Exclusionary Development
Knowledge and Accessibility in Rural Morocco

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Dedication

The author wishes to dedicate this thesis to her parents.
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Abstract of Thesis

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In recent decades, there has been an increased awareness of the concentration of the poor in rural and underdeveloped areas and increased attention to scaled economic and multi-dimensional assessments as tools for targeting rural poverty. While this has led to new forms of development intervention in previously neglected regions across the Global South, in Morocco this system of poverty reduction continues to exclude key sites and stakeholders. This thesis asks how local state offices and non-state actors participate in or disrupt the structural systems of development in Morocco and what potential these local communities have for contributing to standardized knowledge production of poverty and development. I use participatory mapping workshops, interviews, and “studying up” strategies to answer questions of access – physical and social – to development planning and interventions. My findings indicate that the Moroccan rural development complex is structurally exclusionary to remote rural communities. The state and its partners have portrayed rural spaces as quickly rising out of poverty thanks to their decentralized and participatory development schemes, yet incongruently, local recipients in the least accessible areas live in spaces devoid of interventions. With all development practices inherently tied to state standards, any oversight or exclusion by state targeting is magnified by the same oversight of its development partners. The scale of targeting and evaluation in international metrics has contributed to this neglect, and the unfortunate result has been a feedback loop of inaccessibility for remote rural pockets of the country. I explain why one spatial indicator, village accessibility to social services, is an appropriate addition to poverty assessments and development targeting, drawing from my conversations with villagers in rural Tinghir Province and the results of my geospatial analysis.
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Glossary of Terms

ADS: Social Development Agency.

Amazigh: An ethnic group originating in North Africa, also known as ‘Berber.’

Auberge: Bed and breakfast.

Centre commune: The marketplace town of a commune offering communal services.

Chantier de règne: An accomplishment that will define the legacy of the king’s reign.

CLDH: Local Council on Human Development.

Convention de partenariat: Partnership agreement.

CPDH: Provincial Council on Human Development.

Darija: the set of Arabic dialects spoken across North Africa.

DGCL: Directorate-General of Local Government.

Enframing: A phenomenon by which an observer only sees what is intended to be seen, to the exclusion of other objects (Mitchell, 1991).


HDI: Human Development Index.

IE: Institutional ethnography.

Imazighen: plural of Amazigh.

INDH: National Initiative for Human Development.

Maghreb: North Africa, specifically the territories west of the Nile and north of the Sahara.

Makhzen: the monarchy, Ministry of Interior, and any colluding individuals or offices.

Maroc Inutile: Useless Morocco, a term common during the French Protectorate referring to the largely rural, Amazigh-majority inland regions of Morocco.
MDGs: Millennium Development Goals.

MoI: Ministry of Interior.

Moqaddem: An appointee of the Ministry of Interior under the direction of the *qaid*.

MPI: Multi-Dimensional Poverty Index.

ONDH: National Observatory for Human Development.

PAC: Communal Action Plan.

PAR: Participatory Action Research.

PCD: Communal Development Plan.

Piste: Unpaved dirt road.

PRM: Participatory Research Mapping.

Qaid: An appointee of the Ministry of Interior charged with communal affairs.

Regionalization: An expansion of power to regional and lower level councils.

Responsible: staff member; authority figure.

SDGs: Sustainable Development Goals

Sheikh: An appointee of the Ministry of Interior under the direction of the *qaid*.

Souq: Marketplace.

Tashlehiyt: A dialect of the Amazigh common to southern Morocco.

Wali: The provincial governor.
Chapter 1: Introduction

1.1 Background

In 2004, the Moroccan census bureau Haut Commissariat du Plan (HCP) published a report of the nation’s first poverty map. This map, an expenditure-based measure, compares administrative areas at the regional, provincial, and communal (municipal) scales (Figures 1.1-1.2). The report was the first nation-wide, publicly published, commune-level assessment of poverty that the Kingdom had ever produced, and it represented a shift in perspective of the state under the new King Mohammed VI: one that, since his ascension in 1999, has been marked by strategic and programmatic efforts to alleviate the vast poverty seen under his father, particularly for rural areas.1 The map was redrawn in a 2007 publication combining household expenditure with HCP’s population census data.

The 2007 poverty map – and associated scalar approaches to poverty assessment – is now ubiquitous in state development policies of the rural provinces. The map itself was the primary targeting tool of the Kingdom’s largest country-wide development program to date, the National Initiative for Human Development (INDH), which was established the year following the first poverty map report. In national ministries, the map is used as a reference point for regional development programs, and even non-state development partners consult the report’s data when targeting their interventions.

The use of such a data-driven and scaled assessment was a striking change from previous decades of development under Hassan II, whose approach to governance over the rural Amazigh2 countryside was marked by neglect, and whose scaled approaches rarely distinguished areas

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1 “[T]he Economic and Social Development plan of 1996-2000 was the first official document to declare the fight against poverty a national priority” (Radwan, El Oraby, Fahim, Nadi, Boughzala, Bibi, & Abdelkhaled, 2005). However, this lacked the acute spatial framework of the poverty maps.
2 The term ‘Berber’ is believed to derive from Latin ‘barbarian,’ and some Moroccans and scholars consider it a derogatory title. I use the singular ‘Amazigh’ and plural ‘Imazighen’ when referring to this ethnic group and ‘Tashlehiyt’ when discussing the dialect spoken in the Moroccan southeast, per local custom.
below the regional level (Radwan, El Oraby, Fahim, Nadi, Boughzala, Bibi, & Abdelkhalek, 2005). Mohammed VI’s new initiatives were a statement to these Amazigh-majority internal areas of unrest: the so-called “King of the Poor” appeared committed to understanding and alleviating the suffering of rural Maroc inutile3 (“useless Morocco”) that was marginalized under his father’s reign. The 2004 provincial map (Figure 1.2 inset) authenticates the historic coastal-inland divide so stark under French colonial and Moroccan monarchic rule.

These new assessments were also a nod to international observers who have long demanded good governance practices of Morocco and its fellow Global South nation-states (Radwan et al., 2005). They signal a shift from the neoliberal, national-level growth strategies of the Washington Consensus and IMF policy to regionally targeted and poverty-centered interventions of the 21st century’s World Bank and United Nations Development Program (UNDP). Both Hassan II and Mohammed VI have been eager to keep Morocco in good diplomatic terms with Western institutions, and these data-driven poverty assessments under Mohammed VI are indicative of that relationship. The new poverty map, published this year4, is a multi-scalar version of the UNDP and Oxford Poverty & Human Development Initiative’s (OPHI) Multi-Dimensional Poverty Index (MPI), an internationally well-received poverty measure based on variables of health, education, and living standards (United Nations Development Program (UNDP), 2016b). As prominent international institutions have evolved their strategies for assessing and targeting poverty in the Global South, the Moroccan state has worked to maintain its image globally as a model participant.

3 For discussion of the Maroc inutile, see Chapter 3.
4 The report was not available in time for publication of this thesis.
Figure 1.1: Communal Poverty Rates, Morocco, 2004 (inset) and 2007 (reprinted from Royaume du Maroc, 2010)

Key: Poverty Rate: Less than 10% (tan); 10% to less than 20% (blue); 20% to less than 30% (green); 30% to less than 40% (salmon); 40% or higher (red).
Figure 1.2: Provincial Poverty Rates, Morocco, 2004 (inset) and 2007
(reprinted from Royaume du Maroc, 2010)

Key: Poverty Rate: Less than 10% (tan); 10% to less than 20% (blue); 20% to less than 30% (green); 30% to less than 40% (salmon); 40% or higher (red).
1.1.1 National Metrics

Hassan II left his son with a country of vast inequalities between urban and rural spaces. His regime’s continuous neglect of Amazigh-majority provinces and over-emphasis on national growth left many rural regions without access to economic and social infrastructural investments (Radwan et al., 2005). One million more men and women fell into poverty by 1999 than there were before 1992, and poverty rates for rural women rose by almost 10 percent, compared to just over four percent for urban women. At the turn of the century, rural schoolchildren were still struggling to achieve literacy due to the costs of education and physical inaccessibility to schools (p. 15).

Thanks to the rural-centered, data-driven, and scaled strategies of Mohammed VI, Morocco is now seen as a poster child for poverty alleviation in the Global South. Morocco has achieved an astounding drop in poverty since the start of King Mohammed VI’s rule, decreasing by over 40 percent and bringing 1.7 million citizens out of poverty in the decade after his crowning (Achy, 2010)5. Moroccans living below two dollars per day dropped from nearly a fourth of the population to just 14 percent within ten years (Hakimian, 2013). In 2009, when many countries were fraught with recession, Moroccan GDP rose by two percent (Friedman, 2010). Unemployment figures plummeted under the new king and education and health indicators have shown improvement (Friedman, 2010; Hakimian, 2013; Benaabdelalaali, Hanchane, & Kamal, 2012). Poverty and economic researchers generally attribute this progress to increased national economic growth and the young king’s overhaul of development policy for poor rural regions. The National Initiative for Human Development lays claim to much of this success, along with expansive national infrastructural programs and strategic collaboration with foreign donors.

Despite the image of a country heaved out of poverty by a benevolent and resourceful monarchy, however, there remain vast disparities in Morocco, some captured by international

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5 Measure based on individual consumption expenditure.
metrics and others less immediately evident. Inequality indices show a persistent disparity between the cities and countryside across multiple dimensions of wealth and poverty. The UNDP’s Inequality-Adjusted HDI (IHDI) brings Morocco’s standard HDI index from 0.647 down to 0.456, a loss of almost 30 percent (UNDP, 2016a). These national inequalities have persisted despite Mohammed VI’s advances; Morocco’s GINI index shows a rise in inequality in the 1990s, the last years of Hassan II’s rule, but these figures, though slower, continued to rise incrementally between 2001 and 2007 (Achy, 2010; Hakimian, 2013). According to the 2015 MPI’s non-income composite of health, education, and living standards data from 2011, 15.6 percent of the Moroccan population is multidimensionally poor, and another 12.6 percent living near multidimensional poverty (UNDP, 2016b). Lanjouw, Ezzrari, & Douidich note the issues of socioeconomic leakage in recent poverty targeting programs, as “the top quintile in the consumption distribution has received more than 40% of total food subsidies and more than half of the government’s subsidies to secondary and tertiary education” (2008, p. 2).

Other scholars have revealed the highly uneven benefits of the new regime’s national development programs through case studies and regional assessment (Bergh, 2012; Berriane, 2010; Bogaert, 2013; Bono, 2011; Iskander, 2010). Dr. Mona Atia, the Principal Investigator (PI) for my research team, is conducting a five-year research study on the uneven geography of Moroccan development. Her forthcoming publications expose the many ways international measures for determining poverty and vulnerability do not capture important expressions of poverty due to poor targeting and poor data.

This thesis draws from research conducted under my two-year assistantship for Dr. Atia at the George Washington University. Her research study, entitled The Impact of Poverty Mapping on the Geography of Development, takes up sites in Morocco and France to investigate the networks and interventions of poverty programs in these countries and internationally. The

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6In the adjusted country ranking, it should be noted, this drops Morocco just two places lower internationally, from 123 to 121, perhaps illustrative of the global implications of the aforementioned neoliberal economic policies.
study considers the politics surrounding poverty knowledge production and poverty mapping as an instrument of intervention at multiple scales of analysis. Our team’s regional focus in Morocco is on southeastern Drâa-Tafilalet, situated in *Maroc inutile* and marked by high rates of poverty at both provincial and communal levels (Royaume du Maroc, 2010). Within this region, Tinghir Province is our primary site of analysis, and three rural communes of variably moderate and extreme poverty rates have been identified as local case study sites. This approach contextualizes poverty and development amid their layers of scaled politics, examining these issues at both the higher decision-making level and local impact.

My primary contributions to this project as a research assistant entailed the management and analysis of literatures, qualitative field data, and quantitative (typically geolocated) datasets. As a member of this research team, I was first made aware of local inequalities erased by broader poverty metrics through the preliminary findings of the project’s work in the rural province of Tinghir. Dr. Atia’s fieldnotes showed that some of the inequalities in this province were stark, yet not captured by national poverty assessments. For example, some INDH buildings are unconnected to electricity or lacking equipment, despite their existence being used as a measure of development progress. Similarly, aid programs are constrained by politics, and RAMED, a national health insurance policy for the poor, is effectively useless for huge swaths of the population. My thesis research elaborates on the spatial dimensions of these inconsistencies, focusing on the same sites for analysis.

1.1.2 Tinghir Province

Tinghir is located in southeastern Morocco, in the region of Drâa-Tafilalet (Figure 1.3). It is a relatively new administrative area and does not appear as an independent province on the 2004 and 2007 national poverty maps; it was created following the redrawing of administrative boundaries in 2009 and draws its territory from the communes of neighboring Ouarzazate and Errachidia provinces. Both original provinces rank high in the 2007 poverty maps at the province
level, at rates of 18 and 16.3 percent respectively (Royaume du Maroc, 2010). Tinghir is a primarily rural province. Its capital city of the same name is about a six hour’s drive from the closest major city of Marrakech and just under two hours from the regional airports in Errachidia and Ouarzazate. It contains three urban enclaves – two urban centers and the capital – and 22 rural communes. Our team’s research is centered on three of these rural communes – Ait Ouassif, Ighil N’Oumgoun, and Ikniouen – all of which fall within the original Ouarzazate Province boundary (Figure 1.3 and to the northeast in Figure 1.4).

Morocco’s easternmost provinces rank high on both the 2004 and 2007 poverty maps; communes along the closed Morocco-Algeria border consistently perform at 30 percent rates of poverty and above. The southeast region’s Zagora, Ouarzazate, and Errachidia provinces are the only areas to contain communes at rates of 40 percent and above in the 2007 report (Figure 1.1). In the former region of Souss-Massa-Drâa (Figure 1.4), one begins to see strong disparities in poverty between neighboring communes that national and international poverty assessments have historically failed to concisely illustrate. The poverty map, in this way, has been a great spatially-sensitive tool for its time, making “it possible, for the first time, to compare poverty across communes and provinces, using a nationally consistent methodology” that is not conceivable through national measurements or local case studies (The World Bank, 2004). In this southeastern administrative region, there is a clear split in the 2007 data between western and eastern communes, demonstrating the progressive rise in poverty as one travels farther from major cities of the west.

Critically, we see this urban-rural distinction at lower scales of analysis as well; in Souss-Massa-Drâa, cities and their surrounding communes show less than 10 percent poverty rates in the 2007 report. Ouarzazate City is one of these prosperous areas, with a rate of just 3.1 percent in 2007 (see ‘Ouarzazate’ commune in Ouarzazate Province (center-east) in Figure 1.4). In the smaller city of Tinghir and its neighboring tourist commune Todgha El Oulia, rates are again in the lowest percentile at 5.9 and 5.7 percent, respectively (see northeast, Figure 1.4). Tinghir
Province’s even smaller urban centers Kelaat M’Gouna and Boumalne Dades, labeled in Figure 1.3, show a modest rise into the second smallest percentile of 10 to 20 percent. The three rural communes targeted for my thesis, in contrast, contain high rates of poverty by both 2004 and 2007 accounts, with Ighil N’Oumgoun and Ait Ouassif at 39.9 and 30.6 percent in the 2007 report, respectively, and Ikniouen one of the highest rates in the area at 50.7 percent impoverished.

The 2007 poverty map report also lists GINI coefficients for every commune, and these figures do not show a positive relationship with the poverty rate. In fact, inequality in expenditures decreases as commune poverty rates increase; Tinghir City and Toudgha El Oulia have substantial 43.0 and 44.1 coefficients (100 being perfect inequality and 0 being perfect equality), Ait Ouassif (nearest of our three target communes to an urban center) at 30.3 and Ighil N’Oumoun and Ikniouen at only 26.5 and 27.8.

The communal GINI coefficients from the 2004 and 2007 poverty maps are the finest scale of analysis publicly available for comparing Moroccan inequalities across space. The coefficients and the poverty rates compare only household expenditure, adjusted for demographics, and do not address specific expressions of poverty and development, such as the availability of social services or existing infrastructure, in these localities. This is an issue for those who seek to understand Moroccan development through freely accessed reports. I quickly learned that even privately transferred data on poverty and development would be limited in precision and detail.
Figure 1.3: Tinghir Province, Morocco
Figure 1.4: Communal Poverty Rates, Souss-Massa-Drâa Region, Morocco, 2004 (inset) and 2007
(reprinted from Royaume du Maroc, 2010)

Key: Poverty Rate: Less than 10% (tan); 10% to less than 20% (blue); 20% to less than 30% (green); 30% to less than 40% (salmon); 40% or higher (red).
1.2 Thesis Study

Over the course of my research assistantship, I was struck by the apparent lack of local data on Tinghir Province provided by national ministries. So much of the data was aggregated up to the commune scale – including the national poverty map and census indicators – making an understanding of the lived experience of poverty in these villages impossible. It became apparent that participation in development knowledge production and transfer would be harrowing. It was a slow and often fruitless task for our team to obtain additional data from national ministries and regional offices. Some datasets were never provided – either because they did not exist or the offices restricted non-state access. Others that we did eventually obtain were often inaccurate or incomplete. I was left without attribute information on Tinghir’s schools and hospitals. I had only coarsely geolocated village data and had no insights on their population sizes or demographics. Without these basic details, my possibilities for quantitative analysis in this province were limited, and I was left frustrated.

My thesis was born out of my desire for a technical solution to this issue and for a better understanding of the processes of development data in the country. I began my investigation with the questions:

▪ What is the role of spatial development data in the geography of aid and development in rural Morocco?

▪ How is the state’s data production distinct from that of local actors, and how do these differences impact approaches to poverty alleviation?

I arranged to spend my 2016 graduate summer in-country to gather data on local issues of development and poverty – data which I would then format and analyze in geospatial software the following fall. The hunt began with a six-week internship in Rabat in the GIS office of the National Observatory for Human Development (ONDH), a quasi-governmental institute for the evaluation of national development. The ONDH gave me access to additional state datasets and
provided a firsthand look into the production of data and knowledge in national offices. It also solidified my view that an understanding of local expressions of development and poverty would not be possible without in-situ fieldwork. At the ONDH, I tested one particular topic of interest I had on rural development: physical access to social services.

Over my six weeks at the Observatory I created an accessibility model using ArcGIS from the villages of Khemisset Province\(^7\) to their closest primary schools. But even at the ONDH – which is funded by the national government – the data I was given was not sufficient in capturing accessibility at this scale. I found that village points from the government’s GIS shapefiles did not line up with satellite imagery of built infrastructure. The Observatory had no elevation data for the country, and the finest raster files I could obtain from US sources were still quite coarse when measuring across such a small space. At the conclusion of my internship, my model explained little about the realities of rural development access on the ground.

My pursuit for data, meanwhile, converged with a separate desire I had for my master’s research: to empower our local research subjects in support of their development goals. I was inspired by the range of outcomes that one particular participatory research methodology, participatory mapping, could have for both quantitative and qualitative research. Participatory research mapping is a methodology with a moral philosophical origin: it aims to create a positive outcome not only for the researcher, but his/her research subjects as well. Researcher and research participants collaborate in mapping a topic of mutual interest, showing “that local people can be active participants in the construction of knowledge about their lands. Not only can they express internalized or cognitive images of their lands, but they can also work with researchers to produce standardized information” (Herlihy, 2003, p. 328). I saw participatory mapping as a solution to my data problem at a technical level and an answer to broader research questions at an ethnographic level.

\(^7\) Khemisset is a rural province east of Rabat. It is rated lower in poverty than Tinghir. My team uses Khemisset as a non-poor benchmark in our GIS model of accessibility, discussed in Chapter 5.
Following my summer internship in Rabat, I traveled to Tinghir Province and began the first phase of my participatory mapping workshops with community members there. These first workshops were designed to be entirely exploratory and open-ended. I asked villagers to answer one broad question: “What are the most important expressions of poverty and development in your villages?” After two weeks of mapping, I came out with over a dozen villages mapped and a much better understanding of the development landscape in these three communes. Conversations over mapping sessions taught me that villagers from these remote rural spaces do feel excluded from the development process, and that accessibility plays a key role in their (in)ability to access the few development interventions available to them. Participants stressed how rare it was for a development actor like me to reach out to their community and ask for their involvement in the production of development knowledge.

My engagements with Morocco were slowly peeling back the layers of politics and knowledge production encompassing rural poverty. I had been exposed – and was subjected firsthand – to the politics of governance and development in Tinghir and Rabat, and structural patterns of exclusion were becoming unveiled. I started asking not only whether and how remote communities are excluded from the development strategies of the state, but why they are excluded. I also began looking for the potential “champions” who could be inclusive to local knowledge but are not, including non-state development organizations and members of the local government.

I arranged a second visit to Morocco in February of 2017, probing deeper into these questions of access (spatial and social) to development planning and interventions. I expanded my research scope to reflect these issues of exclusion:

- How have lower state offices and non-state actors participated in or disrupted the structural systems of development that exclude these remote areas?
- What potential do local communities have for contributing to standardized knowledge production of poverty and development?
In these three weeks, I conducted semi-structured interviews with actors of regional and local development to learn how they understand these remote spaces: where they go to seek development knowledge, how they target impoverished areas, and with whom they seek partnerships for this work. I also conducted the second phase of my participatory mapping process with members of village associations, centered on the issue of accessibility and road obstacles. I learned from this second mapping exercise that local knowledge from non-state actors can be standardized with appropriate guidance. However, the availability of such guidance is highly correlated with accessibility, and for those living in remote enclaves of rural communes, this guidance is all but absent. Moreover, even in more accessible spaces of Tinghir, and despite both state and NGO rhetoric of “participatory” development, knowledge production continues to be top-down and capacity-building does not include training for development.

My conversations with actors (and non-actors) of rural development and my experiences negotiating my own access to development knowledge over the course of this research brought me to the conclusion that village inaccessibility is at once symptomatic and generative of remote rural areas’ recursive marginalization from the processes of development. The Moroccan rural development complex is structurally and systemically exclusionary to remote communities. The state and its partners have portrayed rural spaces as quickly rising out of poverty thanks to their participatory development schemes, yet incongruently, local recipients in the least accessible areas live in spaces empty and devoid of interventions. Scale in targeting and evaluation has contributed to this neglect, and the unfortunate result has been a feedback loop of inaccessibility, whereby remote communities are overlooked by development interventions, not trained in the practices of development, and thus unable to communicate their exclusion to those who could offer support.

This thesis walks the reader through the two structures contributing to the recursive marginalization of remote rural spaces: the superficial decentralization of Moroccan governance and the aggregated, crudely spatial approaches to poverty measurement and intervention by state
and international institutions. In Chapter 2, I begin with the methodologies for this investigation: the geospatial analysis, participatory mapping workshops, interviews, and “studying up” strategies I employed while seeking access to data. This chapter also includes a discussion about the issue of subjective and situated knowledge and the limitations of my qualitative and quantitative conclusions.

Chapter 3 provides background to Morocco’s exclusionary rural development practices. In this chapter I examine the first of two exclusionary structures, tracing back the history of Moroccan decentralization and the strategic ways the Moroccan state has covertly reinforced its own centralized power while simultaneously appeasing advocates of democratization.

The following two chapters discuss the impacts of a strong centralized governance for higher and lower level development actors. In Chapter 4, I introduce the restrictive systems for knowledge production and transfer in the form of development data. Data production is reserved for the highest tiers of the Moroccan ministries, and data access only to trusted partners of the state. Efforts to push the state toward open source data practices have fallen on deaf ears, and national ministries guard data access from anyone with the power to delegitimize state development work. The knowledge of local communities is one alternative way of accessing information on rural spaces, but this knowledge is not sought by the state and its partners. Through interviews and mapping workshops in Tinghir, I describe how an elaborate system of authorizations and evasion results in a Catch-22 of development practice: those seeking to digress from state standards in development targeting are blocked from intellectual access to data and physical access to impoverished communities unless they establish a partnership with the state; yet the state will only partner with organizations that use state strategies for targeting and evaluation.

With all development practices inherently tied to the standards of the state, any oversight or exclusion by state targeting is magnified by the same oversight of its development partners. Chapter 5 introduces the second system of exclusion bearing down on Moroccan rural
communities: the masking of sub-communal inequalities in national and international targeting and poverty assessments. In this chapter I discuss the lack of spatial indicators in poverty measurements and the issue of aggregation when determining units of analysis. I explain why one spatial indicator, village accessibility to social services, is an appropriate addition to these assessments, drawing from my conversations with villagers in Tinghir and the results of my geospatial analysis. Chapter 5 also includes an ethnographic account of poverty, development, and problems of accessibility for those living in remote micro-regions of rural communes. I argue that development in Morocco is dominated by state and non-state development organizations, which continually intervene in already-accessible areas of the province, resulting in the daily reproduction of inequality between accessible semi-urban spaces and remote areas off the paved road.

I conclude with a discussion of the combined impact of the two systems of exclusion for remote rural pockets of the Moroccan southeast and offer insight into what it would take to diversify poverty targeting strategies in Morocco and internationally. I argue that it begins at the local level with centering the experiences of remote populations through the standardization of local knowledge and their inclusion in the targeting of interventions. At the national and international level, poverty measurements must begin to divide scaled assessments into lower units of analysis and incorporate spatial inequality as a dimension of poverty and development.
Chapter 2: Methodologies

2.1 Introduction

My thesis research investigates how development actors gain access to rural development knowledge and how this knowledge shapes subsequent development interventions. I assess the potential for and limitations of an accessibility framework in explaining local inequalities ignored or misrepresented by the current poverty mapping framework. My study design invokes a range of empirical methodologies in response to these questions, taking the rural province of Tinghir, Morocco as a central area of study.

