

Migrant-Funded Development: The Influence of Mexican Hometown Associations on  
Development Indicators

Rachel Lauren Lopez

Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in  
partial fulfillment of the requirements for the degree of

Master of Arts  
In  
Political Science

Karen Hult  
Deborah J. Milly  
Craig L. Brians

April 27, 2012  
Blacksburg, Virginia

Keywords: HOMETOWN ASSOCIATIONS, MEXICO, DEVELOPMENT, RELATIVE  
DEPRIVATION, SOCIAL NETWORK THEORY

Copyright 2012

# Migrant-Funded Development: The Influence of Mexican Hometown Associations on Development Indicators

Rachel Lauren Lopez

## ABSTRACT

This thesis examines development as a catalyst for the decision to migrate. Specifically, the two complementary theories of relative deprivation and social networks are examined to explore possible associations between level of household development and migrants' designation of savings or remittances towards development-related purposes and whether remittances are positively affected by migrants' participation in a hometown association (HTA). The study relied on data from the Mexican Migration Project (MMP), using the historical Mexican sending state of Jalisco. The MMP, using an ethnosurvey method, gathers data on individual migrant experiences, including border-crossing methods, jobs held, and participation in migrant hometown associations, amenities found in individual households, and available services in communities. No support was found for the first hypothesis, which predicted that relative deprivation was a catalyst of migration. Support was found for the second hypothesis, that migrant participation in HTAs, specifically in social clubs, positively influenced designation of savings or remittances for development-related purposes. This same support was not the case for migrant involvement in sport clubs. This thesis contributes to social network theory, pinpointing the positive effect that migrant participation in hometown associations has on designating money towards development.

## ACKNOWLEDGEMENTS

I would first and foremost like to thank my committee members for their assistance with this project. I am extremely grateful to Dr. Hult, for helping me hone this project from the very beginning of the program; Dr. Milly, for helping me produce a framework for this project and teaching me more about the complex field of immigration; and Dr. Brians, for strengthening my research with questions and suggestions. With extreme gratitude I thank my mother, Barbara, who told me from a young age, attending college was not an option. She has provided an overwhelming amount of emotional support over the years, without which I would not have been as successful. Special thanks go also to Ben, who has given me countless pep-talks over these two years and will continue to be a great support in my life. Finally, I thank my family in Blacksburg, my aunts, cousin, and the wonderful friends I have met in Blacksburg, including the Union: Jennie, Sean, Joel and (internationally) Sascha.

## **Table of Contents**

<b>Chapter One: Introduction.....</b>	<b>1</b>
Influence of the Economy and Society.....	2
Case Selection and Data.....	5
Significance.....	6
Hypotheses.....	7
Limitations.....	8
<b>Chapter Two: Conceptual Grounding.....</b>	<b>11</b>
Theoretical Grounding.....	12
Trends.....	18
Migrants and Development.....	23
Critiques.....	26
Conclusion.....	28
<b>Chapter Three: Research Design.....</b>	<b>30</b>
Selection of Jalisco.....	30
The Mexican Migration Project.....	35
Testing Hypotheses.....	39
Data Compilation and Variables.....	42
Conclusion.....	48
<b>Chapter Four: Findings.....</b>	<b>50</b>
Initial Patterns.....	50
Hypothesis 1: Migrants in households with lower levels of development are more likely to remit/save towards development.....	53
Hypothesis 2: those migrants involved in sport/social clubs are more likely to remit towards development.....	59
Additional controls.....	63
Conclusion.....	73
<b>Chapter Five: Conclusion.....</b>	<b>74</b>
Future Directions.....	76
<b>Bibliography.....</b>	<b>77</b>
<b>Appendix A: Variables and Coding.....</b>	<b>81</b>

**Appendix B: Additional Output from Findings.....86**

**List of Figures**

Figure 4.1: Level of Household Development by Number of Migrants Contributing to  
Development by Number of Purposes of Remittances.....55

Figure 4.2: Level of Household Development by Number of Migrants Contributing to  
Development by Number of Purposes of Savings.....58

## **List of Tables**

Table 3.1: Communities Surveyed in Jalisco by Year of Survey.....	38
Table 4.1: Development Level by Household- Jalisco.....	51
Table 4.2: Reported Numbers of Purposes of Remittances Designated for Development.....	51
Table 4.3: Reported Number of Purposes of Savings Designated for Development.....	52
Table 4.4: Number of Purposes of Remittances Designated to Development by Level of Household Development.....	53
Table 4.5: Number of Purposes of Savings Designated to Development by Level of Household Development.....	56
Table 4.6: Level of Household Development by Designation of Purposes of Remittances controlling for Participation in a Sports Organization.....	59
Table 4.7: Level of Household Development by Designation of Purposes of Savings controlling for Participation in a Sports Organization.....	60
Table 4.8: Level of Household Development by Designation of Purposes of Remittances controlling for Participation in a Social Organization.....	61
Table 4.9: Level of Household development by Designation of Purposes of Savings controlling for Participation in a Social Organization.....	62
Table 4.10: Level of Household Development by Designation of Purposes of Remittances controlling for Community.....	64
Table 4.11: Level of Household Development by Designation of Purposes of Savings controlling for Community.....	66
Table 4.12: Level of Household Development by Designation of Purposes of Remittances controlling for Year.....	69
Table 4.13: Level of Household Development by Designation of Purposes of Savings controlling for Year.....	70

## **Chapter 1: Introduction**

Mexico has a long history of migration out of the country, mainly to the United States, and of the flow of remittances coming back to the state. This migration has contributed to a variety of “push” and “pull” factors, including opportunities for education and employment, the state of the economy in both sending and receiving countries, and the ease of border crossing (Cave, 2011; Passel & Cohn, 2011). Favorable factors for emigration have encouraged large waves of Mexican migrants over the decades to seek opportunities in the United States that were not available to them in Mexico. In the United States, Mexican migrants have formed hometown associations (HTAs), organized networks of migrants, which began providing support for those migrants in receiving communities and have evolved to give collective remittances to be used in migrants’ hometowns in Mexico.

This thesis examines the influence of HTAs, looking at whether and how migrants contribute to development in their hometowns. The emphasis of many projects funded by hometown associations has been development. Giving remittances for development projects shows how migrants who participate in these social networks may be more focused on development shortcomings in their hometowns, beginning with their own households.<sup>1</sup> To thoroughly explore this question, migrants who made remittances at the individual level were considered, specifically from the standpoint of how Mexican hometown associations (HTAs) contribute to development in their country of origin. Although the examination of whether and how migrants contribute to development would have benefited greatly from including the community level of analysis, due to time restrictions, only the individual level was analyzed. In the individual level of analysis here, migrants’ responses about the intended use of savings and

---

<sup>1</sup> In this thesis, development refers to basic development indicators in a household. Examples of such indicators include running water, electricity, and plumbing. Although different households have different levels of development, this study focused on the provision of more basic needs.

remittances are compared to development indicators in the home, such as the presence of running water, electricity and a sewer system. Also, at the individual level, the study examined the effect that participation in social or sport clubs had on intended use of migrant savings and remittances. Social and sports clubs are both forms of hometown associations, and it is important to determine if there is an association between migrants who participate in these networks and the likelihood of their designating money for development needs. The study seeks to expand the understanding of the influence that development levels have on migration patterns by focusing on individual level decisions, unlike the majority of scholars who examine only country-wide patterns.

This chapter will outline the framework of the thesis, including its theoretical foundation, case selection, contributions and expectations, hypotheses, and boundaries.

### *Influence of the Economy and Society*

Focusing mainly on general migration trends, scholars overlook the decision process of migration. Guiding this project on the influence that development indicators have on individual migrants' remittances in Mexican communities is scholarship on the new economics of migration and network theory. The new economics of migration and social network theory play key roles in explaining the intricate decision-making process surrounding migration.

Although the new economics of migration started with the work of Michael Todero, who reasoned that migrants' movements were a response to higher expected income, scholars have argued whether migrants' individual responses to expected income are the only influence on migration decisions (Katz & Stark, 1986; Lauby & Stark, 1988; Massey, 1990; Stark & Lavhari, 1982; Stark & Taylor, 1991; Todero, 1969). Rather than isolated individuals making migration decisions, scholars such as Stark and Douglas Massey point out that individual decisions are

always affected by specific local conditions and that migration models need to take into account circumstances at the family, household, and community levels (Massey, 1990, p. 7).

A subset of the new economics of migration, relative deprivation theory further explains the choices of individual migrants as influenced by other factors. Oded Stark proposed relative deprivation theory in response to Todero's theory of the new economics of migration. Instead of absolute income as the motivator, Stark saw the primary motivator of migration as the desire to improve an individual's or a household's income position with respect to other individuals or households within a relevant reference group (Stark & Taylor, 1991, p. 1163). These reference groups act as catalysts for migration flow because once migration has started, the increased income provided to migrant households, which can be used to improve material wealth or services, agricultural production, and rank, also can create relative deprivation in a community that encourages individuals from other households to migrate (Katz & Stark, 1986). I use relative deprivation theory to specifically examine development as a motivating factor for migration. If present development as an indicator of relative deprivation is an important part of the decision to migrate, one would expect that remittances at the individual level would be directed towards the sorts of individual household development that are lacking.

Combining network and new economic theories helps reveal how decisions at the micro level influence the macro level of remittances and vice versa, with social networks reinforcing remittance trends based on levels of development in a community. Social networks provide interpersonal ties between migrants and nonmigrants in areas of origin and destination, which scholars have noted make it easier for migrants to relocate and find work in other countries (Burgess, 2005; Fitzgerald, 2009; Katz & Stark, 1986; Massey, 1990; Massey et al., 2006; Massey & García España, 1987; Stark & Taylor, 1991).

Hometown associations (HTAs) are a form of these social networks, which help in making the transition easier for migrants in a receiving country as well as grounding migrants in the well-being of their home communities. This form of network also helps create a cooperative arrangement between family and individual migrants, situating the migrant in a network of those *paisanos* from his or her home community, who hold individual migrants more accountable to those in the home community (Katz & Stark, 1986). HTAs have grown from simple social networks that assisted migrants in new locations to also fostering philanthropic giving to home communities (Alarcón, 2002; Burgess, 2005; Lowell & de la Garza, 2002; Rivera-Salgado, Bada, & Escala-Rabadán, 2006).

Following Stark's theory that the decision-making unit in migration is the family instead of solely the individual migrant, the opportunities provided to a family via their surroundings, including their community and household assets, would need to be taken into account when studying migration (Katz & Stark, 1986; Massey, 1990; Stark & Taylor, 1991). Involvement with social networks in the receiving location also is a key component of how individual migrant remittances may be influenced, particularly because these networks have become more philanthropic in nature over the years (Alarcón, 2002; Burgess, 2005; Lowell & de la Garza, 2002; Rivera-Salgado et al., 2006). Relative deprivation theory hones in on the influence that development indicators and other factors at the individual household and community levels could have on the individual use of remittances (Katz & Stark, 1986; Stark & Taylor, 1991). By focusing on the level of development found in individual households, this thesis sought to expand the application of new economics of migration as well as social network theory by applying them to the actions of individuals responding to specific development needs.

### *Case Selection and Data*

Jalisco was used in this study of Mexican hometown associations and remittance because of its status as an historical “sending” state. Three western states in Mexico--Jalisco, Michoacán and Guanajuato--have had high emigration rates since 1900. These levels of emigration have been driven by wars, the lack of economic opportunities in Mexico, and the promise of economic opportunities in the United States. Congruent with the trend of emigration from Jalisco, remittances back to Jalisco also have been present. The Mexican national government has taken note of these flows and encouraged the remittances. Jalisco is one of the states that receives the largest share of federal “3 por 1” matching funds in Mexico, which is matched funding at the federal, state, and municipal levels for migrant funds used to implement approved community projects (Orozco & Lapointe, 2004). Along with its history as a traditional sending state and active involvement of HTAs, Jalisco was chosen because the Mexican Migration Project, which produced the data set this thesis relied on, conducted numerous surveys in the state between 1988 and 2008 (Durand, Massey, & Zenteno, 2001; Fitzgerald, 2009; Massey, Rugh, & Pren, 2010; “Mexican Migration Project,” n.d.; Rivera-Salgado et al., 2006).

In order to study the relationship between remittances and development, I used data from a project conducted by the Office of Population Research at Princeton University. The Mexican Migration Project (MMP) is “a collaborative research project based at the Princeton University and the University of Guadalajara” (“Mexican Migration Project,” n.d.). The data that have been collected by the Mexican Migration Project provide depth with ethnosurvey interviews and scope in the various samples that were collected from different communities. The project started its data gathering in the 1980’s, and the first surveys were conducted in the Mexican states of

Guanajuato and Jalisco in 1987 and 1988, respectively (“Appendix A: Sample information, summary of MMP communities,” n.d.).

Looking at the state of Jalisco, this project examined how levels of individual household development, by the presence of basic household amenities, influenced the level and the nature of remittances; the role of HTAs in these individual level remittances also was examined. Focusing on Jalisco as a traditional sending state, this study examined survey data from several different communities within this Mexican state. This gives the research authority if the hypotheses are supported, as these development patterns would then be something to look for in other Mexican states as more migrants begin to send remittances to their hometowns. The complementary theories of social networks and the new economics of migration help to describe the pattern of remittances sent to Mexico from those individuals connected with hometown associations. This study allows an application of both theories, using them to explore the phenomena of hometown associations and flows of transnational remittances.

### *Significance*

Although previous studies of Mexican hometown associations and remittance money have concluded that contributions have positive impacts on development indicators in receiving communities, they have not pinpointed whether HTAs focus on specific development indicators that are lacking. This oversight is due to the fact that scholars mainly focus on trends in country-wide migration, which miss nuances of individual migration decisions (Adida & Girod, 2011; Alarcón, 2002; Burgess, 2005; Duany, 2010; Fitzgerald, 2008; Fox & Bada, 2008; Goldring, 2002; López-Córdova, 2005; Mooney, 2004; Orozco & Garcia-Zanello, 2009; Orozco & Lapointe, 2004; Orozco & Welle, 2005; Rose & Shaw, 2008). This thesis sought to correct the

oversight of decision making at the individual level by focusing on features of development that are weak or absent from a household in order to determine if those aspects are what migrants view as being the most important to address. This study advances scholarship on hometown associations and their specific impacts on development. Although ethnographic studies have been done on HTAs and their contributions to development, no study has focused on the specific responses of hometown associations, and migrants involved in these associations, to development needs. By honing in on development as a specific catalyst for migration, this study adds to the literature on Mexican hometown associations by examining the apparent lack of development in households that motivates those individuals who participate in social networks to focus on development, a need often the focus of HTAs in communities.

This thesis looks for a more direct connection between remittances and development, taking a cue from the new economics of migration and focusing on individual levels of decision making, rather than assuming that remittances actually benefit development in the home country. It also takes into account the influence social networks have by examining the nature of household level remittances from those migrants involved in HTAs to see if they are more likely to designate remittances for the development needs of their individual households. This permits an analysis of the possible relationships between development and remittances by comparing individual migrants within multiple communities in the single state of Jalisco.

### *Hypotheses*

This thesis proposes and tests hypotheses at the individual level of analysis. The examination of network and new economic theories suggests how decisions at the micro level influence the remittances, with social networks reinforcing remittance patterns based on levels of

development in a household. Following the guidelines of the new economics of migration, if development is an important part of an individual's decision to migrate, I expected that remittances at the individual level would be directed towards development indicators that are lacking. Coupled with the influence of a social network that tends to concentrate remittances on development projects, migrants who are members of a form of hometown association were expected to be more likely to contribute to development in individual households.

These expectations are reflected in the hypotheses that the thesis examined:

- A higher level of remittances and savings that migrants designate for development-related purposes will be associated with lower levels of development indicators in their own homes.
- Those migrants who are involved with sport or social clubs are more likely to contribute to development at the individual household level than those not a part of such clubs because the former are exposed to a culture that encourages these types of remittances in migrants' hometowns.

### *Limitations*

Although this research could reveal new factors in Mexican migration, it must be remembered that the study directly applies only to Mexico. Moreover, Jalisco itself is not the same as other states in Mexico. As a traditional sending state, Jalisco might have different remittance behaviors than those in other states. It also must be kept in mind that Jalisco is one of the states that receives the largest share of federal "3 por 1" matching funds in Mexico (Orozco & Lapointe, 2004). This might mean that the state has more active hometown associations and therefore more development projects than other states. Although this should be kept in mind, the purpose of this project was to determine whether continued study of migrant-funded

development projects and the impact on development indicators is worthwhile. The reasons Jalisco was chosen were that it is an historical sending state and has a government-supported involvement with hometown associations. Although these characteristics make it unlike the rest of Mexico, they also make it a better case to explore if there are associations between these variables at all.

Also the data used from the Mexican Migration Project (MMP) are very specific due to the manner in which they were collected. Although the MMP has conducted numerous surveys in the state of Jalisco, they are not repeatedly conducted in the same communities. Since surveys are conducted in different communities at different times, the flow of remittance money cannot be tracked in communities across time. Instead, multiple cross-sectional surveys generate the MMP data. Although this means that patterns of remittances being directed towards development cannot be tracked longitudinally, this study can still observe the differences in communities with and without the presence of HTAs as well as the associations between remittance patterns and development. While these limitations must be taken into account, these data from the Mexican Migration Project still are worth examining due to its use of in-depth ethnoscience surveys.

The following chapters will give a detailed description of the theoretical foundation, case selection, methodology, and data analysis completed to answer the questions posed by the hypotheses. Chapter Two discusses the theoretical framework, taking the reader through the conceptual grounding of this project in the theories of relative deprivation and social networks. Chapter Three discusses the study's methodology, including the selection of Jalisco, the methodology of the Mexican Migration Project, and how the data set used in this study was compiled. Chapter Four includes the results of testing the two hypotheses as well as analysis of

additional control variables. Chapter Five is the conclusion, wrapping up the results and discussing the significance of the project.

