and February. And then when it's the season to start the oninos, they come back. So it's like temporary. Because during this time there's nothing to do here. Then they come when the onion season starts. It's seasonal.

I: Are there any problems that you think would cause potential migrants to not want to stay in Guigou?

P: No. I don't think so. I mean if you want to come and you want to work you can find a job. If you want to do your own thing you can do it. So I don't think there's a problem.

I: What about the infrastructure?

P: No. I think we're fine. We don't really have a problem with that.

I: Do you think you're going to stay here?

P: Yes. I'm staying here. I'm not moving. I have my work I have my job. There are enough people that know me here. I feel satisfied with my life here.

I: Did you have any problems or help when you came here for the first time?

P: I had no problems. The people here welcomed me. And they're still welcoming me. They're like brothers and sisters to me. They're like family. I never felt that there were any problems. I'm satisfied.

I: Did you go to school?

P: No. I don't have any schooling.

I: What languages do you speak at home?

P: Just Tamazight. In the house we speak just Tamazight. But outside, we speak darija.

I: Do you know how old you are?

P: I was born in 1972, which means I'm 42 no I'm 72, 82, 92... I'm 44.

I: Thank you.

P: Let's go get some tea or something.

I: No thank you. We have to get going.

Participant #3 (Group 2)

Introduction:

I: Do you remember that lady who came here when we did the survey?

P: Yes.

I: Well, we're here to do the second part of it. It's the same research. (Introduction...)

P: Okay.

I: How long have you lived in Guigou?

P: Me. I've been here for about 20 years.

I: Before you came to Guigou, where were you living?

P: From Enjil. It's the same region. For us it's the region.

I: Can you tell us the reasons why you came to Guigou?

P: Guigou for us is in the same region. It's not far. There's more...

I: Not just your personal reasons but why did you choose Guigou? Why didn't you go to Fes or Sefrou, but instead you decided to come to Guigou?

P: For me I didn't go to Sefrou, because what I needed for living, the requirements of life, I found it here. It's cheaper for me to stay here. Like, the school is here. And I don't have a problem with work because I'm retired. I'm retired from the military.

I: The first time, did you come by yourself or did you come with your family?

P: No. I came with my family straight with my family. I didn't come by myself.

I: After you came here, did you influence other people to come to Guigou?

P: No. I never talked to somebody about coming here.

I: A lot of people think that Guigou attracts migrants. What do you think about that?

P: Compared to their villages and where they live, Guigou is much better. Guigou has lots of migrants. If you compare Guigou with Ait Hassan, it's like you're comparing Guigou and Casablanca. In Ait Hassan, there's nothing of what people need. There's nothing. People just live. They eat and they sleep. There's nothing else to do. At that point, Tarjda, just to explain. Tarjda is a mountain here in Guigou. It's way better than Ait Hassan. There's nothing. There's no rain. Even the land. They don't really have good land. IT's just rocky. They're just building houses and living. They don't really have something else to do.

I: Do you think that there are any problems that would make people who moved here want to leave again?

P: For me. I think the only problem is the infrastructure, the sewer systems. After a period, if they don't fix this problem, a lot of people are going to leave. Because it gets dirty. The second problem I think, is the weather. It's cold. The wood now is getting expensive. A lot of people will not be able to afford the wood for the fireplaces. I think maybe these two problems, a few people, some people are going to decide to leave Guigou again.

I: So do you really have no intention of ever leaving?

P: No. The first time I came, I didn't like it, but now I'm staying here for personal reasons. My family is here so I'm not really thinking about leaving.

I: The first time you came, do you remember if you had any problems as a foreigner coming in and staying here? Any ethnic problems with people?

P: No. We had no problems. I didn't have sheep and stuff. A lot of problems now that you hear about, it's about animals, it's about sheep. Because if you have sheep, sometimes you have to take them, and then you make go into somebody's land and the sheep might destroy some of his harvest. I think that's the only problems you're going to hear about between people. But you won't hear about problems with ethnicity and race.

I: Then for you there were no problems.

P: Yeah, so the only people that might have problems are the people outside Guigou who raise sheep and livestock. Outside that, no.

I: Did you go to school? Do you have a bac?

P: No.

I: Are you working?

P: No. I'm retired from the military.

I: What language do you speak at home?

P: Tamazight and darija of course.

I: How old are you?

P: I'm 47. From 1969. So what's the purpose of all of these questions?

I: By analyzing all these answers we can be able to figure out the movement of migrants where they come from, why they come to Guigou. The kinds of migrants in Guigou, if it's immigration from rural to rural or from urban to rural. We want to know what reasons people come to Guigou or leave Guigou. It's an academic research for Tarik's wife for her PhD. Tarik is from El Mers. He's from here. His wife is in school. She writes about immigration and she chose as a case study Guigou.

P: Yes. Immigration to Guigou it's a lot of people who come to Guigou. But immigration from Guigou to another place, there's not a lot of people that are leaving Guigou. Why? Because when they come here they find the cost of living is low. The land is cheap. For example here, he can buy a piece of land for 500 dirhams. It's cheap. But if he goes to Sefrou he's not going to find that. It's too high.