Participatory mapping is the foundation to my investigations; this methodology has been fundamental in shaping this thesis as a mixed methods study, interlacing qualitative and quantitative approaches both in terms of my study procedure and in the synthesis of my findings. Participatory research mapping uses a quantitative data collection process to inform qualitative observations on knowledge production and gathers qualitative knowledge from local communities for standardized quantitative results. My additional research methodologies are similarly reciprocal. Datasets on Tinghir, as solicited from state ministries, are analyzed for both their statistical results and the broader context of what these indicators reveal – and mask – about Morocco’s development system. Interviews reveal how data production and its resulting interventions are “enframed” within perspectives that exclude the lived realities of remote rural populations (Mitchell, 1991).

My qualitative approach is varied: it is ethnographic when descriptive of accessibility’s role in this rural mountainous setting, but I use an inductive grounded theory approach when suggesting how spatial inequalities should be incorporated in development (Charmaz, 2011). Further, as I contextualize this rural Moroccan site within the state’s broader data processes, I

8 In Chapter 5, I draw upon Mitchell’s concept of enframing to illustrate how accessible spaces are magnified by development targeting by the innocuous practices of development actors, while remote rural spaces are pushed to the periphery.
frame my investigation as a case study in issues of poverty and accessibility internationally. Literature reviews serve to inform my research questions and guide the process of this study, and I place my findings in conversation with these authors.

In the present chapter, I describe my research process, beginning with the sites, subjects, and procedure for data collection and following with a conversation about the limitations of my approach. While qualitative and quantitative methodologies are often strictly distinguished in academia, some methods cannot be placed in one box or another, such as my participatory mapping workshops or my institutional ethnography in a data analysis office. Therefore, I organize this chapter using a quantitative framework but elaborate where needed on qualitative decisions.

2.2 Study Area

Strictly defined, our team’s study area consists of three rural communes (municipalities) in the rural southeastern province of Tinghir, Morocco: Ait Ouassif, Ighil N’Oumgoun, and Ikniouen (Figure 1.3). These three communes are the conceptual locus of my research and the subjects of my ethnographic writing. However, my research questions are scalar in scope and thus my empirical work frequently transcends these administrative areas to discuss nearby urban centers, the province at large, its surrounding region of Drâa-Tafilalet, and the non-coastal Maroc inutile more generally.

In my statistical work, observations are bounded within the administrative area of Tinghir Province. In my mapping workshops and interviews, most “local” participants consist of villagers and local leaders who work in the three targeted communes, though some of these participants, namely students and select civil servants, are from neighboring urban centers within the same province. Interviews with non-governmental organizations (NGOs) took place in many

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The GIS model of accessibility, discussed in Section 2.4, is designed for the province of Tinghir but also takes up the Moroccan province of Khemisset as a “non-poor” comparative site.
sites within and without Tinghir, depending on the office location of the interviewee. Additionally, the geographical scope of each organization’s work frequently carried our conversations beyond Tinghir Province and into other sites of intervention throughout the country. My institutional ethnography and interviews with staff from national development programs were conducted in Rabat, and flowed between conversations of Moroccan rural areas generally and Tinghir Province specifically.

I refer to all sites by their administrative area classification as defined by the Moroccan government. Morocco classifies administrative areas in rural regions by a direct hierarchy of region, province, rural commune (or urban center), and village (or town). When discussing both rural communes and urban centers in the aggregate, I refer to all as communes. I have introduced the terms “village enclave” in reference to a conceptual group of geographically clustered villages within a commune and “micro-region” as a general term for describing a sub-communal region home to one or several village enclaves of the commune.

2.3 Qualitative Methods and Participants

My thesis combines intensive qualitative fieldwork with extensive quantitative analysis. My qualitative methods consist of semi-structured interviews and focus groups, structured participatory research mapping workshops (“workshops”), and an institutional ethnography (IE). I conducted these investigations on two separate field visits to Morocco: the first over a nine week stay in the capital of Rabat and the province of Tinghir in summer 2016, and the return in February 2017 for three weeks of interviews and workshops between these same sites.

2.3.1 Institutional Ethnography

In the summer of 2016, I completed a six-week internship as a GIS analyst with the National Observatory for Human Development (ONDH). The ONDH is a semi-autonomous office of the Moroccan federal government, established the year following the 2005 unveiling of
Morocco’s National Initiative for Human Development (INDH). The mission of the ONDH is to monitor and evaluate national development and specifically the impact of INDH programs. The quasi-governmental nature of the ONDH and the delicacy of its work in evaluating the Kingdom’s largest development program provides a rich environment for observing Morocco’s development policies and practice (Bergh, 2012). My internship was arranged as a project partnership between our research team’s study and the ONDH, agreeing to unpaid assistance in the spatial analysis of newly geolocated development data in exchange for the chance to observe office data practices and interactions between the Observatory and the state.

First coined by sociologist Dorothy Smith in the 1980s, the term institutional ethnography refers to the sociological examination of work processes, typically through the study of an organization of some power or governance over an issue pertinent to the research question (Smith, 1986). Billo and Mountz (2015) offer profound insights into the IE process and suggest ways that IE can “reveal the unevenness of institutional practices and effects” (p. 202). DeVault and McCoy (2002) emphasize the diversity of actors involved in the creation of the institution and the importance of including a plurality of actors in IE observation. I typify my data exchanges with other state ministries as elements of my institutional ethnography, though these exchanges were not exclusively conducted during the weeks of my internship.

My ethnographic strategies at the ONDH included participation in office meetings several days per week, observance of daily practices, and examination of relevant internal documents and datasets. All interactions were in French. I also obtained GIS shapefiles from the Observatory, which I describe in the statistical data section below. Arrangements for the internship were not covert. All staff were made aware of my plans to conduct research on poverty and development in a rural province following the internship and knew that I was not working in any other government offices apart from the ONDH, resulting in little anonymity of my IE findings. Therefore I chose to limit my IE to participant-observation and avoided formal interview questions with staff members to preserve privacy.
2.3.2 Field Visit, Phase 1: Exploratory mapping

I began fieldwork directly after this internship by initiating my participatory mapping workshops with local community members in Tinghir Province. Over the summer, I arranged and led five workshops with the support of the research team: Dr. Mona Atia, Principal Investigator; Mr. Said Samlali, on-site research aide; Mr. Youssef Ben Moula, interpreter; Mr. Tyler Overfelt, technical support; and an additional on-site aide in each commune. The workshops were classed by education level, with three Technical Level 1 ("Tech 1") workshops hosted in the marketplace town of each commune and two Technical Level 2 ("Tech 2") workshops in two of Tinghir’s three urban centers. All workshops were led in English with Tashlehiyt translation.

Tech 1 workshops were open to the public and ranged between 20 to 35 participants each.\textsuperscript{11} These low-tech workshops were conducted in the central marketplace town of each of the three communes and strategically scheduled for the day of the weekly market. This resulted in a wide variety of participant demographics. For cultural reasons, we did not ask participants their education level. Nonetheless, it was noted that many who came were illiterate, while some others had university degrees. Many participants stated during introductions that they were members of local village associations but others identified themselves only by their village. Women were encouraged to attend but were consistently outnumbered by men by about 10 to one. Tech 2 workshops were advertised for those with basic computer skills and who hail from the targeted communes or surrounding areas. Tech 2 workshops were initially advertised through Moroccan team members’ professional network, but we also invited participants of Tech 1 workshops to join if they had an interest. The first Tech 2 workshop was hosted in an urban center along the main highway and the second in Tinghir City. At all five sites, a so-called “informant” to the

\textsuperscript{11} Due to the public nature of the Tech 1 workshops and the choice to host them on the day of the weekly market, participants came and left throughout each workshop and not all attendance was recorded.
local office of the Ministry of Interior attended each workshop for a couple hours for observation. This is common practice in Morocco and was both expected and tolerated by participants.

Both workshop categories consisted of several teaching and practicum modules and a post-workshop discussion that lasted between four to six hours in total length. During teaching and practicum modules, Tech 1 participants learned:

1. How geocoded data is collected and managed in both traditional and open source projects;
2. How to collect data on infrastructure and social services in their home villages using paper mapping tools; and
3. Options for validation and distribution of such data to development actors.

Tech 2 participants were taught:

1. How geocoded data is collected and managed in both traditional and open source projects;
2. How to map geospatial data on their communes in free use, open source mapping software;
3. Best practices for independent collection and mapping of geocoded data; and
4. How to communicate the development needs of their communities through their newly mapped data.

Tech 1 participants worked with only paper maps and satellite imagery. Tech 2 participants brought personal laptops and worked on two open source mapping applications, OpenStreetMap (OSM) and CartoDB.12

While I provided the resources and technical knowledge necessary to instruct participants on the mapping process, these workshops were designed to be participant-driven. I decided the broader mapping topic: *what are the most important expressions of poverty and development in your home?* Participants decided communally which data to collect, what purpose their mapping

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12 OpenStreetMap: openstreetmap.org; CartoDB: carto.com (Now known as “Carto”).
products will have for their communities, and to whom their products will be disseminated. In Chapter 4, I elaborate on the findings of the summer workshops. The process and product of these summer workshops informed my lesson plans for the winter workshops, which were narrowed down to one theme of poverty and development deemed important by summer participants.

My workshop strategy is informed by pioneering research studies of such practices worldwide. Poole's (1995) survey of 60 mapping projects, while now dated, provides some scope as to the extent and varied impact of participatory mapping projects such as “Participatory Rural Appraisal” (PRA) strategies in land ownership, particularly among indigenous communities. Bryan (2011) and Herlihy (2003) both provide excellent models for constructing a participatory mapping project in rural areas, with successes and struggles equally highlighted. Kindon (2000) further unpacks the processes, strategies, and techniques behind participatory action research (PAR) that ideally "result in people's co-learning and collective action" (p. 261). Her list of key stages in the PAR process has been acutely useful as I construct my own participatory project.

While academic mapping work exists in southern Morocco (Debolini et. al, 2015), I have found none which incorporate participatory methods. Likewise, participatory research has been conducted in the country, but none that I have encountered incorporate a mapping element (for examples, see Boelee and Laamrani, 2009; Pellissery and Bergh, 2007). My fieldwork is the first scholarly participatory mapping project conducted in this region.

2.3.3 Field Visit, Phase 2: Targeted mapping and interviews

In February 2017, I returned to Morocco for a second round of fieldwork. I spent two weeks in Tinghir Province conducting workshops, focus groups, and interviews with local development actors of the province. I concluded the fieldwork with another week of interviews in Rabat.

My workshops during the second field visit were more targeted than the previous phase. They consisted of two workshops with village association members, 8-15 participants each, in the
marketplace towns of Ighil N’Oumgoun and Ait Ouassif communes and one workshop with 12 current or former university students from the targeted communes or surrounding region. Lesson plans were limited to a single theme: the identification and classification of obstacles to road accessibility in the two communes. Association members were tasked with identifying and detailing road and bridge problems using printed satellite imagery obtained from Google Earth. The student workshop continued this work by digitizing associations’ maps in the open source mapping application QGIS. The association workshops featured a longer discussion session than those in the summer and can be thought of as a workshop-focus group hybrid methodology. I present the results of these workshops in Chapter 5. In addition to these hybrid workshops, I conducted one focus group with associations based in Tinghir City which did not contain a mapping component. I categorize this focus group in the “interviews” methodology rather than with the workshops due to the lack of practical training involved.

Interviews dominated the remainder of the winter fieldwork. These consisted of eight meetings with government staff, six with foreign and national NGOs, and two with local associations based in urban centers. All interviews were semi-structured and were conducted in a variety of settings, including coffee shops, meeting rooms, and personal offices; interviewees were asked to choose the location. Most of these meetings were set in Tinghir Province except for three NGOs whose offices were in Ouarzazate City and Rabat and one civil servant from a regional ministry office in Ouarzazate City. Some of these interviews included multiple interviewees from the same office, and as mentioned previously, one of the association interviews was a focus group and consisted of seven representatives from associations based in Tinghir City. Though most NGOs are classified as foreign, the majority of interviewees from these organizations were Moroccan by birth and residence. Interviews were conducted in French and occasionally English.

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13 Due to time constraints, it was not possible to include a workshop in Ikniouen in the second trip.
14 One of these interviews was also conducted in Washington, DC with a staff member from a US development institution.
2.4 Quantitative Methods Design

2.4.1 Descriptive Geospatial Analysis

The poverty map is a tool designed by the national government for poverty targeting and assessment in Morocco. This scaled metric uses the commune as the smallest unit of analysis for rural populations. Variation expressed at more local scales becomes aggregated up to this administrative area: for example, disparities between sub-communal micro-regions or villages. State-reported studies have shown that INDH interventions have contributed to a significant decrease in poverty in target communes; however, these reports do not discuss inequalities in poverty below the commune scale (INDH, 2011). In my qualitative methodologies, I investigate the role of accessibility as both a reflection and a cause of sub-communal inequalities masked by these poverty maps. My geospatial analysis complements this investigation by responding to the questions: do development projects and services appear in the same spaces as villages? Are development services concentrated in areas of accessibility? I hypothesize that projects and services are concentrated in accessible spaces and do not correspond with the spatial distribution of villages.

In Chapter 5, I test these hypotheses by employing summary statistics and descriptive geospatial analysis tools to visualize and analyze the distribution of human development projects, schools, and health centers in the communes of Tinghir. Specifically, I describe the pattern of distribution of villages and determine their spatial relation to roads, INDH projects, schools, and health centers. Following this analysis, I contend with the question of population size as a confounding variable to these results, measuring the spatial distribution of the provincial population against these services. I discuss the importance of this village number versus population size distinction in Chapter 5. A correlation test between services and villages or services and population count is not possible due to small sample size in distance-from-road classes. In section 2.4.2, I provide a short summary of our team-designed GIS model of
accessibility as an alternative to traditional Euclidean distance approaches to accessibility measurement, and in Chapter 5 I use this model to reflect on the weaknesses of contemporary poverty measurement and targeting in rural mountainous contexts.

Methods

I measure the geographic concentration of Tinghir’s population and services through a three-part methodology. In my first approach, I qualitatively examine the spatial distribution of these variables through heatmap observation. Using the QGIS Heatmap tool, I created point density maps for villages, schools, health centers, and INDH projects at 100 by 100 meter pixels and a search radius of six kilometers. Results are discussed in Section 5.3 and depicted in Figures 5.1-4.

My second method for determining the spatial relationship between villages and services involves Euclidean distance measurement and remoteness classes. The World Bank and other agencies are proponents of a standard two-kilometer binary measure from the nearest road to determine village accessibility, whereby villages located two kilometers or more away from an all-season road\(^\text{19}\) suffer from remoteness. I class projects, services, and villages in Tinghir by their Euclidean distance to the nearest paved road to determine:

1) What percentage of villages are located in “remote” spaces of Tinghir, as defined by the two-kilometer standard of development practitioners?

2) Do development projects and services correlate with villages along these classes of remoteness?

Using the Spatial Analysis tool in QGIS, I created a two-kilometer buffer on all paved roads in Tinghir Province, distinguishing the main national highways N10 and N12 (“primary roads”) from regional and provincial roads (“secondary roads”). I then used the Points in Polygon

\(^{19}\) The technical definition of “road” varies by country and by institution. My analysis includes only paved roads, informed by villagers from my workshops who insisted unpaved roads were of much lower quality, more dangerous, and generally symptomatic of inaccessibility.
tool to count the number of points of each variable – projects, schools, health centers, and villages – that fall within the two-kilometer boundaries. In this analysis, the urban centers of Tinghir, Boumalne Dades, and Kelaat Mgouna are included as village points less than two kilometers from a primary road. Figures and discussion of these results are provided in Section 5.3.

My final approach to descriptively measuring population and services distribution in Tinghir incorporates village population size into these remoteness classifications. The question of spatial inequality in development distribution must contend with the issue of village population size. Not all villages contain the same number of households, and an urbanized, accessible town will usually have a higher population than a rural, remote village. The national census records the number of residents living within one, two, three, four, five, and ten kilometers from a paved road. However, the figures are dated, as many roads in Tinghir Province have since been paved. Therefore to class population by distance to the paved road, I repeat the above-described two-kilometer buffer method on the data available: village population counts from 2004 and OSM road data from this year. I include the results of this analysis in Section 5.3.

2.4.2 GIS Model of Accessibility

The methods described in the previous section are useful in measuring the relative concentration of villages, services, and development projects across a geographical area, but these approaches do not incorporate important variables to physical accessibility that plague the province of Tinghir. I introduce a GIS model of accessibility to such services designed by another member of our research team, Matthew Mittler. In Chapter 5, I refer to this model as a conceptual framework for understanding local inequalities in a remote mountainous context. Our team will also include the model and outcomes from qualitative fieldwork in a forthcoming publication on rural accessibility (Atia, Doherty, & Mittler, forthcoming). My description of the model is brief; a full explanation of the project can be found in Atia, Doherty, & Mittler’s working paper.
This accessibility model was inspired by the findings of my first phase of research in Morocco and the broader findings of Dr. Atia’s poverty mapping study. The development of this GIS model began during my internship at the ONDH. Due to lack of data on our case study province of Tinghir at the time, I chose to work on a model for Khemisset, a semi-rural province near Rabat, rated lower in poverty on the national poverty map than Tinghir. Over the course of the internship, I grappled with the task of capturing issues of rural accessibility with relatively little data for Khemisset. Additionally, I had a limited understanding of which variables – elevation, road distance, built infrastructure, or other factors – were most and least problematic for villagers. Using field data from Tinghir gathered through my mapping workshops and Dr. Atia’s study the following fall, coupled with new access to additional datasets on Tinghir from the state and Mittler’s GIS expertise, the team refined the original accessibility model to reflect the realities of the field. Mittler’s model is designed to assess accessibility for the province of Tinghir and takes up Khemisset as a non-poor benchmark.

This GIS model is a response to the quantitative research question, where are the least accessible spaces of Tinghir?, but also to a qualitative question on data and accessibility: is it possible for limited geospatial data to capture accessibility in rural and remote spaces? It combines variables of accessibility from villages to roads and social services to create a composite index of accessibility for each village and identifies high population, remote village clusters as possible sites for intervention.

**Methods**

Mittler approaches this model using a composite index, reflective of how composite indices of development are constructed (Booysen, 2002). Eight indicators (Table 2.3) are measured and combined into a single index applied to each individual village of the province. This method reduces error, as additional indicators reduce the impact of a potential faulty measure in the final result. The array of indicators also reflects the complicated realities on the
ground for villagers who are often doubly or triply impacted by issues of distance, mountainous terrain, and poor infrastructure.

| Model indicators |
|-------------------|-------------------|-----------------|-----------------|-----------------|
| Category          | Indicator         | Measures accessibility directly or additional cost | Datasets Used | Roads | Villages | Health centers | Schools | Rivers | Elevation |
| Routing           | Time distance to nearest school | accessibility | x | x | x | |
|                   | Time distance to nearest health center | accessibility | x | x | x | |
|                   | Network distance to nearest school | accessibility | x | x | x | |
|                   | Network distance to nearest health center | accessibility | x | x | x | |
| Euclidean measuring weighted by elevation | Euclidean distance to nearest school | accessibility | x | x | x | |
|                   | Euclidean distance to nearest health center | accessibility | x | x | x | |
|                   | Euclidean distance to nearest main road | cost | x | x | x | |
| Other             | River crossing (note: binary result) | cost | x | x | x | |

Table 2.1: Accessibility Model Indicators  
(reprinted from Mittler capstone)

Network Analyst, an ArcGIS tool, is used for road measurements, and Euclidean distance captures walking routes from villages to the nearest road. Euclidean routes are weighted by elevation, reflective of the mountainous landscape of Tinghir and Khemisset provinces. Time distances are measured and categorized by travel time, whereby primary roads (national highways) are given a speed of 80 kilometers per hour, secondary and tertiary (regional and provincial roads) 40 kph, unpaved track and residential 20 kph, and walking paths 10 kph. Road distance factors as another separate indicator to account for error in the time estimation. Euclidean distance was measured between the village and nearest school, nearest health center, and finally nearest primary, secondary, or tertiary road, and all were weighted by elevation, measured as the absolute difference between maximum and minimum elevation along the length of the route. Finally, a binary indicator was included to account for the issue of river crossings, a positive or negative response to: must villagers cross a major river to reach a road? Positive responses indicate lower accessibility. This ignores existing infrastructure, such as bridges, but
was necessary to include due to the absence of data on such infrastructure and the prevalence of
the topic in qualitative conversations with villagers.

We tested this model against the Moroccan poverty map from 2007 and INDH development projects to determine whether our accessibility ratings correlate with existing measures of poverty and existing development intervention. Due to differences in scale, Mittler scaled up the accessibility indices to the commune level for the poverty correlation. Correlation was tested between villages and development projects by converting INDH project point data to a kernel density raster, then performing the correlation test between village accessibility indices and their corresponding project density values.

In addition to determining village remoteness, this model identifies sites of high population, low accessibility villages that could serve as new targets for development projects and services. After rating each village by degree of accessibility, Mittler grouped proximal villages together using the ArcGIS Buffer tool, identifying clusters of villages within five kilometers walking distance of one another. These clusters were then reclassified into five classes of accessibility by averaging their combined village accessibility ratings. Clusters in the two lowest accessibility classes by natural breaks – that is, least accessible – and containing combined population sizes of 500 inhabitants or more were selected as new targets for intervention.

2.4.3 Data Sources

Administrative area polygon files and development services point files were obtained from Moroccan federal offices, such as the national census office (HCP) and the ONDH and affiliated offices. All data were geolocated by these institutions. Due to several cases of erroneous geolocation of villages in the original government dataset\textsuperscript{21}, our Moroccan team members created distinct village datasets for our three targeted communes with more accurate geolocation on

\textsuperscript{21} Some village points were placed up to a couple hundred meters from any visible infrastructure on ESRI and Google Earth satellite imagery (credits in following FN).
ArcGIS. Moroccan team members native to Tinghir studied the government’s locational records for the INDH, school, and hospital datasets against ESRI and Google Earth satellite imagery and determined they were accurately geolocated based on placement over reasonably sized infrastructure and team members’ knowledge of the built landscape.

The INDH projects dataset is for the year 2015 and contains 350 projects for the province of Tinghir, a combination of public works, economic development, and infrastructural projects. The health centers and schools databases were undated and list 38 and 256 points, respectively. The village shapefile has 444 points and is also undated, however the population field is believed to be populated from the 2004 national census. Road data was obtained from the open-sourced platform OpenStreetMap (OSM) and validated with a government roads dataset and Bing satellite imagery.

River files were obtained from OSM and only major rivers were extracted for this analysis. I verified the completeness of the OSM major river data using satellite imagery and my knowledge of the geography of the province from my summer and winter visits. Elevation raster data is from NASA’s ASTER GDEM V2 dataset at a 30-meter resolution. Village, health center, and school datasets for Khemisset were sourced from the same state offices as Tinghir. Khemisset road, river, and elevation files were also from OSM and NASA.

2.5 Fieldwork Procedure

2.5.1 Permissions, Positionality, and Trust

All of my Moroccan research permissions were granted through Dr. Atia’s NSF-funded study. My internship was arranged formally between the ONDH and Dr. Atia’s project with full

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23 This dataset does not contain unpaved roads. Additionally, it includes an inaccurate road placement in one of my target communes. OSM files proved to be both more accurate and more detailed in the case of Tinghir.

24 Microsoft Corporation, 2017, credits: DigitalGlobe, GeoEye, Earthstar Geographics SIO.
documentation. Research permissions are strictly enforced by civil servants at both national and local offices and interviewees routinely made copies of my authorization documents before beginning discussions.

Travel through Tinghir Province as a researcher also meant frequent stops by the local Ministry of Interior office, which is charged with safety and security in administrative areas under its purview. Upon arrival in each commune these offices would request a copy of our passports and materials related to workshops, such as our printed lesson plans.

Gaining trust from community members was made easier by my affiliation with local members of the research team, who arranged and advertised meetings and workshops with the community on my behalf. Our Tashlehiyt interpreter further facilitated this trust by bridging cultural gaps between us in conversations. Participants were generally eager to speak with me and insistent that I disseminate my findings widely, especially in policy circles where this research could directly impact their community. That said, in the workshops a variety of opinions and personalities colored the room with some voices louder than others; not all perspectives were heard. It is possible that positive voices could have drowned out dissenting ones. My identity as an American and a young white woman also likely changed the tone of my fieldwork in known and unknown ways. Should another team member or independent researcher conduct the same workshops or interviews, they would likely get different responses. When possible, I tried to work with rather than against my positionality. For example, some interviewees, particularly male civil and public servants, took my interview questions as an indication that I did not understand their field of work, which I presumed is because I am young or female. Rather than correct or interrupt, I used their assumptions to guide subsequent research questions, asking for clarification on points that I “did not understand” to hear their perspectives on topics of interest for my research.

In interviews, I spent a few minutes at the beginning of each conversation to talk about my values as a researcher and what I hope to get out of this work. Though this approach
undoubtedly colored participants’ responses to subsequent questions, I believe strongly that recognizing one’s positionality as a researcher should involve recognition of this identity with participants in the field site in addition to one’s academic writing (Chacko, 2004).