## **Chapter 2: Conceptual Grounding**

This chapter will highlight scholarship that seeks to explain the connection between development indicators at the household level and their association with development-specific remittances. Scholars have sought to understand the catalyst for migration, debating different causes. This grounding will highlight important scholarship in the new economics of migration, which has explored different factors in migration, from absolute income to the more recent theory of relative deprivation. The theory of relative deprivation suggests the focus on development. Along with this theory, social network theory guided the research here. Social network theory explains how migration is made easier for migrants, both economically and socially, through networks of relations in the receiving community. This study examined one form of these networks, hometown associations, as scholarship has shown the strong network Mexican hometown associations provide for migrants. This social support also has given way to philanthropic remittances, a pattern that will be studied for potential association with development-related remittances.

Through exploring the relationships between household development and remittances, the study sought to advance the new economics of migration and network theory. First, this conceptual grounding suggests that the example of migrant-financed development projects expands both the new economics of migration and network theory. Second, it will describe the function of HTAs in Mexico and their growth through the recognition by and involvement with different levels of the Mexican government. Lastly, it will examine the contributions of migrants to development within their own communities.

## *Theoretical Grounding*

Guiding this project on the influence that levels of household development have on individual migrant remittances, especially those guided by hometown associations, is scholarship on the new economics of migration and social network theory. These two theories offer complementary explanations of the pattern of remittances this project examined in Jalisco. The new economics of migration and social networks play key roles in the explanation of the intricate decision-making process of migration patterns.

Scholarship on the new economics of migration started with the work of Michael Todero, who “states that rural-to-urban labor migration in less developed countries (LDCs) is an individual response to a higher urban expected income” (Katz & Stark, 1986, p. 134). Yet there has been significant contestation about whether migrants’ individual responses to expected income is the only variable in migration decisions (Katz & Stark, 1986; Lauby & Stark, 1988; Massey, 1990; Stark & Lavhari, 1982; Stark & Taylor, 1991; Todero, 1969). Stark suggests that other motivating factors influence migration decisions, including “strong theoretical and empirical reasons to suggest that the decision-making entity is often the family, of which the individual is a member” (Katz & Stark, 1986, p. 136). Instead of examining migrant decisions as individual choices, scholars increasingly have incorporated the decisions of larger units such as household and families into the decision-making process of individual migrants.

Douglas Massey, for example, points out that individual decisions are always affected by specific local conditions (Massey, 1990, p. 7). Migration models need to take into account

...that a large share of moves are not volitional but are structurally imposed by conditions beyond the individual’s control...it is extremely important, therefore, to develop theories that identify which contextual variables are important to the migration decision and under what circumstances and to compile data sets that include individual, household, and community-level information (Massey, 1990, p. 7).

These conditions beyond a migrant's control suggest that migrant decisions can depend on family choices as well as on the condition of the overall environment. If work conditions do not yield good prospects in a hometown, "migration by a family member is then warranted when it facilitates reduction in total familial risk via diversification of earning sources" (Katz & Stark, 1986, p. 136).

The second stream in the new economics of migration, relative deprivation theory, adds another layer to the choices of migrant households. Oded Stark proposed relative deprivation theory in response to the view that migration is undertaken to improve the *absolute* income of the individual or household (Stark & Taylor, 1991, p. 1163). Stark argues that instead of absolute income as a motivator, "...rural-to-urban migration might be undertaken primarily to improve an individual's or a household's comparative income position with respect to that of other individuals or households in the relevant reference group (for example, the village)" (Stark & Taylor, 1991, p. 1163). While Todero's higher expected income model would lead to a decline in migration once the incentive of a higher income disappeared, relative deprivation theory does a better job of explaining the actual trend of continued migration (Stark & Taylor, 1991, p. 1165). Rather than economics being the only factor encouraging the flow of migrants, reference groups matter:

If the village is the relevant reference group for village households, before the change no household had any inducement to migrate, since the relative deprivation of each and every household was nil [at 100 units of income]. After the change, however, half of the village households – those which now experience relative deprivation (at the level of 25 units of income) – will have an incentive to migrate, whereas the incentive to migrate of the others (whose income is 150) will remain at zero (Stark & Taylor, 1991, p. 1165).

Not only does migration add to absolute income but Stark argues that “...in real life people not only derive utility from rank and from absolute income but also use one to obtain more of the other” (Katz & Stark, 1986, p. 144).

Often, this rank can be expressed as material wealth or services that can be provided to a family. This can be seen in new technologies brought to an area because of the remittances provided by migration, which can in turn help agricultural production and boost family status (Katz & Stark, 1986, p. 140). Assets also can be invested in future generations in ways that will raise their status later in life, “...including human capital in the form of the education and upbringing of own children left behind in the rural areas” (Katz & Stark, 1986, p. 140). These trends help to explain the first hypothesis in this thesis, which expects those individual households with lower levels of development indicators will have more migrant-funded household development than those with higher levels of development indicators. Since there is more relative deprivation of assets in households with lower levels of development, migrants from these households will have more of an incentive to remit towards development needs.

Also following the guidelines of the new economics of migration, if development is an important part of the decision to migrate, remittances should be directed towards development indicators that are lacking. Massey, et al. provide an example: if the “...risks to income and a desire to overcome local constraints on production are the driving forces behind migration, then the outcomes of migration (e.g., the patterns and uses of remittances) should reflect this fact” (Massey et al., 2006, p. 53). Looking at the provision of basic needs as a driving force in emigration, this pattern in remittances also would be reflected in the first hypothesis, with individual migrant remittances and savings responding to needed household development. Looking at the factors of migration analyzed in network and new economic theories reveals how

decisions at the micro level influence the more macro level of remittances and vice-versa, with social networks reinforcing remittance trends based on levels of development within households.

These hypotheses seek to predict migrant responses to relative deprivation. In Stark and Taylor's test of Mexican households to determine the effects of absolute income and relative deprivation on migration, they find that when examined together, both factors had "...a significant impact on migration to US [sic] destinations" (Stark & Taylor, 1991, p. 1174). In this test, relative deprivation was based on individual income level, although the authors also paid attention to household data and social networks (Stark & Taylor, 1991, p. 1171).

Networks in the receiving location, especially in the United States, play a large role in the decision to migrate, as they dramatically reduce costs<sup>2</sup> of international migration (Stark & Taylor, 1991, p. 1176). Network theory focuses on the influences social networks provide on "...interpersonal ties that connect migrants, former migrants, and nonmigrants in origin and destination areas through ties of kinship, friendship, and shared community origin" that scholars have noted make it easier for migrants to relocate and find work in other countries (Burgess, 2005; Fitzgerald, 2009; Katz & Stark, 1986; Massey, 1990; Massey et al., 2006, p. 43; Massey & García España, 1987; Stark & Taylor, 1991). A social network of "...friends, relatives, or other members of one's personal community at a destination dramatically increases the probability of migrating there because these social connections lower the costs and hence, increase the expected net returns to migration" (Massey, 1990, pp. 7–8). Such networks link sending and receiving communities, which is "...especially important for circumventing state controls because they are conduits for experienced migrants to provide beginners with the money and

---

<sup>2</sup> These costs include basic costs, such as monetary expenses to move across the border; opportunity costs, which is the money that is lost during migration and searching for work; and psychic costs, which account for the psychological toll of adjustment (Massey & García España, 1987, p. 734).

information needed to cross the border illegally” (Fitzgerald, 2009, p. 68). Stark and Taylor found in their quantitative study of Mexican migrants that “...households with kinship networks in place in the United States (USNET) are significantly more likely to send additional members to the United States” (Stark & Taylor, 1991, p. 1176). The paths that networks provide for migrants “...become part of a process of ‘cumulative causation’ that propels the persistence of international migration” and also provide structure for remittance flow (Fitzgerald, 2009, p. 68; Massey, 1990; Massey & García España, 1987; Stark & Taylor, 1991).

Hometown associations (HTAs) are a form of social network that help in making the transition easier for migrants in a receiving country as well as grounding migrants in the wellbeing of their home communities. This form of network also helps create a cooperative arrangement between family and migrants, situating the migrant in a network of those *paisanos* from his or her home community, who help monitor

...intrafamilial trade in risks, coinsurance arrangements, [act as] devices to handle principal agent problems, moral hazard problems (the migrant understates his success in the urban area, or the migrant increase[s] his standard of living appreciably, thus producing a smaller surplus), and contract enforcement problems (the migrant admits his success but refuses to share it with his family) and, overall, striking a mutually beneficial, intertemporal, self-enforcing contractual arrangement (Katz & Stark, 1986, p. 136).

These intricate social ties link migrants to those individuals who remain in the home community. Regardless of whether migrants are involved with a form of hometown association in the receiving community, “migrants are inevitably linked to nonmigrants through networks of reciprocal obligations based on shared understandings of kinship and friendship” (Massey, 1990, p. 8). These social structures help reinforce decisions made within a migrant’s family, and if these decisions are in the “economic interests of both the migrant and his family...under general conditions familial agreements to remit are self-enforcing” (Massey, 1990, p. 10). This strong

influence of social networks shows how families and tight-knit communities, especially those with small populations, can influence migrant remittances to individual households as well as community projects. However, the ties of social networks are more formal through the organizations of hometown associations, allowing for more successful collaboration with government institutions.

Although I will elaborate on HTAs later, these networks have grown from simple social networks that assisted migrants in a new location to also fostering philanthropic giving to home communities (Alarcón, 2002; Burgess, 2005; Lowell & de la Garza, 2002; Rivera-Salgado, Bada, & Escala-Rabadán, 2006). Migrant philanthropy in Mexico via HTAs has become “...more organized, diverse, and substantial, and it has begun to intersect with government initiatives to decentralize governance and promote local development” (Burgess, 2005, p. 111). The diversity of migrant remittances via hometown associations also reflects the integration of “...migration decision making with migrants’ remittance behavior and households’ remittance use” (Massey et al., 2006, p. 53).

These different forms of migrant remittances bring together the new economics of migration, specifically relative deprivation theory, and network theory in this study of Mexican hometown associations. Following Stark’s view that the decision-making unit in migration is the family instead of the individual migrant, the opportunities provided to an individual migrant’s family via their surroundings, including their household assets and those household assets of others in the community, need to be taken into account when studying migration (Katz & Stark, 1986; Massey, 1990; Stark & Taylor, 1991). Involvement with social networks in the receiving location also is a key component of how migrant remittances may be influenced, particularly because such networks have become more philanthropic in nature over the years (Alarcón, 2002;

Burgess, 2005; Lowell & de la Garza, 2002; Rivera-Salgado et al., 2006). Relative deprivation theory hones in on the influence that household development indicators and related community factors could have on the use of individual migrants' remittances (Katz & Stark, 1986; Stark & Taylor, 1991). By focusing on the overlooked area of level of development in individual households, this project expands the new economics of migration as well as network theory.

### *Trends*

A notable trend in remittance sending has been the growing involvement of transnational hometown associations. An HTA is an organized network of migrants that provides community for those in receiving communities, as well as collective remittances to be used in migrants' hometowns in Mexico. The foundation for the community aspect of HTAs is the fact that they are comprised of "...members from the same town or state in the migrant-sending community" (Lowell & de la Garza, 2002, p. 14). A concentration of *paisanos*—those from one's hometown—makes migration easier, as migrants are "...able to draw upon obligations implicit in these relationships to acquire assistance in migrating abroad" (Massey & García España, 1987, p. 734). These groups provide a social community through the hosting of events and involving migrants in sports clubs—mainly for soccer (Lowell & de la Garza, 2002, p. 14). As previously noted, these social obligations exist in tight-knit units of society, such as family or small communities (Massey, 1990, p. 10). These social aspects of community were quick to adapt to a social form of remittances, as these networks "of reciprocal social relationships...carry mutual obligations of assistance and support" (Massey & García España, 1987, p. 734). Members of hometown associations "...are financing community benefits by purchasing buses and ambulances, supplying seed funding for small-scale business endeavors, and building local

schools, roads, bridges, and water and electric systems in Mexico” (Merz, 2005, p. 1). Scholars studying these types of remittances have noted that financial contributions from HTAs are “...significant in volume and have broad economic effects” (Orozco & Welle, 2005, p. 157). While transnational hometown associations started as early as the 1950s and 1960s, governments recently began to acknowledge their development potential (Rivera-Salgado et al., 2006).

HTAs serve multiple purposes for migrants from receiving communities. The first is social: as they are “...the well-known clubs or community organizations that host dinners, dances, and other events” (Lowell & de la Garza, 2002, p. 15). Hometown associations also provide migrants with a supportive community in the United States, helping “...new migrants to adjust to the new environment, combat discrimination, and protect their members from the cultural and economic shock created by their uprooting” (Rivera-Salgado et al., 2006, p. 139). In addition, they have served historically as mutual aid societies that “...offered [monetary] support in times of economic hardships due to unemployment, illness, injury, and burial expenses” (Rivera-Salgado et al., 2006, p. 139). Over time, these hometown associations have continued contributing to their hometowns, funding important public works such as

...construction or renovation of roads, bridges, parks, churches, schools, health care clinics, sport facilities and streets. The social projects they fund benefit the poor in the community of origin through the support of health care clinics, childcare centers, and convalescent homes for the elderly. HTAs also donate ambulances, medical goods, and school supplies and distribute educational grants among low-income students (Alarcón, 2002, p. 103).

This type of giving shows how individual migrants who participate in these social networks may be more focused on development shortcomings of their hometowns than those migrants not involved in social networks.

The large scope of influence of hometown associations have shows why they are invaluable in the study of development in Mexican hometowns. Some scholars have focused on

the community aspect of HTAs. These networks redefine "...what it means to belong to a community by including people who are physically absent but who make their presence felt through regular visits and remittances and by sponsoring charity and development projects in their hometown" (Fitzgerald, 2009, p. 104). Perhaps more importantly, through their funding of community projects, HTAs have fostered close relationships with federal, state and local governments, working in tandem in order to successfully implement projects, some of which require government approval. This influence that HTAs have gained with government through project implementation in their hometowns also has paved the way for greater political involvement within home communities, providing Mexican citizens a way to hold their governments accountable (Orozco & Welle, 2005, p. 163).

The contributions of hometown associations also began to be augmented by contributions from the Mexican government on approved projects instituted by transnational hometown associations. The Mexican national government had not been a part of the conception of hometown associations and had not attempted to associate with these transnational associations for decades. However, beginning in the 1980's, the Mexican national government concentrated on sustaining relationships with migrants in the United States for both political and monetary reasons. Government can successfully connect with the migrant diaspora because of these associations and can encourage the transfer of funds back to the state of origin as well as advocate for political involvement of its citizens abroad (Orozco & Welle, 2005, p. 164).

The Program for Mexican Communities Abroad (PCME), established in 1990, was the first federal program to reach out to hometown associations (Burgess, 2005, p. 112). It fostered the growth of hometown associations in the United States by reaching out through consulates in the U.S. in order to educate migrants about HTAs and to encourage more organization of HTAs.

Some state governments also began reaching out to hometown associations, matching monetary sums for projects funded in communities (Burgess, 2005, p. 112). State provision of matching funds for the projects implemented by hometown associations helped to spur the monetary involvement of the federal government.

The Mexican federal government followed the example of state involvement by creating the Two-for-One Program, in which states could choose to participate (Burgess, 2005, p. 113). This program matched one federal dollar as well as one dollar from the participating state government for every dollar migrants donated to a project. This opportunity was only available to those hometown associations that were part of a recognized HTA federation (Burgess, 2005, p. 113). Due to the need for HTAs to be part of a recognized HTA federation in order to benefit from these matching programs, the numbers of organized HTAs grew significantly in the 1990s, a trend that continued into the 2000s (Burgess, 2005, p. 113). Manuel Orozco noted that many new hometown associations, formed well after these matching programs began, “started out with a philanthropic mission and devoted a sizable share of their fundraising to infrastructure projects” (Burgess, 2005, p. 113). These philanthropic missions of HTAs show the guiding force they have for migrant remittances in sending communities.

However, not all state governments in Mexico have chosen to participate in governmental matching programs. HTAs depend on state and municipal levels of government and their own internal levels of organization for the success of the projects their donations fund (Alarcón, 2002, p. 105). Federal support has not been a strong influence in the growth of HTAs as it started late and has fluctuated according to the interests of the president and other federal decision-makers. State support also has varied, suggesting that the push for projects implemented by hometown

associations were motivated by those migrants in the United States as well as those individuals in hometowns that HTAs worked with in order to implement projects.

Despite the fluctuation of federal support for matching programs, many Mexican states have continued with their own programs. Usually, the states that continue to give strong support to HTA projects are those with historical migration patterns that also have long-running and abundant HTA activity, such as Zacatecas, Jalisco and Guanajuato; yet newer migration states such as Durango also are among those that have continued to encourage HTA philanthropy regardless of the decisions of federal government (Burgess, 2005, p. 113).

In 2000, President Vicente Fox renewed federal support for HTAs, expanding the matching program to a Three-for-One program that also includes support from municipal governments (Burgess, 2005, p. 114). The program triples every dollar that a hometown association donates with matching donations from the federal, state, and municipal governments on approved social development projects in migrants' hometowns. Sedesol, the Office of the Secretary for Social Development, which is in charge of the Three-for-One program, favors outreach to "...those communities most in need of basic infrastructure" (Burgess, 2005, p. 117; "Sedesol," n.d.). Although this incentive stretches the migrant dollar further in Mexico, funding larger projects that could not be accomplished by HTAs alone, it does not account for all migrant contributions that contribute to development. In many states, Jalisco included, government efforts to incorporate HTAs into federations has not been as strong as in others; groups can organize but not receive government matching funds (Alarcón, 2002, p. 106).

The Three-for-One program does not account for all migrant-based contributions, or even all projects funded by hometown associations due to the inconsistency among different levels of government. Also, those communities that have high levels of out-migration are not necessarily

those that are the most underdeveloped (Burgess, 2005, p. 117). Frustrated by restrictions on the types of projects that will be accepted for funding by the matching program, migrants also can collectively remit independent of government programs in order to fulfill needs in the town that may not be considered “basic” under program rules. Although the MMP community level data would be a useful layer to add to this study, the analysis relies only on individual level data on hometown associations and their development potential. Migrant remittances put towards development projects, regardless of the existence of matched government funds, are observed.