I: Thank you.

Participant #2 (Group 3)

Introduction

I: All the questions we're going to ask are just why did you come here, where did you come from. About languages. Just simple questions. How many years have you been in Guigou?

P: Here as a family, seven years.

I: Where were you before you moved to Guigou?

P: We were in the region of Meknes. We were outside Meknes.

I: Where exactly in Meknes, like in Meknes the city or somewhere?

P: No. We were in a village called Ain Jemaa. It's in the direction of Sidi Kassm.

I: Do you think that Ain Jemaa is bigger than Guigou or smaller than Guigou?

P: No. It's a little bit smaller. It's a commune. It's a rural commune. It's like Guigou but it's a small size. There's not enough space. Geographically it's limited. It's too small.

I: Yeah, it's like when you go and turn right..

P: It's like just when you leave Meknes at the first roundabout then you turn right, it's like you're going to Khemisset. There is a big roundabout. If you're coming from Khemisset and you don't want to go into the city and there's Marjane and there's the first roundabout and then you turn left.

I: SO it's not Ain Karmaa?

P: No no. Ain Karmaa is on the road if you're going to Sidi Kassm. Ain Jemaa is on the road to Khemisset.

I: DO you know me? I'm from Guigou.

P: Yes, yes, I know you. I know you work a lot with associations. I know you since you came in.

I: Can you tell us the reasons for coming to Guigou.

P: We cam here to work. Our project is the reason we came to Guigou.

I: So your project is welding. IT's not agriculture or something.

P: No we're here. We do welding. That's our job.

I: When you came here for the first time, did you come with your family or did you come by yourself?

P: My family was here first. My brother got here first. He was here like 13 or 14 years ago.

I: He was here. Then you came later?

P: Yeah, with my family we came all at once after that.

I: After you came did you tell somebody else that you know to come to Guigou. That there were available jobs here?

P: It's like a chain pretty much. One brings one after another. Like the guy who works here with me, I brought him. I told him to come here, there's more jobs. He works for me. He's from Meknes. It's like a chain.

I: It's like us, because my brother came here first then we came then after we came, we brought our inlaws. A lot of people see Guigou as a migrant hub. What is your opinion about this?

P: Yeah. That's right. But everybody has his project. We all have different reasons to move.

I: Do you really think that there's a lot people coming to Guigou compared to other places?

P: Yeah, for me there's more activities in Guigou. There's more things to do than other places. Well, that's what I see. That's my opinion. Like agriculture.

I: Do you think that there are still problems that people face here that are going to push them to leave Guigou again? (silence...) Did you understand my question?

P: Yeah. It depends on the people. We all see things differently.

I: No. In your opinion. We want to know what you think.

P: In my opinion, I don't think there's a problem. I'm here. I haven't found any problems. That's why I say it depends on the person. Each case is different. For my case I don't see any problems, I don't see why people would leave Guigou again.

I: So you have every intention to stay in Guigou?

P: Oh yeah, for me there's no doubts. I will stay in Guigou.

I: Inchallah. You will open more shops.

P: No no no. There are no more shops. This one is fine. I'll have kids and I'll stay here. That's all.

I: The day you came to Guigou, did people welcome you? Did you get any help from people to open your shop?

P: For us, we never had problems. No no. Not even small ones. Everybody treated us well. Everyone was good to us. It was fine.

I: Did you take the bac?

P: No.

I: Your job now is you're a welder?

P: Yeah.

I: What languages do you speak in the house?

P: Arabic, darija. Even if my mom is Berber, but my dad is Arab so we grew up speaking Arabic.

I: Then your moms language just disappeared?

P: Yep it disappeared.

I: How old are you?

P: I think I'm 43 or 33.

I: Thank you for your time. I appreciate it.

Participant #7 (Group 3) - Location - Hamam

I: We're here because my friends wif is doing a Phd on migration in villages like Guigou. And she chose Guigou as a case study. (Introduction...)

I: I'm going to ask some simple questions like where were you before, why did you come here. So, when did you move to Guigou?

P: In 2001. I came here in 2001. It's like 15 years ago now.

I: Where were you before?

P: Before Guigou I was in Errachidia.

I: So you were in Errachidia the city or a small village around Errachidia. We just want to know exactly.

P: No. I came from Errachidia the center. I'm from another village, but I moved to Errachidia in 1996.

I: Which means like you moved from a major city to Guigou?

P: Is it possible to tell us why you left the city to come to Guigou.

I: Well the only reason I did it was because of my job, work. I came here to manage this hammam. It's like a business trip. Managing a hammam.

I: When you came you, did you come alone by yourself or did you bring your family with you.

P: No. the first time I came by myself, and then after 3 months, my family came to join me.

I: After you moved and stayed here do you think you influenced other people to come to Guigou?

P: Yes yes you're right pretty much my entire family came.

I: How big is your family? How many people came with you?

P: There's my mom and my kids and my brother and then he brought his kids. That's more than 10 or 12 people.

I: What are the reasons that you brought your brother? Why did you think to bring him here?