2.5.2 Anonymity and the Push for Local Data

Decisions on how to reference my field data have been difficult as I contend with two competing research philosophies: the first, that identifying information should not be connected to research participants for their protection and the second, that researchers must start working with local data to improve poverty metrics. The premise of this thesis is an argument for the inclusion of local-scale data in research and practice, and yet aggregation of data is the most common form of anonymization in human subjects research.

Due to this contradiction, I am careful in my writing to strike a balance between anonymity of the speaker and specificity of location. In my ethnographic sections, I present fictional narratives based on the true stories of my fieldwork, using pseudonyms for information that could be misinterpreted as identifying information; for example, association names are not real and location names below the commune level are also invented. When pulling direct quotes from my field notes, I do not identify the personal details of speakers but do explain how they are associated to development in the area, such as “regional NGO staff member” or “villager from a remote rural area.” I do identify our study areas in maps and in overview sections but do not refer to the specific sub-communal sites when discussing revealing details in my writing.

2.5.3 Field Notes

Since I was the primary instructor for the mapping modules, it was imperative during workshops that I record the sessions. All workshops were audio recorded with my personal smart phone and these recordings have been saved on a secure server in compliance with IRB procedure. Workshop participants were informed of recordings during introductions. I recorded
less often for interviews, depending instead on written notes for documentation. Whenever other team members were in attendance, I asked them to take notes as well, which I later compared and consolidated into one document in my secure research drive.

I am proficient in French and understand some Darija, but I am not familiar with Tashlehiyt. Due to these language barriers, there were several moments in workshops and interviews where I or a participant was misunderstood, or the Tashlehiyt translation from our interpreter was noticeably weak. In the months following the fieldwork when I was reviewing my field notes, I asked our interpreter to review select portions of the audio recording to clarify any points of confusion with Tashlehiyt responses.

2.5.4 Process and Modifications

In many ways, my summer fieldwork served as a trial and preliminary investigation period for my later fieldwork in the winter. Though I had spent the first half of the summer in Rabat, I had never visited the southeast until this first field visit. Workshops were planned in great detail, but no amount of preparation can guarantee a smooth experience the first time in the field. Some workshops proceeded haltingly; unexpected attendance numbers, misunderstanding of practicum instructions, and sudden debates about data control were recurring problems.

The scope of these first mapping sessions was very broad; participants were asked to trace aspects of development important to them, without adhering to a particular theme or category. While the lesson slides illustrated possible categories of development services, participants were not required to choose a single category in their maps and I sought no specific data outcome from the work. Thus, final mapping products varied in quantity of features and quality of attributional information. Nonetheless, these maps proved critical in the modification and reformulation of my research questions. Recurring themes of physical accessibility inspired the lesson design of winter workshops, and discussions of data restrictions and the knowledge of the state influenced the framework of my interview questions with civil servants and NGOs.
2.5.5 Referencing

For general findings, I cite fieldwork in these chapters by method and by time, e.g. “IE, 2016;” “Tech 2 workshops, 2016;” or “civil servant interviews, 2017.” Specific quotes or observations are cited by type of organization, with identifying attributes removed, such as “civil servant of a rural commune, 2017.” General information such as descriptions of the landscape or facts about development processes that are repeated by multiple participants are not cited, but the sections in which they appear are introduced as empirical. Ethnographic sections do not include case-by-case citations but are identified by an introductory footnote. Occasionally, I also cite the unpublished findings of other members of our team, such as my PI, in which case I identify information by researcher, type of fieldwork, and time, e.g. “women’s focus group, Atia, 2016.”

Notes written at the time of the interview or workshop are the main source for my references. Secondarily, I draw from audio recordings to pull specific quotes and to review discussions, a process which is useful when particularly rich conversations offer new revelations upon second review.

2.6 Limiting Conditions

2.6.1 Validity

My research is limited by factors of validity and reliability. This study takes on a broad theoretical scope but a narrow empirical approach. Ighil N’Oumgoun, Ait Ouassif, and Iknouiouen are small, sparsely populated administrative areas, and my time in these sites was limited. Moreover, though findings from the field do suggest that the stories from these three communes are in many ways representative of poverty and development throughout Tinghir, the unique geography and expressions of poverty in Tinghir may vary from other provinces in the country. I discuss throughout this paper the issue of data and the limitations of the datasets I used for geospatial analysis. Our team’s GIS accessibility model likewise is limited by scale and its
precise configuration of variables should not be assumed to represent accessibility in all provinces of the country or in other countries. However, we maintain that the approach of the model – capturing village-level issues of accessibility using GIS as a way of measuring spatial indicators of poverty – is what should be incorporated in development decisions internationally. Adapted versions of our model could easily be applied in other rural areas around the world.

It is the goal of the present study to inspire rural accessibility studies in other regions of Morocco and internationally so that others may offer the comparative scope that this study cannot. I make the claim that nationally and internationally, remote rural spaces are not represented in measures of poverty, and that in Tinghir, the result is that development interventions do not reach such remote communities. I am careful to define the scale of my claims throughout the thesis.

2.6.2 Reliability

My qualitative fieldwork is intensive rather than extensive, and the structure of my interview questions is reflective of this. Due to the fluid character of my interviews, it is possible that my results would be inconsistent upon repetition. This is the nature of ethnographic and intensive fieldwork. My repeated workshops across multiple communes are of higher reliability. I also attempted to minimize issues of reliability by asking the same question of multiple interviewees; discord in responses gave me a chance to reconsider the credibility of my research findings thus far and refine future research questions accordingly. However, I employ no other systematic, extensive data collection technique in the field, reserving extensive observations for my statistical analysis.

Qualitative data collection methods always deal with higher and more variable risk of bias. Interviews depend on my identity and personality as an interviewer. Focus groups, though they evoke rich commentary that is not always mirrored in an interview, also are contingent on the identities of the participants; I found that women did not speak often in my larger male-
dominated groups, for example. Education is also a factor, as the more technical my questions became, the more silent the illiterate or otherwise low-educated participants were compared to those with higher degrees. While this could be seen as low-educated participants simply not understanding the question, it is possible that they would have more to say if not obligated to show deference to the others.

Due to these constraints, this study should be read as a case study in accessibility and state development control. It is written with the goal of steering poverty and development conversations toward new locally-sensitive spatial frameworks.

2.7 Conclusion

This thesis combines a host of qualitative and statistical strategies to expose the issues of local-scale poverty in rural southeastern Morocco. While participatory mapping workshops form the base of my methodology, findings from initial workshops have informed subsequent methods, with topics of accessibility inspiring new mapping workshops, and the nexus of accessibility and data control defining the approach of geospatial statistical analysis. In the next chapter, I contextualize these methodologies within the geographical and development landscapes of Tinghir Province, situating the roles of Tinghir’s many development actors within systems of governance and aid nationally and locally.
Chapter 3: The Co-optation of Decentralization under Two Kings

3.1 Introduction

In my introductory chapter, I identified two forces that contribute to the exclusion and marginalization of remote rural spaces. One is the scale of geographical targeting and the lack of spatial indicators in assessments of poverty, which I discuss in detail in Chapter 5. The other is Morocco’s strategically crafted processes of decentralization which, though resulting in increased local participation in bounded areas of development planning and practice, have proven to further entrench the power of the central state in the design and surveillance of development interventions. In these conditionally decentralized systems, local actors are inducted into rural development without the power to decide the manner or target of their interventions. Though recent programs have begun to transfer development authority to civil society and local councils, the offices of the central state continue to insert their control at key points in the development process to undermine and regulate this local power.

The present chapter critically examines the mechanisms of decentralized governance under two regimes and their effects on local participation in development. It begins with a brief history of rural governance under King Hassan II, tracing back Morocco’s current elaborately layered rural governing responsibilities to the long-reigning king’s tactics to repress or appease his critics and allies. I discuss the resulting incapacity of local actors to contribute to development planning under these layered politics, and the conditional privileges afforded to migrant NGOs as they formalized their role in rural development.

I then turn to the pro-poor movement of the 1990s and King Mohammed VI’s new programs for the alleviation of rural poverty. The young king’s initiatives merge modern international approaches to poverty targeting with modern interpretations of democratic governance, both of which call for the inclusion of local constituents in the processes of development. Morocco’s adherence to “participatory” notions of development has resulted in the
real inclusion of select local populations in the state development system, breaking from the superficial notions of inclusion seen under Hassan II. Yet this participation has been uneven and still bounded within strict rules of engagement.

In Section 3.3, I demonstrate that while some members of civil society have found new avenues for advocacy in this participatory framework through the INDH, others have been effectively excluded. Meanwhile local councils have gained new responsibility in development planning and assessment through the Communal Development (PCD) and Action (PAC) Plans but remain dependent on nationally-directed programs or existing social capital for the support to carry out projects. Chapters 4 and 5 of this thesis draw from my empirical research to demonstrate how the limitations that stem from this stunted decentralization are amplified for Morocco’s most remote development actors.

3.2 A History of Conditional Decentralization

*These regimes manage to give the illusion of democracy but never truly allow other political players a share of power in the political game. Whenever there is a “gift” of political power, it is always a calculated gift (in reality, a favor) and premised on the idea that only the monarchy is able to move things forward in the country.*

Loudiy, 2014, p. 77

Moroccan rural communes are governed by two branches of the state: a council of elected representatives and the appointed staff of the Ministry of Interior (MoI). These two branches are presently involved in development in overlapping layers. The elected councils are charged with the communal budget, taxes, and the supervision and provision of public services at communal, provincial, and regional levels. The appointees of the Interior are driven by matters of local and national security and have jurisdiction over issues of media, elections, and civil society (Hoffmann, 2013; Royaume du Maroc, 2009). The lowest level appointees in this interior branch, the sheikh and moqaddem, are the population’s closest point of contact to the state. The qaid is also responsible for “follow-up” with commune presidents regarding any major governance
decisions, and his MoI superior the provincial governor (wali) has the authority to perform checks on most decisions of the commune president. The qaid office does not have its own development budget, but this official supervises all projects under his territory, including the communal council’s development plan.

This bifurcated structure of rural governance has existed since the birth of the modern Moroccan nation-state, but responsibilities between horizontal and vertical offices have been redistributed over decades of national policy, reflecting the changing role of local and elected offices in issues of governance, development, and security. With increasing pressures – external and internal – for the state to democratize its systems of power, since independence the Kingdom has sought creative ways to incorporate Western-prevailing democratic processes while still retaining centralized control over its diverse regions. In this section, I give a brief historical account of the state’s strategies for controlled and incremental decentralization as a tool for appeasing international partners and intra-national regions of dissent under Hassan II. I demonstrate how this system of superficially decentralized governance has set the stage for King Mohammed VI’s most recent national programs for development. I also discuss how these numerous iterations of decentralization have shaped the state’s relations with foreign development associations, most notably migrant development associations in Europe.

3.2.1 Hassan II: Decentralizing governance, 1960s-1990s

Arab dynasties have governed the Moroccan territory since the eighth century Islamic conquests of the Maghreb, presiding over the indigenous tribes of the Amazigh (plural: Imazighen) people and Arab citizens of the caliphate until present day. Despite this formal jurisdiction, however, the Amazigh of the High Atlas Mountains were largely self-governing up

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26 The qaid typically oversees several communes in an area. The sheikh and moqadhem oversee village micro-regions within the commune.
27 Arabic for ‘North Africa,’ specifically the territories west of the Nile and north of the Sahara. The state of Morocco is also called l-Maghreb in Arabic.
until the 20th century, participating in trade and sending men for military conquests in Spain but otherwise functioning under their own tribal authority (Sadiqi, 1997). The French and Spanish Protectorates of 1912 brought modest administrative change to the rural tribal lands of the Amazigh. In the 1920s, the northern Rif region of Morocco revolted and nearly claimed independence from the Spanish colony;28 the French, fearing identical behavior to the south, endeavored to divide administrative boundaries and penetrate the traditional tribal hierarchies of Maroc inutile. French leaders in Rabat sent colonial civil servants to the inland regions and inserted them alongside inveterate intermediaries between tribes and the monarchy. The central colonial authority also reconfigured local leadership responsibilities, resulting in little representative power for the tribes (Hoffmann, 2013; Olivier de Sardan, 2011). Regional colonial governance was limited to surveillance practices of colonial civil servants and no substantial governing power to tribal authorities, and strategies for development were largely absent during these colonial years (Hagopian, 1967).

The new Arab kings’ first years of rule following the 1956 Moroccan independence heralded in what would become a decades-long period of repression and contempt for human rights across the country: the “Years of Lead.” Fearing any “threat to the legitimacy or survival of the king,” the independent monarchy in these years leaned on “sheer violence and utter repression” of dissidents and non-supporters, including those from the Amazigh-majority Maroc inutile (Loudiy, 2014, p. 71). Throughout the second half of the 20th century, “thousands from the student and intellectual communities” including Amazigh and Sahrawi29 activists “were arrested, held incommunicado at various sites, tortured, and tried en masse in waves of political trials for ‘plotting against the state’” (Slymovics, 2005, p. 2). The monarchy’s human rights violations are inextricably tied to its superficial reforms in governance, offered as a paltry response to internal and international demands for justice, democracy, and an end to the violence.

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28 This pattern of revolt would continue in this northern region under the independent state.
29 Saharan.
Hassan II was eager to continue the centralized framework of governance seen under the Protectorate, but understood the utility of superficial political redistribution to quell dissent. Following independence and his father’s brief reign until 1961, his regime enacted a French-inspired divide-and-conquer tactic with the rural Amazigh countryside of the north and south. Politically advantageous commune boundaries were drawn in these first years of independence, and once again, the appointed leaders held little governing power (Lewis, 1960). Democratically elected local councils were established under the new state for these communal administrative areas. However, the authority of these elected representatives was largely symbolic (Nellis, 1983). In the first phase of the regime’s decentralization, rural governance was effectively managed by centralized offices of the monarchy without the input of local staff. The result for rural development was an encumbered central bureaucracy in Rabat with little knowledge of rural issues and no accountability to treat them. Poverty, subsequently, was left untreated in Maroc inutile (Lewis, 1960; Hagopian, 1967).

Morocco’s first decade as an independent nation saw economic stagnancy and growing internal threats to the monarchy’s power, particularly from the still restive northern Rif region and the sovereignty-seeking Western Sahara to the south. The regime chose both carrot and stick to maintain control. Clandestine disappearances, torture, and secret detention darkened these first years, but the redistribution of authority in appointed offices was thrust into public discourse (Slyomovics, 2005). Morocco’s first “a genuine attempt to achieve partial decentralization” was inspired by “the rise of a political incentive: Morocco’s annexation of the former Spanish Sahara” (O’Sullivan, 2010, p.6). In 1975, the regime announced new “regionalization” measures to assuage the northern and southern populations, particularly the Sahrawi (Nellis, 1983). This regionalization was heavily regulated; the state would give authority to sub-national administrative bodies conditional to their compliance with the quieter interests of the monarchy and did nothing to affect the neglectful situation of rural development.
In 1971 and 1972, two failed coup attempts rocked the regime, and in the later 1970s the national government introduced further decentralizing reform across the country (Slyomovics, 2005). These changes included unprecedented, but still highly regulated, financial responsibility to local councils. New directive from the king gave elected councils jurisdiction over the local budget, development plans, investments, and proposed projects for their communes (Nellis, 1983). However, these elected representatives had little autonomy to enact these plans. Appointees from the Ministry of Interior formed a heavy check against the actions of the council, invoking concerns over partisanship to block proposals that did not align with Interior interests. Additionally, though financial authority was nominally handed over to these councils, budgets and taxes were already designed and allocated by the central government, allowing little opportunity for altering centrally-mandated development planning. Elected members gained administrative responsibilities without any expanded representational power (Merat et al., 1981).

This strategy of administrative decentralization would continue into the following decade. In 1983, the state more than doubled its provinces from 18 to 47 territories and 849 communes after demands “from less favoured areas that they be given their own administrations” (Nellis, 1983, p. 489). This increase in administrative areas was met with an increased need for councils and training, and in this same period the state hired additional technical staff to both Interior and elected offices. However, despite this increase in staff, the councils received primarily low-level personnel such as repairmen and secretaries, while the mid-level technical experts that councils seriously needed for proposals and administrative matters (most council members were illiterate or low-educated) went to the appointed offices (Baldous, 1977; Merat et al., 1981; Nellis, 1983).30

Notably, the incapacities of the elected branch during these years were not evenly distributed across *Maroc inutile*. As discussed, though councils had jurisdiction over communal

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30 This dearth of expertise was in part made up for by new training programs for elected members through the establishment of the national Directorate for Staff Training in 1981 and the appointment of a secretary-general to each communal council to help with project proposals (Nellis, 1983).
budgets and project proposals, all funding allocations were determined by central offices in Rabat. Nellis (1983) reveals how inequalities between urban and rural areas were left unchecked through this system, as “at least up to 1978, the more established Communal Supply Fund made loans mainly to the wealthiest, most urbanised communes, due partly to their generally superior creditworthiness, and also because of their skilled staff who were able to submit attractive proposals” (p. 499). Nellis compares funds between urbanized and rural regions and does not comment on possible inconsistencies between neighboring rural and urban communes within the same province, as my empirical research does for Tinghir. Nonetheless, Nellis’ 1983 study complements my findings concerning the phenomenon of contemporary development chains channeling into urban and built-up access points amid untouched rural communes, detailed in Chapter 5.

In the 1990s, rising pressure from internal activists and international human rights organizations like Amnesty International finally compelled the Hassan II regime to address some of its worst violations to human rights (Loudiy, 2014). This pressure for justice coincided with the push within and without Morocco for poverty-centered infrastructural and social development. In his last years as king, Hassan II began taking incremental steps toward rural-centered poverty policy, introducing a new Social Development Strategy, geographical targeting of poverty through the BAJ1, and infrastructure programs for the connection of electricity, water, and roads to rural and urban areas (Radwan et al., 2005). These centrally administered initiatives would help form the foundation to the later national poverty targeting approach of the INDH. However, the timid programs saw low levels of success, as they favored the less impoverished areas, failed to service the most remote villages and, in the case of infrastructural services, targeted just under half of Morocco’s rural poor (Van de Walle, 2004).
3.2.2 Mohammed VI: Pro-Poor development, 2000s – present

Evolved from the human rights advances of the 1990s, the turn of the 21st century carried in a wave of international support for targeted, comprehensive global poverty reduction in Morocco and around the world. Countries across the Global North and South signed on to achieve the Millennium Development Goals (MDGs) for 2015, and international institutions such as the UNDP and regional banks urged states away from national economic notions of growth and toward targeted humanitarian methods of poverty alleviation through other standards, such as the eradication of hunger, gender inequality, and environmental vulnerability (Hulme, 2009). This happened at a crucial time in Moroccan history, as the long-reigning Hassan II passed away in 1999 after 38 years of rule, opening the way for his son Mohammed VI to reinterpret and recraft the mechanisms of Moroccan governance and development. The King of the Poor has proven committed to these new international interpretations of development and poverty and keen to impress international observers. As discussed in Chapter 1, these strategies have included data-driven, scaled assessments of poverty across the country and an unprecedented recognition of the state’s historic neglect to Amazigh rural areas (Royaume du Maroc, 2010). His development interventions, meanwhile, are also unprecedented for their inclusion of local populations in certain aspects of the development process.

Mohammed VI introduced comprehensive reforms in development, politics, and human rights; however, these changes remain steeped in the history of his father’s governance. In 2002, the new regime introduced its first Communal Charter, which expanded the powers of the communal council from those described by Hassan II’s 1976 decree (Achy, 2010; van de Walle, 2004). The new charter gave elected members autonomy in budget management, taxes, and public services (Hoffmann, 2013). It also formally condoned communes to establish partnership with local associations – though, as always, these partnerships must be supervised by Interior offices (Bergh, 2010). These measures were not insignificant and have been a legitimate step toward the democratization of rural governance (civil servant interviews, 2017). Yet this charter
did nothing to alter the ambiguous corrective power of the deconcentrated Interior posts (Hoffmann, 2013). Another Communal Charter in 2008 compelled communal council members of select targeted communes to propose a Communal Development Plan (PCD), which also requires civil society participation; however, as discussed in Section 3.3, the PCD proved to be ineffectual in facilitating development interventions (civil servant interviews, 2017; Hoffmann, 2013). In 2004, Mohammed VI established the Equity and Reconciliation Commission for reparations for past human rights abuses under his father, “a revolutionary initiative in Moroccan politics [and] unprecedented in the Arab world” (Kausch, 2009, p. 167). Yet like the charters, this commission sidestepped any action that might delegitimize the political and religious authority of the monarchy, avoiding mention of the monarchy’s role as “instigator, beneficiary, and sometimes actor of the gross human rights violations” of the past (Vairel, 2008, p. 239).

The Arab Spring uprisings, continued activism in the northern Rif and southern Sahara, and increasing pressure from the European Union prompted swift and extensive reforms from the regime in 2011. In this year Mohammed VI announced a new constitution which pushed for further decentralization of the elected branch through a process deemed “advanced regionalization,” substantially expanding the representational power of regional council members (García & Collado, 2015). This marks the most democratic effort toward decentralization seen in these rural regions to date. However, implementation of the regionalization project has been slow among regional offices, suggesting “that [regionalization] was not a priority for the main institutional actors, except for the king” (Hoffmann, 2013; García & Collado, 2015, p. 57). Moreover, this transfer of power to regional elected representatives did not offer any new authority to leaders at provincial or communal levels of governance (Radwan et al., 2005). In essence, advanced regionalization in governance has led to a transfer of responsibility away from Rabat and onto the local scale but has not led to substantive changes in resource allocation.

As part of this new regionalization, the young regime established national programs to alleviate rural poverty and increase access to basic services. One of these programs is the
Mohammed V Foundation for Solidarity, which distributes food aid during the month of Ramadan to poor households as identified by the local MoI. Mohammed VI also introduced enhanced rural infrastructure programs for the connection of villages to water, roads, and the electrical grid, which saw greater success than those enacted under his father (van de Walle, 2004).

The most consequential development program enacted by Mohammed VI to-date is the National Initiative for Human Development (INDH), established in 2005, which aims “(1) to reduce the social deficit (both urban and rural) through better access to basic infrastructure and social services…; (2) to promote income-generating activities and employment; and (3) to offer assistance to the most vulnerable social groups to help them emerge from their precarious conditions” (Martín, 2006, p. 433). The INDH is a product of Mohammed VI’s new inclusive approach to regionalization marked by “terms such as ‘participation’, ‘decentralization’, ‘good governance’ and ‘gender equality’ in his public rhetoric” (Berriane, 2010, p. 90). Civil society is called upon to propose projects under this initiative, and NGOs and local communal councils are also integrated. Women, handicapped groups, and other traditionally marginalized populations have been given unprecedented attention and support under INDH programs (Berriane, 2010). However, researchers have revealed the uneven and regulated nature of the INDH participatory approach that has further consolidated the role of the central state in Moroccan development practice, and in Chapter 5 my geospatial measurements indicate that projects are concentrated in built-up, accessible areas of rural provinces, ignoring remote undeveloped village enclaves.

Under Mohammed VI, rural governance has seen true but marginal decentralization of development power to elected representatives of local populations, with communal council members given new autonomy in finances and public service projects and national responsibilities diffused to regional councils. Yet their counterparts in the Ministry of Interior still have the prerogative to approve, change, or deny elected councils’ proposals. Civil society now plays a greater role in development under national programs; however, in Section 3.3 I explain
how this new avenue for funding and intervention takes a conditional, unbalanced, and restrictive interpretation of “participatory” development. The next section depicts the implications of these conditionally decentralizing changes in rural governance for foreign NGOs by giving a brief history of the Moroccan diaspora’s attempts at rural development.

### 3.2.3 Negotiating Development: Emigrant NGOs and the state

The Moroccan monarchy has offered incremental and conditional distribution of governing power across the Moroccan territories while maintaining central authority, one impact of which is the severe underdevelopment of rural regions. Conditional decentralization has also served to regulate the development work of the non-state organizations attempting to alleviate poverty in these rural areas. I have found no comprehensive literature on Morocco’s historic relationship with foreign and domestic NGOs, however migration scholars have thoroughly documented the agitated relations between the state and its diaspora in Europe, and many foreign NGOs working in Morocco are founded by members of this large diaspora (Iskander, 2010a). As Hassan II’s regime sought ways to undergo controlled and cosmetic democratization of its regional governance, it also was faced with the demand for democratization from its de facto constituents abroad. Moroccan emigrants have inserted themselves as key players in rural development since the 1950s.

Morocco’s international emigration figures are tremendous. The Human Development Report estimated an average of 8.1 percent of the Moroccan population living internationally between 2000 and 2002, out of a population of 29 million (UNDP, 2009).\(^31\) Migrant remittances have far outranked both official development assistance and foreign direct investment.

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\(^{31}\) Data figures can be misleading for international migrant stock, as sources differ regarding what degree of national identity defines a migrant (Price, 2016). Most sources on Morocco refer to numbers of Moroccan citizens abroad, rather than Moroccan-born emigrants.
consistently since the 1980s (de Haas, 2009). Notably, these numbers represent strictly private monetary remittances and do not consider migrant development investment, which has not been systematically measured by federal or external sources. In addition to their contribution to national growth, remittances have been measured to reduce economic measures of poverty for Moroccan households. Radwan et al. (2005) estimate that in 1991, almost 180,000 more Moroccans would have been below the poverty line if not for their remittance transfers. Migrant development contributions have not been quantified, but evidence suggests that rural regions are frequent sites of development intervention for migrant associations (Iskander, 2010a; mapping workshops, 2017).