### *Migrants and Development*

Looking at hometown associations from different angles, studies have examined their influences on government accountability, on the provision of basic needs in individual homes, and on development indicators in communities (Adida & Girod, 2011; Alarcón, 2002; Burgess, 2005; Duany, 2010; Fox & Bada, 2008; Goldring, 2002; López-Córdova, 2005; Mooney, 2004; Orozco & Lapointe, 2004; Rose & Shaw, 2008). Projects that HTAs support in government matching programs tend to channel money into small rural communities, where “historically, very little government spending has reached” (Burgess, 2005, p. 119). Many studies have examined the power of migrant remittances, including the impact of hometown associations, in the development of Mexican communities (Adida & Girod, 2011; Fitzgerald, 2008; López-Córdova, 2005; Mooney, 2004; Orozco & Garcia-Zanello, 2009; Orozco & Welle, 2005; Rose & Shaw, 2008). These studies have focused on the impacts of remittances because in some areas of Mexico, levels of remittances are higher than levels of federal social spending. This has produced interest in how these conditions affect the use of remittances in migrant households as well as in migrant communities (Adida & Girod, 2011, pp. 4–9).

In their study of the impact of individual remittances, Adida and Girod examine the change in access to basic utilities of clean water and drainage in homes in relation to the level of remittances. They find that those municipalities that receive more remittances have higher levels of improvements for drainage (Adida & Girod, 2011, p. 18). López-Córdova also analyzed the impacts of remittances on development indicators in Mexican communities. He finds that remittances are positively associated with higher levels of literacy and school attendance as well as with reduced municipal marginalization<sup>3</sup> (López-Córdova, 2005, pp. 234–240). This general pattern of remittances being related to improved development indicators is the reason this project takes a closer look at the levels of individual household development and the contributions of individual migrants, especially those involved in hometown associations.

With positive patterns noticed at the community level, these patterns should be examined at the individual level to explore influences on migration decisions. At the individual level, Mooney shows how remittances affect individual households, using Mexican Migration Project<sup>4</sup> data to study the purpose of savings and remittances sent by those migrants involved with social clubs (Mooney, 2004, p. 45). As noted earlier, social clubs are a form of these transnational networks. Mooney’s finding that migrants who stay with family when they migrate or are part of a social club are more likely to remit money for housing and production rather than for consumption helps to bolster the second hypothesis<sup>5</sup> of this project (Mooney, 2004, p. 60).

Studies at both the community and individual levels help to guide this study of how individual remittances influenced by hometown associations respond to development indicators

---

<sup>3</sup> López-Córdova uses a marginalization index that includes “...municipal schooling, housing, demographic, and income characteristics,” which he considers to be a gauge of municipal marginalization (López-Córdova 2005, p. 240). This municipal marginalization is something that López-Córdova uses to judge overall welfare of a town.

<sup>4</sup> The Mexican Migration Project is a joint project between Princeton University and the University of Guadalajara. It uses ethnosurvey techniques to gather data on migration patterns and its impact on the community as well as individual households (Office of Population Research, <http://mmp.opr.princeton.edu>).

<sup>5</sup> The second hypothesis expects migrants who are members of sport or social clubs to be more likely to contribute to development at the individual household level.

at the household level in Jalisco. Although studies at the community level offer insight into the complex decisions that influence remittances, they often look only at one or two indicators of development. Looking at indicators such as clean water and how remittances impact its availability identifies only one area in which development was important to migrants, leaving out other areas that migrant contributions also might target (Adida & Girod, 2011). This is why this project focused on those features of development that are low or absent from a household in order to determine if those areas are what migrants view as most important to address. Honing in on these deficiencies, this study examined a more direct connection between development and remittances, taking a cue from relative deprivation theory in the new economics of migration, rather than reiterating that remittances do benefit development in the home country. It also took into account the influence social networks have on the nature of household level remittances made by those migrants involved in HTAs to see if they are more likely to designate remittances to development needs (Mooney, 2004). Many of these studies also do not differentiate between remittances as a whole and those contributed by social networks such as hometown associations.

The importance of differentiating the study of remittances between the community and individual levels can be seen in an article by Rose and Shaw, entitled “The Gamble: Circular Mexican Migration and the Return on Remittances.” Rose and Shaw examine fieldwork from the Mexican Mosaics, a project of ethnographic interviews, on remittances at the community and individual levels and how they influence the capacity for investment at both the government and individual levels (Rose & Shaw, 2008, p. 88). The authors do this through examining “...factors that lead to circular migration and the sending of collective remittances through hometown associations” (Rose & Shaw, 2008, p. 79). Although Rose and Shaw see the importance of community development funded through hometown associations, they found that those

interviewed viewed personal remittances as having more impact than community-level remittances (Rose & Shaw, 2008, p. 100). This response gives more insight into the perceived impacts that could influence a stronger tendency to remit at an individual rather than a community level. It also shows the benefits of using the Mexican Migration Project as the data source for this project, removing individual perceptions of how remittances help and strictly examining whether remittances address certain development deficits in an individual household. Rose and Shaw's results may highlight migrants' individual perceptions of development deficits compared to the data that the Mexican Migration Project produces from an unbiased ethnographic survey technique. Looking at the state of Jalisco, this project examined development influenced by HTAs at the individual level as well as how relative deprivation guided remittances. While getting similar in-depth information as would be collected from interviews, the data from the MMP also can easily be looked at for overall development indicators rather than the perceptions of community members about levels of development.

### *Critiques*

While heralded as aids to development, hometown associations also have been criticized for their general ineffectiveness at implementing successful and sustainable development projects (Alarcón, 2002; Burgess, 2005; Fitzgerald, 2008; Fox & Bada, 2008; Goldring, 2002; Mooney, 2004; Orozco & Garcia-Zanello, 2009; Orozco & Lapointe, 2004; Orozco & Welle, 2005; Rivera-Salgado et al., 2006; Rose & Shaw, 2008). Although they give migrants the chance to provide public works programs that the government has already *failed* to provide for, critics have pointed out that the federal government can use HTAs as a crutch to provide

development projects rather than taking direct responsibility itself (Duany, 2010, p. 208; Goldring, 2002, p. 92).

Hometown associations also have been criticized for the types of projects that they fund (Fox & Bada, 2008, pp. 448–449). In order to receive federal matching funds, projects must be approved by the national government, which can create a conflict of interests. These concerns were attached to the older Two-for-One program, which involved matching funds from the federal and state governments. Most recently, migrants who participate in philanthropic giving through hometown associations have “...expressed concerns over the new role given to municipal governments” in the new Three-for-One program because they are wary of power over projects shifting to the municipalities, which they do not trust to provide necessary basic services (Burgess, 2005, p. 116). In order to maintain control over the direction of a project, HTAs must be very well established to overpower state or municipal control (Burgess, 2005, p. 116). The federal government also favors the most basic development projects, leaving other more established communities without the chance for matching funds (Burgess, 2005, p. 117).

This wariness is echoed in scholarly arguments over whether “...transnationalism offers transmigrants a way to gain autonomy or evade the national state and those who perceive national states exerting co-optive control over transmigrants organizations or the reproduction of social hierarchies in transnational spaces” (Goldring, 2002, p. 92). Most concerns about HTAs are about the long-term sustainability of their projects (Orozco & Garcia-Zanello, 2009; Orozco & Welle, 2005). Whether communities can successfully maintain projects implemented through migrant funding is a big point of contention. If a project lacks ownership, community members participating in implementation, correspondence, meeting a development priority, sustainability through a long life cycle, and replicability by having resources for the project available in other

communities, then there is a good chance the project will fail, wasting the donations of the hometown association and not actually producing development benefits (Orozco & Garcia-Zanello, 2009).

The construction of this study took these criticisms into account. While the overall effectiveness of hometown associations as aids to development has not been decided, they still contribute to and guide the flow of remittances. The inconsistency of Mexican government at the federal, state, and municipal levels to which migrant hometown associations are subject also can lead to communal remittances without the aid of government matching programs. This study was able to capture remittances from HTAs regardless of government support due to the generalized survey questions about migrant-funded projects. While picking up broad patterns in migrant remittance use, this study did not try to determine the longer term effects of hometown associations but rather examined how individual remittances are associated with specific development needs. This combined network and new economics theories to examine the relationships between development and individual remittances, creating a new outlet for both these theories (Massey et al., 2006).

### *Conclusion*

This chapter provides the theoretical grounding for this project studying the effects of development on migrant remittances, especially those migrants involved in hometown associations. Although there is strong evidence seen in the literature that a community level analysis would complement the study of the theories of relative deprivation and social networks, time limitations focused this thesis solely at the individual level. This analysis was a good initial test of the strength of the hypotheses; given the results, it can be decided if a community level

analysis would be further beneficial. Building a strong basis for this study, this conceptual analysis shows that remittance patterns previously studied in Mexico are known to be linked to basic development indicators. Based on this knowledge, the next chapter describes the research design used to explore these relationships.

### **Chapter 3: Research Design**

Given Chapter Two's discussion of the study's theoretical grounding, attention turns to how this study was designed and conducted. This chapter details the selection of Jalisco as the state to be studied. Next it discusses how the hypotheses introduced in Chapter One were explored. Lastly, the data used in the study are discussed.

#### *Selection of Jalisco*

This study of Mexican hometown associations and remittances focused on Jalisco because of its status as a long-time "sending" state. Three western states in Mexico--Jalisco, Michoacán and Guanajuato--have had high emigration rates since 1900. In 1900, one-third of Mexican migrants came from these three states, with the percentage from Jalisco leading with 14% of total migration, compared to Guanajuato at 10% and Michoacán at 9% (Durand, Massey, & Zenteno, 2001, p. 109). Mexico historically has recognized its citizens' rights to exit the country, including a formal recognition in the 1857 Constitution (Fitzgerald, 2009, p. 40). Nonetheless, the Mexican national government also has expressed concern over the number of citizens leaving the country due to the smaller remaining workforce in Mexico as well as the poor treatment of Mexican workers in the United States.

Starting in the early 1900's, the Mexican government at both the federal and state levels sought to slow the rate of emigration, ordering municipal governments to stop issuing documents that allowed contracted workers to cross the border into the United States (Fitzgerald, 2009, p. 40). This was prompted by Mexican state governments' fear that the emigrating workforce had already created "...labor shortages in the states of Jalisco, Michoacán, and Guanajuato" (Fitzgerald, 2009, p. 40). Conditions for halting emigration did not get better as the Mexican

Revolution caused people to flee the country from 1910-1920 (Fitzgerald, 2009, p. 41). During this time period, state governments ceased to exist in many areas of Mexico. Along with the loss of Mexican state governments was the loss of the necessary documents that legalized workers' travels to the United States, causing a rise in those migrants crossing illegally (Fitzgerald, 2009, p. 41). Fighting during the 1920's and 1930's in the Mexican states of Jalisco, Michoacán, Guanajuato, and Zacatecas also encouraged emigration at the local level, because "...from the perspective of local government in war-torn areas encouraging emigration was a political escape valve" (Fitzgerald, 2009, p. 43). This history of migration in Jalisco due to work contracts and political turmoil has influenced the emigration pattern in more recent years in this Mexican state.

Emigration from Jalisco did not stop after political fighting subsided, as contract workers continued to travel to the United States. In the more recent *bracero* era, Mexican governments at both national and state levels had a different perspective on emigration than in earlier years, as they voiced displeasure over wages and the treatment of workers who went to the United States (Fitzgerald, 2009, p. 49). Although some Mexican states went so far as to ban the contracting of *bracero* workers between 1943 and 1944, the program remained incredibly popular, with "...the three main traditional sending states of Michoacán, Jalisco, and Guanajuato...having around twenty applicants per available contract" (Fitzgerald, 2009, pp. 50-51). Those selected for *bracero* contracts often committed bribery or were part of those coincidental "...one hundred aspirants [who] had applied for the one hundred available slots" (Fitzgerald, 2009, p. 51). With actual interest in the worker program not met by the available applications, Mexicans who sought work in the United States often used coyotes and other methods of illegal border crossing (Fitzgerald, 2009, pp. 51-52).

Continuing into the 1980's, Mexico continued to allow emigration due to its own struggling economy (Fitzgerald, 2009, p. 56). With the "...1986 U.S. Immigration Reform and Control Act (IRCA), which accelerated a trend toward permanent settlement by legalizing 2.3 million Mexicans," the Mexican government began to make more of an effort to reach out to migrants living abroad (Fitzgerald, 2009, p. 56). Emigration tends to increase after statutes such as the IRCA are enacted, because legalization allows for risk-free circular migration as well as for family migration (Durand et al., 2001, p. 122). This happened following the IRCA, as millions of Mexican workers received green cards, corresponding with a jump in migration from 20 to 25 percent in the early 1990's (Durand et al., 2001, p. 122). Other reasons for the sudden increase in migration during the 1980's and 1990's included a Mexican baby boom and the economic crisis in Mexico (Cave, 2011).

Mexican political parties began to reach out to potential voters living in the United States, with candidates campaigning in large migrant-receiving U.S. cities, such as Los Angeles and Chicago (Fitzgerald, 2009, pp. 56–58). Outreach also appeared in government attempts to encourage migrants to retain social ties to Mexico through remittances to their hometowns (Fitzgerald, 2009, pp. 58–59). Programs such as the Program for Mexican Communities Abroad (PMCE) have helped to create "...formal ties between the [social] clubs and the Mexican government at the federal, state, and country levels," guiding remittance money towards projects that benefit migrants' hometowns (Fitzgerald, 2009, pp. 58–59). These programs helped Mexico capitalize on the large number of migrants in the United States who sent "...remittances that reached US\$20 billion in 2005, the second largest source of foreign income after oil" (Fitzgerald, 2009, p. 63).

In the past two decades in Jalisco, migration patterns have changed. Many internal pressures to migrate, such as job and education opportunities, have started to lessen. In Jalisco specifically, “a tequila boom that accelerated through the 1990s created new jobs for farmers cutting agave and for engineers at the stills” (Cave, 2011). Jalisco also has gained considerably more “senior high schools or preparatory schools for students aged 15 to 18; [they] increased to 724 in 2009, from 360 in 2000, far outpacing population growth” (Cave, 2011). With the increase in education opportunities in Jalisco, citizens are more likely to stay home, where a college degree or specific skill set yields higher pay than would working illegally in the United States (Cave, 2011).

Immigration from Mexico declined in general, with “fewer new immigrant arrivals to the U.S. from Mexico in the 2000s (4.2 million) than in the 1990s (4.7 million)” (Pew Hispanic Center, 2011, p. 1). Internal “push” factors from within Mexico also have been decreasing. Among these factors are lowered birth rates, the increasing dangers of illegally crossing the border, and growing education and employment opportunities (Cave, 2011). Lower birth rates means the “pool of likely migrants is shrinking,” which also means fewer new potential job seekers, enabling more Mexicans to stay at home rather than migrate to find work in the United States (Cave, 2011). While growth in the economy in Mexico has slowed migration levels, not all influences are positive. The increasing violence of drug cartels also has deterred illegal border crossing. This violence, which began in the mid-2000’s, also could contribute to the decline in migrants, where “an average of 150,000 unauthorized immigrants from Mexico arrived annually during the period from March 2007 to March 2009, which was 70% below the annual average of 500,000 during the first half of the decade” (Passel & Cohn, 2011, p. 2).

Most recently in the United States, the number of all unauthorized immigrants also has dropped significantly, remaining unchanged from 2009 to 2010 (Passel & Cohn, 2011, p. 1). This decline from the peak of 12 million unauthorized immigrants in 2007 “appears due mainly to a decrease in the number from Mexico, which went down to 6.5 million in 2010 from 7 million in 2007” (Passel & Cohn, 2011, p. 1).

External, or “pull,” factors from the United States also can affect levels of migrants. These factors include the economic recession; changes in U.S. local, state, and federal enforcement of unauthorized migration laws; and an increasing number of deportations (Passel & Cohn, 2011, pp. 1–2).

Throughout history, Jalisco and the west-central region have been the epicenter of migration, making it a good choice for studying the flow of remittances. While percentages of migration have dipped in recent years, the west-central region still is home to the majority of migrants (Massey, Rugh, & Pren, 2010, pp. 133–134). As of 2010, Jalisco was one of the three important source states, ranked second along with “...Michoacán (13 percent of all migrants), Jalisco (11 percent), Guanajuato (9 percent), [and] Zacatecas (4 percent)...” (Massey et al., 2010, p. 135). Emigration and managing the flow of workers have continued, and Mexican governments also have found ways to connect with their foreign populations. Congruent with the pattern of emigration from Jalisco is the well-established pattern of sending remittances back to the state. The Mexican government has taken note of these flows and found ways to encourage them, such as partnering with HTAs.

### *The Mexican Migration Project*

In order to study the association between remittances and development, I used data from a project conducted by the Office of Population Research at Princeton University. The Mexican Migration Project (MMP) is “a collaborative research project based at the Princeton University and the University of Guadalajara” (“Mexican Migration Project,” n.d.). The data that the Project has collected provide in-depth examination of migrant activities with ethnosurvey interviews and numerous samples collected from different communities.

The Mexican Migration Project started its data gathering in the 1980’s, and the first surveys were in the Mexican states of Guanajuato and Jalisco in 1987 and 1988, respectively (“Appendix A: Sample information, summary of MMP communities,” n.d.). Interviewers are mainly native Spanish speakers and employees of the Social Movement Department at the University of Guadalajara (“Mexican Migration Project,” n.d.). The interviews are ethnosurvey questionnaires in which interviewers ask questions in a manner that seeks to make participants feel comfortable. Times of the interviews may vary based on the discretion of the interviewer. Information gathered during the interviews then is checked with others in the community (“Mexican Migration Project,” n.d.). An ethnographic study of the community also is conducted, including the size of the town and the services available (such as water, electricity, and sanitation) (“Mexican Migration Project,” n.d.).