P: Yeah, he found a job. A job was available. He found a place to live with us family. It's about job availability pretty much. Then he opened his grocery store.

I: There's a number of people that think that Guigou is a migrant hub. What's your opinion on that?

P: Yes that's true. If you see the people here, there's a multitude of different people that came from different places and different regions. I think most of them came for work. For jobs. In Guigou, you cannot sit and do nothing. There's always something to do. There's a wide availability of jobs.

I: Do you think that there are any problems in Guigou that would push people to leave?

P: All the people that I know stayed here. Nobody left. None of them are thinking to leave even if there's a lot of missing things that we need here. It's better than where they were before. A lot of people stayed and they had kids and their kids had kids. They're here. Sometimes they might leave just for a few months if it's cold. They might leave for a few months and then they come back. Also for the agricultural season, some of them go when there's nothing to do and then they come back when the agricultural season starts. But I noticed that a lot of them are happy because they have a job here and they're happy with their lives.

I: Do you have the intention of staying in Guigou?

P: I mean once you build your house you don't think of moving somewhere else. That's it. I'm here. I'm not moving anywhere.

I: The first day you came, did you think that you were not welcome from the people?

P: No. The people were really welcoming. It was fine. There were no problems at all.

I: Do you have a bac?

P: No.

I: What is your job now?

P: I'm the manager of a hammam.

I: What languages do you speak at home?

P: Darija.

I: Tamazight?

P: No. I don't speak Tamazight, just Arabic.

I: What are your origins?

P: We're Arabs.

I: How old are you?

P: I'm 49 this week.

I: Thank you so much for your help.

Participant #4 (Group 3)

I: (Introduction..) And we're trying to see people who came from villages to Guigou and also people who came from cities to Guigou.

P: Our example, we came from the city to Guigou.

I: Where were you before?

P: In 1986, we were in Sefrou and then we moved to Guigou.

I: Now we have a few questions. How long have you been in Guigou.

P: It's been about 38 years. 86, 89, 96, 2006, 2016. IT's about 30 years. Yeah, we came from Sefrou.

I: Can you tell us why you left the city to come to Guigou.

P: You know at that time we didn't have a house in Sefour. The cost of living was high. We couldn't keep up with it. But here in Guigou, we had a house. But at that time, my dad was retired. He retired in 1978. We were in Sefrou because of the schooling. At that time, XXXX got his bac, then he went to the university, after that the university is in Fez. And XXXX got her bac. And then XXXX found a job and he went to wherever his job was. And XXX was in the university so she wasn't staying with us in Sefrou. So we decided to move here. There was nothing else to do in Sefrou. Since the schooling for kids didn't matter. They all went to different places. Then it was too much for my dad because he was just a worker. It was too much for 6 people to live there, because of the cost of living. Compared to the income of my dad. His retirement salary was really low. He said it was better to come to Guigou, because then we can have a house and we don't have to pay rent. Because we already had a house here. And the money to pay the rent in Sefrou, we can use it for something else here.

I: The first time you moved here, did you come alone or with you whole family?

P: No, we all came. Just Mohamed who stayed because he had a job there. He was working.

I: After you came do you think other people were influenced by you coming here?

P: No.

I: A number of people think that Guigou is a hub for migrants. What do you think about that?

P: Yes. I'm one of those people who thinks that. Probably there's enough jobs for laborers that's easy to find in agriculture. That's all they have here pretty much are agricultural jobs. There's an example, here these homeless people here, one of the gendarme told us that one of the homeless people told him that why do you want me to leave if I can spend the night here for 3 dirhams a night. The café owners let them

sleep in their café for 3 dirhams a night. Then he eats dinner for 3 dirhams. Why would he think of leaving Guigou if the cost of living is so low? Now the homeless they sleep in the cafes for 3 dirhams a night. He eats dinner for 3 dirhams. He has lunch for 3 dirhams. He can have breakfast with 2 eggs for 3 dirhams. Do you understand? It's like you are in a university restaurant. The university restaurant is like 1.5 dirhams.

I: I think it's still the same price. It hasn't changed for years. It's like 1.5 dirhams.

I: Tell us, do you have the intention of leaving Guigou?

P: For now, no. I mean we're still in Guigou. We're not thinking to move.

I: Why?

P: What do you want me to stay. Me personally, I have no other place to go. To go now from Guigou to the city it's too expensive. I'm not doing that. I'd have to go and look for a place to rent. It's going to be expensive. Then I would need to rent another space for my convenient store which would be even more expensive.

I: Fthe first day you came di dyou get any help from people, from others? And were people welcoming?

P: We had no problems. I mean, wherever you go in Morocco, people are going to welcome you. That's a good thing. We never felt like we were strangers or anything.

I: Do you have a bac?

P: No.

- I: What do you do for a living?
- P: I own a convenient store.
- I: What languages do you speak at home?
- P: We speak both Arabic and Darija.
- I: Your origins are Berber?
- P: Yes. I'm Berber from Ain S.... Yeah, but we speak darija as well.
- I: How old are you? Just approximately.
- P: I'm between 46 and 60.
- I: Thank you so much for your time.

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