International migration from rural southern Morocco was first encouraged en masse in the early 1900s by France, whose need for migrant labor would grow increasingly with the First and Second World Wars (de Haas, 2007). This first international wave lasted several decades, as European countries found need of soldiers and laborers to rebuild their war-torn countries and French colonists saw emigration as one solution to the issues of governance for the unruly countryside. Rural villagers were eager to oblige, recognizing these factory and mining positions as opportunities to remit directly back to their families and hometowns in substantially higher amounts than they would have with regional movement (Lacroix, 2009). Figure 3.1 outlines the areas of origin of this first major wave of migrants, concentrated in the southern Souss and High Atlas Mountains and in the northern Rif. The contemporary province of Tinghir was one of these emigration sources.

Sources do not discuss whether remittance tracking strategies have changed over the years, which could misconstrue this trend (Price, 2016). However, my conversations with villagers indicate that while emigration is high from some of Tinghir’s rural communes, this transnational link has not necessarily led to an increase in migrant-invested development in the most remote of these areas. See Chapter 5 for discussion.
The team’s case study province, Tinghir, is located in the southeast emigration region (see labels “TODGHA” and “DADES”).

Post-independence Morocco in the 1950s and 60s saw a second significant wave of European migration, this time with a growing emphasis on hometown development from within the migrant population’s vast number of remittance-senders. These early efforts were a miscellany of small projects, such as the building of religious centers or laying the lines of basic infrastructure (Lacroix, 2009). Meanwhile, economic remittances remained the main form of development nationally, as facilitated by the government’s Banque Centrale Populaire (Iskander, 2013). The 1973 global oil crisis bookended Morocco’s post-independence international migration wave. The now permanently settled migrants in France and other countries would form the cornerstone of later development efforts.

As previously discussed, the doubling of provinces and communes in 1983 led to a lack of funding and administrative support for elected councils, undermining their ability to implement infrastructural projects and provide key services. With the weight of development on their shoulders but little funding to act independently, local leaders in select rural provinces established
village development associations and reached out to emigrants for project funding (Lacroix, 2009). Migrants, in response, began formalizing their development networks to gain access to resources that would help fund these projects. Many of today’s most influential migrant NGOs came out of this decade’s formalization, such as Migration et Développement (M/D) and the Association of Moroccan Workers in France (ATMF). Fearing the influence of foreign political opinion in Amazigh regions of the country, the Moroccan state introduced so-called “friendship societies” in emigrants’ countries of residence as a form of surveillance over migrant organizations (Iskander, 2010a).

Aiming to ease the political confrontations from the unruly Rif region and other discontented rural Imazighen, Hassan II created several institutions in the early 1990s looking to facilitate and support migration and emigrant investment: the Hassan II Foundation for serving the needs of Moroccan migrants, al-Amal Bank for migrant investments, and a new Ministry for Moroccans Living Abroad (de Haas and Vezzoli, 2013). Despite superficial facilitation and support of migrant development goals, however, these institutions did not treat migrants as harbingers of regional development and poverty alleviation but rather selectively supported sympathetic emigrant organizations for national economic development (Iskander, 2010a; Leung, 2008; Radwan et al., 2005). The Hassan II Foundation “excluded migrant groups it viewed less than loyal to the Moroccan regime, sidelining migrant labor and rights groups in particular” (Iskander, 2010b, p. 32). Meanwhile, the al-Amal Bank’s “board of directors was stacked with friendship society presidents” who acted as royal informants to migrant activism abroad (Iskander, 2010a, p. 162).

King Hassan II’s infrastructural projects of the 1990s were likewise unhelpful to migrant development leaders who originated from impoverished villages far from these areas of construction (van de Walle, 2004). Poor servicing of rural regions encouraged continued emigration, such as from the independence-seeking Rif region where Hassan II categorically denied support. It was visible even to the central government at this time the connection “between
emigrant-sponsored rural development projects” and “the state neglect of rural areas that generated the need for them in the first place” (Iskander, 2010a, p. 167).

King Mohammed VI brought on a new era of development and migration reform for the nation at the turn of the century. Mohammed VI’s relationship with emigrants was more fruitful than Hassan II’s, as he transformed his father’s parsimonious attempts to court international emigrant remittances with more altruistic local development policy. The new king reopened various avenues for communication and dialogue with the diaspora, and without the previous political restrictions which marked his father’s reign. This included the opening of Maghir Bank in 2013 for migrant investments, which functioned better than the merely symbolic relationship of al-Amal Bank (International Organization for Migration (IOM), 2015).

Most remarkably, the new king opened the doors for migrant participation and planning in national development schemes. The 2005 National Institute for Human Development, detailed in the following section, encourages foreign NGOs to propose rural development projects (Bergh, 2012). The PCD and its successor, the Communal Action Plan (PAC) both are designed to accommodate foreign donor funding in communal development initiatives. The national infrastructure programs begun under Hassan II and expanded under Mohammed VI engaged migrant organizations and local communities in their project design (Iskander, 2010a). The state established the Social Development Agency (ADS) to guide NGOs in local development projects and NGOs today find it easier to gain authorization from the state for projects that align with stated national development outcomes, such as micro-crediting and educational initiatives (Radwan et al., 2005).

Yet despite increased participation in national development programs, Moroccan migrants and local associations are still blocked at crucial points in the development process as the state exercises its right to control and recraft NGO efforts. Some of these blockages have had spatial ramifications for rural communities. For example, Natasha Iskander reports on an incident where the Mohammed V Foundation confiscated a migrant organization’s resources and
redistributed them to urban areas, “rather than on the villages the organizations had wanted to help” (2010a, p. 189). In another case, the Foundation refused to financially support capacity-building projects for village associations as migrants desired. As development data forms an increasingly important role to rural surveillance under Mohammed VI, state control over migrant development has shifted from the transnational monitoring of emigrant communities to complex systems of authorization over the migrant-village partnerships themselves, which I describe in Chapter 4.

The Moroccan diaspora has a conflicted relationship with the Moroccan government. On one hand, emigrant efforts to aid their hometowns have been embraced by the state as a costless form of support for its neglected rural regions. On the other hand, this embrace has been conditionally offered and all development practices carefully monitored for fear of undermining the legitimacy of the monarchy. Thus, emigrant strategies for rural investment have always been married to the predominant national objectives of the King. Early efforts by emigrants were limited to remittance-sending to households, which were co-opted by the Moroccan government via the national bank. Later, migrants began forming cohesive development organizations in the 1960s and 1970s; Morocco’s response was the implantation of intelligence agents in migrant organizations to monitor for politicized behavior (Iskander, 2010a). Under King Mohammed VI, the Moroccan state began co-opting migrant NGOs into formalized structures of development, and in Chapter 4 I discuss the implications of these partnerships on poverty targeting in rural areas. Migrants have succeeded in creating substantial growth for rural and impoverished sites in Morocco (Iskander, 2010a; Radwan et al., 2005). However, Chapter 5 reveals that this rural-migrant nexus has been spatially uneven at several scales. Local-international development chains are stronger in some provinces than others, and my fieldwork suggests that this is often to the detriment of the most remote rural spaces of the country.

…
In summary, both Moroccan kings have restricted rural development actors local and abroad through seemingly inclusive systems of governance. Hassan II enacted large transfers of responsibility to local and elected communal councils, offering rural representatives the chance to involve themselves in the governance and development of their home regions to quell dissent. Yet these responsibilities were largely administrative or symbolic, as the MoI had full authority to revise or reject proposals, and national offices did the influential work of allocating budgets and resources. Moreover, a participatory framework for members of the local population or civil society under Hassan II was effectively absent (Radwan et al., 2005). Contributions from migrants in Europe were seen as a source for national as opposed to local growth, and migrant NGOs were carefully monitored for fear that they would politically incite their rural Moroccan development partners.

With the crowning of the “King of the Poor” in 1999, the Moroccan government introduced new pro-poor, participatory programs for development at multiple scales of intervention. The state also reformed rural systems of governance to further decentralize local jurisdiction to the elected branch. The Mohammed VI regime’s relationship with emigrant NGOs was more formalized and inclusive than his father’s, inviting development organizations to partner with state ministries in achieving the national development goals designed by the state and international agencies. Nonetheless, Mohammed VI’s inclusion of non-state actors came with stipulations. In the following section, I consider the contemporary implications of Hassan II’s legacy of conditional decentralization and Mohammed VI’s strategic systems of participation on local actors of development, drawing heavily from my field interviews with local development actors in Tinghir Province.
3.3 “Guardianship” and “Grievances”
Moroccan interpretations of participatory development

In the 1990s, participatory approaches to development entered increasingly into the recommendations of international development institutions. Similar to participatory action research, discussed in Chapters 2 and 4, participatory development practices are meant to give agency to the local recipients of development interventions. The participatory approach can be thought of as an extension of decentralization, a new precondition to the consummation of “good governance.” The concept of participation in today’s development reports is paired with terms such as “public transparency,” “institutional accountability,” and “inclusivity” (Ondrik, 1999). For key development donors like the United Nations and World Bank, participatory methods of development have become non-negotiable preconditions of sub-national targeting for their Global South recipients.

Morocco has been an eager partner in international development programs and, since King Mohammed VI, has been a vocal proponent of participatory development (Berriane, 2010). Many observers expected a stronger transition from authoritarian to democratic governance in Morocco under the jurisdiction of a new king, and this was paired with growing international expectations that “pro-poor governance” in rural areas should take precedence in national policy. Mohammed VI has responded to demands with further decentralization of governance in elected offices and participatory strategies for development in national and local development programs.

Yet Moroccan interpretations of “participatory” development seldom resemble the standard promoted by the Bank and its peers. In provincial offices of the Ministry of Interior, for example, “the ‘participatory diagnostic’ [is considered] to be an annual collection of grievances on the part of the population, rather than a multi-year bottom-up planning exercise” (ONDH, 2009, p. 67-68, cited in Bergh, 2012, p. 415). In the 2010 Communal Development Plan (PCD), participation is a measure of institutional transparency involving the one-way communication of PCD planners’ development strategy to the communal population (Bergh, 2012; civil servant
interviews, 2017). On a national level, participation in development programs is selective, and civil society is monitored by a “guardianship” of centralized offices which surveil and regulate the activities of these non-governmental groups.

This section takes up the INDH and the Communal Development (2010-2016) and Action (2016-2022) Plans as two cases for analyzing national and local implications of participatory and decentralized development governance. There is a wide-ranging scholarship on the INDH and its participatory framework which I review below. Following this summary, I draw from my fieldwork in Ait Ouassif and Ighil N’Oumgoun Communes in Tinghir to critically examine the PCD and its successor, the PAC. The PAC is in its early stages at the time of this writing, and it is too soon to know the impact it will have on local rural communities. However, I discuss the structural limitations to this new initiative and suggest how current centralized systems of development governance could prove inhibitive to the PAC’s success in rural spaces.

3.3.1 Guardianship and Selectivity under the INDH

[T]he failure by donors to implement policies on participation is institutionally deep-seated and structural, and...through participatory development grassroots organizations are in danger of becoming ‘the human software through which investments can be made with least local opposition.’

Cooke & Kothari, 2001, p. 9

The budget for the INDH is supported by numerous international donors, among them the World Bank, European Union, Saudi Arabia, and individual countries of Europe and East Asia (World Bank, 2012). As discussed in Chapter 1 and Section 3.2, the INDH targets impoverished communities using data from the national poverty map and is divided into four programs, two for targeted rural and urban issues (directed by provincial committees), one cross-cutting program (also under the provincial committees), and a program for the reduction of vulnerability (regional

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35 In this section, I study the PCD and PAC for two of our three case study communes, Ait Ouassif and Ighil N’Oumgoun. My team was unable to obtain a copy of the Ikniouen PCD at the time of this writing, and my 2017 interviews discussing the PAC were limited to the former two communes.
committees) (Achy, 2010). All three communes in my empirical research are targeted by the
INDH: Ikniouen and Ighil N’Oumgoun in all three phases of implementation and Ait Ouassif in
only the latest (2016-2020).

Though the INDH’s national office is chaired by the prime minister of the elected branch,
governors from the MoI oversee Provincial Local Human Development Committees (CPDHs),
which prioritize the projects, financing, and partnerships with other ministries, local authorities,
and local and foreign associations. Therefore, the initiative is effectively concentrated in the
Ministry of Interior, which takes directives from the monarchy and “does not necessarily facilitate
a real transfer of political power and competences to the local level” (Martín, 2006, p. 436).

Despite – or perhaps as a counterbalance to – this centralized framework, the INDH
enacts participatory mechanisms of local inclusion in its targeted programs. This is accomplished
through the facilitation of small-scale development projects proposed by local civil society,
allowing local communities to become “a privileged scene for government action” (Bergh, 2012,
p. 411). The initiative encourages synergy between civil society, NGOs, and the private sector,
and is a source of funding for communal development planners. The INDH’s interpretation of
“participatory” development also involves the empowerment of civil society by requiring
administrative and financial accountability from associations; civil society must propose projects
in an open, competitive “market” and are expected to co-finance a small portion of their approved
projects (Bergh, 2012).

A detailed critique of the INDH’s participatory measures is beyond the scope of this
thesis and is well-documented by the ONDH and academic scholars (ONDH, 2009; Bergh, 2012;
Berriane, 2010; Craig & Porter, 2006; Martín, 2006; World Bank, 2012). In summary, authors
have found that while the INDH does invoke selective participatory measures for its programs,
these measures fail to include local actors in the initiative’s broader targeting. As an example, the
initiative’s provincial planning committees (CPDHs) are supposed to include representatives from
“local” councils, but in most regions this position is filled by provincial, rather than communal,
The role of partnering NGOs is also dominated by regional, rather than more local, organizations (Bergh, 2012; World Bank, 2012). Moreover, while the initiative has opened up new collaborative spaces between larger NGOs and previously marginalized members of civil society (for example, women), “others are de facto excluded” (Berriane, 2010, p. 101).

Finally, while participatory mechanisms of development are “conventionally represented as emerging out of the recognition of the shortcomings of top-down development approaches,” the inherent “tyranny” (Cooke & Kothari, 2001, p. 5) of the Moroccan participatory approach remains as a powerful check against local power. Even as the INDH is forging a more welcome environment for local civil society to participate in the development of their home spaces, it is also using that participation to strengthen the Ministry of Interior’s local intelligence. Berriane (2010) recounts the path of one association member’s quest to gain approval for her projects; when she is blocked at the local president’s office, she appeals to the governor for his endorsement: “thus contributing to undermining core elements of political representation” (p. 107). “Indeed, the majority of NGOs take their proposals directly to the CPDH36…the head of which is chosen by the governor…and not to the CLDH37…headed by the [commune] president” (Clark, 2015, p. 36). Additionally, the introduction of the INDH resulted in a tremendous increase in the number of local associations created: associations which are registered with and monitored by Interior offices. The informants of the Interior moqaddem are then free to observe and attend local gatherings planned by these now formal associations, and at the national level, associations are entered into a central database to track their activity (Berriane, 2010).38

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36 Provincial Council for Human Development
37 Local Council for Human Development
38 In Chapter 4, I examine how the Moroccan government utilizes development data for surveillance and control, using evidence from my institutional ethnography and interviews.
3.3.2 Grievance-Based Participation in the Communal Plans

In a span of just 15 years, the new Moroccan regime has legislated three major successive changes to communal development planning. In 2002, three years into the young king’s reign, the national government recomposed the Communal Charter of 1976, devolving new financial and decision-making powers to commune presidents and allowing partnership agreements with local associations (Royaume du Maroc, 2002). However, these new responsibilities “only marginally reduced the importance of the supervision of the MoI,” which continued to act as a “guardian” over the elected office’s duties and supervised the new formal relationships with civil society (Clark, 2015, p. 14). The new Charter also failed to alter the communal framework for planning projects. Councils continued to frame their projects according to the directives and timeline of the National Five-Year Plans started under Hassan II, but these local plans typically consisted of scattered arrays of documents without concise goals or deliverables (Bergh, 2012).

The modified Charter of 2008 rectified the latter issue through the enactment of the six-year Communal Development Plan (2010-2016) for targeted communes and incorporates the same participatory rhetoric as the INDH.39 Despite setting high expectations for inclusive and data-driven planning, the PCDs did not live up to international – nor even Moroccan – standards for participatory development, and the Plans accomplished little in the way of successful development interventions.

In June 2016, a decree for the new Communal Action Plan was announced, which promises a true participatory framework for communal development planning and better implementation of proposed projects. Using Ait Ouassif and Ighil N’Oumgoun Communes in Tinghir Province as case studies, I review the mechanisms for participation and decentralization used by 2010-2016 PCD and 2016-2022 PAC planners. I end with a discussion of the structural

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39 The state targeted 35 communes in Ouarzazate and Tinghir provinces for PCD planning in 2008, the only provinces targeted in the former Souss-Massa-Drâa region. Of these, 17 rural communes and two urban enclaves were targeted in Tinghir, including my three case studies, Ait Ouassif, Ighil N’Oumgoun, and Ikniouen.
limitations of the PAC and the prospects of commune-driven development in the Moroccan southeast.

... 

*The aim is to build a shared vision of the future of the commune based on a continuous process of consultation and negotiation with local actors, full ownership of the territorial project by local institutional actors, the mobilization of human resources, effective and sustainable partnerships, and better articulation of the strategies of intervention at the local level with the country’s national-level engagements...*  

Communal Development Plan Introductory Brief, ADS, 2010

Morocco announced the Communal Development Plan in 2008 as a tool for decentralized, participatory management of development, handing over the responsibility of localized poverty assessment and intervention to elected representatives and civil society. It is seemingly antithetical, then, that the PCD was designed by two national institutions that are intimately tied to the monarchy: the Ministry of Interior’s Directorate-General of Local Government (DGCL) and the newly-enacted Social Development Agency (ADS), which was established in 2001 as a complementary agency to other national development programs, including the INDH. Both the DGCL and the ADS perform as explicitly and emphatically in support of decentralized development governance in their written communications. The DGCL website welcomes visitors with open language on decentralization. It offers its web portal as a space of communication to local elected councils and Interior officials and is inclusive of non-state actors, “including national and international partners, academics, the private sector, civil society and others – to share with them the experience of decentralization in Morocco” (DGCL, 2016). The ADS promotes the participation of civil society in partnership with elected councils for the provision of public services (Bergh, 2010). Both also touch on the need for “capacity-building” of local development actors. In detailing its role in the formulation of the PCD, the DGCL claims it is “embarking” on an offer of capacity-building and decentralization of development powers to the local elected branch (DGCL, 2016).
Under the structure of the PCD, each targeted commune’s plan was headed by a consultant hired by the state (Bergh, 2012). These consulting offices were typically based in a large city in the same general region as the commune – such as Marrakech or Agadir in the case of Tinghir (civil servant, 2017). Like the DGCL and ADS, the written text of the PCD promotes decentralization and participation as central strategies for both planning and intervention. In the contextual brief, the PCD is said to be a tool for “Participatory Strategic Planning (PSP)” and is aimed “to reinforce the institutional place of the commune” in local development (ADS, 2010, p. 3). In listed objectives and methodological strategies, key terms appear throughout which stress the importance of local and democratic development such as “capacity-building,” “communal awareness,” “collective responsibility,” and “participatory diagnosis.” Local knowledge is encouraged and explicitly solicited.

Each PCD consists of seven phases: a preparatory Phase A; two information-gathering phases B and C (survey and “consultation and exchange”); “capacity-building for local actors,” Phase D; strategic planning, Phase E; and operational and follow-up work, F and G. In the Ighil N’Oumgoun and Ait Ouassif Plans, Phases A-E have already been completed; F and G list a general strategy without offering results. The local population, i.e. civil society, is mentioned in the diagnostic Phase B during the “Participatory Territorial Survey” as a source for information about the issues of the commune. Civil society is also consulted for Phase C, in which a town hall-style meeting is planned with the local population to present the results of the survey and to “take into consideration the advice and comments of the local actors and local population” (ADS, 2010, p. 5). The diagnosis of each commune is thorough and unique to the individual commune, with sections for each sector – infrastructure, economy, education, etc. Both communes’ diagnoses give special consideration to women’s issues.

40 Several sections of the PCD, such as contextual briefs and the follow-up chapter, are identical across all communes that my team acquired; other chapters are unique to each commune. I cite identical sections as (ADS, 2010) and use page numbers from the Ait Ouassif plan when pulling quotes. I cite all sections unique to each commune by the order their commune appears in this paper, i.e. (ADS, 2010a) for Ait Ouassif Commune and (ADS, 2010b) for Ighil N’Oumgoun.
The project list – which is the main content for Phase E – is relatively brief. Ighil N’Oumgoun’s Plan lists fewer than 30 projects, giving a timeframe, budget, and proposed financial sponsors for each (ADS, 2010b). The financial partner categories are not specific; other than the commune and the INDH, donors are not named, and an “other” category makes up over 50 percent of the total proposed budget. Ait Ouassif has 37 projects budgeted and lists its financial partners as the commune, provincial council, DGCL, INDH, NGO and “other,” the last of which accounts for about a third of the total budget (ADS, 2010a). Ighil N’Oumgoun commune proposes to pay 21 percent of the total six-year budget, and Ait Ouassif 43 percent. The final evaluation phase is written identically across the two documents, listing a general framework in which the communal council should act as lead evaluator while external experts, i.e. the consulting agency, remain available to help with strategy.

The PCDs are written to be thorough and responsive to the local needs of the commune and brief but comprehensive in their plan of action. It is clear that external “experts” took the lead in strategizing the plans, with documents beginning and ending with pre-written text peppered with national rhetoric. However, the plans also repeatedly demand the participation of local council members and civil society in the diagnostic and implementation of projects. The Plans call on council members to fill gaps in data with their “local knowledge” and include the advice of all relevant development actors – state, NGO, and local population – in the modification and verification Phase C (ADS, 2010). The “valorization of local knowledge” and “capacity-building for local actors” are recurring themes in both plans and factor in to the final budgets as well, which list several objectives for trainings and workshops.

On paper, the PCD recognizes the unique expressions of poverty of each targeted commune and offers a comprehensive list of projects for alleviation. In practice, however, the plan was largely ineffectual in instigating development and was devoid of any participatory action. Interviewees from Tinghir recall that the PCD was not even remotely participatory. Many blame the consultant-driven framework, which did not provide planners “incentives to develop
the PCDs in a participatory way” (Bergh, 2012, p. 421; civil servants, 2017). Evidence from the field and other scholars suggest that only the consulting agency, the president of the commune, and MoI officials played a role in data gathering or project proposals (Bergh, 2012). Civil society members in Tinghir report never hearing of the PCD’s participatory phases, and current elected representatives confirm that the communal president was easily able to conceal parts of the PCD process from the population and even his own council (workshops, 2017; civil servants, 2017). Consulting agencies might look to the local Interior official to fill gaps in data “since he is the one on the ground,” but the local council members would only see the final document, which was not always translated out of French to Amazigh or Arabic (quote from MoI staff, 2017; Bergh, 2012). Staff from regional ministries complain that prior to the PAC, external services were rarely consulted or informed of the projects outlined for the PCD (civil servant, 2017).

Comparing the plans for Ighil N’Oumgoun and Ait Ouassif, it is clear that the external consultants were honest in documenting the particular issues of each space; diagnostics are dissimilarly structured in writing style, and while major topics are the same, the information provided is unique to each commune. However, interviews suggest this is not the case across all communes assessed under the PCD. Local staff insist that consultants for some communes simply copied from one plan onto another, editing place names and numbers but retaining identical assessments about purportedly unique problems (civil servants, 2017). It is worth noting that the introductory chapter and concluding phases are identical between the two documents I have reviewed, and one can notice where place names have been inserted amid pre-written text due to slight differences in font face and color.

Finally, the PCD did not meet any of its own promises in Tinghir regarding training, and communes rarely followed through on proposed projects. Associations report no instances of being offered capacity-building training, despite budget allocation for such work in Phase E

42 Criticism of the PCD by current civil servants might be in part colored by political divisions, since the PCD and PAC align with the 6 year election cycle.
As discussed previously, council members likewise were not trained in how to plan projects and were not included in the planning process (civil servants, 2017). Though NGOs and “other” donors made up a substantial portion of Aït Ouassif and Ighil N’Oumgoun’s funding sources, the plan did not suggest avenues for seeking out such funding. Effectively, the only donors who were sure to review the budget were centralized state offices and provincial councils (ADS, 2010a). This leaves financial control largely in the hands of these higher offices, particularly in the case of Ighil N’Oumgoun, whose communal council was able to provide less than a fourth of the total necessary budget. Interviews and focus groups reveal these communes have very little social capital in non-state development networks, making partnership with NGOs unlikely (fieldwork, 2016 & 2017). Without guidance in establishing new non-state financial partners, the communes were left to the same centralized sources for funding under the PCD as they had been before its creation. As with the INDH, the presumably participatory framework of the PCD actually serves to undermine local and elected development power, decentralizing benign tasks to the councils while retaining effective control of funding and resources within centralized offices.

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On one hand, there are priorities at the national, regional, provincial levels. On the other hand, there are the needs of the inhabitants. Narrowing down priorities is essential.

PAC planning staff, 2017

The Communal Action Plan was brought in with a quieter introduction than its predecessor. Announced in a royal decree in 2016, the PAC is portrayed by national offices as an enhanced version of the PCD – one that has learned from the mistakes of the previous initiative. Like the PCD, the PAC is arranged over a six-year timeline, which falls on the 2016-2022 term cycle of the elected council members. However, the PAC breaks down this timeline, allotting the first three years specifically for “prioritizing projects for development and estimating the resources necessary for their mobilization” (Programme de Renforcement de la Société Civile au
Maroc (CSSP), 2016). In addition, PAC planners must conduct ongoing evaluations of the process and submit an evaluation report at the end of each year (PAC planning staff, 2017).