Annually,

...during the winter months (when seasonal migrants are home), the Mexican Migration Project randomly samples households in communities located throughout Mexico. After gathering social, demographic, and economic information on the household and its members, interviewers collect basic information on each person's first and last trip to the United States (“Mexican Migration Project,” n.d.).

If researchers determine through their interviews that migrants in a certain community return home during a different time of the year, they return to that community during the months identified to complete a portion of their surveys (“Mexican Migration Project,” n.d.).

Conversely, researchers also survey those migrants who have permanently settled in the United States, based on information gathered during interviews in Mexican communities. In the months of “July and August interviewers travel to those U.S. destinations to gather non-random samples of 10 to 20 out-migrant households from each community. The U.S.-based samples thus contain migrants who have established their households in the United States” (“Mexican Migration Project,” n.d.).

Selection of communities by the Mexican Migration Project is based on the presence of *some* level of out-migration. Although the Project states it gives no priority to studying communities with high out-migration, it wants to be sure there is migration to study in the area sampled. In order to determine out-migration, the MMP uses the sex ratio of communities in order to determine “...the intensity of the process of international migration because in Mexico emigration is so heavily male” (“Mexican Migration Project,” n.d.). After this initial fieldwork, the MMP checks these data against bibliographic sources, and since 2000 has been able to use census data available through Mexico’s Population Council (CONAPO) (“Mexican Migration Project,” n.d.).

Selection of communities varies by size, taking into account the different levels of urbanization in Mexico. The four types of community included are “**ranchos**, with fewer than 2,500 inhabitants; **pueblos** (towns), having 2,500 to 10,000 inhabitants; **mid-sized cities** containing 10,000 to 100,000 inhabitants; and finally, a **metropolitan setting**, usually a particular neighborhood within a state’s capital city or some other large city” (emphases in

original; “Mexican Migration Project,” n.d.). Field investigators conduct a census of dwellings in the community before randomly sampling residents from that list to interview. In all communities, individuals in 200 dwellings are interviewed, unless the size of the community is under 500, in which case fewer households are sampled to gather data on all family members (who must be biologically or legally related, not just residents) living in the household (“Mexican Migration Project,” n.d.).

In the two larger communities, mid-sized and metropolitan, investigators target “traditional” communities, making sure not to survey a neighborhood with high numbers of recent rural-to-urban migrants (“Mexican Migration Project,” n.d.). Although the Project acknowledges that this selection creates samples of neighborhoods rather than a full overview of a city, it is a useful attempt to create a picture of those citizens native to the city rather than those that have already undergone a migratory trip in order to live in the city. Sampling those native to the city reduces the possibility of gathering a sample with skewed patterns of migration and remittances, which could go back to the hometowns of rural-to-urban migrants rather than to the city in which the survey is conducted.

Looking at the Mexican state of Jalisco, this project examined whether and how the number of purposes of remittances/savings that migrants designated for development was influenced by basic household amenities as well by migrant membership in HTAs. Besides gathering the sort of in-depth information as would be collected from an interview, the data from the MMP was examined for evidence of the actual presence of development indicators, rather than relying on the perceptions of community members about levels of development. Focusing on Jalisco as a traditional sending state, this study relied on survey data from several different communities within the Mexican state.

The complementary theories of social networks and the new economics of migration help identify how household development indicators and hometown associations influence the patterns of remittances sent by migrants to Mexico as well as the savings designated for development. Although relative deprivation cannot be measured at the individual level, flows of remittances and savings that address specific household needs is one way to look at this theory. This study used possible relationships between the level of development present in a household and transnational remittances/savings as a way to operationalize relative deprivation.

Although I focused on the 21 surveys that the MMP conducted in Jalisco, I also looked at the kind of community in which the survey was conducted to see if that affected the answers. A breakdown of the 21 different communities surveyed in Jalisco can be seen in table 3.1.

Table 3.1: Communities Surveyed in Jalisco by Year of Survey

No.	1990 Population	2000 Population	2010 Population	Year of Survey	Size of Mexican Sample	Size of U.S. Sample	Refusal Rate
20	3,000	3,000	3,000	1982	106	0	0.038
21	2,000	2,000	2,000	1982	94	0	0.037
23	12,000	18,000	22,000	1982	200	0	0.038
24	1,650,000	1,646,000	1,495,000	1982	200	16	0.048
3	4,000	5,000	5,000	1988	200	22	0.140
6	5,000	6,000	8,000	1988	200	19	0.115
7	3,000	4,000	4,000	1988	200	15	0.010
17	31,000	35,000	36,000	1991	200	20	0.044
25	1,000	1,000	1,000	1992	100	7	0.029
28	73,000	85,000	98,000	1992	200	20	0.074

57	4,000	6,000	6,000	1998	201	20	0.057
58	1,000	1,000	1,000	1998	100	10	0.029
91	1,650,000	1,646,000	1,495,000	2002	200	0	0.429
97	31,000	40,000	52,000	2003	200	20	0.000
98	669,000	911,000	1,142,000	2003	200	0	0.149
99	1,000	1,000	1,000	2003	97	0	0.010
107	7,000	8,000	9,000	2004	185	0	0.079
120	1,000	2,000	1,000	2007	150	15	0.085
122	2,000	3,000	3,000	2008	200	0	0.020
123	1,650,000	1,647,000	1,495,000	2008	200	0	0.231
124	12,000	18,000	22,000	2008	201	0	0.145

(“Appendix A: Sample information, summary of MMP communities,” n.d.).

### *Testing Hypotheses*

As discussed earlier, I expected to find the following associations in individual remittance and savings patterns. At the individual level, I hypothesized that a higher level of remittances and savings that migrants designate for development projects rather than for direct consumption would be associated with lower levels of development indicators in their own homes.<sup>6</sup> I also hypothesized that those individual migrants who are involved with sport or social clubs would be more likely to designate savings or remittances toward development than those not a part of such clubs because the former are exposed to a culture that encourages these types of remittances to migrants’ hometowns.

---

<sup>6</sup> Development indicators include those homes that have running water, electricity, and plumbing.

Following the new economics of migration and network theory, I examined individual-level data. Using the guidelines of the new economics of migration, if development as a form of relative deprivation is an important part of the decision to migrate, remittances at the individual level would be directed towards development indicators that are lower. Relative deprivation is tapped by households at comparatively lower levels of development designating more purposes of remittances for development in the household.<sup>7</sup> Specific variables were combined from the “house134,” “mig134” and “migother134” databases into an SPSS data file in order to run the appropriate analyses.

At the individual level, I used the data sets “house134”, “mig134”, and “migother134” to study patterns in individual remittances. I employed REMIT1-REMIT5 and SAVINGS1-SAVINGS5 from “mig134” and “migother134” as the dependent variables to examine whether and how stated intentions for money sent or brought back home was related to the independent variables, indicators of development in individual households. The categories in which responses could be categorized are: food and maintenance, construction or repair of house, purchase of house or lot, purchase of vehicle, purchase of tools, purchase of livestock, purchase of agricultural inputs, purchase of consumer goods, start/expand business, education expenses, health expenses, debt payment, finance a special event, recreation/entertainment, and savings. I grouped these into categories of basic needs (food and maintenance, construction or repair of house, purchase of house or lot, education expenses, health expenses), production (purchase of vehicle, purchase of tools, purchase of livestock, purchase of agricultural inputs, start/expand business, savings), and consumption (purchase of consumer goods, debt payment, finance a

---

<sup>7</sup> The information coded under REMIT1-REMIT5 and SAVINGS1-SAVINGS5 asked about the “purpose of remittance/savings.” Those answering the question told the interviewer the purpose for which remittances and savings had been sent or saved (“MIG Data File: Variable list and specification,” n.d.).

special event, and recreation/entertainment).<sup>8</sup> Those migrants designating savings or remittances for the purposes of basic needs or production were viewed as contributing to development needs.

The independent variables appear in “house134” and cover basic household amenities: running water (WATER), electricity (ELECTRIC), sewers (SEWER), stoves (STOVE), and refrigerators (REFRIG) in households. I also compared members and non-members of sport or social clubs to examine if this participation increased the levels of remittances to development-related causes (SPORT/SOCIAL). Katrina Burgess relied on the work of Victor Espinoza when she observed that “before the 1990’s, most HTAs were social clubs (with the exception of groups formed in direct response to economic emergencies), but they have gradually evolved into philanthropic organizations” (Burgess 2005, 111).

Coupled with the influence of a social network, which may tend to concentrate remittances on development projects, individual remittances would be expected to be even more likely to go towards development if this were a preexisting need in the community. Remittances may be further influenced by the presence of relative deprivation. Looking at the provision of basic needs as relative deprivation, I expected to find a pattern of remittances directed toward investing money in those areas where development indicators are low in their own homes.

I examined the first hypothesis—higher level of remittances and savings that migrants designate for development-related purposes would be associated with lower levels of

---

<sup>8</sup> These categories were based on the study that Mooney (2004) did on Mexican migrants’ investment of remittances in the sending community. Mooney focused on consumption, housing, and production, which differed slightly from the areas I studied in this project. The category of consumption nearly identical, as Mooney categorizes it is “consumer goods, recreation, family maintenance, and debts”; I viewed food, education and health expenses to be in the category of basic needs that elevate the standing of the family unit in the home community (Katz & Stark, 1986; Mooney, 2004, p. 49). Mooney’s categorization of production is the same as mine, with the exception of my inclusion of savings, as this would also be something to boost family standing in the community, along with “money spent to purchase farmland, livestock, or tools, to help finance a business enterprise, or to acquire a motor vehicle” (Katz & Stark, 1986; Mooney, 2004, p. 49). The last category is significantly different than mine based on the different aims of our research. Mooney categorizes the third category as housing, including “money dedicated to the purchase, construction, or repair of a home (Mooney, 2004, p. 49). I chose basic needs as the most appropriate third category to this project, and included the choices of migrant remittances that best pertained to the elevation of the social status of migrants that would be visible in the community (Katz & Stark, 1986).

development indicators in their own homes—using cross-tabulations as well as graphs to look for any relationships between migrant-funded household development and levels of development present in the household. The second hypothesis—those migrants who are involved with sport or social clubs would be more likely to contribute to development at the individual household level than those not a part of such clubs—introduced club participation as a possible moderator for the development-remittance relationship. Again, I examined this hypothesis using cross-tabulations.

### *Data Compilation and Variables*

The data set was assembled from three separate data bases in the Mexican Migration Project: HOUSE134, MIG134, and MIGOTHER134. HOUSE134 pertains to all those who are related to each other living within a surveyed household. These data include the health and migration history of all household members. Information on the household itself also is available, including the funding sources and use of land held, livestock, equipment, and houses owned as well as other amenities found in the household (“HOUSE Data File: Variable list and specification,” n.d.). This dataset is the source of information on basic household amenities that were the independent variables in the analysis. These variables include the presence of running water (WATER), electricity (ELECTRIC), sewers (SEWER), stoves (STOVE), and refrigerators (REFRIG) in households.

Also included from the HOUSE134 dataset are the variables COMMUN, the community number; SURVEYPL, the place the survey was taken; SURVEYYEAR, the year the survey was

conducted; HHUM, the household number that the survey was taken in, and WEIGHT<sup>9</sup>, the weight of the community (“HOUSE Data File: Variable list and specification,” n.d.). These variables are consistent in each data set, making them crucial when checking that data from all three data sets line up.

The second data set, MIG134, contains data collected on those heads of household<sup>10</sup> with migratory experience in each household surveyed in a community (Pren, 2012). If the head of household does not have migratory experience, the Mexican Migration Project obtains information from another member of the household with migration experience, which is put into the third data set, MIGOTHER134 (Pren, 2012). Both of these datasets include responses to the same survey. The information asked about pertains to the migratory trips and health of the migrant, social relations in the U.S., employment held and benefits used while in the receiving country, and intended purposes of remittances and savings from migratory trips. Data are also included about the migratory experiences of family relations. The variables tapping migrant involvement with social clubs and migrant intent for the uses of savings and remittance are drawn from these data bases. These variables include REMIT1-REMIT5, purpose of remittances; SAVINGS1-SAVINGS5, purpose of savings; SPORT, migrant involvement with a sport club; and SOCIAL, migrant involvement with a social club in the receiving country (“MIG Data File: Variable list and specification,” n.d., “MIGOTHER Data File: Variable list and

---

<sup>9</sup> Weights are calculated as the inverse of the sampling fraction. The sampling fraction is calculated by dividing the number of interviewed households by the estimated number of eligible households (“The Mexican Migration Project weights,” n.d.).

<sup>10</sup> The “head of household” must be a native of the country studied. In the case of those households surveyed in the United States, the head must be native of the Mexican community studied. Elderly heads are not preferred, unless they can reconstruct their migration history. In the case of a couple, the head is the male, unless the male is incapable of responding. If a woman is living by herself, although she is married or in a union, the male is still considered the head of household if the woman can answer specific questions about him. If this is not the case, the woman is considered head of household (“Interviewer’s Manual,” 2005).

specification,” n.d.). The responses that can be selected for both REMIT and SAVINGS variables are discussed in greater detail below.

Also included from the MIG134 and MIGOTHER134 datasets are the variables COMMUN, the community number; SURVEYPL, the place the survey was taken; SURVEYYEAR, the year the survey was conducted; HHUM, the household number that the survey was taken in; and WEIGHT, the weight of the community (“HOUSE Data File: Variable list and specification,” n.d.). As noted previously, these variables helped line up all the data correctly when the three datasets were combined.

Combining variables from the three data sets was a multi-step process. First, the variables WATER, ELECTRIC, SEWER, STOVE, REFRIG, COMMUN, SURVEYPL, SURVEYYEAR, HHUM, and WEIGHT from HOUSE134 were copied and pasted into a blank data set. Frequencies for each of these variables were checked for each community number in Jalisco (see table 3.1) to make sure the correct number of cases was copied.

After this first dataset for household data based on HOUSE134 was created, the dataset for migrant information was compiled. The variables REMIT1-REMIT5, SAVINGS1-SAVINGS5, SPORT, SOCIAL, COMMUN, SURVEYPL, SURVEYYEAR, HHUM, and WEIGHT were copied from MIG134 and pasted into a blank dataset. Frequencies for each of these variables were checked for each community in Jalisco (see table 3.1) in both the original and new data files to make sure the correct number of cases was copied.

This same process was followed for the dataset MIGOTHER134. Variables REMIT1-REMIT5, SAVINGS1-SAVINGS5, SPORT, SOCIAL, COMMUN, SURVEYPL, SURVEYYEAR, HHUM, and WEIGHT were copied from MIGOTHER134 and pasted into a blank dataset. Again, frequencies were checked in both the original and new data files.

In each of these steps, all communities not located in Jalisco were identified and eliminated. Once this initial gathering of MMP data pertaining to Jalisco was completed, the new data sets from the MIG134 and MIGOTHER134 data were combined. Again, I checked frequencies. Then, the cases were organized within the community based on the variable HHNUM, which the consistent household number found in each dataset.

Having combined and sorted the migrant side of the individual level data, I turned my attention to the combination of the Jalisco-specific variables gathered from HOUSE134 and those Jalisco-specific variables gathered from the migrant datasets. In order to combine household and migrant variables, the accuracy of the number of cases from each community as well as the presence of data from surveys completed in the United States in both new datasets had to be determined.<sup>11</sup> First, the presence of communities with survey data from the United States (coded 2 on the variable SURVEYPL) was identified in both the household and migrant portions of the new datasets. If there were not matching data in both portions of datasets for surveyed communities in the United States, the case was deleted. Then, matching cases were determined using the variable HHNUM. This was done by manually listing every household number (HHNUM) in each community in the household portion of the new datasets. This list was then checked against the household numbers in the migrant portion of the new datasets. Care was taken to note household numbers present in the household portion and not in the migrant portion and vice versa. In order to be included in the combined dataset, migrant information had to correspond with a matching household number in the household data. If a household number of a migrant case did not match a case in the household data, the case was

---

<sup>11</sup> Data from a survey completed in the United States instead of Mexico were distinguished by the response found in the variable SURVEYPL.

deleted.<sup>12</sup> Once all of the cases in the migrant and household portions of the new datasets were matched, the variables from the migrant portion of the new datasets were copied and pasted into the new household portion. Again, frequencies were checked for accuracy. Lastly, when synchronicity was verified among all variables (that is, the data in each case corresponded with the same specific household number), duplicate variables were deleted. These duplicate variables included COMMUN, SURVEYPL, SURVEYYEAR, HHUM, and WEIGHT. When completed, the new data set contained only one of each of these variables along with the migrant and house-related data. When this was completed, the new individual-level dataset was ready for analysis.

#### *Creation of Additive Indexes*

I used additive indexes for the analysis of certain variables. Specifically, three sets of variables were transformed into additive indexes. The first index was created from the set of variables concerning household amenities. This included five variables --WATER, ELECTRIC, SEWER, STOVE, and REFRIG. The original variables for household amenities all were coded 1-Yes, 2- No, and 9999- Unknown (“HOUSE Data File: Variable list and specification,” n.d.). These variables first were each recoded into dummy variables, with unknown values changed to “No” (0). The additive index for household amenities was created by adding together responses on the five new dummy variables: WATER\_DUMMY, ELECTRIC\_DUMMY, SEWER\_DUMMY, STOVE\_DUMMY, and REFRIG\_DUMMY. This additive index ranged from 5 (“highly developed” in terms of basic development needs, with access to running water, electricity, sewer, a stove, and refrigerator) to 3 or 4 (“developed”) to 1 or 2 (“low development”) to 0 (“no development”).

---

<sup>12</sup> In community number 120, duplicate HHNUM 37 (in house and migrant datasets) was deleted. In community number 123, HHNUM 29 had two different responses. The response originally found in MIGOTHER134 was deleted, leaving the response of the head of the household from MIG134.