The design of the original Communal Development Plan of 2010-2016 called for a bounded approach to participatory development that, in writing, satisfied international recommendations for participatory governance. Local populations were “consulted” and communal councils also helped fill gaps in diagnostic data. Yet it became clear by the end of the election cycle that the PCD was not living up to even Morocco’s hollow participatory standard, since in practice the plan excluded locals from all steps of the process (where the process was even completed). The newly mandated PAC offers a similarly inclusive approach to development, but communal planners in Tinghir insist that the new plan will not result in the same siloed, non-participatory outcomes of the PCD (civil servants, 2017).

For one, the leadership structure for the new plan is already inherently bottom-up. The original PCD was outsourced to external consulting agencies that were not incentivized to seek information beyond what they could acquire readily from state documents. Thus while the framework of this earlier initiative required the agency to consult local actors for a portion of the data collection, this action was easily omitted during implementation. With the PAC, communal presidents are the lead planners. The PAC also compels presidents to assemble committees dedicated to topics of interest to the commune, such as education or transport, and these committees are led by elected council members (PAC planning staff, 2017). One committee topic is required across all participating communes: the Equity and Equal Opportunities Committee, responsible for assuring intervention for marginalized groups, such as women, children, and handicapped residents.

The PAC does not mandate a rigid structure for the planning phases, leaving commune presidents to design their plans however they feel would be most appropriate for their commune.

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43 I cite the Safi Commune PAC, available online in French, for background information on the new Plans. I was unable to obtain a copy of my target communes’ PACs at the time of this writing. Instead, PAC planners would read off of or summarize draft sections of the PAC during interviews.
(PAC planning staff, 2017). Some elements remain the same across the communes. All PACs begin with the vision of the president; this elected leader proposes his ideal framework for planning to the provincial governor, who then approves the approach. There is then a commune diagnosis with the help of the committees, followed by the “prioritization” of projects according to the objectives and vision of the planners and the budgetary constraints of the commune and its financial partners. The president must head the yearly evaluations. The process is bookended by another visit to the governor, who is presented the final plan for another round of approval. Additionally, presidents are given the option to do the framework and evaluations themselves, or to hire out a consultant for these two phases. If the commune president chooses to hire an external agency, the choice in consultant must also be approved by the state prior to hiring.

The planning teams I met were eager to describe their personalized strategy for the new initiative. One variation that stood out in interviews was each commune’s interpretation of “local participation.” The role of civil society varied immensely in these interpretations. Tinghir Province chooses to include associations as so-called “assistants” to the steering committees during the diagnostic phase, stressing that associations “are not members of the committees” but might help orient them “in the field” (Tinghir PAC steering team, 2017). Associations are then left out of Tinghir’s following phases. In Ait Ouassif, civil society has a formidable role. For the diagnostic phase, the president has planned “five workshops with associations to identify problems and solutions on topics of history, geography, environment, demography, and basic infrastructure” (Ait Ouassif PAC steering team, 2017). Some associations are brought in again for the following phase, where they assist committee heads and the steering team in determining their yearly objectives and narrowing down the projects. In the Ighil N’Oumgoun plans, associations were not mentioned. However, this commune integrates elected members in decision-making.

44 I interviewed team members of the PAC steering committee for Ait Ouassif Commune, Ighil N’Oumgoun Commune, and Tinghir Province at large. I also refer to the online PAC document for Safi Commune near Marrakech, but this is a brief introduction (only five pages long) that I only refer to for context about the PAC process.
throughout the plan, valorizing their local knowledge. Council members participate in not only the initial data collection phase, but are allocated two distinct phases for evaluation when the PAC steering team “presents the final draft of the PAC to the committees” first and “to the communal council” second before the final document filing to the governor (Ighil N’Oumgoun steering team, 2017). Tinghir and Ighil N’Oumgoun also specifically mention that they make time for consultation with external services (Ministries of Health, Transport, etc.) to be aware of their existing plans for the commune – a marked improvement from the isolated work of the PCD. Indeed, it would appear that communication with external services is urged under this new framework (Le Matin, 2016).

The Communal Action Plan, at the time of this writing, is in its second of six years.\textsuperscript{45} It is too early to know the result this new framework will have on rural development. Nonetheless, the planners I interviewed were optimistic that this process is successfully facilitating a decentralized and participatory approach to development targeting. Under the new plan, presidents are allowed their own unique vision for the commune and take the lead in diagnosis, prioritization, and evaluation. Elected members of the commune are essential operators in needs assessment as heads of the PAC’s surveying committees. In some plans, even civil society is brought in for village surveys or to help narrow down the priorities of the commune. The first projects mandated by the PACs have yet to be implemented in any of the communes I studied, but it does appear that the choice in projects will be influenced by local knowledge – either that of elected council members or, more rarely, local associations.

Despite these advances, I am hesitant to declare that the PAC will drastically change Morocco’s approach to communal development interventions. Though on the planning side, there is a clear inclusion of local elected members in the production of development knowledge, the PAC does nothing to change the structural obstacles to the successful implementation of these

\textsuperscript{45} For some communes not studied in my fieldwork, the PAC process has been delayed by politics and has yet to begin (PAC steering teams, 2017)
proposed projects. Most notably, the PAC (and its predecessor, the PCD) promises no additional development funding to its planners, with communal budgets still apportioned by central offices of the state. Planners lament that “the local population has been waiting for these interventions, but the municipal budget is still weak. The distribution of the national budget throughout the country has created deep disparities between territories” (PAC planning staff, 2017). If weak local governance were the sole reason for Morocco’s historic neglect of rural development, the PAC’s planning-focused mandates might be an appropriate solution; but this is not the case. Rather, this historic rural neglect was a symptom of nationally-focused economic planning, and modern local councils continue to cite a lack of state funding as a major limitation to carrying out their development objectives (Nellis, 1983; PAC steering teams, 2017). This lack of additional funds to the commune has not been offset by new social capital; the PAC offers no new financial or project partnerships, nor does it suggest capacity-building exercises with steering teams to seek out new donors.

This leaves effective financial power in the hands of the state, through the still-powerful role of the wali, or provincial governor. The governor becomes a key but covert player in the PAC process. In addition to his role in the distribution of the communal budget, he has effective control over the INDH’s provincial development committee, one of the primary donors in PCD project lists (ADS, 2010a; 2010b). He also has the power to perform checks on all PAC decisions; the governor must approve the initial PAC proposal, the choice in consultant (if hiring an outside agency), and the final PAC. MoI officials say that the relationship between their staff and the communal councils is an “amicable” one, with the qaid and wali acting as “guardians” to the administrative work of the commune’s elected office – without the need for heavy-handed regulation (MoI staff, 2017). Even if this is the case, it remains that the governor has considerable power to revise or deny the work of the communal councils if he wishes.

Finally, while the PAC has mandated that local elected members of the commune participate directly in the production of development knowledge, the PAC framework does not
guarantee this local knowledge will reach higher circles. PAC diagnoses and strategic plans are created by the commune, for the commune. No other institution – including the INDH and external services – is mandated to use PAC data to inform their work. Additionally, the new framework still leaves associations’ role open to interpretation, both in terms of knowledge and decision-making. As has been seen with communes in Tinghir, the free interpretation of civil society’s role can lead to significant partnership (as in Ait Ouassif), an ambiguous informant role (Tinghir), or no inclusion at all (Ighil N’Oumgoun). Thus, while the PAC demands new structural changes in participation at the level of the commune for elected members, it fails to change broader structural obstacles at the provincial and national level and has failed to mandate a relationship with civil society at the local level.

3.4 Conclusion

Morocco’s two longest-reigning kings, Hassan II and Mohammed VI, have readily adhered to the international community’s evolving directives for national and pro-poor growth since independence, modeling policies after prevailing notions of decentralization of governance and local participation in development. While the monarchs’ policies would suggest that elected councils and civil society now have the autonomy to plan, prioritize, and implement their own development objectives, the reality remains that the central offices of the state still hold significant regulatory power over these groups.

In fact, the decentralization of one development responsibility is often paired with the recentralization of another. Under Hassan II, decentralization of administrative duties to the elected branch actually strengthened the corrective power of lateral Interior offices. Emigrant investments likewise were co-opted, as remittances were siphoned through the national bank and migrant development organizations with ties to Amazigh rural areas were put under state surveillance. With the ascension of Mohammed VI, local elected councils gained real power over their development budgets, foreign NGOs could establish formalized partnerships with state...
ministries, and civil society emerged as a foundational pillar to new national development programs. These new participatory measures have been commended for their pro-poor and rural-centered approaches to development. Yet like the previous administration, the Mohammed VI regime has been strategic in its new forms of democratic development, always ensuring the state retains a powerful role in the checks and balances of local development activity. Local councils and civil society, while afforded new freedoms to plan their own development projects, are still dependent on central state institutions for financing. Moreover, new tools for local engagement, such as the INDH or the PAC, come with additional state surveillance over these local actors’ activities.

Local knowledge production and transfer are ideal outcomes of truly decentralized and participatory development schemes, and through an analysis of the INDH at a national level and the PCD and PAC at a communal level I argue that under Moroccan governance, local knowledge is rarely sought and rarely used in interventions. The knowledge produced by centralized departments has proven to be of higher value to these regimes; state offices are the ones consulted about communal issues in development, and national surveillance over non-state actors has become a compulsory consequence to their partnership with state development programs. The next chapter examines the daily practices that result from these systems of governance: the practical implications of centralized knowledge production for local and non-state development actors, and how these actors are invited to or impeded from contributing their own knowledge or gaining access to the development knowledge of the state.
Chapter 4: Local Knowledge and the Evasive State

4.1 Introduction

Since the 1990s, the Moroccan monarchy has faced mounting pressure by international observers to enact “good governance” over its territories. As prevailing ideals state accountability have shifted and international development institutions have gained preeminence, international expectations of good governance have evolved to include a responsibility to open communication, transparency, and collaboration with pro-poor and participatory development actors. Anxious to stay in the good graces of international donors, King Mohammed VI has eagerly enacted poverty reduction programs and partnered with small and large development agencies toward the goal of social, economic, and infrastructural development across the country.

In recent years, the open source initiative has sought to align with the movement for good governance, creating the new philosophy of “open government” (Pyrozhenko, 2011). Open government combines the long-standing democratic and participatory interpretations of “good governance” advocated by international institutions with the ideal of freely shared and collaborated information advocated within the information technology community. The result has been a call for governments to open up access to their datasets and in some cases even trust open source data for their humanitarian solutions. The philosophy behind open government is that of a transparent government accountable to its citizenry and a collaborative government which shares and exchanges information for increased efficiency and effectiveness (Pyrozhenko, 2011).

Western governments and institutions have carried the torch for open government in the 21st century (Global Facility for Disaster Reduction and Recovery (GFDRR), 2014). In 2003, the United Kingdom established its Advisory Panel on Public Sector Information (APPSI), which advises “Ministers on how to encourage and create opportunities in the information industry for greater re-use of public sector information” (APPSI, 2009, p. 6). In October 2007, Washington, D.C. became the first to launch an exhaustive catalogue of government data available for free to
the public (Davies, 2010). Meanwhile many governments and aid organizations are now convinced of the necessity of open data and collaboration in disaster risk management and humanitarian relief (Cowan, 2011). The 2010 earthquake in Haiti was a testament to the potentially catastrophic consequences of siloed information and the life-saving benefits of open license datasets, particularly geographic and infrastructural data (GFDRR, 2014). Today, 75 nations have signed the Open Government Partnership calling for governments to “commit to pro-actively provide high-value information, including raw data, in a timely manner, in formats that the public can easily locate, understand and use, and in formats that facilitate reuse” (Open Government Partnership, 2011).

While the open source community has redefined “the fundamental notions of what constitutes property” for many countries (Weber, 2004, p. vii), there are others who still see data as a commodity to be protected, and their governments remain “organized to control the most expensive elements of information management” (GFDRR, 2014, p. 8). Morocco has not signed on to the Open Government Partnership and remains stalwart against open data, both in terms of releasing its own datasets and trusting external sources. This is despite increasing donor consensus on the issue, even among the Kingdom’s key benefactors. For Morocco, the open government philosophy is the antithesis to a functioning state. Sharing data and increasing transparency would open the floodgates for inordinate criticism of the monarchy and of King Mohammed VI’s programs for poverty reduction. Paradoxically, though the “King of the Poor” has devoted unprecedented national attention to data-driven poverty targeting programs – so much so that he has proclaimed the INDH to be his chantier de règne, “a reign-long effort that will define his legacy in the long term” – the question of how the monarchy selects its data and methods for targeting is closed for debate (Berriane, 2012, p. 411).

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46 The World Bank has been a leader in the movement to open government data internationally, and the African Development Bank (AfDB) and UNDP offer online data portals of Moroccan statistics and projects (The World Bank, 2016; AfDB, 2017; UNDP, 2017).
As discussed in Chapter 3, while the Moroccan monarchy is anxious to remain a dutiful participant in international donors’ calls for decentralized governance, it also seeks new mechanisms for recentralization within these systems. This chapter continues this conversation by examining the policies and practices surrounding the Moroccan convention de partenariat, the agreement mutually arranged between state ministries and their trusted development partners. In Section 4.2, I explore my own experiences as an authorized researcher seeking development data and the experiences of development agencies in Tinghir to expose how the state reinforces its own centrality through day-to-day interactions with its development partners. Morocco regulates access to the development system through a network of authorizations and data sharing practices; any development actors not trusted by the state will be impeded from opportunities for development intervention and development knowledge by innocuous regulations and procedures. Due to the centrality of the national government and its regional partners in the production and management of development data, information on poverty and development at a local scale is difficult for untrusted development actors to obtain. Through workshops with community members in Tinghir, in Section 4.3 I attempt to reconcile these issues, posing the question: Can local knowledge, produced by rural communities, fill existing data gaps in the state-controlled system of development? I offer participatory research mapping as a case study in the production and standardization of local knowledge.

4.2 Authorization and Partnership in Data and Intervention

4.2.1 Contracting Access

_The NGO is not here as a counter to the state. We are here to help the state realize its objectives. The HCP has calculated the poverty rate, it has made its report of the marginalized zones of the country. The role of the NGOs and civil society is to help the state intervene within those marginalized zones. The data comes from the state – it is not our role to offer alternatives._

International development agency, interview, 2017
Nikolas Rose writes that for the state to define and control its domain requires the extension of government over a vast “zone of space and time,” made possible through the material “links, networks, alliances, and conduits that in various ways allow ‘action at a distance’” (1999, p. 210). These material extensions may take the form of numericization of a domain, or in other cases governance over professionals through audits or contract. In the first, the numericized object becomes governable even across a vast territory by virtue of its new definition: revenue offices identify populations by their economic worth and impose taxes by these numbers; surveys and censuses announce the demographic truths used for later targeting. In the second material extension, the state’s allies become its governing partners, co-opted by contract to enact the government’s numericized interventions.

Radwan et al. (2005) take note of Morocco and Tunisia’s successful strategies for “harmonization” – that is, development coordination – with their international donors. For example, the objectives listed in the World Bank’s and the AfDB’s country strategies for Morocco “are similar/complementary [to each other], and consistent with Morocco’s strategy in its five-year development plan” (p. 12). The authors also write that this harmonization builds trust between the state and its benefactors: “The donor’s intervention is concentrated on the planning phase and on the monitoring of the project. This mode usually signals that the donors trust recipient government… [T]he funds are transferred to the country’s budget and managed through its own institutions and mechanisms” (p. 12). A comparable harmonization is enacted between Morocco and the partners contracted to implement interventions. For large institutions seeking to conduct development in Moroccan territory, it is common to arrange not small authorizations for independent projects, but a full and embedded partenariat with the state. Unlike small migrant NGOs and civil society, the larger NGOs and agencies I interviewed in Tinghir and Rabat were highly invested in the state’s development objectives. This is apparent in their written materials – public reports offered at interviews and program descriptions on their websites – which infallibly name the organization’s ministerial collaborators and the national or regional state strategies with
which their projects align. In their rhetoric, too, interviewees describe their goals for “provincial synergy” with an array of state committees and services (interviews, 2017). Many of the regional offices of international agencies were housed in the same office compound as their partnered ministry and staffed by former Moroccan state employees, a testament to the way international NGOs become woven into the fabric of their target countries at the local level.

While these development partners offer unique resources and expertise for their state-collaborated programs, the blueprint for the programs is typically designed by the ministry. As one agency put it, “each ministry has its strategy and action plan, divided into regions. They ask us to provide support for these action plans. We trust the government and their plan, so we follow it” (international development organization, interview, 2017). In another interview, an NGO staff member described his organization’s role in supporting a working committee of public administration and external services staff. The NGO had offered a new participatory methodology for youth employment training which the governmental committee incorporated into its programming. Asked whether his organization ever implemented its own independent training programs without collaborating with a ministry, he explained that this was simply not done: “You must present your interest to the state. Find a sector which approaches your own objectives. You will find someone with a common vision de développement” (international development organization, interview, 2017). Yet another interviewee described his agency’s work with Moroccan ministries as similar to a consultancy: “We always start with requests from the government” and “respect the government’s priorities” in targeting (international development organization, interview, 2017).

Given Morocco’s centralized data management, this harmonization is a benefit to development agencies, as the state’s trust grants them exclusive access to its data and resources. In my fictional narratives (Chapter 5), I draw from my interviews and field notes to describe the privileges afforded an NGO through its partnership with the regional Ministry of Education. When the development agency decides to plan a new school sanitation project for the region, it
narrow down a list of schools through indicators obtained from the Ministry. Indeed, ministry data has proven to be very important for any plans for intervention. In one conversation, I pressed my interviewee to explain, hypothetically, how I could enact a project – such as repairing a school – in a commune that the state has decided is not in need of support. His response stressed the necessity of government data for any attempts at targeting:

**NGO Staff**  
*If they are saying, ‘this work is not needed in this commune,’ I’d say it’s your job to convince them. Show them how your methodology has brought you to choose this commune.

**Author**  
What if I don’t have a methodology? I know this commune is struggling, I have talked to them.

**NGO Staff**  
*No, it’s not enough. You need more information to convince them: There is this level of education, this many students dropping out of school…*

International development organization, interview, 2017

Agencies seeking entry into Morocco’s development system will find it challenging to gain authorization without reinforcing the centrality of the state in their work. Those who do use state data for their targeting or support state programs in their projects are received warmly. These actors are given privileged access to state datasets and sites for intervention, with the precondition that their contributions be harmonized with preexisting state development programs. Meanwhile, the untrusted actors seeking access to development under independent objectives will be regulated or obstructed for fear of delegitimization of the state.

### 4.2.2 The Evasive State

Over the course of my research, I have been witness to the various and creative ways by which civil servants delay, regulate, obfuscate, and otherwise impede outsiders’ access to the Moroccan development sphere. When I first entered this scene of development as a self-announced poverty researcher, the evasions of ministry staff were disheartening. I would spend hours carefully wording French email requests for data, only to be ignored or redirected to another evasive office. Yet over months of virtual and in-person communications with civil
servants, the routine of dismissed requests and redundant demands for copies of my authorization papers became almost forgettable, an irrevocable piece of the development landscape of the Kingdom. My interviewees too would remark upon Morocco’s regulatory practices with a laugh and a shrug, recounting their interactions with the state in an almost fond frustration.

Rose tells us that through numbers, government becomes “both possible and judgeable… Possible, because they help make up the object domains upon which government is required to operate… Judgeable, because rates, tables, graphs, trends, numerical comparisons have become essential to the critical scrutiny of authority in contemporary society” (1999, p. 197). It is logical, then, that the Moroccan state would want to control the means of producing, transferring, and testing the numbers of development. For a capricious outsider to produce or share data without the guiding hand of government would risk subjecting the state to the “critical scrutiny” of “vigilant liberal” thought (p. 198). It would offer vigilant thinkers the power to define where and what the state is responsible for, i.e. the scope of its domain. To test the numbers of development, further, would call into question the domains already claimed by the state through its careful numericization.

A non-state actor seeking entry into the Moroccan development system will be faced with one of two reactions from the state. Trusted organizations with like-minded goals for development are embraced, drawn in to the planning and processes of the government’s development programs through the convention de partenariat. Meanwhile, the volatile actor – Rose’s so-called “vigilant liberal” thinker – is given at best specious access to development, legally permitted to participate but regulated and impeded by the encumbering bureaucracy of state ministries. I fell in to the latter category. In Morocco, I was marked by the double externalizing consequences of being both a foreign researcher without a partnership with the state and an intern for the ONDH. The volatility of being a foreign researcher was obvious; one need only read the critical scholarship cited in this thesis to understand why Morocco would be wary of offering information to social science academics.
In an effort to demonstrate openness to critique, the Moroccan state does authorize foreign researchers to conduct work in its territories. Our team has a long list of clearance documents, beginning nationally with the Ministry of Foreign Affairs and Cooperation and moving down to administrative area permissions for each of our case study sites. This system of permissions is unevenly enacted, with some individual ministries requiring a separate lengthy process of registration through multiple bureaus but others accepting the national clearance without further inquiry. The ritual exchanges in documentation would precede all civil servant interviews, even in offices already familiar with our work, and exceptions to procedure were rare. As one researcher warned, “once a contract is finished, good luck getting data you didn’t already ask for” (Moroccan development researcher, meeting, 2017). During my February visit in the southeast I sought interviews with leading planners of the Communal Action Plans of our team’s target communes, and on one occasion I attempted to interview a provincial authority to discuss the Action Plan for Tinghir Province. Though I had appropriate authorization for our three target communes, without separate documentation for their presiding province I was refused an interview. While I was eventually allowed a short conversation with the office, the meeting was limited to one staff member reading out a French translation of the Arabic document I already had on file, while another derailed my attempts at further discussion by interrupting with benign questions about my stay.

When I sought data from regional and state offices, staff were able to dodge my requests through simpler methods. On one hand, information already released for public consumption is forced upon outsiders; in first-time visits to Moroccan state and partnered agency offices, visitors are inundated with pamphlets and event schedules, offered CD-ROMs of documents on the organization’s projects and custom-printed folders to contain it all. On the other hand, the process of accessing closed government datasets as a foreign researcher is a constant negotiation. In some instances, files would be transferred readily, but with spreadsheets stripped of most of their attributional fields. In other cases, over email or in a meeting (after the exchange of
authorizations), the civil servant will offer you assurance that the information exists and requires “only a little validation” (IE, 2016). Then weeks will turn into months, and enquiries as to the status of the dataset will be deflected or ignored altogether. Our team found that simply arriving at the bureaus unannounced proved to be the most efficient route for obtaining our data, which would inexplicably emerge fully validated from the office server after half an hour’s patience in the reception area.

The ONDH is funded by the national government, and its office culture echoes the bureaucratic behavior of government departments, but the Observatory’s contentious function as a watchdog to the king’s chantier de règne often means it is branded more a vigilant observer than a trusted partner or ministry. The ONDH was established with funding from the state to appraise national efforts in human development, poverty, and social exclusion, with a central focus on the programs of the INDH (ONDH, 2017). Its organizational mission states that this appraisal will be conducted through the analysis of both private and public data. Yet during my internship at this agency, I became aware that the ONDH’s pursuit for information from state ministries was often met with the same evasions that I experienced as an independent researcher. Dr. Atia’s fieldwork reveals the tenuous relationship the ONDH cultivates with the state, compelled to conduct critical analysis yet also forced to carefully tend to its mercurial relationships with ministries for data and funding (Atia interviews, 2015). Some observers denounce the Observatory for this reason, claiming it is too timid in its reports, hesitant to bite the hand that feeds it (IE, 2016).

In development practice too, external actors are frequently blocked from entry into the development system through procedure and practice. This is often the case for younger and smaller NGOs without an established history of partnership with the state. In Chapter 3 I gave examples of this regulation at the policy level, detailing the heavy-handed participatory structure of the INDH with civil society at the local scale and the friendship societies monitoring migrant NGOs in their countries of residence. My interviewees lamented as well upon the procedures and
practices used by the state to deter or disrupt their projects. One transnational NGO cited unnecessary delays in the process of obtaining Moroccan associational status which would have allowed more freedom in their development practices (foreign NGO, interview, 2017). In another case, an organization resorted to distributing donated clothing to households through covert methods after the local MoI appointee demanded that his office be in charge of determining which households were in need (foreign NGO, interview, 2017).

There is also a humanity in the numbers of development, a human vulnerability to the skepticism of liberal thought. Bruno Latour’s macro-actor, the one protecting and defining government through his “dispersed network of persons, things, and techniques,” manages his macro state affairs through the micro-actions of human conduct (Latour, 1986; Rose, 1999, p. 5). This conduct, in the face of the skeptical liberal thinker, is protectionist and isolationist. The impetus for this isolation is indistinguishably both macro and micro. In his macro identity, the civil servant uses evasion to shield his government from the skeptical observer; in the micro, he shields himself.