For the second index, “remittance\_add”, dummy variables were first created from the variables “remit1-remit5.” Each of the original “remit” variables was coded using the following values: 1-food and maintenance, 2-construction or repair of house, 3-purchase of house or lot, 4-purchase of vehicle, 5-purchase of tools, 6-purchase of livestock, 7-purchase of agricultural inputs, 8-purchase of consumer goods, 9-start/expand business, 10-education expenses, 11-health expenses, 12-debt payment, 13-finance a special event, 14-recreation/entertainment, 15-savings, 16-other, 8888-N/A (no remittance/no additional remittance), and 9999-unknown. As previously stated, these responses were grouped into categories of basic needs (food and maintenance, construction or repair of house, purchase of house or lot, education expenses, health expenses), production (purchase of vehicle, purchase of tools, purchase of livestock, purchase of agricultural inputs, start/expand business, savings), and consumption (purchase of consumer goods, debt payment, finance a special event, and recreation/entertainment). Those migrants designating the purposes of remittances in the categories of basic needs or production were coded as contributing to development needs.

Based on these categories the responses were recoded, grouping categories of “basic needs” and “production” into a “development” category, leaving the category of consumption as a separate category. This additive index included all cases with non-missing responses between 0 and 5. In this additive index, the higher the number, the more migrants intended certain purposes of remittances to go toward development-related uses.

For the third index, “savings\_add,” dummy variables first were created for the variables “savings1-savings5.” Each of the original “savings” variables was coded the same as the “remit” variables: 1-food and maintenance, 2-construction or repair of house, 3-purchase of house or lot, 4-purchase of vehicle, 5-purchase of tools, 6-purchase of livestock, 7-purchase of agricultural

inputs, 8-purchase of consumer goods, 9-start/expand business, 10-education expenses, 11-health expenses, 12-debt payment, 13-finance a special event, 14-recreation/entertainment, 15-savings, 16-other, 8888-N/A (no remittance/no additional remittance), and 9999-unknown. These responses were grouped into the same categories as remittances: basic needs (food and maintenance, construction or repair of house, purchase of house or lot, education expenses, health expenses), production (purchase of vehicle, purchase of tools, purchase of livestock, purchase of agricultural inputs, start/expand business, savings), and consumption (purchase of consumer goods, debt payment, finance a special event, and recreation/entertainment). Those migrants designating the purposes of savings in the categories of basic needs or production were coded as contributing to development needs.

Based on these categories the responses were recoded, grouping categories of “basic needs” and “production” into a “development” category, leaving the category of consumption. This additive index included all cases with non-missing responses between 0 and 5. In this additive index, the higher the number, the more migrants intended certain purposes of savings to go toward development-related purposes.

When tests of statistical significance are reported, the relevant confidence level is 90% ( $p \leq .1$ ). I chose this less stringent level both because of the smaller sample sizes and because I wanted to find evidence of any possible relationships (that is, I was more concerned with committing a Type II than a Type I error).

### *Conclusion*

With the case selection and dataset construction outlined, the following chapter will examine the two hypotheses. Focusing on Jalisco as a traditional sending state, this study relied

on survey data of several different communities within the Mexican state. If the hypotheses are supported, the development indicators then would be worth looking at in other Mexican states as more migrants make the decision to emigrate. The complementary perspectives of social network theory and the new economics of migration help to suggest the importance of development indicators on the use of remittances and savings sent to Mexico from migrants, perhaps especially those individuals connected with HTAs.

## **Chapter 4: Findings**

In order to analyze the complementary perspectives of the new economics of migration and social network theory, this chapter examines two hypotheses. The first hypothesis, analyzing the relationship between level of household development and the designation of remittances and savings towards development, focuses on the new economics of migration by specifically examining relative deprivation. Relative deprivation views household development as a catalyst for migration; therefore the designation of monies for development purposes is important to migrants. The second hypothesis, controlling for migrant participation in a sport or social organization, is drawn from social network theory and examines whether participation in these forms of hometown associations strengthens the designation of remittance and savings use for development.

This chapter uses the data provided by the Mexican Migration Project to analyze the hypotheses. After the two main hypotheses are examined, two other controls-- year and community-- will be examined. These controls suggest other influences on remittance and savings designation: community size and external economic factors that can be identified by year.

### *Initial Patterns*

The frequencies of the additive indexes that were created from household amenities and the intended use of savings and remittances tell a story all their own. These first looks highlight patterns that will be examined more closely.

Examination begins with a look at household development levels.

**Table 4.1: Development Level by Household- Jalisco**

	Frequency	Percent
No Development	14	0.1
Low Development	44	0.4
Low Development	116	0.9
Developed	419	3.4
Developed	1168	9.6
Highly Developed	10463	85.6
Valid Total	12224	100

In Jalisco, the majority of houses are more developed, with 85.6% of respondents reporting “highly developed” households; these have all five basic amenities (see table 4.1). An additional 13% reported “developed” households, with three or four basic amenities. These higher levels of development leave only 1.4% of the sample at a low level, with one or two basic amenities or no development in their homes. With the majority of households highly developed, it is probably unlikely that most migrants who choose to designate remittances or savings to development needs will be from households with lower levels of development.<sup>13</sup>

**Table 4.2: Reported Numbers of Purposes of Remittances Designated for Development**

	Frequency	Percent
0 Remittances towards Consumption	105	0.9
1 Designation with Purpose towards Development	3309	27.1
2 Designations with Purpose towards Development	1742	14.3
3 Designations with Purpose towards Development	842	6.9
4 Designations with Purpose towards Development	144	1.2
5 Designations with Purpose towards Development	4	0
Valid Total	6145	50.3
Missing System	6079	49.7
Total	12224	100

<sup>13</sup> Data in this chapter are weighted. Numbers and percentages reflect the sample as if it reflected the total population in each community surveyed.

Those migrants whose data were collected by the Mexican Migration Project expressed their intent to designate remittances to development-related causes. Looking specifically at remittance use, a good portion of migrants, 27.1%, designated at least one purpose of a remittance to go toward development. A number of migrants who were surveyed, 41.4%, stated they intended that remittances be designated for one or two development purposes. This bodes well for the analysis of associations between intended remittance use and household development as earmarking portions of remittances for development is not an isolated pattern. (See table 4.2.)

**Table 4.3: Reported Number of Purposes of Savings Designated for Development**

	Frequency	Percent
0 Savings towards Consumption	694	5.7
1 Designation with Purpose towards Development	2418	19.8
2 Designations with Purpose towards Development	1124	9.2
3 Designations with Purpose towards Development	806	6.6
4 Designations with Purpose towards Development	547	4.5
5 Designations with Purpose towards Development	107	0.9
Valid Total	5696	46.6
Missing System	6528	53.4
Total	12224	100

Fewer migrants overall designate savings for development purposes, and they seem to be less inclined to designate savings for development than remittances (see table 4.3). Despite this, 29% of migrants designated one or two purposes of savings for development use. What is interesting about the designation of the purposes of savings compared to those of remittances is that a larger percentage of migrants earmarked *more* of their savings towards development. Twelve percent of migrants designated savings to go for three through five development purposes, while only 8.1% of migrants earmarked remittances for the same numbers of purposes.

This may reflect what other scholars have observed: migrants feel more confident that money will be used properly when it is delivered by the migrant (Mooney, 2004). This has been a concern of migrants with Mexican hometown associations and government matching programs. Due to lack of assurance that their money is being used for the purpose they intended, migrants may be more reluctant to provide funds, preferring projects unrelated to government intervention (Alarcón, 2002; Burgess, 2005; Rose & Shaw, 2008).

This initial look at the main variables points to several patterns. Households in Jalisco on average have most basic amenities. Due to this alone, it may be difficult to find support for the two proposed hypotheses. Many migrants find it important to designate money for development purposes in their households. While more migrants overall designate remittances for development-related than consumption purposes, a higher percentage of migrants designated savings for more development-related purposes.

*Hypothesis 1: Migrants in households with lower levels of development are more likely to remit/save towards development*

The first individual level hypothesis examines the associations between levels of household development and development-directed purposes of remittances and savings. The first relationship to be examined is that between level of household development and intended remittance use.

**Table 4.4: Number of Purposes of Remittances Designated to Development by Level of Household Development**

Number of Purposes of Remittances	Level of Household Development					Total
	Low Development	Low Development	Developed	Developed	Highly Developed	
0- Remittances towards consumption	0.00% (0)	0.00% (0)	0.00% (0)	2.10% (13)	1.70% (92)	1.70% (105)

1 Designation towards Development	100.00% (4)	94.40% (34)	93.70% (74)	71.40% (432)	51.00% (2765)	53.80% (3309)
2 Designations towards Development	0.00% (0)	5.60% (2)	6.30% (5)	18.70% (113)	29.90% (1622)	28.30% (1742)
3 Designations towards Development	0.00% (0)	0.00% (0)	0.00% (0)	7.10% (43)	14.70% (799)	13.70% (842)
4 Designations towards Development	0.00% (0)	0.00% (0)	0.00% (0)	0.70% (4)	2.60% (140)	2.30% (144)
5 Designations towards Development	0.00% (0)	0.00% (0)	0.00% (0)	0.00% (0)	0.10% (4)	0.10% (4)
Total	100.00% (4)	100.00% (36)	100.00% (79)	100.00% (605)	100.00% (5422)	100.00% (6146)

\*\*\*Statistically significant at  $p \leq .05$

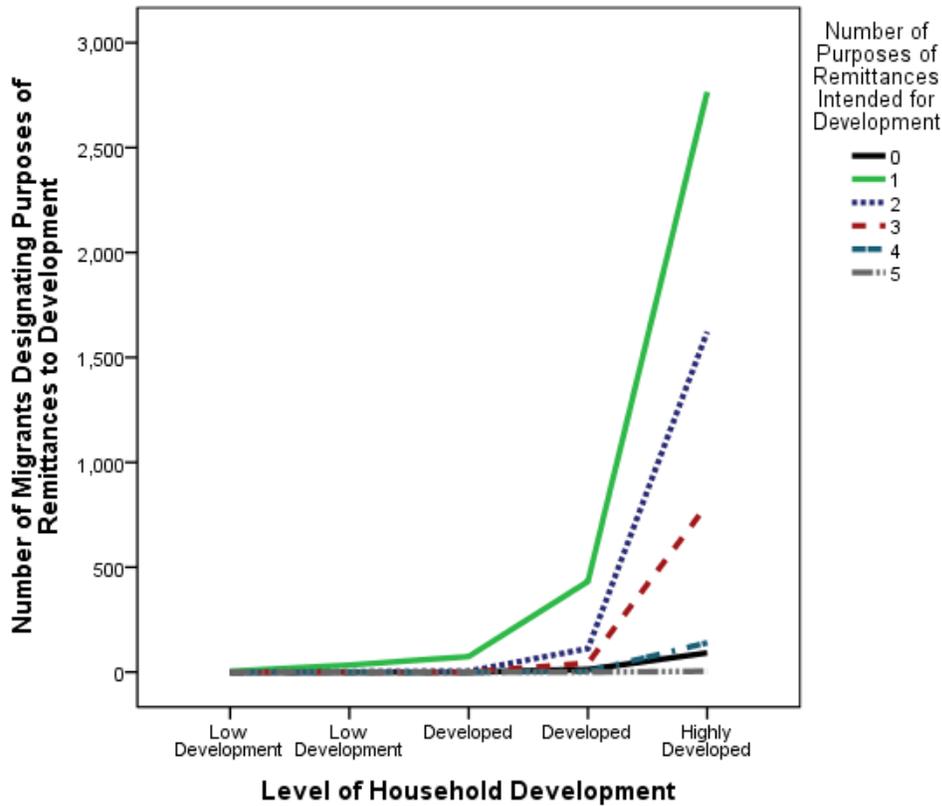
Pearson Chi-Square 179.025\*\*\*

Somers' d: Remittance Dependent 0.248\*\*\*

As table 4.4 shows, there is a statistically significant positive relationship between the two variables, but it is in the opposite direction than hypothesized. Those migrants with higher levels of development designated the most purposes of a remittance towards development. However, migrants in households with less development—one to three basic amenities—show interest in designating at least one purpose of a remittance to be used for development. Knowing the level of development in a migrant's household increases one's ability to predict the use of remittances by 24.8% compared to not knowing.

This pattern of designating development purposes for remittances is especially prevalent among those migrants with “highly developed” households, who designate the most purposes. However, those migrants who designated one or two purposes of a remittance towards development tended to come from lesser developed households. (See figure 4.1.)

**Figure 4.1: Level of Household Development by Number of Migrants Contributing to Development by Number of Purposes of Remittances**



As figure 4.1 shows, a majority of migrants who designated one purpose of a remittance towards development were those from households with only one or two basic household development indicators. Migrants from households in both categories of “low development” made up 100% and 94.4% of migrants in their respective categories who designated one purpose of a remittance towards development.

Such a pattern likely reflects that fewer migrants in Jalisco are from lesser developed households. A certain level of capital is needed to be able to afford to migrate in the first place. However, those who are able to migrate clearly do view development as an important concern to address.

The next dependent variable is the designation of savings for development purposes. As noted earlier, savings were more frequently designated towards development purposes than were remittances.

**Table 4.5: Number of Purposes of Savings Designated to Development by Level of Household Development**

Number of Purposes of Savings	Level of Household Development						Total
	No Development	Low Development	Low Development	Developed	Developed	Highly Developed	
0- Savings towards consumption	0.00% (0)	0.00% (9)	25.70% (11)	12.00% (64)	2.10% (122)	1.70% (488)	1.70% (694)
1 Designation towards Development	100.00% (14)	68.60% (24)	84.80% (78)	65.60% (160)	58.60% (447)	37.30% (1694)	42.40% (2417)
2 Designations towards Development	0.00% (0)	0.00% (0)	3.30% (3)	5.70% (14)	12.50% (95)	22.30% (1012)	19.70% (1124)
3 Designations towards Development	0.00% (0)	0.00% (0)	0.00% (0)	0.00% (0)	10.00% (76)	16.10% (730)	14.20% (806)
4 Designations towards Development	0.00% (0)	5.70% (2)	0.00% (0)	0.80% (2)	1.20% (9)	11.70% (534)	9.60% (547)
5 Designations towards Development	0.00% (0)	0.00% (0)	0.00% (0)	1.60% (4)	1.80% (14)	2.00% (89)	1.90% (107)
Total	100.00% (14)	100.00% (35)	100.00% (92)	100.00% (244)	100.00% (763)	100.00% (4547)	100.00% (5695)

\*\*\*Statistically significant at  $p \leq .05$

Pearson Chi-Square

493.806\*\*\*

Somers' d: Savings Dependent

0.330\*\*\*

Table 4.5 shows that more migrants from households at lower levels of development designated savings for development purposes. All migrants who reported “no development” in their households chose to designate one purpose for savings to be directed towards development. The same strong relationship appears in both categories of “low development” households, with 68.6% of migrants with one basic need present in their household and 84.8% of migrants with

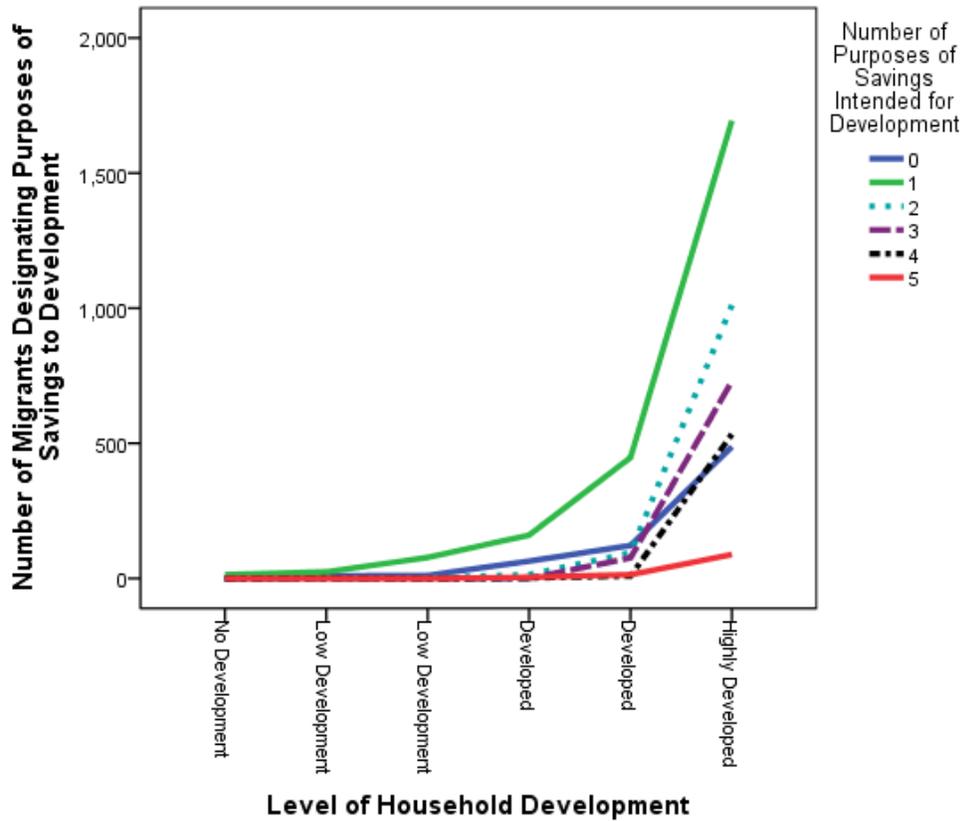
two basic needs present designating one purpose of savings toward development. This stronger pattern of migrants from less developed households designating savings toward development shows increased migrant confidence that money will be properly used when money is delivered directly (Alarcón, 2002; Burgess, 2005; Mooney, 2004; Rose & Shaw, 2008).

Although the overall relationship between household development and designating savings for development is statistically significant, it is in the opposite direction of what I hypothesized. Knowledge of migrants' household development increased prediction of use of savings by 33.3% compared to not knowing.

Due to the small number of migrants in less developed households who responded, these responses were outnumbered by responses from those from more developed households.

Nuances in responses can be better seen by distinguishing among the responses based on the number of purposes of savings designated to development. (See figure 4.2.)

**Figure 4.2: Level of Household Development by Number of Migrants Contributing to Development by Number of Purposes of Savings**



As already noted, those reporting one purpose of savings intended for development were especially common among households with less development. However, those households with the highest level of development also are the most likely to report designating purposes of savings for development.

While the relationship between these variables did not support the hypothesis, that migrants from less developed households designated that purposes of savings would go for development should not be disregarded. It may have been that the MMP sampled more developed households. If more less developed households had been surveyed, it may have shifted the relationship. Nonetheless, the reported use of savings confirms that development is in

fact an important concern for all migrants, including those from households with fewer amenities.

*Hypothesis 2: those migrants involved in sport/social clubs are more likely to remit towards development*

Although the difference in migrants’ responses to the designation of purposes of remittances and savings towards development was not what I expected, statistically significant relationships appeared. In order to determine if these associations were influenced by migrant involvement with hometown associations, which have started to focus more on development-related philanthropic giving, I tested the second hypothesis.

First, I analyzed intended remittance use by level of household development, controlling for participation in a sports organization. (See output in Appendix B, table B.1.) The findings indicate that more migrants who *did not* participate in a sports organization designated purposes of remittances for development. Those migrants without ties to sports organizations who designated purposes of remittances towards development also were those from less developed households, specifically those with “low development.” Few of the relationships, though, were statistically significant. (See also table 4.6.)<sup>14</sup>

**Table 4.6: Level of Household Development by Designation of Purposes of Remittances controlling for Participation in a Sports Organization**

Relations: Participated in sports organization		Value
Yes	Pearson Chi-Square	13.321 <sup>b</sup>
		(482)
No	Pearson Chi-Square	160.002 <sup>c***</sup>
		(5565)
Unknown	Pearson Chi-Square	2.899 <sup>d**</sup>

<sup>14</sup> Due to low cell frequencies in the chi-squares for relationships when control variables were introduced, complete confidence cannot be placed in the reliability of the results.

	(100)
Total	(6147)

b. 10 cells (62.5%) have expected count less than 5.  
The minimum expected count is .11.

c. 15 cells (50.0%) have expected count less than 5.  
The minimum expected count is .00.

d. 1 cells (25.0%) have expected count less than 5.  
The minimum expected count is 2.00.

\*\*\*Statistically significant at  $p \leq .05$

\*\*Statistically significant at  $p \leq 0.1$

Analysis with this same control was repeated with savings as the dependent variable (see table 4.7). Again, more migrants from less developed households designated purposes of savings for development than remittances and the statistically significant positive association remained. More of these migrants were not members of sports clubs. Migrants, especially those from lesser developed households, designated purposes of savings towards development but did not participate in sports clubs. The relationship between household development and designating purposes of savings to development controlling for sports club membership was statistically significant, though not in the hypothesized direction. (See Appendix B, table B.2.)

**Table 4.7: Level of Household Development by Designation of Purposes of Savings controlling for Participation in a Sports Organization**

Relations: Participated in sports organization		Value
Yes	Pearson Chi-Square	57.857 <sup>b***</sup>
	Somers' d	0.186 <sup>***</sup> (365)
No	Pearson Chi-Square	435.678 <sup>c***</sup>
	Somers' d	0.334 <sup>***</sup> (5202)
Unknown	Pearson Chi-Square	29.574 <sup>d***</sup>
	Somers' d	0.355 (127)
Total		5694

- b. 20 cells (66.7%) have expected count less than 5. The minimum expected count is .03.
- c. 12 cells (33.3%) have expected count less than 5. The minimum expected count is .18.
- d. 16 cells (80.0%) have expected count less than 5. The minimum expected count is .16.

\*\*\*Statistically significant at  $p \leq .05$

A second control variable tapped whether respondents participated in a social organization. (See Appendix B, table B.3.) Like participation in sports organizations, migrant participation in social organizations did not positively affect migrant propensity to designate purposes of remittances towards development. In fact, those migrants from less developed households who designated purposes of remittances for development more frequently responded that they did not participate in a social organization. The relationship between household development and designating remittances for development purposes remained positive and statistically significant after controlling for participation in social organizations (see table 4.8).

**Table 4.8: Level of Household Development by Designation of Purposes of Remittances controlling for Participation in a Social Organization**

Relations: Participated in social organization		Value
Yes	Pearson Chi-Square	24.487 <sup>b***</sup>
	Somers' d	0.650 <sup>***</sup>
		(417)
No	Pearson Chi-Square	155.308 <sup>c***</sup>
	Somers' d	0.235 <sup>***</sup>
		(5606)
Unknown	Pearson Chi-Square	.812 <sup>d</sup>
	Somers' d	-0.056
		(122)
Total	Total	6145

b. 1 cells (16.7%) have expected count less than 5. The minimum expected count is .84.

- c. 14 cells (46.7%) have expected count less than 5.  
The minimum expected count is .00.
- d. 1 cells (25.0%) have expected count less than 5.  
The minimum expected count is 3.62.

---

\*\*\*Statistically significant at  $p \leq .05$

For those migrants involved in social organizations, knowledge of the level of development in a migrant’s household increased the ability to predict the number of reported remittance purposes by 65%. When one looks at those who did not participate in social organizations, when one knows their level of household development, prediction of purposes of remittance increases by 23.5%.

A similar analysis was performed with savings as the dependent variable. As already seen, migrants from less developed households were more likely to designate purposes of savings for development than they did for remittances. Yet, participation in social organizations does not have as strong of an impact on the propensity of migrants to designate savings for development purposes as it did for remittances. More migrants from less developed households who *do not* participate in social organizations designated purposes of savings towards development. (See table B.4 in Appendix B). The relationship remains statistically significant when the control variable is included. (See table 4.9.)

**Table 4.9: Level of Household development by Designation of Purposes of Savings controlling for Participation in a Social Organization**

Relations: Participated in social Organization	Value
Yes	Pearson Chi-Square 49.147 <sup>b***</sup>
	Somers' d 0.108 <sup>***</sup> (339)
No	Pearson Chi-Square 463.055 <sup>c***</sup>
	Somers' d 0.343 <sup>***</sup> (5215)
Unknown	Pearson Chi-Square 32.924 <sup>d***</sup>

Somers' d		0.307*** (140)
Total	Total	5694

b. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .05.

c. 11 cells (30.6%) have expected count less than 5. The minimum expected count is .18.

d. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .14.

---

\*\*\*Statistically significant at  $p \leq .05$

For those migrants involved in social organizations, knowledge of the level of development in a migrant's household increases the ability to predict the number of purposes for savings by 10.8%. By comparison, knowing household development level increases one's ability to predict the number of purposes listed by those not involved in social clubs by 34.3%.

#### *Additional controls*

After testing both hypotheses, I also explored other possible factors. Two factors I thought might be important in understanding the relationship between household development and remittance use were the community the survey was administered in and the year the survey was conducted. Descriptive factors such as the size of the town in which a migrant lived and other possible push-pull factors may have influenced remittance use. Both variables were used as controls in examining the relationships between remittance/saving use and household development levels.

The first analysis examined how migrants in different communities chose to use remittances based on levels of household development. Most patterns were similar to those previously seen, with those migrants in households with the most amenities designating more purposes of remittances for development. (See Appendix B, table B.5.) The relationship was

statistically significant at  $p < .1$  in six communities: 3, 6, 17, 25, 97, and 107. Except for communities 25 and 97, in which the opposite pattern appeared, migrants with higher levels of household development designated more purposes. (See table 4.10.)<sup>15</sup>

**Table 4.10: Level of Household Development by Designation of Purposes of Remittances controlling for Community**

Community Number		Value
3	Pearson Chi-Square	17.550 <sup>b***</sup>
	Somers' d	0.048 (390)
6	Pearson Chi-Square	19.460 <sup>c***</sup>
	Somers' d	0.146 <sup>***</sup> (273)
17	Pearson Chi-Square	10.124 <sup>e***</sup>
	Somers' d	0.077 <sup>***</sup> (557)
25	Pearson Chi-Square	12.150 <sup>g***</sup>
	Somers' d	-0.250 (25)
97	Pearson Chi-Square	38.163 <sup>l***</sup>
	Somers' d	-0.114 <sup>***</sup> (2448)
107	Pearson Chi-Square	5.386 <sup>n***</sup>
	Somers' d	0.481 <sup>***</sup> (166)
Total		6150

b. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .20.

c. 9 cells (60.0%) have expected count less than 5. The minimum expected count is .12.

e. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .58.

g. 8 cells (88.9%) have expected count less than 5. The minimum expected count is .32.

l. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.36.

n. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .47.

<sup>15</sup> Due to low cell frequencies in the chi-squares for relationships when control variables were introduced, complete confidence cannot be placed in the reliability of the results.

To better understand the patterns in communities with statistically significant findings, I examined the community descriptors found in table 3.1. The majority of communities surveyed in Jalisco were pueblos with 2,500 to 10,000 inhabitants, then mid-sized cities with 10,000 to 100,000 inhabitants, followed by ranchos, with fewer than 2,500 inhabitants; metropolitan settings with over 100,000 inhabitants made up the fewest number of surveyed communities.<sup>16</sup> These descriptors help illuminate possible migration patterns in these communities. Pueblos are small communities, though they may have more opportunities than rancho-sized communities; here, pueblos included migrants in households with both high and low levels of development designating purposes of remittances to development. All other communities—ranchos, mid-sized cities and metropolitan settings—have more migrants with more developed households designating purposes of remittances for development. Although this makes sense for ranchos, which probably have lower levels of development than other communities, allowing only those with some wealth the ability to migrate, it is striking that the only communities with migrants from less developed homes were pueblos. Perhaps in these towns, communities have a balance between tight-knit and economically advantaged households, making it financially possible for some to migrate while also bringing relative deprivation into play as a catalyst for migration.

However, neither community 25 nor 97 is a pueblo: community 25 is rancho-sized and community 97 is mid-sized. The size of community 25 suggests that development is important to those migrants from less developed households in a smaller community. It also reflects the close-knit community that Douglas Massey suggests will give migrants strong ties to those friends and family members at home, remitting money for previously discussed purposes

---

<sup>16</sup> Only 18 communities had valid data for the variables examined in the crosstabulation, which is why the total number of communities does not total the 21 communities surveyed in Jalisco.

(Massey, 1990). However, the association for this community is not statistically significant. The directional measure for community 97, though, is statistically significant, ( $p > 0.04$ ). However, the negative relationship is quite weak (Somers'  $d = -0.114$ ), and it is difficult to see evidence of less developed households designating more purposes of remittances to development.

As was seen in the original bivariate analysis with use of savings as the dependent variable, migrants designated more purposes of savings for using on development. When controlling for community (see Appendix B, table B.6) the relationships between household development status and numbers of designated purposes of savings are statistically significant for communities 6, 7, 17, 20, 25, 28, 57, 97, 98, 107, and 122 (see also table 4.11). These communities represent a mix of community sizes with six pueblos, four mid-sized cities, and one rancho. Most have a pattern of migrants with higher levels of household development designating more purposes of savings toward development. However, there are some other patterns, such as that in community 25, where migrants in less developed households reported several development-related purposes. Again, this reflects the connection Massey makes to tight-knit communities and migrant's remittance patterns (Massey, 1990). In community 21, though it is not statistically significant, migrants from less developed households designate more purposes for development than do those in the most developed houses. Both communities are ranchos, small communities in which the positive effects of migrant remittances perhaps are more easily noticed by other migrants.

**Table 4.11: Level of Household Development by Designation of Purposes of Savings controlling for Community**

Community Number		Value
6	Pearson Chi-Square	41.490 <sup>c***</sup>
	Somers' d	0.109 <sup>**</sup>
		(234)
	Pearson Chi-Square	25.575 <sup>d***</sup>

7	Somers' d	-0.150 <sup>***</sup> (157)
17	Pearson Chi-Square Somers' d	51.965 <sup>e***</sup> 0.078 <sup>**</sup> (723)
20	Pearson Chi-Square Somers' d	16.820 <sup>f***</sup> 0.186 <sup>***</sup> (233)
25	Pearson Chi-Square Somers' d	6.579 <sup>k**</sup> 0.009 (29)
28	Pearson Chi-Square Somers' d	10.346 <sup>l***</sup> -0.046 (216)
57	Pearson Chi-Square Somers' d	7.113 <sup>m**</sup> 0.103 (249)
97	Pearson Chi-Square Somers' d	129.458 <sup>o***</sup> 0.263 <sup>***</sup> (1558)
98	Pearson Chi-Square Somers' d	14.982 <sup>p***</sup> 0.300 <sup>***</sup> (614)
107	Pearson Chi-Square Somers' d	6.910 <sup>r**</sup> 0.348 <sup>***</sup> (176)
122	Pearson Chi-Square Somers' d	7.183 <sup>t**</sup> -0.120 (112)
Total		5696

c. 11 cells (55.0%) have expected count less than 5.  
The minimum expected count is .21.

d. 6 cells (50.0%) have expected count less than 5.  
The minimum expected count is .31.

e. 5 cells (31.2%) have expected count less than 5.  
The minimum expected count is .45.

f. 1 cells (12.5%) have expected count less than 5. The  
minimum expected count is 3.73.

- k. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .83.
- l. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .93.
- m. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.24.
- o. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.56.
- p. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.30.
- r. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .41.
- t. 5 cells (62.5%) have expected count less than 5. The minimum expected count is .14.

---

\*\*\*Statistically significant at  $p \leq .05$

\*\*Statistically significant at  $p \leq 0.1$

Communities 6, 7, 17, 20, 97, 98, and 107 also had statistically significant measures of association. While almost all of these measures are positive, supporting a relationship in the opposite direction of that hypothesized, community 7 has a weak negative value. Here, those from slightly less developed households find it important to designate purposes of savings towards development (see Appendix B, table B.6). That community 7 is a pueblo may mean that migrants in this community are more aware of the development levels in their community, and this relative deprivation prompts them to designate savings for a range of development purposes (Massey, 1990). Worth noting as well, community 7 had a statistically significant, weak positive Somers' d with remittances as the dependent variable. So while migrants in this community with more developed households were slightly more likely to designate a larger number of purposes for development, those with less developed households were more likely to designate more purposes for savings. Again, that savings may be viewed as a safer way to transfer funds may in part explain this difference.

*Year*

The relationships between remittances or savings and levels of household development also were examined by the year the survey was administered. By controlling for the year of the survey, possible influences associated with other time-dependent factors, such as the state of the economy in Mexico or the United States that could affect migration patterns could be taken into account. (See Appendix B, table B.7.)

Those communities surveyed at the later end of the Mexican Migration Project, from 2002-2008, report more purposes for designating remittances to development.

**Table 4.12: Level of Household Development by Designation of Purposes of Remittances controlling for Year**

Year of survey		Value
1988	Pearson Chi-Square	21.601 <sup>b***</sup>
	Somers' d	0.057 <sup>***</sup> (698)
1991	Pearson Chi-Square	12.085 <sup>d***</sup>
	Somers' d	0.090 <sup>***</sup> (489)
1992	Pearson Chi-Square	14.803 <sup>e***</sup>
	Somers' d	0.077 (267)
2003	Pearson Chi-Square	18.491 <sup>h***</sup>
	Somers' d	-0.131 <sup>***</sup> (2957)
2004	Pearson Chi-Square	5.386 <sup>i**</sup>
	Somers' d	0.481 <sup>***</sup> (166)
Total		6151

b. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .03.

d. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .66.

e. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .15.

- h. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .02.
- i. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .47.

---

\*\*\*Statistically significant at  $p \leq .05$

\*\*Statistically significant at  $p \leq 0.1$

Relationships between household development and numbers of designated development-related purposes of remittances are statistically significant in 1988, 1991, 1992, 2003, and 2004 (see table 4.12).

In years with statistically significant measures of association, the relationships were positive in all years but 2003. The communities surveyed in 2003 were 97, 98, and 99, two mid-sized cities and a rancho. Looking at this year, one notable pattern is the higher number of migrants in the category of “Developed” with four basic household amenities that designated two purposes of remittances toward development rather than one purpose. Both communities 97 and 98 had statistically significant, negative relationships between household development and use of both remittances and savings.

Again controlling for year, the test was repeated with savings as the dependent variable. (See Appendix B, table B.8.) More migrants designated more purposes of savings for development than they did remittances. This is especially noticeable in the earlier years of the survey, from 1988-1992, when migrants did not designate as many purposes for remittances to development as they did in the later years. Although this could be a result of the survey questions used by the Mexican Migration Project during this time period, it also could reflect greater trust over time in transnational money wiring, while savings always have been a trusted method of bringing money back to migrants’ hometowns.

**Table 4.13: Level of Household Development by Designation of Purposes of Savings controlling for Year**

Year of survey	Value
----------------	-------

1982	Pearson Chi-Square Somers' d	36.514 <sup>b***</sup> -0.117 <sup>***</sup> (561)
1988	Pearson Chi-Square Somers' d	53.533 <sup>c***</sup> 0.046 (677)
1991	Pearson Chi-Square Somers' d	50.430 <sup>e***</sup> 0.137 <sup>***</sup> (605)
1992	Pearson Chi-Square Somers' d	254.853 <sup>f***</sup> -0.646 <sup>***</sup> (361)
1998	Pearson Chi-Square Somers' d	6.540 <sup>g**</sup> 0.095 (258)
2003	Pearson Chi-Square Somers' d	167.344 <sup>i***</sup> 0.161 <sup>***</sup> (2209)
2004	Pearson Chi-Square Somers' d	6.910 <sup>j**</sup> 0.348 <sup>***</sup> (176)
2008	Pearson Chi-Square Somers' d	10.756 <sup>l**</sup> -0.494 <sup>***</sup> (318)
Total		5698

a. 11 cells (30.6%) have expected count less than 5. The minimum expected count is .26.

b. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.32.

c. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .03.

e. 7 cells (43.8%) have expected count less than 5. The minimum expected count is .54.

f. 16 cells (66.7%) have expected count less than 5. The minimum expected count is .06.

g. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.20.

i. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .38.

j. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .41.

l. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .05.