In Morocco, especially within the bureaus of the government, “there is a very low tolerance for mistakes, so [staff] have to be careful to avoid judgement” (Moroccan development researcher, meeting, 2017). One way civil servants protect themselves from the internal judgement of their bureaus is by excessively regulating external bodies acting within their territory. As Alison Mountz (2010) writes, “[s]tates perform competence through lengthy processes of identifying, categorizing, observing, testing, numbering, and recording” (p. 33). In Tinghir, the performance of competence was most expressive with Ministry of Interior offices, whose officials would track our team throughout the length of the research project. In each commune, for example, staff of the moqaddem would materialize to make copies of our passports and letters of authorization, despite identical copies already made available to them from his superior qa'id. At the end of each public mapping workshop, requests would also be made for our flyers and lecture materials. As discussed in Chapter 2, the moqaddem would also dutifully send
an informant to the workshops, who would sit among the villagers but incidentally disappear from the room when we asked for participants to introduce themselves.

This system of centralization and concealment is not monolithic, and subversive practices are sometimes performed by the state’s otherwise dutiful staff and partners. One salient example of this subversion is the flash drive, a tool aptly joked to be a “weapon of information” in Morocco. I described earlier the advantages of arriving in person to state offices as a guileful way to corner data managers, but this strategy is not always met with resentment. Often, remembering to bring a thumb drive to private meetings would award me with a bounty of electronic files, freely offered. The untraceable USB exchange is relieving for civil servants – Latour’s “micro-actors” – who find in it the freedom to communicate information of the state without risking their own positions in the process. Further, the popularity of the flash drive among even national level offices of the state is recognition that the “vigilant” outsider does have a role to play in Moroccan development.

4.2.3 The Need for Local Knowledge Production

Collective investigation, education, and action are important to the re-humanizing goal of participatory research. By treating people as objects to be counted, surveyed, predicted, and controlled, traditional research mirrors oppressive social conditions which cause ordinary people to relinquish their capacity to make real choices and to be cut out of meaningful decision making.

Maguire, 1987, p. 31

The Moroccan state under its two longest-reigning kings has excluded knowledge production from any decentralizing reform. While local actors are invited and co-opted into development practices through partnership and contract, these community members are barred from decisions that could change the scope or target of the project. This is an unfortunate outcome, as my experiences negotiating for data have shown that knowledge from locally-based development actors could greatly improve the data used for development research and practice. Despite the evasions of the state described in the previous section, our team was able to
successfully navigate access to numerous datasets for Tinghir Province over the course of two years, allowing us a glimpse into the lived realities of our rural case study communities before beginning our own primary data collection. However, these files still left us in the dark on key aspects of rural poverty and development, particularly at local, i.e. sub-communal, scales. A set of files from the Ministry of Transportation and Supplies, for example, came to us with detailed information on the public transportation networks and paving projects for national, regional, and provincial roads, and another office passed along a GIS shapefile mapping these same three road types across the country. Yet in both sets of files, no data was available on the communal pistes: the unpaved gravel and dirt tracks connecting villages to points of interest.

In another batch of shapefiles, we found a health clinic placed in the center of a commune where it should have been 15 kilometers north, and a provincial road traced that did not yet exist. Village locations were also roughly positioned, with some placed at varied distances from any built infrastructure observed on Bing, Google Earth, and Mapbox imagery. When questioned about the villages, one data manager in Rabat stated simply, “yes, but this is only a problem of scale. We are addressing issues at the provincial level, so it doesn’t matter that a village is a kilometer or two off” (civil servant, meeting, 2016). His response is emblematic of the scaled consequences of nationally centralized development data management; the data collected is only suited for the broadly scoped research questions posed by national and regional ministries.

It is likely that somewhere in these bureaus, more detailed and accurate information does exist on some of these services. In one example, we discovered that the national census bureau has extremely accurate data on village distribution, tracking the spread of even dispersed villages and their enclaves. However, the only way HCP would allow us access to this information was to buy it as a set of printed maps, which we could then re-digitize on our own (but not redistribute).

In Morocco, the most valuable information is rarely made available to the critical scrutiny of the

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47 By government classification, national roads traverse region boundaries, regional roads provincial boundaries, and provincial roads communal boundaries.
vigilant liberal thinker, reserved instead only for the privileged state ministries and their trusted partners.

During my internship with the ONDH in Rabat, I used the datasets made available to the Observatory to model physical accessibility in a rural province of Morocco, tracking the routes from villages to their closest schools and health centers. I was dissatisfied with the design of my model, as it suffered from many of the examples I have discussed thus far of inaccessible, incomplete, and coarse state datasets. For instance, I did not trust the geolocation of villages or their services and did not have the capacity to ground truth their positions in the field. Meanwhile the ONDH knew of no ministry that might have access to fine scale elevation data for the country, leaving the issue of mountainous travel between rural sites ignored in my analysis. I left my internship with the understanding that I was unlikely to obtain an accurate picture of rural life if I depended on the national and regional offices of the state for information. My interest in finding alternative sources for data on local issues increased after this experience in Rabat.

4.2.4 Participatory Action Research and Participatory Research Mapping

As I describe in Chapter 3, rural Moroccan communities rarely get the chance to participate in meaningful decision-making in development. The few participatory information gathering exercises offered by the state continue to exclude key stakeholders and offer no promise to transfer this locally collected information to regional decision-makers. Yet participatory methods for data collection have the potential to fill the gaps in data that I encountered in my work. In academic research, scholars employing Participatory Action Research (PAR) methods have had considerable success in creating inclusive knowledge production. In PAR, research subjects – once powerless objects of the research experiment – become instead collaborators, actively contributing to some or all components of the research. PAR draws ordinary people into meaningful decision-making, emphasizing “a ‘bottom-up’ approach with a focus on locally defined priorities and local perspectives” (Cornwall & Jewkes, 1995, p. 1667).
Participatory research is a useful tool for work with vulnerable communities, as the collaborative approach to decision-making “offers a way to openly demonstrate solidarity with oppressed and disempowered people through our work as researchers” (Maguire, 1987, p. 29). The educational nature of participatory research is upheld as an empowering feature of the methodology (Elwood, 2008; Schwanen & Kwan, 2009). Through participation in the research design, community members “further develop skills in collecting, analyzing, and utilizing information” that allow them “to develop an increasingly critical understanding of social problems, their underlying causes, and possibilities for overcoming them” (Maguire, 1987, p. 31). This commitment to “critical understanding” is symbiotic with Moroccan civil society’s commitment to “raising the population’s awareness” of their marginalized place in society, a concern mentioned in several of my conversations with villagers (workshops, 2016; 2017).

Participatory Research Mapping (PRM) has been one particularly applauded version of PAR. Most popular in land use disputes and indigenous rights cases, PRM studies have helped oppressed communities take ownership of their land by converting their local knowledge into standardized, communicable data (Bryan, 2011; Cornwall & Jewkes, 1995). Herlihy (2003) offers several examples of how “harness[ing] the power of maps and geographic information” through guided mapping has given indigenous leaders the necessary tools to “solicit legal control of their lands” or use mapped products for negotiation in international development (p. 327). In both participatory research and participatory mapping, the research process is often as important as the product for both researcher and participant. For the researcher, the participatory process offers the opportunity for rich insights into the socio-political relations in a community. For the community member, participation in the research project provides education and training useful for later activism.

The PAR approach is not perfect, and scholars have cautioned that the methodology does not promise to eliminate the power imbalances imposed by positivist research. Sarah Elwood (2008) warns that while this community-centered strategy for “[fleshing] out incomplete public
data sets is important and promising, …critical, participatory and feminist GIS suggest that the very mechanisms that produce these gaps in the first place may well perpetuate them” (p. 178). If not carefully planned, PAR may result in simply co-opting locals into a project that does not help – or might even hinder – their communities. “Some researchers have found that the ‘communities’ they want to involve are apparently uninterested in taking part in research. Enthusiasm for local knowledge or for the involvement of people in health service provision may lack any local relevance…As Stone reflects, community participation often seems to carry more significance for outsiders than it does for the poor” (Cornwall & Jewkes, 1995, p. 1673; Stone, 1992). Researchers must be careful in finding compromise between Western practices of data standardization and indigenous “understandings of space” or risk compelling participants “to shed aspects of their traditions” for the sake of the project (Bryan, 2011, p. 40; Asad, 2003). Participatory research also runs the risk of offering a false opportunity for voicing the needs of oppressed groups without ensuring any tangible outcomes, reminiscent of Morocco’s town hall style participation in the Communal Development Plans from Chapter 3.

I attempted to address these concerns in my own participatory mapping exercise in Tinghir. Through Participatory Research Mapping with community members, civil society, and university students from the province, I investigated the potential for incorporating participatory knowledge production into the existing system of development in Morocco.

4.3 Local Knowledge through Participatory Mapping

Earlier in this paper, I posed the question, What potential do local communities have for contributing to standardized knowledge production of poverty and development? My participatory mapping workshops outlined in Chapter 2 are a case study in how local communities might participate in the production and transfer of knowledge on issues of rural life. In this section, I discuss the challenges of the participatory data collection process and the opportunities it allows for encountering rich insights into poverty and development in rural
spaces. Drawing from field data gathered through eight participatory research mapping workshops in Tinghir, I respond to the following questions:

1. What forms of knowledge can local communities contribute to development?
2. What barriers prevent their contribution?

Following this discussion, I introduce the issue of accessibility as one pressing barrier to both international poverty alleviation and local participation in existing systems of development.

### 4.3.1 Mapping Poverty and Development

My participatory mapping project with Tinghir’s villagers was enacted in two phases. In the first, which I call Exploratory Mapping, I aimed to understand what villagers know about poverty and development in their communes, what they consider important, and what aspects of this knowledge might be made into standardizable and communicable information for results-oriented development organizations. In the second phase, entitled Targeted Mapping, my primary goal was to enact this standardization, transforming community-gathered information into extensive, measurable datasets. This process – converting abstract knowledge into actionable information, and information into measurable data – was at the forefront of my goals for the research project.

**Exploratory Mapping**

I began summer mapping with the broad question, “what are the most important aspects of poverty and development in your homes?” Our team taught participants representing a dozen villages to use basic mapping concepts to communicate this information graphically and verbally. Priority was given to conversation and detail, leaving strict data standardization to the second phase of the project. Two weeks of mapping in three communes produced rich information on Tinghir’s development landscape. Groups were formed by village and each described serious concerns for their hometowns.
Examples from the workshops are depicted in Figures 4.1-3. While participants’ maps indicated that all communes are serviced by basic infrastructural, educational, health and community facilities, written details and group conversations revealed that insufficient access, equipment, and staffing were impediments to their use. Participants reported that hospitals near the marketplace town of each commune were overcrowded and lacked the necessary staff and medical supplies to meet local demand. Primary and secondary schools in these access points were also understaffed. Sanitation was another crucial concern to those near the marketplace, and several groups reported that a lack of sanitation options at the schoolhouse was a deterrent to female student attendance.

Figure 4.1: Satellite Image of a village targeted in the Tech 1 Workshop, July 2016. Cartographic data from OpenStreetMap; imagery from Mapbox; georeferencing paper from FieldPapers.
Participants in this group mapped a communal hospital (1), a primary school (2), and a high school (3) and noted an excessive demand for services and far distance from other villages.

Groups from villages farther from these marketplace service points named many of the same issues in their mapping products, noting issues of sanitation, understaffing, and a lack of
supplies. However, these remote villagers also mentioned other serious concerns unique to their micro-regions. One group took note that their village, though home to a large population, did not have its own primary school, leaving children to attend overcrowded schools a couple kilometers away. Two others complained that their schoolteachers were prone to frequent absences. One particularly distant village group lamented that none of their surrounding villages were connected to basic water, sanitation, or electricity networks yet, and that accessing these services elsewhere required traveling through challenging mountainous terrain.

In fact, travel was universally troubling for participants; nearly all maps demarcated a point in the road that inhibited access to an essential service. One group from a village near the market traced a bridge used by nearly 2,000 communal inhabitants that was prone to dangerous flooding. Another wrote that a primary school was inaccessible during the region’s frequent flash floods. Yet another group near the market lamented that though their community lived close to many facilities, without a bridge to take them across the river after a rain, they were stranded from these services. For the more distant villages, road access and travel were endemic problems. Impassable dirt tracks, weak bridge infrastructure, unmaintained roads, and flood points were of urgent concern for these remote groups, limiting access to basic education and life-saving health facilities only reachable by these routes.

Participants produced over 20 maps during this exploratory visit. Mapped products from this first phase were not extensive, and the quality of the maps varied by group, education level, and other social factors. However, the rich detail provided in spreadsheets and during workshop conversations were crucial for me as a development researcher in uncovering the geographic context of state-offered information. This is a key benefit of participatory data collection. The collaborative nature of the project and flexibility in the research design allowed rich, detailed insights into issues of rural poverty and development that abstract conversations with civil servants could not provide.
The participatory approach also had a corrective purpose. For example, in Ait Ouassif Commune, some participants were frustrated to learn that I had not printed satellite imagery of all villages of the commune; a village on the remote northern border had been overlooked during workshop preparations. Through conversation with these villagers, I learned that this negligence was a painful slight to a village that already felt pushed to the margins of development work, and this offered me new insight into the relationship between remoteness and data practices.

**Targeted Mapping**

In the second phase of the project, I asked members of village associations – the most active and involved participants of the exploratory workshops – to map one theme from the previous phase in detail: obstacles to accessibility. These targeted mapping workshops were more hands-on than the previous project, with the ultimate goal of producing standardized, extensive datasets communicable to state or partnered development agencies. Civil society members mapped all known road obstacles in their communes using satellite imagery, denoting important characteristics of each feature, such as the type of obstacle, frequency, and the association’s proposed solution (Table 4.1).

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Current Infrastructure</th>
<th>Villages Affected</th>
<th>Frequency</th>
<th>Details</th>
<th>Proposed Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floods</td>
<td>Bridge</td>
<td>Bouzlafa</td>
<td>Rains</td>
<td>Children cannot attend school</td>
<td>Maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Talat Righen, Igrramen, Tighraf, Ouaouchki...</td>
<td>Seasonal</td>
<td>These villages are isolated from the centre commune</td>
<td>Pave the road</td>
</tr>
<tr>
<td>Snow</td>
<td>Nothing</td>
<td>Haute Ameskar</td>
<td>Rains</td>
<td>Crop losses</td>
<td>Bridge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Some households cannot reach services</td>
<td>Maintenance</td>
</tr>
</tbody>
</table>

*Table 4.1: Excerpt from Obstacles to Accessibility Attribute Table, Ighil N’Oumgoun Commune*
Most of the targeted mapping participants had little technological training, so university-educated Moroccans from the province were invited to a final workshop to validate, clean, translate, and digitize association maps in open source software. In total, 128 features were mapped in two communes48, revealing previously unidentified patterns of inaccessibility in the micro-regions of each administrative area. In Ait Ouassif, this exercise underscored the importance of the river – which the commune’s only paved road follows along the eastern bank – in supporting and constraining rural life (Figure 4.4). While groups emphasized the critical role of this water source in supporting agricultural practices, the channel was also the biggest obstacle to accessing key services for all villages on the western bank. Absent or broken bridges proved inhibitive for travel after rains, denoted by the blue flood point diamonds on the map. In Ighil N’Oumgoun, a large commune with a rugged mountainous terrain, road maintenance was a fundamental factor to accessibility to the market town (Figure 4.5, orange and yellow diamonds). More distant villages also noted that seasonal snowfall (white diamonds) could be particularly restrictive, limiting travel to the market for several months of the year.

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48 Due to time constraints, my second visit was limited to the communes of Ait Ouassif and Ighil N’Oumgoun.
Figure 4.4: Obstacles to Accessibility, Ait Ouassif Commune
Figure 4.5: Obstacles to Accessibility, Ighil N’Oumgoun Commune
With the combined support of associations and students, this visit ended in the production of two extensive thematic maps and detailed datasets of these features in French and Arabic. The data produced out of the Exploratory and Targeted mapping phases is original and contains rich detail on poverty and development not present in any of the datasets I encountered in Rabat. Participants generally agreed that the data produced would be useful to their communities, noting that the maps provide convincing evidence for their project proposals to the INDH and other funding sources. As one association member explained, “What we are doing today is a reflection of the truth in the villages: the real life. If an association is asking INDH or a foreign association about building a bridge, this map gives value and evidence to the project. It makes it real” (workshop, 2017). However, participants also warned that such an exercise would not be enough by itself to change the course of development in Tinghir.

4.3.2 Elusive Social Capital

We would like to thank you for coming here to train us. This is a unique project. No one has asked our community to offer our knowledge in this way before. Given that, we ask for your patience in this process as we learn these tools. Please also give us copies of this work, so that we may take it to our communities and show it to the organizations who would help us.

Community representative, workshops, 2016

During the months prior to my first participatory mapping workshops, team members from Tinghir warned that this exercise would be an unfamiliar experience for the residents of our rural case study communes, as the knowledge of these local populations is rarely sought by the state and its partners. Upon engaging with state and partnered staff, this was confirmed, and I found their perspectives on local knowledge to be quite dismissive. During interviews with these development actors, I described my goal for participatory research: to guide rural villagers through the production of datasets and maps of poverty and development in their communes, the results of which could be incorporated into data-driven methods of targeting and intervention. My plans were met with mixed and skeptical reactions.
Some Rabatis insisted that this form of data collection would be redundant. The Ministry of Interior knows everything already; why ask the local population to fill gaps in data when there are no gaps to be filled? Moreover, it is hazardous to depend on communities or elected members of the communes to gather data, as this inevitably devolves into politics. Dominant groups will manipulate the results to benefit their political goals, masking issues suffered by unrepresented populations. In some conversations staff would point out how anecdotal a villager’s knowledge is, suggesting that participatory practices with uneducated communities could never produce extensive, comparable results across communes or provinces. They advised that the fluid knowledge of local populations is not suited for the regionally-scaled “hard” data analysis that these larger institutions were conducting. A better option would be to leave community information gathering to the small interventions of civil society and instead hire an “objective,” trained expert for the work of standardized data collection (civil servant, 2017).

These dismissive perspectives aggravate an already exclusionary system of development for Morocco’s remote communes, leaving rural civil society without the social capital to communicate the poverty of their home villages. In Chapter 3, I revealed the minimal structural change from the new Communal Action Plans, which require no formal inclusion of civil society in development planning and establish no new networks for communicating information upward. Conversations from mapping workshops cast a similarly exclusive vision for the future of participatory information gathering. When asked whether these mapping exercises could be replicated without our help, villagers pointed out the futility in such an endeavor, noting that there are no trained advocates willing to help them with this work.

With each of my Targeted Mapping groups, I went down a list of possible “champions” (GFDRR, 2014) who would be willing to take over the logistical and technical steps to the participatory mapping process. Emigrants, I proposed, would be very promising advocates. As described in Chapter 3, Moroccan emigrants are known in migration and development scholarship to play a fundamental role in advancing the cause of rural development. Their
European development training, broad professional networks, and powerful influence in state decision-making have all led to substantial development in rural regions of the country (Iskander, 2010a). Yet conversations in Tinghir painted a different picture of migrant engagement. Here migrants are known to invest in the province; however their target is the urbanized town along a major access route where their families have transplanted, eager to benefit from the accessible resources of an already built-up population center. Any investment into their rural communes of origin is typically limited to “certain small resources, like medicine, clothes. They are not going to help the village with roads and civil society projects” (workshop, 2017). Thus migrant investments may improve rural development at a provincial scale, but at the local level these investments are only reinforcing inequalities between urban and rural populations.

University students educated in Marrakech and Casablanca brought technical expertise to our mapping exercise, and I suggested that these internal migrants might be a better alternative for hometown advocacy and training. However, association members expressed wariness, citing that students “may have a diploma, but when they come back to the village, they don’t do anything. To them, the village is for rest and vacation.” While some students have joined or started their own village associations, “they might start a project with excitement but after a couple weeks, they leave and it is forgotten.” Other participants warned of wrought tensions between elders and youth whose competing notions of activism have prevented collaboration.

As we went down the list, it became clear that these rural communes lack the trained or experienced champions who might help transfer their knowledge to larger development actors. Schoolteachers could help write data-backed proposals, but their poor assimilation and lack of tribal ties leave them unwilling to act as advocates. The imam of the communal mosque can read and write in Arabic, but participants insisted his response to requests for support “will simply be: ‘No. I am not from here and I am not here for politics. I am only here to teach religion.’”

Meanwhile external agencies, though claiming to offer “capacity-building,” “civil society training,” and “participatory programs” in rural communities, were notably absent from these
communes. In the first phase of mapping, our team gave participants the option to categorize mapped features by development project and organization, yet the vast majority of mappers left this field blank. In the second phase, association members confirmed that agencies rarely came to their villages. The most remote associations had not partnered with an agency in years, and all associations insisted that they had never been offered capacity-building training.

4.3.3 Scaled Exclusions

Earlier, I asked whether local knowledge could offer original insights into poverty and development not captured by the data attainable from the state. My participants’ cartographic products provide evidence that local communities do have rich information to offer on poverty with real implications for poverty reduction, and this information can be formatted for use in “hard” data development strategies. Participatory mapping also produced a second key benefit to my development research. Flexibility in the research process led me to view rural development with a new lens: one that recognizes the fundamental role of physical and social access in inhibiting poverty reduction efforts.

When I returned to Tinghir for the second phase of my project, I interviewed local associations based near Tinghir’s larger urban centers, where I learned of an entirely different form of civil society. Where rural residents of our communes were loosely organized and unfamiliar with the systems of Tinghir’s provincial development, urban associations had established a strong professional network. These groups discussed some of the same issues cited by my rural participants, speaking of the neglectful state which “doesn’t help associations and does not listen even if you express your needs.” Yet when speaking of their exclusion from decision-making, urban groups described issues with great clarity and detail where rural associations could only explain their exclusion in abstract terms. Urban interviewees also made little mention of an inability to physically reach the services offered in their towns.
This urban-rural divide is not a new revelation, and in Chapters 1 and 5 I describe the shift in international attention from national growth toward poor rural regions. Yet what was striking in my conversations was that this same urban-rural disparity could be found at even lower scales of analysis. Within our case study communes, villagers proximal to the marketplace showed on average a higher level of education, more social capital, and more familiarity with state systems of development than those hailing from remote enclaves. Maps also reflected an urban bias, depicting the most severe symptoms of poverty much farther off the main route.

4.4 Conclusion

In this chapter I have critically examined how local and non-state actors are met with uneven opportunities for access to the Moroccan system of development. For the state’s most trusted partners, access to sites of intervention is offered freely, but data production and decision-making remain tightly controlled by state offices. At the regional level, the convention de partenariat treats large development organizations as contract work, allowing unique projects only when they conform to pre-established state development objectives. For those without a trusted partnership, such as researchers and smaller NGOs, systems of exclusion are enacted to prevent any practices that may delegitimize the state. Often, these practices are not formally established but performed through the daily practices of Morocco’s civil servants. Finally, for the local rural villager, social and physical systems of exclusion have impeded access to opportunities for development. In this chapter, I introduced the issue of remoteness as an oppressive barrier to poverty reduction. In Chapter 5, I unpack this finding, arguing that physical accessibility is an unmeasured yet fundamental indicator of poverty in rural areas.
Chapter 5: Accessibility: The exclusion of remote rural areas in poverty assessment and development intervention

5.1 Introduction

In recent decades, national governments have shifted their view on poverty. Where once impoverishment was viewed as an inevitable or even necessary evil for the growth of the national economy, today nation-states and international donors treat poverty “as a social ill that can be avoided” through “the right anti-poverty policies” (Ravallion, 2016). With this new philosophy came increased attention to scaled economic and multi-dimensional assessments as tools for targeting poverty, and an increased awareness of the concentration of the poor in rural and underdeveloped areas (United Nations (UN), 2010; Roser & Ortiz-Ospina, 2017). Poverty maps, such as Morocco’s 2004 and 2007 expenditure-based maps, were born out of this “data revolution” in international development and “[shift] poverty data away from sole emphasis on the nation-state toward provincial and local variances. Poverty mapping tools have been used to guide a wide range of interventions including the location of basic infrastructure development; the creation of national, provincial and municipal development plans; the allocation of grant monies; and the piloting of conditional cash transfers to replace subsidies” (Atia, 2014).

Moroccan state ministries continue to use the national poverty map at the regional, provincial, and communal scale to inform development targeting, particularly for the poverty-alleviating development programs of the INDH but also for sector-specific initiatives. My conversations with development actors revealed that ministries and their partners also use ministry and census data scaled to the same administrative areas to determine sites of intervention (interviews, 2017). With the release of the new national poverty map, development actors will have the opportunity to target provinces and communes through multiple dimensions of poverty; the MPI-based assessment incorporates factors of health, education, and living standards into each administrative area rating (Royaume du Maroc, 2017).
While these Moroccan poverty maps compare geographical places, neither the current expenditure-based maps nor the upcoming MPI measures incorporate spatial indicators which capture the physicality of rural poverty. My state and agency interviewees likewise focus their attention on non-spatial indicators – such as school attendance rates, population sizes, and medical equipment – in determining the criteria for intervention without mention of physical travel or local scale access to services. This is reflective of international development practice. Despite increased attention to rural spaces and new focus on sub-national poverty assessment, development actors continue to crudely characterize the physical reality of poverty in rural spaces.

In this chapter, I draw from my empirical research in Tinghir and geospatial analysis of poverty and development to demonstrate how the remote rural area is left out of metrics and interventions. Section 5.2 sets the scene: I take the reader through the lived experience of accessibility and remoteness in mountainous Tinghir, spotlighting the seemingly innocuous daily practices in development that have perpetuated the exclusion of remote rural communities. The reader is immersed into my travels and that of two fictional development actors, foreign and native to the province, as they engage with Tinghir’s layered development landscape. Section 5.3 follows with a critique of the global, systemic issue of remote rural exclusion present in current approaches to poverty targeting internationally. I examine how key decisions in data analysis have contributed to masking issues of inequality seen at the sub-communal scale. I also illustrate how these decisions are reinforced by the development practices of larger development actors which favor accessible spaces. Finally, in the last section I discuss the future of remote rural spaces and the need for new approaches to rural poverty targeting, arguing for a data-driven and localized understanding of poverty and access in the rural Global South.
5.2 Narratives of Rural Development

In *Colonizing Egypt*, Timothy Mitchell argues that the act of ‘enframing’ limits the observer to see only what the architect intends to be seen. The observer is positioned before a framework used “to build-in an effect of order and an effect of truth…but also to circumscribe and exclude” (1988, p. 33). Like in a photograph, the object captured in the frame becomes the only truth observed – but a realm of other truths may extend beyond it. In human development, the development actor is the observer, and her daily practices, the frame. Her network of partners and the sites she visits form the architecture for her knowledge of ‘the field,’ and this knowledge informs her interventions. ‘Poverty’ is enframed by her observations, and development is enacted within this frame. What extends beyond these networks and sites goes unobserved.

In this section, I draw attention to expressions of poverty left outside of development’s frame. I use the following three narratives, informed by my participatory mapping and interviews, to illustrate how each development actor is engaged in his own enframing and how this contributes to the reproduction of spatial inequalities in Tinghir Province. The first narrative is a reenactment of my own first visit to the mountainous province. In this depiction, the route my taxi takes from Ouarzazate City to Tinghir’s capital demonstrates the power of the national highway in the enframing of rural life. The second story is of a technical expert from a fictional European NGO as he engages with the built landscape ‘on the ground.’ As the visitor observes the sites of underdevelopment around him, we see how this new knowledge shapes his decisions for intervention. The final narrative follows a local civil society member living in a village far from the paved road. His commute from home to the weekly market of his commune guides the reader past the many untreated obstacles of poverty that confine his family’s lives: obstacles that go unseen by the province’s highway-bound visitors. Frequently, these depictions are punctuated by issues of accessibility – physical access to key services and social access to professional networks of development – which prevent the development actor and the villager from meeting.
5.2.1 The Road to Tinghir

Twelve hours ago, I was in Casablanca’s international airport, standing in line to board a small propeller plane to the southeast. Now, the morning after a good night’s rest in one of Ouarzazate City’s many hotels, I ride a grand taxi through the Drâa-Tafilalet region, watching the built landscape transform around me.

From Ouarzazate, filled with five-story buildings and traffic lights, I ride in the cramped taxi van east down the national road N10: a two-way, two lane highway of compact cars and cargo trucks, some of which pass us impatiently on the open stretches. Instead of meandering over or around hills, route N10 cuts through them. A few kilometers outside of the city, the driver navigates a median managing the flow of traffic to Morocco’s prized solar power complex, Noor, the 9 billion dollar project promising 2,000 megawatts of energy by 2020. Not far past Noor’s sprawling facilities brings us by the 4,000-inhabitant oasis of Skoura, a surprising patch of green palms in the otherwise rocky and parched foothills of the High Atlas Mountains.

The view following Skoura is much more vacant, but telephone poles line up dutifully along the route through the valley and pistes$^{49}$ cut across it to connect modest villages in the mountains surrounding our path. I don’t see it from my seat, but at the crossing of the dry Imassine riverbed a set of piped culverts rest beneath the road, ready to funnel water through at the next big rain. At this river too, the route faces its first mountain ridge, and metal barriers appear along the shoulders at the sharp hilltop turns. Route N10 remains well-maintained across the length of the journey, and aside from occasionally passing around trucks over-burdened with hay bales and construction materials, our path remains clear.

After just over an hour’s drive, we reach the westernmost communes of Tinghir province. Our driver slows, watching for kids on bicycles and villagers carrying goods along the road. To the left and right are compounds of homes one and two stories tall, some painted, most the same shade of orange as the scorched earth around us. Between them, fields of grain and herbs. The

$^{49}$ Unpaved dirt roads.
occasional auberge\textsuperscript{50} sign offers tourists food and clean beds for their visit to the nearby kasbahs. Our route vaguely follows the thin channel of the river Im'Goun, and eventually we ride from its western to eastern bank, a sturdy bridge taking us across. A fellow passenger signals the driver to pull over. She steps out onto the rocky roadside and marches toward home, the driver quickly shoving the gear back into first to continue his route.

Winding past more green fields and houses, we arrive in Tinghir’s first urban center, Kelaat Mgouna. At the edge of Kelaa’s\textsuperscript{51} downtown, the driver takes us through a fork in the road and for the first time since Ouarzazate, both paths are paved. In this small city, we are confronted with roundabouts and restaurants, banks and small businesses. Neighborhoods here are grided neatly near the main street but begin to sprawl as they stretch away off the route. Another passenger is dropped off. As we continue along the national road, a grove of olive trees greets me to my left, a reminder that Kelaa is, after all, still an agricultural town.

We continue along N10, following this time the Dades River. Its confluence with Im’Goun is to the southwest, south of Kelaa, but we drive northeast, hugging the western edge of the Dades Valley. The valley is filled with agricultural plots to the right and loosely grided homes and auberges to the left. Twenty kilometers more and a roundabout appears for a smaller regional road; we take it east and cut sharply across the Dades River. The engine churns as the driver downshifts to climb the cliff on the river’s eastern bank. We have reached Boumalne Dades, another urban center smaller and more scenic than Kelaa. The taxi lurches up the hillside, pharmacies and markets winking past. At the turn, a huge kasbah: crumbling in solitude on a hill just below the cliff. A lookout point with a car park encourages visitors to stop for a photo.

After Boumalne, the landscape is suddenly and starkly empty. We drive lengthwise along the foot of another mountain ridge, the flat expanse of land uninterrupted by buildings or farms. As with the journey after Skoura, telephone poles race alongside us and pistes dart across the

\textsuperscript{50} Bed and breakfast, common along rural sites for tourism.
\textsuperscript{51} In Arabic linguistics, some compound words – such as Kelaa + Mgouna – are joined with a “t” phoneme. This sound disappears when the words are disjoined.
road, leading to invisible pockets of homes and farms. Another 20 kilometers from Boumalne, the small town of Imider flanks the road. It lies just before what looks to be a curious black mountain spread across our path. But as we approach, a gap appears, and the taxi glides easily between the two black hills.

As the mountain fades behind us, we come to the capital. "New Tinghir" first, a large demarcated plot of land filled with half-constructed buildings and a gravel road network. Then, the city: much larger than Kelaa, but not quite as expansive as Ouarzazate. Tinghir is introduced first by government offices: big, gated, Amazigh-style brown buildings. A line of large hotels and a spattering of restaurants and cafes follow, then a roundabout to lead us onto the main drag. The driver zips through traffic lights and around motorbikes, eager to finish the journey and to break for a smoke.

Ahead of us, I see signs for the road to the Todgha Gorge, one of the most popular tourist destinations in the province. But our driver pulls off the road into the grand taxi plaza to end the ride. In the plaza, drivers lean against vehicles and smoke under café awnings as runners shout out destinations. I step down from the car, grab my unloaded luggage from the ground, and walk back out on the national road to hail a petit taxi to my hotel.

Notes from the field, July 2016

For most visitors to the province, N10 is the only road they will ever traverse. The national route continues east of Tinghir, passing through more villages and valleys to reach the second largest city in the region and home to another modest airport, Errachidia. For tourists, some regional roads north of N10 offer scenic hiking trails and picturesque kasbahs; however, rarely do explorers venture farther than Todgha or Boumalne Gorge, each a few kilometers off the national road. Meanwhile business travelers and government staff can easily complete their work in one of three urban centers along the road where economic and state activity is concentrated. On the rare occasion of working with a qaid or president of a commune located off
the main drag, he\textsuperscript{52} is likely to arrange your meeting on the same day as one of his frequent visits to Kelaa, Boumalne, or Tinghir as a convenience for you both.

Yet convenient though it is to set up shop on Tinghir’s major artery, the concentration of visitors on this small dividing strip of a much larger province is obscuring. The national highway is a powerful piece of architecture in the enframing of rural Morocco, training the visitor’s eye to the built infrastructure lining its path. Urban centers and roadside attractions dominate the scene, and villages far from the paved grid of national and regional roads disappear into the landscape.

Using scaled methods of targeting, development organizations hope to engage with rural poverty beyond the enframing of built infrastructure. Through administrative area targeting informed by census and ministry data, these actors aim to provide spatially equitable interventions that reach past sites of existing infrastructure and services to undeveloped spaces of poverty. In the rural province of Tinghir, however, stark disparities remain between the communities along the paved road and the remote villages to the north and south. Despite geographical targeting, interventions by the state and its partners are all but absent off the paved grid. The following two narratives exemplify how these spatial inequalities are reproduced every day through development encounters. In the first, a visitor from an international NGO meets with a dependable network of development partners to identify the most appropriate site for his intervention. In the second, a villager experiences the lived realities of a commune untouched and unheard by state and partnered development programs.

5.2.2   Engaging with Rurality on the Ground

Author’s note: Both stories feature fictional characters and organizations. However, all descriptions are drawn from the responses of research participants in Tinghir. I have adopted some fictional place names for purposes of anonymity.

\textsuperscript{52} As of the time of this writing, no known government offices in this province are headed by a woman.
In a modest hotel room on the outer limits of Kelaat M'gouna, a man in a pressed shirt and slacks gathers his laptop and scattered papers into a briefcase. He is frustrated; the hotel has placed him on the third floor and internet access from his room has been spotty. He had hoped to read over the Ministry of Education’s latest statistics on Tinghir’s adult education courses once more before heading out. Today he will meet with a local responsable\(^53\) of the Ministry to finalize a project for his organization’s latest program, an adult literacy campaign for the region of Drâa-Tafilalet.

The visitor is a technicien, a technical expert, for the Swiss Agency for Development’s regional office in Ouarzazate. Personally, he has never been to Switzerland; his family is from Marrakech, but he moved to Ouarzazate after his university studies for work. The NGO zealously hires locally for its regional offices, and the man works among several other Moroccans from Ouarzazate and the surrounding towns. It is good that they sent a Moroccan for this trip, as many of the people from Kelaa and its nearby villages would not keep up with his Swiss coworkers’ rapid French, nor do the foreigners understand the locals’ Tashlehiyt-ridden Darija.\(^54\)

It is September, but when the tech steps out from the hotel entrance a hot wave of air still rushes over him, a shock after the cool of his air-conditioned room. He flips open his keys and unlocks his car. His hotel is tucked away on one of Kelaa’s side streets, and with time to kill he decides to meander through the residential roads on his way to the office of the responsable. He passes by a mosque just as the azan begins calling from its tall minaret. In the distance, he hears another call to prayer starting a second later from across the national road. On the other side of the street, a couple of young boys shout and chase each other on the sidewalk while their mother chats inside a small pharmacy.

The tech continues through the neighborhood and slows as he passes Kelaa’s high school: a long, gated building lined with classrooms and an adjacent yard. While the building

\(^53\) Staff member; authority figure.

\(^54\) Darija is a term used to define the set of Arabic dialects spoken across North Africa. The dialects spoken in Morocco are also referred to in English as Moroccan Arabic.
appears to be in good shape, the tech knows from Ministry reports that the school is just scraping by, in terms of both student marks and expenses. Too few children are making it to graduation, and the administration complains of lack of funding for basic classroom equipment. Tinghir Province has a long way to go to bring the education system up to the national standard.

In fact, the province has a long way to go in plenty of other metrics too – all you need to do is visit a town like Kelaa to know it. The Swiss organization’s local contacts lament that sports fields have fallen into disrepair here. Youth unemployment is endemic; training programs are needed to steer young men and women toward work. Farmers need machines for canning and preserving perishable fruit, and female weavers need new markets for their blankets and rugs. Handicap-accessible facilities are a rarity in this town, and the hospital is low in beds and high in demand. Maroc inutile is a region in need of support, and the tech is glad to be working for an organization so committed to helping it. He knows the NGO’s support is limited, but they do their best to target their money wisely, trying to reach as many people as possible with their services.

The tech’s contact from the local Ministry of Education office agrees with this philosophy. They shake hands and kiss cheeks in a small government building a few minutes’ drive from the hotel. The responsable is from a village just outside of Boumalne Dades, and he knows all the schools in the area from personal as much as professional experience: which ones lack rooms or teachers, which ones are still off the electrical grid. As they discuss plans for the new campaign’s literacy course, he suggests that the NGO consider a multipurpose building in the center of Boumalne for the lessons. The course will get the greatest reach there, he insists, as residents from even the surrounding communes will have an opportunity to attend. The tech agrees, grateful to have a local contact so familiar with the population. A small association from Boumalne has volunteered to help with logistics, fulfilling the participatory requirement of the Swiss agency’s program. The responsable passes along their email and brochure to the tech for follow-up.
The tech still needs to validate the quality of the classroom before heading back to Ouarzazate, so the two climb into the car and head toward Boumalne. As they make their way up route, the tech eyes the pistes cutting across the paved road between the towns. North and south of N10 are mountains. There are villages, of course, but the tech knows they are spread out across the High Atlas, in remote rocky outcrops or deep down the rivers’ ravines. Pastoralists roam the region too, and in his mind’s eye he sees Amazigh tents and small herds of goats dotted here and there along the hills. Tinghir is a vast province, and not all of its 25 communes are near to N10. For those far afield, the responsible explains that villagers travel to the so-called centre commune, a marketplace town in the middle of each commune, for the services not found in their farming villages: things like health centers, mosques, the local government office. Then for anything the small centre cannot provide, like a hospital or high school, residents make their way down a provincial road or a piste to one of the urban centers. For this reason, it is crucial that organizations like the Swiss keep up the support for community services along N10. The province depends on it.

The tech recalls his organization doing work once near one of those centres several years ago. It was a big initiative, and well-funded; they had set out to build sanitation facilities in 40 primary schools across the former region of Souss-Massa-Drâa to encourage young girls to stay in school. Of course, there were many more than 40 schools in this region without sanitation, but as usual the organization narrowed its targeting based on its limited budget. They had a long list of criteria: among them that the school must serve a significantly high surrounding population, and that it show promising attendance rates. A school in the commune of Amidiz just made the cut.

The tech is happier, though, to be working on a more targeted project now. He felt that the sanitation program – though a noble initiative – was not a very efficient use of funds. The schools were spread out across such a large region, and each one served a relatively small
school district, resulting in high transport and labor costs for only modest results. In addition to that, establishing a relationship with each communal council was exhausting for his office.

Looking around the wide-open rooms of the Boumalne facility, the tech finds himself grateful to already have such a trusted network for this project, having worked with the responsable and the Kelaa office on several projects now. The planning is much smoother this way, and more importantly, the literacy course will be available to anyone who wants to come, no matter their village or commune.

... 

On the southern slope of the High Atlas, 40 kilometers north of Boumalne as the crow flies, a farmer packs apples into the satchel of a mule. Tomorrow is the day of the weekly market in the Amidiz centre commune. He must make his way down to the souq this afternoon to be ready to sell by morning. His village is Ait Aoulimt, a settlement of several dozen households. It sits in a thin, deep ravine in the micro-region of Sefdou on the Serghizt Mountain, resting among the other eight sister villages of the Tchouki tribe. The man must travel through two of these villages to get to the piste of Imdine, the easiest way to the main road.

He hoists himself onto the animal. To begin the trek, he guides his mule cautiously on a long and narrow bridge of stone and wood over the river dividing the two sides of Ait Aoulimt. A month ago this bridge had collapsed following a hard rain. The men of the village spent several days reconstructing it, but their materials were limited and it is noticeably fragile. No piste has been extended to the farmer’s village to ease his journey, but on the other bank is a footpath pressed into the hill which his mule begins following eastward with routine steps.

Forty minutes of walking brings the duo past the village of Ouallam. Next week the farmer will return here for a checkup with his wife, who is pregnant with their fourth child.

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55 Marketplace.
Ouallam, home to a couple hundred households, is equipped with a small health center and a local nurse, helpful for the women and elderly who cannot make the journey to the centre. He still worries, though, about the timing of his wife’s delivery. She is due in winter, a very difficult season for travel here in Sefdou. Snow cover in this season can slow or even stop travelers completely, for months at a time. Ouallam’s health center is not equipped to meet the needs of more than quick medical consultation, and there is no delivery center anywhere in the commune. It was barely over a year ago that a young woman of the area died in labor waiting for a service car to take her to the hospital in Boumalne. Dounit aya, rest in peace. Some men send their wives to stay in the maternity ward in Kelaa during the last month of their pregnancies, but expenses are too high for the farmer’s humble income. Inshallah he prays there will be no complications.

In the village of Ait Tamat they stop, and both man and mule pause to drink from the fresh water of the stream. Sefdou still has no water towers or basins in any of the villages, though the elected council members say it is being planned. But the river water is safer now than a decade ago. When the UNDP came in, they taught the Tchouki women to wash their laundry as a collective to reduce pollution of the channel. With multiple years of sustained support for sedentary and pastoral populations of the region, the UNDP program had a unique and lasting effect on the community here.

The villagers of Sefdou have not seen projects from agencies before or since. The farmer is a member of the Sefdou Association for Development and Social Solidarity. When the state does make the journey up here for a project, the association attempts to help with implementation. However, the small group of farmers has little influence in the decisions of the makhzen or the commune. The Sefdou region council member usually listens to the association, and on rare occasions the president of the commune will even hear out their concerns;

56 The literal translation of makhzen refers to the Moroccan government centered around the king. It is loosely used by Moroccans to refer to the monarchy and Ministry of Interior offices and any offices or officials colluding with the monarchy.
nonetheless, the villagers know that just because the government receives their requests does not mean it will act.

This month, the weather has been favorable for travel. Little flooding and no snow means that a communal transportation van is in service from the village of Ait Tamat to the souq. The farmer leaves his mule with a relative in Ait Tamat and climbs into the van filled with men from the region. The driver is leaning against the fender of the van, waiting for more passengers to wander in. After another half an hour, he hops in the driver’s side door, turns the engine, and sets out.

From Ait Tamat, the piste is erratic and rough. The packed dirt path is dug snugly into the earth, but this is not enough to avoid the challenging terrain of the mountain. It zigzags, back and forth up the first steep hill of Serghizt Mountain. At the top of the slope they pass the one room schoolhouse. The farmer’s children are there today. The young students make the hour-long walk to school five days a week, so long as their instructor is present to teach them. There is just one school in the Sefdou region, and one man must teach all primary school grades at once. The teacher is from the city of Meknes, near Fes, and like his predecessors before him, he is miserable in Amidiz. With no wife and no tribal ties here, the foreigner does everything he can to spend his free time closer to the centre, or even down in Boumalne where there is strong phone service and internet connection. When it rains or snows, he does not come to teach, as he lives far from the school and the flooding makes the piste to Sefdou very dangerous.

He is also a new teacher, as is normally the case for a region like this. It is common for school teachers in Morocco to start their work in remote rural areas and work their way up to a more privileged location like Kelaa or Skoura. It can take many years before a teacher like him might be offered a job in a better serviced school. Given their instructor’s inexperience and frequent absences, the children of the region do not advance quickly in their lessons. That, and the lack of resources: Sefdou is still not connected to an electrical grid, and the villages struggle to find money for books and educational materials. The parents, meanwhile, are most often
illiterate and speak only weak Darija, making it hard to supplement schooling in the home. Given these setbacks, the few children who do move on to the high school near the centre will struggle to keep up with other students. Most families do not even try to send their children, as the cost of staying in a dormitory there is unsustainable. As for the farmer’s family, his sons will continue their father’s work on the farm or migrate elsewhere in the country as a laborer. The daughter will stay in the region to marry and give support to elders at home.

The van continues making its way south to the central region of the commune. At times, the piste cuts straight along the mountain, fighting the natural turns and curves, but more often, it runs evasively along the ridges, criss-crossing down and up again so as not to lose traction. In some stretches, the path is almost smooth, but in many others it is patchy, with chunks of unmaintained gravel tumbled down across the road. Weak curbs of rock are piled up on the outer edge of the path at high cliff-side turns.

After about an hour’s trek, the van makes a last dramatic zig-zag to reach the piste’s final ravine. At the turn of the riverbed the village of Imdine comes into view. After picking up another passenger from the village, the van continues past Imdine along the still unpaved piste. Then, abruptly, it turns away from the ravine and cuts again up a mountainside, back and forth on the steep slope. At the top, it traverses its way down again, over and across until rejoining the ravine. From here, it is at last a smooth, quick drive down the crevasse to the village of Tamaline, where the piste finally meets the paved provincial road. Just a few minutes farther down the smooth pavement and the van stops, letting out the farmer and his satchel of goods at the main souq of the centre commune. The sun is beginning to set. The farmer and his fellow riders walk off the provincial road and arrange rented stalls to sleep for the night, as residents of the centre step inside their homes for dinner and tea.

Spatial inequalities and uneven power relations in rural Morocco are reproduced through daily development encounters, excluding remote communities in development planning and
practice. Development agencies targeting Tinghir seek to engage with rural dimensions of poverty, but the established networks on which they depend are concentrated in urban loci. The Swiss agency technician from this narrative begins his visit to *Maroc inutile* by soliciting help from the provincial office of the Ministry of Education, an easily accessible building in a town along the busiest road of the province. The Ministry turns out to be a rich local resource for the NGO, offering program contacts from state and civil society; yet these contacts too are based in urban spaces. The role of built infrastructure in containing the movement of the visitor also cannot be understated. The promise of electricity, internet, air conditioning, and proximity to other services are only offered in already-developed towns; thus the lonely schoolteacher from Amidiz commune can only soothe his social disconnect through visits to services-rich Boumalne, and the tech chooses a Kelaa hotel with full amenities for his short stay.

There is evidence of poverty in these accessible urban centers, and the tech takes note of the problems of unemployment and underfunding of services. For this development actor, Kelaat Mgouna and Boumalne Dades are emblematic of the poverty he has encountered in his research. However, these urban sites distract the tech from other manifestations of poverty existing just outside of view. The tech is aware of the villages beyond the mountain, but they rest at the periphery of his frame, a homogenous population of farmers and pastoralists in ephemeral villages. Some villagers from these rural zones will travel down to Boumalne for the NGO’s future literacy course – maybe even a few from the commune of Amidiz – and the tech will hold this as proof that the town was a great location for spatially equitable access to the Swiss’ services. But it is unlikely that any of these participants will hail from villages far from the paved road and the *centre commune*.

For the farmer of Sefdou, an entire life exists outside of this urban frame. In Sefdou, symptoms of poverty are more pervasive and more tied to the physicality of the region. The natural and built landscape are the most formidable obstacles to the farmer’s economic prospects and his family’s health and education. An absent road doubles the travel time from their home to
the schoolhouse. Snow and flooding stop women of the region from receiving care at childbirth and schoolteachers from educating the region’s youth. When a bridge falls into disrepair, the villagers find no support from the state or partners like the Swiss agency. In fact, they rarely hear from or are offered an opportunity to speak to the makhzen or external organizations. There are of course no government offices in Sefdou, and civil society has not met a partnered agency for many years. The farmer is aware of some of the services available along the national highway – a high school, a hospital – but to reach there would mean a day’s travel, and to stay there, a discouraging price. Though Sefdou is just 40 kilometers from Boumalne – half the length of the journey from Ouarzazate to Kelaat Mgouna – the farmer will remain boxed in by the physical and economic realities of his commune, and the tech will remain strapped to the grid of infrastructure and social capital filling the national road.

5.2.3 Satellites and Hubs

Accessible spaces are the viewed objects of development, the subjects of intervention, leaving the remote commune a peripheral space. In French, small schoolhouses dotted along the mountains are called satellites, and this language is reflective of development’s enframing of Morocco’s rural life. The highways, urban centers, and marketplace towns are treated as service hubs, and everywhere else becomes a satellite turned toward these spaces of access. Goods and services come in to Tinghir along the national road to the urban centers, where the population trails in for its services and back out to their dispersed homes. The rural home space is thus separate and apart from the public service space of the main road. And it can remain that way because the biggest players in Morocco’s development are keen on distributing their services wisely and equitably, strategically investing in only the spaces which serve larger populations.

Yet to the spatially disadvantaged populations north and south of the highway, these schools are not satellites but their first and often only source of education. Moreover it is not the urban center – hours away and unrelated to their daily lives – that is the hub of activity for the
villager, but his own home. The national road and its service points are at the villager’s periphery, reached only in rare moments – a birth, a dedicated student, an escalated issue needing the qaid’s swift adjudication. Thus, it is rare that members of civil society in micro-regions like Sefdou have the opportunity to interact with organizations like the Swiss. More often, these external agencies meet with associations only in familiar, proximal spaces and only through familiar, proximal networks, leaving those who are excluded to remain excluded.

Statistically designed geographical poverty targeting is intended to resolve issues of spatial inequality, reducing mistargeting or leakage to the nonpoor (Bigman & Fofack, 2000). Yet the scale of these strategies has not been appropriate for villagers in places like Sefdou, as inequalities are typically aggregated and sub-communal disparities are erased. Moreover, practitioners like the fictional Swiss tech rarely apply statistically-driven methods for geographical targeting when determining sites of intervention. In the following section of this chapter, I examine why prevailing methodologies for poverty targeting and assessment are ill-suited to respond to the stark spatial disparities in access to services in remote rural areas.