---

\*\*\*Statistically significant at  $p \leq .05$

\*\*Statistically significant at  $p \leq 0.1$

Relationships between household development and the numbers of purposes of savings designated for development were statistically significant in 1982, 1988, 1991, 1992, 1998, 2003, 2004, and 2008 (see table 4.13). The majority of these years have a strong pattern of those migrants in more developed households designating more purposes for using savings for development, with small discrepancies in this pattern in years 1982 and 1992. In 1982, those migrants who designated more purposes for development were those in “highly developed” households with four amenities, while those “developed” households with all five amenities designated far fewer purposes for development. Those communities that were surveyed in 1982 were 20, a pueblo; 21, a rancho; and 23, a mid-sized city. When community was used as a control, community number 20 was the only one with statistically significant findings. Somers’  $d$  also was statistically significant in community 21, and the relationship was negative in 1982.

In 1992, there was also irregularity in the pattern of purposes of savings designated towards development. In this year, migrants from households with “low development,” with only one amenity, stated they intended four purposes for savings to be directed toward development.

Years where the development-savings relationship was statistically significant were 1982, 1992, and 2008. In 1982, the Somers’  $d$  is not as strong as the other two years. The measures for 1992 and 2008 were  $-.646$  and  $-.494$ , respectively. In 2008, 100% of those respondents in “highly developed” households responded that they would designate two purposes of savings for development. In contrast with the other respondents, who were all from “developed” households, these responses were probably enough to create the strong negative association.

## *Conclusion*

The first hypothesis did not fare well when tested using the Mexican Migration Project data. Those migrants in less developed households did not designate more purposes for using remittances or savings in development than those in households with more amenities. The findings for the second hypothesis were more complicated. Involvement in a sport organization was not associated with more purposes for remittances designated to development, though it did influence more purposes for savings to be designated for development. However, those migrants designating savings remained those from more developed households. Migrants who participated in a social organization influenced the numbers of development-related purposes for both remittances and savings. This is especially true for participants in a social organization who designated purposes for remittances to be used for development. Ability to predict the numbers of development-related purposes for remittances of those migrants in less developed households with involvement in a social organization increased 65% compared to similar households without such participation.

The other controls used in the analysis, community and year, suggested stronger patterns in certain communities and time periods. However, no specific community size evidently influenced the relationships between household development and numbers of purposes designated for using remittances/savings for development. Still, this chapter has provided support for social network theory by showing statistically significant outcomes for those migrants who participate in forms of hometown associations designating more purposes for remittances and savings to be used for development; this participation amplifies the tendency of those from more developed households to designate money toward development.

## **Chapter 5: Conclusion**

This thesis examined two hypotheses about the relationships between household development and remittances based on the complementary theories of relative deprivation and social networks. The first hypothesis took into account the theory of relative deprivation as a catalyst for migration (Stark & Taylor, 1991), while the second reflected scholarly research on the influence of social networks such as hometown associations as an important influence on migrants in receiving countries. These hometown associations provide a familiar community in the receiving country, and associations may influence the designation of migrants' remittances and savings due to their increasing philanthropic nature (Alarcón, 2002; Burgess, 2005; Lowell & de la Garza, 2002; Rivera-Salgado, Bada, & Escala-Rabadán, 2006). The hypotheses were explored in Jalisco, a long-time sending state, using data from the Mexican Migration Project.

The first hypothesis posited that those migrants with less developed households would be more likely to designate money for development purposes. I found little support for this expectation. Those migrants in less developed households were not the ones who designated more purposes of remittances or savings for development purposes. Instead, migrants from more developed households designated more purposes of remittances or savings for development purposes. The results for the second hypothesis, which proposed that the tendency of migrants to designate money to development purposes would be stronger if they participated in a form of a hometown association, were multifaceted. Two forms of hometown associations, sport and social clubs, were examined. Involvement in a sport organization did not influence remittances to be designated towards development, though it did influence savings to be designated for development purposes. In contrast, migrant participation in a social organization was associated with both remittances and savings being designated for development purposes.

These results do not support the theory of relative deprivation viewing development as a catalyst for migration. However, as Chapter One mentioned, the Mexican Migration Project does not repeat surveys in the same communities. Since the surveys are conducted in different communities at different times, the flow of remittance money cannot be tracked in communities across a period of time. Instead, the MMP data are made up of multiple cross-sectional surveys, so the patterns of remittances can only be observed through the differences in communities based on the presence of HTAs and the current associations between remittance patterns and development. Due to this, the lack of support for development as a significant form of relative deprivation should not be taken as conclusive.

Regardless of the lack of support for the first hypothesis, the results of the second hypothesis strengthen social network theory by shedding light on the interconnectivity of small communities. These communities seem to promote a sense of responsibility in migrants for the home community. This interconnectivity was seen by migrants from less developed households in small communities remitting monies for development-related purposes. Not only does this speak to the tight-knit communities that can more successfully hold migrants accountable for their actions, it also draws attention to the fact that small communities make it easier to identify household disparities between community members. While this strengthens social network theory, the possibility that disparities between community members could be driving remittance uses again underscores that the lack of support for the first hypothesis should not be viewed conclusively.

### *Future Directions*

This thesis should serve as a stepping stone for future research in this area. At the individual level, it would be beneficial to analyze the monetary amount of savings and remittances in comparison to the number of intended purposes to determine if this also factors into development decisions. Also, though I focused on the individual level of analysis, analyzing the community level would provide greater scope for migrant actions, including development factors and migrant-funded community development projects. Many scholars have discussed important information that can be gathered from a broader sphere of analysis by including migrants' community assets (Katz & Stark, 1986; Massey, 1990; Stark & Taylor, 1991). Beyond data from the Mexican Migration Project, use of interviews also would contribute valuable information about the patterns seen in migrant remittance choices and involvement in hometown associations. Interviews would be a useful complement to the MMP data since they would allow me to move beyond sole use of cross-sectional survey data.

With such future directions in mind, this research can be used to expand the scope of social network theory, while providing suggestions for how relative deprivation in the new economics of migration can be analyzed further. This research reflects the strength of some kinds of hometown associations, which were shown to positively affect migrant development-related remittances and savings in Jalisco. This finding suggests that more attention should be given to hometown associations as catalysts of development. This relationship should be analyzed in other states of Mexico to determine if this relationship is confined to Jalisco or appears in other regions. Such relationships not only add to the theory of social networks, but with additional empirical support of the findings here, they can encourage further support of hometown associations by Mexican governments.

## **Bibliography**

- Adida, C. L., & Girod, D. M. (2011). Do migrants improve their hometowns? Remittances and access to public services in Mexico, 1996-2000. *Comparative political studies*, 44(1), 3–27. doi:10.1177/0010414010381073
- Alarcón, R. (2002). The development of the hometown associations in the United States and the use of social remittances in Mexico. In R. O. de la Garza & B. L. Lowell (Eds.), *Sending money home: hispanic remittances and community development* (pp. 101–124). New York: Rowman & Littlefield Publishers, Inc.
- Appendix a: sample information, summary of MMP communities. (n.d.). Mexican migration project. Retrieved from [http://mmp.opr.princeton.edu/databases/pdf%20codebooks/Appendix%20A%20-%20Sample%20Information%20\(MMP134\).pdf](http://mmp.opr.princeton.edu/databases/pdf%20codebooks/Appendix%20A%20-%20Sample%20Information%20(MMP134).pdf)
- Appendix b: place codes in Mexico and the United States. (n.d.). Mexican migration project. Retrieved from [http://mmp.opr.princeton.edu/databases/pdf%20codebooks/Appendix%20B%20-%20Places%20\(MMP134\).pdf](http://mmp.opr.princeton.edu/databases/pdf%20codebooks/Appendix%20B%20-%20Places%20(MMP134).pdf)
- Burgess, K. (2005). Migrant philanthropy and local governance. In B. J. Merz (Ed.), *New patterns for Mexico: observations on remittances, philanthropic giving, and equitable development* (pp. 99–123). Cambridge, MA: Harvard University Press.
- Cave, D. (2011, July 6). Better lives for Mexicans cut allure of going north. *The New York Times*. Retrieved February 23, 2012, from <http://www.nytimes.com/interactive/2011/07/06/world/americas/immigration.html>
- Duany, J. (2010). To send or not to send: migrant remittances in Puerto Rico, the Dominican Republic, and Mexico. *The ANNALS of the American Academy of Political and Social Science*, 630(1), 205–223. doi:10.1177/0002716210368111
- Durand, J., Massey, D. M., & Zenteno, R. M. (2001). Mexican immigration to the United States: continuities and changes. *The ANNALS of the American Academy of Political and Social Science*, 36(1), 107–127.
- Fitzgerald, D. (2008). Colonies of the little motherland: membership, space, and time in Mexican migrant hometown associations. *Comparative Studies in Society and History*, 50(1), 145–169. doi:10.1017/S001041750800008X
- Fitzgerald, D. (2009). *A nation of emigrants: how Mexico manages its migration*. Berkeley: University of California Press.
- Fox, J., & Bada, X. (2008). Migrant organization and hometown impacts in rural Mexico. *Journal of Agrarian Change*, 8(2/3), 435–461. doi:10.1111/j.1471-0366.2008.00176.x

- Goldring, L. (2002). The mexican state and transmigrant organizations: negotiating the boundaries of membership and participation. *Latin american research review*, 37(3), 55–99.
- HOUSE data file: variable list and specification. (n.d.).*Mexican migration project*. Retrieved November 1, 2010, from [http://mmp.opr.princeton.edu/databases/pdf%20codebooks/HOUSE%20Codebook%20\(MMP134\).pdf](http://mmp.opr.princeton.edu/databases/pdf%20codebooks/HOUSE%20Codebook%20(MMP134).pdf)
- Interviewer's manual. (2005). Mexican migration project. Retrieved from <http://mmp.opr.princeton.edu/databases/pdf/Interviewers%20Manual%202005.pdf>
- Katz, E., & Stark, O. (1986). Labor migration and Risk aversion in less developed countries. *journal of labor economics*, 4(1), 134–149.
- Lauby, J., & Stark, O. (1988). Individual migration as a family strategy: young women in the philippines. *Population studies*, 42(3), 473–486.
- López-Córdova, E. (2005). Globalization, migration, and development: the role of mexican migration remittances. *Economía*, 6(1), 217–256. doi:10.1353/eco.2006.0010
- Lowell, B. L., & de la Garza, R. O. (2002). A new phase in the story of remittances. In B. L. Lowell & R. O. de la Garza, (Eds.), *Sending money home: hispanic remittances and community development* (pp. 3–27). New York: Rowman & Littlefield Publishers, Inc.
- Massey, D. M. (1990). Social structures, household strategies, and the cumulative causation of migration. *Population index*, 56(1), 3–26.
- Massey, D. M., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (2006). Theories of international migration: a review and appraisal. In A. M. Messina & G. Lahav (Eds.), *The migration reader: exploring politics and policies* (pp. 34–62). Bolder: Lynne Rienner Publishers.
- Massey, D. M., & García España, F. (1987). The social process of international migration. *Science*, 237(4816), 733–738.
- Massey, D. M., Rugh, J. S., & Pren, K. A. (2010). The geography of undocumented mexican migration. *Mexican studies/estudios mexicanos*, 26(1), 129–152.
- Merz, B. J. (2005). New patterns for mexico. In B. J. Mertz (Ed.), *New patterns for mexico: observations on remittances, philanthropic giving, and equitable development* (pp. 1–9). Cambridge, MA: Harvard University Press.
- Mexican migration project. (n.d.). Retrieved November 1, 2010, from [mmp.opr.princeton.edu](http://mmp.opr.princeton.edu)
- MIG data file: variable list and specification. (n.d.). *Mexican migration project*. Retrieved November 1, 2010, from [http://mmp.opr.princeton.edu/databases/pdf%20codebooks/MIG%20Codebook%20\(MMP134\).pdf](http://mmp.opr.princeton.edu/databases/pdf%20codebooks/MIG%20Codebook%20(MMP134).pdf)

- MIGOTHER data file: variable list and specification. (n.d.). *Mexican migration project*. Retrieved November 1, 2010, from [http://mmp.opr.princeton.edu/databases/pdf%20codebooks/MIGOTHER%20Codebook%20\(MMP134\).pdf](http://mmp.opr.princeton.edu/databases/pdf%20codebooks/MIGOTHER%20Codebook%20(MMP134).pdf)
- Mooney, M. (2004). Migrants' social capital and investing remittances in Mexico. In J. Durand & D. M. Massey (Eds.), *Crossing the border: research from the Mexican migration project* (pp. 45–62). New York: Russell Sage Foundation.
- Orozco, M., & Garcia-Zanello, E. (2009). Hometown associations: transnationalism, philanthropy, and development. *Brown journal of world affairs*, 15(2), 57–73.
- Orozco, M., & Lapointe, M. (2004). Mexican hometown associations and development opportunities. *Journal of international affairs*, 57(2), 31–49.
- Orozco, M., & Welle, K. (2005). Hometown associations and development: ownership, correspondence, sustainability, and replicability. In B. J. Mertz (Ed.), *New patterns for Mexico: Observations on remittances, philanthropic giving, and equitable development* (pp. 157–179). Cambridge, MA: Harvard University Press.
- Passel, J., & Cohn, D. (2011). *Unauthorized immigrant population: national and state trends, 2010* (pp. 1–8). Pew Hispanic Center. Retrieved from <http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-national-and-state-trends-2010/>
- Pew Hispanic Center. (2011). *The Mexican-American boom: births overtake immigration* (pp. 1–5). Retrieved from <http://www.pewhispanic.org/2011/07/14/the-mexican-american-boom-births-overtake-immigration/>
- Pren, K. (2012, February 27). RE: data discrepancy- MIG134.
- Rivera-Salgado, G., Bada, X., & Escala-Rabadán, L. (2006). Mexican migrant civic and political participation in the U.S.: the case of hometown associations in Los Angeles and Chicago. *NORTEAMÉRICA*, 1(2), 127–172.
- Rose, S., & Shaw, R. (2008). The gamble: circular Mexican migration and the return on remittances. *Mexican studies/estudios mexicanos*, 24(1), 79–111.
- Sedesol. (n.d.). Social Development Secretariat. Retrieved from <http://www.sedesol.gob.mx/>
- Stark, O., & Lavhari, D. (1982). On migration and risk in LDCs. *Economic development and cultural change*, 31(1), 191–196.
- Stark, O., & Taylor, J. E. (1991). Migration incentives, migration types: the role of relative deprivation. *The economic journal*, 101(408), 1163–1178.

The mexican migration project weights. (n.d.). Mexican migration project. Retrieved from <http://mmp.opr.princeton.edu/databases/pdf%20codebooks/MMP%20and%20LAMP%20Weights.pdf>

Toderó, M. P. (1969). Urban job expansion, induced migration and rising unemployment in less developed countries. *American economic review*, 59, 138–148.

## Appendix A: Variables and Coding

### I. Original Variables (MMP)

COMMUN- (nominal) Community number

**Community number, see table 3.1 for codes and descriptions**

ELECTRIC- (nominal) Amenities: Electricity in the household?

**Amenities: Electricity in household?**

1	Yes
2	No
9999	Unknown

HHNUM- (ordinal) Household number within community

**Household number (within community)**

nnnn	Number of household
------	---------------------

HOUSEHOLD\_DEVELOPMENT- (ordinal) Level of household development

**Level of household development (additive index of amenities)**

0	No Development
1	Low Development
2	Low Development
3	Developed
4	Developed
5	Highly Developed

REFRIG- (nominal) Amenities: Refrigerator in the household?

**Amenities: Refrigerator in household?**

1	Yes
2	No
9999	Unknown

REMIT1-REMIT5- (nominal) Finances: Purpose of remittances?

**Finances: Purpose of remittance (1-5)**

1	Food and maintenance
2	Construction or repair of house
3	Purchase of house or lot
4	Purchase of vehicle
5	Purchase of tools
6	Purchase of livestock
7	Purchase of agricultural inputs
8	Purchase of consumer goods
9	Start/expand a business
10	Education expenses
11	Health expenses
12	Debt payment

- 13 Finance a special event
- 14 Recreation/entertainment
- 15 Savings
- 16 Other
- 8888 N/A (no remittance/ no additional remittance)
- 9999 Unknown

SAVINGS1-SAVINGS5- (nominal) Finances: Purpose of savings?

**Finances: Purpose of savings (1-5)**

- 1 Food and maintenance
- 2 Construction or repair of house
- 3 Purchase of house or lot
- 4 Purchase of vehicle
- 5 Purchase of tools
- 6 Purchase of livestock
- 7 Purchase of agricultural inputs
- 8 Purchase of consumer goods
- 9 Start/expand a business
- 10 Education expenses
- 11 Health expenses
- 12 Debt payment
- 13 Finance a special event
- 14 Recreation/entertainment
- 15 Savings
- 16 Other
- 8888 N/A (no remittance/ no additional remittance)
- 9999 Unknown

SEWER- (nominal) Amenities: Sewage in the household?

**Amenities: Sewage in household?**

- 1 Yes
- 2 No
- 9999 Unknown

SOCIAL- (nominal) Relations: Participated in a social organization?

**Relations: Participated in a social organization?**

- 1 Yes
- 2 No
- 9999 Unknown

SPORT- (nominal) Relations: Participated in a sports organization?

**Relations: Participated in a sports organization?**

- 1 Yes
- 2 No
- 9999 Unknown

STOVE- (nominal) Amenities: Stove in the household?

**Amenities: Stove in household?**

1 Yes  
2 No  
9999 Unknown

SURVEYYR- (interval/ratio) Year of survey

**Year of survey**

yyyy Year (See table 3.1 for survey periods)

SURVEYPL- (nominal) Place of survey

**Place of survey**

1 Home country  
2 US community

WATER- (nominal) Amenities: Running water in the household?