5.3 Exclusion of Remote Rural Areas in Poverty Targeting

To problematize drunkenness, idleness or insanity requires it to be counted. Reciprocally, what is counted – slavery, pauperism, insanity – is what is problematized. To count a problem is to define it and make it amenable to government. To govern a problem requires that it be counted. Secondly, numbers are linked to evaluation of government. To count is bound up with a new critical numeracy of government; to measure the success of government is to measure quantitative changes in that which it seeks to govern.

Rose, 1999

There is an understanding among international observers that physical accessibility plays a role in the provision of poverty-alleviating services, but the measure itself is underdeveloped. The Sustainable Development Goals (SDGs), for example, include the word “access” 39 times in 169 listed targets and call on organizations to offer “affordable and equal access for all” (UN, 2016a). Yet throughout these goals, “access” as a measurable indicator is only defined for one
target (Goal 9.1), using the Euclidean distance benchmark used by the World Bank. This indicator, which counts “the proportion of the rural population who live within 2 km of an all-season road,” offers neither the scale nor the detail to account for the numerous factors impacting rural accessibility in places like Tinghir Province (UN, 2016b).

In development research, contributors have similarly failed to address the scale and complexity of the uneven distribution of poverty alleviating resources, even while lamenting that “rural and remote areas, with their significant levels of extreme poverty, may still be far behind” in the movement to reduce global poverty (UN, 2010, p. 40). Remoteness is rarely discussed outside of the abstract, and village-scale accessibility is rarely measured beyond the two-kilometer, commune-aggregated standard (for example, see Kraay & McKenzie, 2014; Van de Walle, 2002). Remote rural poverty is recognized as an obstacle to poverty reduction, but assessments do little to account for the inherently spatial manner by which inequalities are distributed nor the impact that national, regional, or provincial development targeting may have on inequalities at lower scales.

5.3.1 Concentrations of Development along Lines of Access

This masking of scale and space in poverty measurement has had real implications for impoverished rural communities. In Section 5.2, I drew from qualitative field evidence to demonstrate the vast disparities between remote and accessible rural areas and the absence of development projects in villages off the paved road. Quantitative results from my geospatial analysis complement these findings, indicating a heavy concentration of development intervention along lines of access in Tinghir Province.

I proposed two quantitative research questions in Chapter 2: Do development projects and services appear in the same spaces as villages? and Are development services concentrated in areas of accessibility? Through qualitative observation, a heat map of INDH projects shows high concentrations along the paved road, as expected (Figure 5.1). These projects are also more
concentrated in two of the three urban centers, Boumalne Dades and Tinghir City, than in other locations along the road. While a much smaller count, health centers nevertheless show a similar spatial pattern, however these points do not show as high of concentration in urban centers as the INDH projects (Figure 5.2). Schools, alternatively, follow a pattern much more similar to villages in that there is dispersion throughout the communes (Figures 5.3 and 5.4). These maps support the hypothesis that INDH projects are not reaching the most spatially marginal villages. They further suggest that health centers are inaccessible to many villages as well, with few instances of clinics or hospitals existing off the paved road. Schools, on the other hand, appear to be more accessible, reflective of rural policy. In Morocco, primary schools are typically placed in central compromise locations between several villages in remote areas so that no single child may have too far to walk, rather than within a village boundary (IE, 2016).
Figure 5.1: Point Density of INDH Projects, Tinghir Province

Figure 5.2: Point Density of Health Centers, Tinghir Province
Figure 5.3: Point Density of Schools, Tinghir Province

Figure 5.4: Point Density of Villages, Tinghir Province
When classed by Euclidean distance to a line of access (Table 5.1 and Figure 5.5), results confirm these observations for each variable. INDH projects are highly concentrated on paved roads; just six percent are outside of any two-kilometer buffer zone. Within the paved road boundaries, 149 projects, or 43 percent of all projects, were implemented along the national roads. Health centers are also concentrated in accessible spaces, with 84 percent located on a paved road. However, a substantial 25 out of 38 centers were built off the main highway on a secondary road. Moreover, 21 out of the 25 communes contain at least one health center, reflecting the country’s commune-focused development priorities.

<table>
<thead>
<tr>
<th>Villager</th>
<th>Village</th>
<th>School</th>
<th>Health Center</th>
<th>INDH Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2km to Primary Road</td>
<td>28%</td>
<td>34%</td>
<td>27%</td>
<td>34%</td>
</tr>
<tr>
<td>&lt; 2km to Secondary Road</td>
<td>41%</td>
<td>32%</td>
<td>41%</td>
<td>50%</td>
</tr>
<tr>
<td>2km or More from Road</td>
<td>30%</td>
<td>35%</td>
<td>32%</td>
<td>16%</td>
</tr>
<tr>
<td>Total Values</td>
<td>447</td>
<td>5,596,203</td>
<td>256</td>
<td>38</td>
</tr>
</tbody>
</table>

*Table 5.1: Distance of Variables to Paved Road, Tinghir Province*

*Figure 5.5: Distance of Variables to Paved Road, Tinghir Province*
Schools and villages are more dispersed and do not appear in accessible spaces as frequently as hospitals and INDH projects. 32 percent of schools and 30 percent of villages are outside of any two-kilometer boundary. 185, or 42 percent, of villages are located within two kilometers of a secondary road, and 28 percent are close to a national highway. Schools have a similar distribution at 41 percent secondary road and 27 percent primary.

Notably for those seeking to target remote areas, results show that the distribution of villages as single units is very similar to the distribution of the population, with approximately one third of villages and one third of the total provincial population living more than two kilometers from a major road. Meanwhile nearly all development projects, 96 percent, are within this two-kilometer distance. These numbers suggest that the spatial pattern of development interventions in Tinghir does not reflect the spatial pattern of villages. INDH projects are more concentrated in accessible spaces than villages. The distribution of projects also does not reflect the spatial pattern of the population by count, showing approximately the same difference in concentration.

5.3.2 Determining a Site of Intervention

Why are development projects disproportionately concentrated in accessible spaces when rural development aims to serve the poorest of the poor? In urban areas, “leakage” of a service to nonpoor households is a key concern of development actors, given high population density and relatively equal geographical access to services (Bigman & Fofack, 2000). For rural practitioners, the inverse can be the most challenging. Development agencies are often faced with the difficult question of how to achieve a high impact and reach a large rural population when rural settlements are widely dispersed and sparsely populated, and when funding and resources are limited. In my fieldwork, I found that development actors on the ground do recognize that physical access impacts the provision of services, which is why marketplaces and urban centers have become a hub for new development projects. These larger towns are typically on a major
access route, have higher populations within and in the villages surrounding them, and are already the traditional geographic provider of social services. The town of Boumalne Dades described in Section 5.2 is one such service point, offering a hospital, higher education, and a direct line of access out of the province via the national route N10. The Amidiz centre commune is another useful option for development, as it services all villages of the commune with a health center, local government offices, and multipurpose community facilities. International and non-state agencies thus concentrate their resources, training sessions, machinery, and professional networks in these marketplace towns with the aim to provide equal access for all residents.

Inherent in this approach is the assumption that services placed in the communal marketplace town will reach the poorest villagers of a commune. However, in reality, rural communities rarely have equal or equitable access to these “central” sites of intervention. In my mapping workshops, research participants from remote areas emphasized the daily difficulties of the dangerous, unmaintained, time-consuming paths that they must traverse to reach the services meant for them. The Sefdou region from Section 5.2’s third narrative exemplifies how these barriers to travel effectively eliminate opportunities to benefit from the services of the centre commune, as snowfall and flood, distance, and poor infrastructure deter the remote villager from depending on these distant resources. Meanwhile, a single remote village may not compare in population size to the marketplace town, but when measured by micro-regional clusters (see Section 5.4), these distant multi-village enclaves are frequently home to a high number of inhabitants. This means that a large proportion of the communal population is untouched by the interventions that are supposedly servicing all inhabitants equitably. Figures 5.6 and 5.7 exemplify the incongruity between assumptions in development and the realities of the lived rural space. Figure 5.6 imagines the marketplace town as a geographically central hub of services equidistant from villages of incrementally lower population sizes. Figure 5.7, showing Ighil

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57 Wiggins and Proctor (2001) provide a conceptual overview of the status of the marketplace as a traditional center for economic and social activities.
N’Oumgoun Commune, depicts the challenging terrain of Tinghir and the large pockets of inhabitants living far from the traditional point of intervention.

Remoteness is a fundamental factor in rural poverty, but without methods for identifying remote villages or comparing inequalities at lower geographic scales, this spatial indicator is left out of data-driven development targeting. Meanwhile through dependency on the marketplace town as a default service outpost, rural development practitioners are reinforcing the remoteness and inaccessibility of these distant village enclaves. A new framework for assessing and targeting remoteness is necessary to alleviate these inequalities.

Figure 5.6: Theoretical Accessibility to a Traditional Service Point
5.4 Toward a New Framework for Accessibility

A new accessibility framework must respond to existing weaknesses in two areas of measurement: poverty assessment of administrative areas and development targeting in these impoverished spaces. In terms of poverty assessment, a novel approach must measure remoteness at a lower scale of analysis than the commune to avoid erasing important variability between sub-communal regions. Moreover, new variables must be incorporated to measure remoteness. Existing two-kilometer Euclidean measurements in poverty assessment are insufficient in capturing the complex geography of inaccessibility in mountainous rural regions and fail to account for the possibility that services may not always appear on an all-season road network: for example, the broad distribution of schools far from major roads as depicted in Figure 5.3.

In terms of development targeting, my field research has made clear that while development agencies traditionally assume that the marketplace of a commune is a high-impact site for poverty reduction, this unmeasured assumption has in fact resulted in an inequitable concentration of resources favoring villagers who live close to existing services. Second,
population size remains an important factor, and a new framework cannot ignore the need to target high populations. However, development actors must also be more realistic in measuring their impact by acknowledging spatial impediments to access, rather than assuming that a program will be accessible to all villagers of an administrative area. Therefore the number of inhabitants must be a factor in determining these new, geographically equitable service points.

5.4.1 GIS Models of Accessibility

GIS offers the opportunity to respond to all of these concerns; geospatial software can be used to measure and define spatial patterns of remoteness to key services. However, a review of the literature indicates that there are very few GIS accessibility models for development that are applicable to data poor, remote rural sites in the Global South. The first road accessibility models introduced to the field of development were for urban, high-density areas (Knox, 1980; Van de Walle, 2002). Many of the sites chosen in current models are still highly urbanized compared to provinces in the rural Global South (Horner & Wood, 2014; Fransen et. al, 2015; Yang, Gorge, & Mullner, 2006). Even those in rural counties of the Global North are not appropriate for mountainous landscapes and dispersed village distribution seen in Morocco. These models are used on still quite high density rural sites and were able to work with rich sets of attributional information for services and populations (Yeager & Gatrell, 2014; Johansson, 2005; Fortney, Rost, & Warren, 2000; Luo & Qi, 2009; McGrail & Humphreys, 2014). Existing models also seldom incorporate elevation as a factor impacting travel, despite its clear relevance to rural mountainous settings.

Those who do design spatial models of accessibility for the rural Global South rarely offer their model as a tool for treating poverty, instead seeking to enhance model design for academic purposes without mentioning policy outcomes (Castella et. al, 2005; Heng, Hirobata, & Nakanishi, 2007; Salonen et. al, 2012). Of those who do put their models in conversation with policy and assessment, they focus on regional and national policies without reference to
international poverty or development indicators (Bisht, Mishra, & Fuloria, 2010; Okwi et. al, 2006). One exception is Rubio, Rubio, & Abraham (2017), whose recent study uses GIS and multi-criteria decision analysis to assess poverty at multiple spatial and temporal scales. Their paper focuses on access to basic infrastructure (electricity, drinking water, and the road network) and uses exclusively Euclidean distance as a spatial measure of remoteness. Presently, the World Bank is developing a GIS-based Rural Access Index (RAI) to be used toward the achievement of the 2030 SDGs and promises to “provide highly disaggregated information to policymakers” (Iimi & Diehl, 2015). However, this tool would define accessibility by the same two-kilometer standard used in present targeting, offering no additional variables such as elevation or obstacles to the road.

In our working paper, our team attempts to address these concerns through our own GIS model of accessibility (Figure 5.8). Composed of eight indicators which capture remoteness to schools, health centers, and paved roads by Euclidean distance, a slope calculation, and geological impediments, this model corresponds with qualitative measurements of accessibility collected over the course of our research project, and was validated by local experts in Tinghir.58 This index alone contributes to poverty assessment efforts internationally: it offers a spatial indicator of poverty that may be combined with other factors to create a new multidimensional poverty index.

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58 More detail can be found in Chapter 2 and in Mittler’s George Washington University capstone report.
The model may also be used for development targeting at the village scale. Using ArcGIS’s Buffer and Points in Polygon tools, the team created five-kilometer radius\(^{62}\) clusters of villages in Tinghir, which we used to identify micro-regions whose accessibility is rated ‘Poor’ or ‘Worst’ and whose total ‘metro’ population exceeds 500 inhabitants\(^{63}\). The results of this

\(^{62}\) Interviews in Tinghir confirmed that villagers are willing to walk up to five kilometers to reach basic services and facilities.

\(^{63}\) As discussed in Section 5.3, data-driven development targeting is typically done at the scale of the commune, and development program evaluations count the entire commune population or number of attendees when measuring impact (despite the sub-communally uneven access to services discussed...
targeting mechanism are depicted in Figure 5.9. Ten remote village clusters were identified through this analysis in the province of Tinghir. Notably, none of these ten clusters lies within five kilometers of an existing marketplace service point. These clusters are found in some of the most impoverished communes of the province, as measured by the 2007 national poverty map. These GIS-identified service outposts allow for more equitable distribution of development projects below the scale of the commune.

Figure 5.9: Remote Village Clusters, Ighil N'Oumgoun Commune

throughout this chapter). There is no standard measure for sub-communal impact. Our 500-inhabitant threshold is informed by qualitative fieldwork but does not comply with any national or international standard.
5.5 Conclusion

Recent reforms in rural governance have turned the Moroccan development space more inclusive of local and non-state actors. Mohammed VI has redistributed development responsibilities, promoting partnership with local communal councils, civil society, and larger development agencies. Nonetheless, this newfound participatory system remains highly centralized in key points in the development process. With primary control over data collection and knowledge transfer and tight Interior security on all local activity, Morocco’s highest state offices retain the power to direct or inform all development planning, assessment, and monitoring and evaluation.

A nationally centralized data management can be useful for the “harmonization” of development objectives. For Morocco, international development’s “donor darling,” the harmonization of poverty assessment measures and development outcomes means gaining opportunities for international funding and investment. For mid-sized NGOs and agencies, this harmonization means access to data and sites for intervention, and state-partnered development agencies stress the importance of “provincial synergy” in planning and targeting (civil servant, 2017). However, my fieldwork in Tinghir Province has revealed that Moroccan and international neglect for local scale development data and their scale of aggregation in poverty assessments have resulted in the uneven development of impoverished rural areas, to the detriment of remote villages.

Accessibility is a fundamental factor affecting economic and social dimensions of poverty. Remote rural areas are disadvantaged, suffering acutely from poor access to poverty alleviating resources. My fictional narratives depict the ways that distance and challenging mountainous terrain are preventing Tinghir’s most remote villagers from accessing markets and health facilities. These impediments to travel influence the decision to send sons and daughters to school and are the most crucial factor in determining whether a local association will be able to build a network with state and partnered agencies. Remote rural households struggle to access
basic services and development interventions but this is rarely accounted for in targeting methodologies. The issues of village remoteness and physical accessibility remain absent from data-driven methods for assessing and targeting poverty both in Morocco and internationally.

Accessibility is also a predictor of development activity. Conversations with development actors in Tinghir indicate that the state and its partnered agencies rarely use data-driven, comparative targeting tools to determine the most appropriate sites for their projects within a targeted administrative area. Rather, the location of a development project within a province or commune is determined based on consultation with local state offices and the prevailing practices of development agencies. Agencies are most likely to establish a presence in the most accessible, urbanized spaces of a province, despite their claim to serve rural populations.

The Moroccan government and its international partners are eager to intervene in sites that serve a large rural population, allowing for higher impact programs. Yet without spatial indicators of poverty and accessibility below the commune scale, organizations remain unaware of how their targeting excludes remote, impoverished villages. These remote sites offer development actors a unique opportunity for investment. When targeted strategically, these remote areas allow for poverty reduction in some of the most vulnerable communities in a commune and avoid leakage to nonpoor households. GIS modeling of accessibility offers a solution for poverty assessment and development targeting by offering a spatial indicator of poverty and identifying the most remote, high population sites for future intervention.
Chapter 6: Conclusion

Morocco’s contemporary system of development is the product of a global shift in thinking about poverty and democracy. Before the 21st century, the plight of the poor was commonly seen as an unavoidable dimension of national economic growth. Today, poverty reduction programs are a requisite in any state partnership with the world’s largest international donors. With increased attention to the symptoms and sources of impoverishment, the international community has developed scalar, statistically-designed methods for determining the distribution and intensity of poverty across a country. International and domestic expectations of “good governance” across the Global South have also evolved over the past half century, and onlookers now expect decentralized, democratic, participatory systems of governance if they are to support the efforts of any legitimate nation-state.

For Morocco, these changes have meant an unprecedented effort to develop rural regions – now measured to suffer greater rates of poverty than cities – and the incremental decentralization of administrative and financial responsibilities to local and elected offices. With the turn of the 21st century and the ascension of the “King of the Poor” Mohammed VI, Moroccan national policies have become decisively pro-poor and focused on rural development outcomes, and development programs now incorporate participatory strategies for intervention. Thus Morocco has positioned itself as an ideal partner for international donors, one that utilizes data-backed methods for determining sites of poverty and employs the local population to enact interventions.

However, studies have indicated that while Morocco’s democratizing reforms may offer new opportunities for inclusion in select steps of the development process, in others local actors remain effectively excluded from decision-making. Likewise, our team’s research has revealed that poverty-targeting strategies for development intervention still often fail to alleviate economic and social issues for the poorest of the poor. In this concluding chapter, I return to the four
research questions I posed in my introduction to discuss the findings of my research on poverty and development and to demonstrate how these exclusionary forces have diverted interventions from remote rural spaces.

6.1 What is the Role of Spatial Development Data in the Geography of Aid and Development in Rural Morocco?

Morocco’s biggest players in development – regional ministries, national programs, and large international agency partners – depend on state-collected human development data to plan the sites and recipients of their interventions. While partnering agencies may have their own criteria for determining project recipients, through interviews I found that these organizations rarely collect primary data in the field for these criteria, but rather look to national census indicators and regional ministry datasets for needed information. These large development actors are also the primary source of funding and resource allocation for local associations and elected councils, leaving effective control over development decision-making in the hands of state data users.

With the introduction of the national poverty map and scaled methods for targeting beyond the binary rural-urban divide, much of the data used by these state and partnered offices is now being georeferenced by administrative area, allowing comparison down to the province and even commune level. Statistically-designed geographical targeting is now a common method used to ensure that the spatial distribution of projects is informed by the economic and social indicators of poverty. However, due to the centrality of national and regional actors in development knowledge, the data collected by state ministries is gathered with the intent to respond to national and regional questions and accomplishing national and regional development objectives. Thus, I found that these datasets frequently lack the fine detail and accuracy needed to capture the local realities of rural life.
An unfortunate result of this top-down knowledge production is that sub-communal disparities in rural areas are erased in these datasets, and spatial indicators of rural poverty – such as distance to services, elevation, and obstacles to travel – are seldom used for either poverty assessment or development planning. This matter is not limited to Moroccan development; internationally, multidimensional indices for measuring poverty lack spatial indicators, and development practitioners rarely grapple with sub-municipal inequalities in accessibility, despite frequent references to “access” and “remoteness” in discourse. This has a critical implication for rural poverty, as I found in my fieldwork that the most remote villagers of a commune are likely to suffer from extreme economic and social disparities.

6.2 How is the State’s Data Production Distinct from that of Local Actors, and How Do These Differences Impact Approaches to Poverty Alleviation?

The production and transfer of development knowledge have remained steadfast a state-controlled process. Large organizations can participate in this process and collaborate with the state in determining development objectives and strategies for intervention, but due to the implicit requirement that they “harmonize” and fulfill state-designed objectives, this effectively becomes contract work. Meanwhile local actors have no avenue for communicating their knowledge to these higher decision-making bodies and little opportunities for receiving training in standardized data collection methods.

In Chapter 4, I demonstrate through my participatory mapping workshops that local development actors can play a valuable role in identifying the weaknesses of the present data-driven system of development. However, Morocco’s top-down, guarded approach to data management excludes such actors from nearly any opportunities to communicate their knowledge upward. While the Moroccan state conditionally redistributed some rural governing power to local elected offices under King Hassan II, this decentralization was limited to administrative and financial responsibilities held in check by the Ministry of Interior. Under Mohammed VI,
communal councils were given the authority to lead the planning for the six-year Communal Action Plans, allowing them increased decision-making power at a local level; yet there is no indication that this new program will facilitate the transfer of their collected information up to Morocco’s more powerful regional offices and partners. In INDH programs, committees are formed at the provincial and “local” level for decision-making, but even the “local” committees are filled by higher level or urban actors, such as those living in the provincial capital.

Rural civil society is left out of decision-making and opportunities for data production, particularly those from remote communes of the country. In the participatory development schemes of the INDH and partnered agencies, associations’ participation is limited to the proposal of small projects or helping to enact the state’s interventions, excluding these local actors from consequential decision-making. Even in the participatory development plans of the communes, civil society is offered no formal role. Meanwhile international agencies claim to offer participatory programs for development, but my research participants could name no organization that had sought their unique local knowledge for their interventions nor trained them in knowledge standardization practices. Moreover, these participatory agencies were all but absent in the most remote spaces of Tinghir Province but very active in urban centers, suggesting that “participatory” programs can be spatially exclusionary.

6.3 How Have Lower State Offices and Non-State Actors Participated in or Disrupted the Structural Systems of Development that Exclude These Remote Areas?

Thus, the Moroccan development system has excluded lower and non-state actors from contributing to development knowledge even while co-opting them into state-controlled programs. Historically, this system was even less inclusive than the conditional participation seen today, but pressure from international onlookers, domestic demands for democratic representation, and the migrant diaspora all contributed to the disruption of this exclusionary system.
Migrants, many of whom hailed from some of Morocco’s poorest rural regions, were strong advocates of nationally prioritized rural development following Moroccan independence. Their status as significant contributors to the national GDP gave them the leverage to convince the Hassan II regime to invest more resources and allow more foreign development in rural spaces. The international community at large also played a role in pushing for good governance practices in rural areas, resulting in increased local influence in development work. In the domestic space, protesters in southern and northern Moroccan territories also instigated this decentralization.

Contemporary Morocco is now more inclusive of elected and local members of government thanks to these reforms. Despite this local influence, however, the system of development continues to marginalize remote rural populations. Today’s development agencies, the INDH, and ministries concentrate their resources in areas of higher educated, urbanized, built-up population centers along the road. This effectively gives urban populations and urban civil society a leg-up in accessing these interventions. Moreover, the international development community and Morocco’s migrant diaspora are themselves failing to intervene in these most remote spaces, thus participating in the same exclusionary system that their historic movements lobbied to change. Migrants, though keen on investing in their home provinces, have concentrated their investments in built-up, accessible spaces where their families now live. The international development community uses data-driven methods for determining who needs poverty alleviating services, but these methods still fail to capture the sub-communal spatial inequalities that result in uneven access to service points in each commune. Students, schoolteachers, and other potential advocates for remote rural populations have likewise failed to disrupt this urban bias, opting out of participation in the development efforts of their communes.
6.4 What Potential Do Local Communities Have for Contributing to Standardized Knowledge Production of Poverty and Development?

Participants from my mapping exercises in Tinghir offered original and impactful information on development and poverty in their home communes. Conversations and mapping products helped our team determine that the facilities meant to serve the rural poor frequently lack the equipment, personnel, and amenities to support these communities. These exercises also demonstrated that rural development has an urban bias, and that services assumed to serve all inhabitants of a commune or province are often inaccessible to impoverished villagers.

Rural civil society members, with the help of higher-educated students from the province, were able to parse out this information on accessibility to create meaningful datasets and maps. The data visualized in these maps is directly relevant to the work of development practitioners, as it depicts a critical spatial dimension of poverty not measured in existing methods of targeting. The team’s GIS model of rural accessibility is an example of how local knowledge can be used to support and improve development targeting. Our model is informed by these participatory mapping workshops and additional interviews in the field. It measures remoteness down to the village scale and allows practitioners to identify high population, remote village enclaves that can serve as new service outposts for remote areas of a province.

6.5 Remote Rural Futures

Yet without help, these remote communities will continue to be excluded from the social capital, tools, and education necessary to complete such data production projects on their own. Existing systems of rural governance do not accommodate the participation of remote rural actors in decision-making at the local level. Higher offices charged with designing poverty metrics and determining targets for intervention ignore locally gathered information, seeking out aggregated information that erases important variations within these rural areas.
An advocate is necessary to train local community members in the work of collecting and standardizing data in a form communicable to decision-making offices, and development agencies are in the best position to support this effort. Agencies must recognize the fundamental role that such capacity-building can play in strengthening remote communities and encouraging sustainable systems of self-advocacy. To this end, agencies need a better approach to targeting that defines and identifies the remote spaces most in need of this support, centering the remote village as the hub, rather than the satellite, of intervention.
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