**Amenities: Running water in household?**

1 Yes  
2 No  
9999 Unknown

WEIGHT- Sample specific weight

**Weight**

nnn.nn Weight

II. Variables Used in Statistical Analyses

COMMUN- (nominal) Community number

**Community number, see table 3.1 for codes and descriptions**

ELECTRIC\_DUMMY- (nominal) Dummy: Electric

**Amenities: Electricity in household?**

1 Yes  
0 No

HHNUM- (ordinal) Household number within community

**Household number (within community)**

nnnn Number of household

REFRIG\_DUMMY- (nominal) Dummy: Refrig

**Amenities: Refrigerator in household?**

1 Yes  
0 No

REMIT\_ADD- (ordinal) Remittances designated to development purposes

**Number of remittances designated to development purposes**

- 0 Remittances designated to consumption
- 1 One remittance designated to development
- 2 Two remittances designated to development
- 3 Three remittances designated to development
- 4 Four remittances designated to development
- 5 Five remittances designated to development

SAVINGS\_ADD- (ordinal) Savings designated to development purposes

**Number of savings designated to development purposes**

- 0 Savings designated to consumption
- 1 One saving designated to development
- 2 Two savings designated to development
- 3 Three savings designated to development
- 4 Four savings designated to development
- 5 Five savings designated to development

SEWER\_DUMMY- (nominal) Dummy: Sewer

**Amenities: Sewage in household?**

- 1 Yes
- 0 No

SOCIAL- (nominal) Relations: Participated in a social organization?

**Relations: Participated in a social organization?**

- 1 Yes
- 2 No
- 9999 Unknown

SPORT- (nominal) Relations: Participated in a sports organization?

**Relations: Participated in a sports organization?**

- 1 Yes
- 2 No
- 9999 Unknown

STOVE\_DUMMY- (nominal) Dummy: Stove

**Amenities: Stove in household?**

- 1 Yes
- 0 No

SURVEYYR- (interval/ratio) Year of survey

**Year of survey**

- yyyy Year (See table 3.1 for survey periods)

SURVEYPL- (nominal) Place of survey

**Place of survey**

- 1 Home country
- 2 US community

WATER\_DUMMY- (nominal) Dummy: Water

**Amenities: Water in household?**

- 1 Yes
- 0 No

WEIGHT- Sample specific weight

**Weight**

nnn.nn Weight

## Appendix B: Additional Output from Findings

Table B.1: Purposes of Remittances by Household Development by Participation in a Sports Organization

**Purposes of Remittances by Household Development by Participation in a Sports Organization**

Relations: Participated in sports organization		Level of Household Development				Total	
		Low Development	Low Development	Developed	Developed		Highly Developed
Yes	1 Designation towards Development		100.00%	100.00%	71.00%	50.10%	52.30%
			(4)	(4)	(22)	(222)	(252)
	2 Designations towards Development		0.00%	0.00%	29.00%	43.30%	41.70%
			(0)	(0)	(9)	(192)	(201)
	3 Designations towards Development		0.00%	0.00%	0.00%	3.60%	3.30%
		(0)	(0)	(0)	(16)	(16)	
	4 Designations towards Development		0.00%	0.00%	0.00%	2.90%	2.70%
			(0)	(0)	(0)	(13)	(13)
	Total		100.00%	100.00%	100.00%	100.00%	100.00%
			(4)	(4)	(31)	(443)	(482)
No	0 Designation towards Consumption	0.00%	0.00%	0.00%	2.40%	1.90%	1.90%
		(0)	(0)	(0)	(13)	(92)	(105)
	1 Designation towards Development	100.00%	93.80%	93.30%	70.30%	50.50%	53.30%
		(4)	(30)	(70)	(385)	(2477)	(2966)
	2 Designations towards Development	0.00%	6.20%	6.70%	18.80%	29.00%	27.50%
		(0)	(2)	(5)	(103)	(1423)	(1533)
	3 Designations towards Development	0.00%	0.00%	0.00%	7.80%	16.00%	14.80%
		(0)	(0)	(0)	(43)	(783)	(826)
	4 Designations towards Development	0.00%	0.00%	0.00%	0.70%	2.60%	2.40%
	(0)	(0)	(0)	(4)	(127)	(131)	
	5 Designations towards Development	0.00%	0.00%	0.00%	0.00%	0.10%	0.10%
		(0)	(0)	(0)	(0)	(4)	(4)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(32)	(75)	(548)	(4906)	(5565)

Unknown	1 Designation towards Development				100.00%	89.30%	92.00%
					(25)	(67)	(92)
	2 Designations towards Development				0.00%	10.70%	8.00%
					(0)	(8)	(8)
	Total				100.00%	100.00%	100.00%
							%
	0 Designation towards Consumption	0.00%	0.00%	0.00%	2.20%	1.70%	1.70%
		(0)	(0)	(0)	(13)	(92)	(105)
	1 Designation towards Development	100.00%	94.40%	93.70%	71.50%	51.00%	53.80%
		(4)	(34)	(74)	(432)	(2766)	(3310)
	2 Designations towards Development	0.00%	5.60%	6.30%	18.50%	29.90%	28.30%
		(0)	(2)	(5)	(112)	(1623)	(1742)
Total	3 Designations towards Development	0.00%	0.00%	0.00%	7.10%	14.70%	13.70%
		(0)	(0)	(0)	(43)	(799)	(842)
	4 Designations towards Development	0.00%	0.00%	0.00%	0.70%	2.60%	2.30%
		(0)	(0)	(0)	(4)	(140)	(144)
	5 Designations towards Development	0.00%	0.00%	0.00%	0.00%	0.10%	0.10%
		(0)	(0)	(0)	(0)	(4)	(4)
							100.00%
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	%
		(4)	(36)	(79)	(604)	(5424)	(6147)

Table B.2: Purposes of Savings by Household Development by Participation in a Sports Organization

**Purposes of Savings by Household Development by Participation in a Sports Organization**

Relations: Participated in a sports organization		Level of Household Development					Total	
		No Development	Low Development	Low Development	Developed	Developed		Highly Developed
Yes	0 Designation towards Consumption		0.00%	0.00%	14.30%	40.00%	21.70%	23.30%
			(0)	(0)	(4)	(24)	(57)	(85)
	1 Designation towards Development		100.00%	100.00%	85.70%	50.00%	48.30%	53.40%
			(5)	(9)	(24)	(30)	(127)	(195)
	2 Designations towards Development		0.00%	0.00%	0.00%	6.70%	18.30%	14.20%
			(0)	(0)	(0)	(4)	(48)	(52)
	3 Designations towards Development		0.00%	0.00%	0.00%	0.00%	4.20%	3.00%
		(0)	(0)	(0)	(0)	(11)	(11)	
	4 Designations towards Development		0.00%	0.00%	0.00%	0.00%	7.60%	5.50%
			(0)	(0)	(0)	(0)	(20)	(20)
	5 Designations towards Development		0.00%	0.00%	0.00%	3.30%	0.00%	0.50%
			(0)	(0)	(0)	(2)	(0)	(2)
	Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
			(5)	(9)	(28)	(60)	(263)	(365)
No	0 Designation towards Consumption	0.00%	30.00%	15.10%	28.60%	14.00%	10.10%	11.50%
		(0)	(9)	(11)	(60)	(94)	(426)	(600)
	1 Designation towards Development	100.00%	63.30%	80.80%	61.90%	59.20%	36.60%	41.40%
		(9)	(19)	(59)	(130)	(397)	(1539)	(2153)
	2 Designations towards Development	0.00%	0.00%	4.10%	6.70%	12.40%	22.00%	19.70%
	(0)	(0)	(3)	(14)	(83)	(925)	(1025)	
	3 Designations towards Development	0.00%	0.00%	0.00%	0.00%	11.30%	17.00%	15.20%
		(0)	(0)	(0)	(0)	(76)	(716)	(792)
	4 Designations towards Development	0.00%	6.70%	0.00%	1.00%	1.30%	12.20%	10.10%

		(0)	(2)	(0)	(2)	(9)	(514)	(527)
	5 Designations towards Development	0.00%	0.00%	0.00%	1.90%	1.80%	2.10%	2.00%
		(0)	(0)	(0)	(4)	(12)	(89)	(105)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(9)	(30)	(73)	(210)	(671)	(4209)	(5202)
	0 Designation towards Consumption	0.00%		0.00%	0.00%	12.10%	5.30%	6.30%
		(0)		(0)	(0)	(4)	(4)	(8)
	1 Designation towards Development	100.00%		100.00%	100.00%	63.60%	38.70%	54.30%
		(5)		(9)	(5)	(21)	(29)	(69)
Unknown	2 Designations towards Development	0.00%		0.00%	0.00%	24.20%	50.70%	36.20%
		(0)		(0)	(0)	(8)	(38)	(46)
	3 Designations towards Development	0.00%		0.00%	0.00%	0.00%	5.30%	3.10%
		(0)		(0)	(0)	(0)	(4)	(4)
	Total	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%
		(5)		(9)	(5)	(33)	(75)	(127)
	0 Designation towards Consumption	0.00%	25.70%	12.10%	26.30%	16.00%	10.70%	12.20%
		(0)	(9)	(11)	(64)	(122)	(487)	(693)
	1 Designation towards Development	100.00%	68.60%	84.60%	65.40%	58.60%	37.30%	42.40%
		(14)	(24)	(77)	(159)	(448)	(1695)	(2417)
	2 Designations towards Development	0.00%	0.00%	3.30%	5.80%	12.40%	22.20%	19.70%
		(0)	(0)	(3)	(14)	(95)	(1011)	(1123)
Total	3 Designations towards Development	0.00%	0.00%	0.00%	0.00%	9.90%	16.10%	14.20%
		(0)	(0)	(0)	(0)	(76)	(731)	(807)
	4 Designations towards Development	0.00%	5.70%	0.00%	0.80%	1.20%	11.70%	9.60%
		(0)	(2)	(0)	(2)	(9)	(534)	(547)
	5 Designations towards Development	0.00%	0.00%	0.00%	1.60%	1.80%	2.00%	1.90%
		(0)	(0)	(0)	(4)	(14)	(89)	(107)

Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	(14)	(35)	(91)	(243)	(764)	(4547)	(5694)

Table B.3: Purposes of Remittances by Household Development by Participation in a Social Organization

**Purposes of Remittances by Household Development by Participation in a Social Organization**

Relations: Participated in social organization		Household Development					Total
		Low Development	Low Development	Developed	Developed	Highly Developed	
Yes	1 Designation towards Development				100.00%	35.00%	37.20%
					(14)	(141)	(155)
	2 Designations towards Development				0.00%	58.80%	56.80%
					(0)	(237)	(237)
	3 Designations towards Development				0.00%	6.20%	6.00%
					(0)	(25)	(25)
	<b>Total</b>				100.00%	100.00%	100.00%
					(14)	(403)	(417)
	0 Designation towards Consumption	0.00%	0.00%	0.00%	2.30%	1.90%	1.90%
		(0)	(0)	(0)	(13)	(92)	(105)
No	1 Designation towards Development	100.00%	94.40%	93.70%	70.00%	51.60%	54.30%
		(4)	(34)	(74)	(389)	(2543)	(3044)
	2 Designations towards Development	0.00%	5.60%	6.30%	19.20%	27.90%	26.60%
		(0)	(2)	(5)	(107)	(1378)	(1492)
	3 Designations towards Development	0.00%	0.00%	0.00%	7.70%	15.70%	14.60%
		(0)	(0)	(0)	(43)	(774)	(817)
	4 Designations towards Development	0.00%	0.00%	0.00%	0.70%	2.80%	2.60%
		(0)	(0)	(0)	(4)	(140)	(144)

	5 Designations towards Development	0.00%	0.00%	0.00%	0.00%	0.10%	0.10%
		(0)	(0)	(0)	(0)	(4)	(4)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(36)	(79)	(556)	(4931)	(5606)
Unknown	1 Designation towards Development				85.30%	90.90%	89.30%
					(29)	(80)	(109)
	2 Designations towards Development				14.70%	9.10%	10.70%
					(5)	(8)	(13)
	Total				100.00%	100.00%	100.00%
					(34)	(88)	(122)
	0 Designation towards Consumption	0%	0%	0%	2.20%	1.70%	1.70%
		(0)	(0)	(0)	(13)	(92)	(105)
	1 Designation towards Development	100.00%	94.40%	93.70%	71.50%	51.00%	53.80%
		(4)	(34)	(74)	(432)	(2764)	(3308)
	2 Designations towards Development	0.00%	5.60%	6.30%	18.50%	29.90%	28.30%
		(0)	(2)	(5)	(112)	(1623)	(1742)
	Total	0.00%	0.00%	0.00%	7.10%	14.70%	13.70%
		(0)	(0)	(0)	(43)	(799)	(842)
	4 Designations towards Development	0.00%	0.00%	0.00%	0.70%	2.60%	2.30%
		(0)	(0)	(0)	(4)	(140)	(144)
	5 Designations towards Development	0.00%	0.00%	0.00%	0.00%	0.10%	0.10%
		(0)	(0)	(0)	(0)	(4)	(4)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(36)	(79)	(604)	(5422)	(6145)

Table B.4: Purposes of Savings by Household Development by Participation in a Social Organization

**Purposes of Savings by Household Development by Participation in a Social Organization**

Relations: Participated in Social Organization		Household Development					Total	
		No Development	Low Development	Low Development	Developed	Developed		Highly Developed
Yes	0 Designation towards Consumption			0.00%	0.00%	0.00%	8.40%	7.10%
				(0)	(0)	(0)	(24)	(24)
	1 Designation towards Development			100.00%	100.00%	73.90%	62.40%	66.40%
				(9)	(20)	(17)	(179)	(225)
	2 Designations towards Development			0.00%	0.00%	17.40%	16.40%	15.00%
				(0)	(0)	(4)	(47)	(51)
	3 Designations towards Development			0.00%	0.00%	0.00%	12.90%	10.90%
			(0)	(0)	(0)	(37)	(37)	
	5 Designations towards Development			0.00%	0.00%	8.70%	0.00%	0.60%
				(0)	(0)	(2)	(0)	(2)
	Total			100.00%	100.00%	100.00%	100.00%	100.00%
				(9)	(20)	(23)	(287)	(339)
No	0 Designation towards Consumption	0.00%	25.70%	14.90%	29.20%	16.90%	10.90%	12.60%
		(0)	(9)	(11)	(64)	(118)	(456)	(658)
	1 Designation towards Development	100.00%	68.60%	81.10%	61.60%	57.30%	35.60%	40.50%
		(9)	(24)	(60)	(135)	(400)	(1486)	(2114)
	2 Designations towards Development	0.00%	0.00%	4.10%	6.40%	11.90%	22.20%	19.70%
		(0)	(0)	(3)	(14)	(83)	(926)	(1026)

	3 Designations towards Development	0.00%	0.00%	0.00%	0.00%	10.90%	16.50%	14.70%
		(0)	(0)	(0)	(0)	(76)	(689)	(765)
	4 Designations towards Development	0.00%	5.70%	0.00%	0.90%	1.30%	12.80%	10.50%
		(0)	(2)	(0)	0	(9)	(534)	(547)
	5 Designations towards Development	0.00%	0.00%	0.00%	1.80%	1.70%	2.10%	2.00%
		(0)	(0)	(0)	(4)	(12)	(89)	(105)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(9)	(35)	(74)	(219)	(698)	(4180)	(5215)
	0 Designation towards Consumption	0.00%		0.00%	0.00%	9.50%	10.00%	8.60%
		(0)		(0)	(0)	(4)	(8)	(12)
	1 Designation towards Development	100.00%		100.00%	100.00%	71.40%	36.70%	55.70%
		(5)		(9)	(5)	(30)	(29)	(78)
Unknown	2 Designations towards Development	0.00%		0.00%	0.00%	19.00%	48.10%	32.90%
		(0)		(0)	(0)	(8)	(38)	(46)
	3 Designations towards Development	0.00%		0.00%	0.00%	0.00%	5.10%	2.90%
		(0)		(0)	(0)	(0)	(4)	(4)
	Total	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%
		(5)		(9)	(5)	(42)	(79)	(140)
	0 Designation towards Consumption	0.00%	25.70%	12.00%	26.20%	16.00%	10.70%	12.20%
		(0)	(9)	(11)	(64)	(122)	(488)	(694)
	1 Designation towards Development	100.00%	68.60%	84.80%	65.60%	58.60%	37.30%	42.40%
		(14)	(24)	(78)	(160)	(447)	(1694)	(2417)
Total	2 Designations towards Development	0.00%	0.00%	3.30%	5.70%	12.50%	22.20%	19.70%
		(0)	(0)	(3)	(14)	(95)	(1011)	(1123)
	3 Designations towards Development	0.00%	0.00%	0.00%	0.00%	10.00%	16.10%	14.20%

	(0)	(0)	(0)	(0)	(76)	(730)	(805)
4 Designations towards Development	0.00%	5.70%	0.00%	0.80%	1.20%	11.70%	9.60%
	(0)	(2)	(0)	(2)	(9)	(534)	(547)
5 Designations towards Development	0.00%	0.00%	0.00%	1.60%	1.80%	2.00%	1.90%
	(0)	(0)	(0)	(4)	(14)	(89)	(107)
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	(14)	(35)	(92)	(244)	(763)	(4546)	(5694)

Table B.5: Purposes of Remittances by Household Development by Community Number

**Purposes of Remittances by Household Development by Community Number**

Community Number	Household Development					Total
	Low Development	Low Development	Developed	Developed	Highly Developed	
0 Designation towards Consumption		0.00%	0.00%	2.50%	6.40%	4.60%
		(0)	(0)	(3)	(15)	(18)
1 Designation towards Development		100.00%	87.00%	88.40%	74.70%	80.50%
		(13)	(20)	(107)	(174)	(314)
2 Designations towards Development		0.00%	13.00%	6.60%	17.60%	13.30%
		(0)	(3)	(8)	(41)	(52)
3 Designations towards Development		0.00%	0.00%	2.50%	1.30%	1.50%
		(0)	(0)	(3)	(3)	(6)
Total		100.00%	100.00%	100.00%	100.00%	100.00%
		(13)	(23)	(121)	(233)	(390)
0 Designation towards Consumption	0.00%	0.00%	0.00%	3.70%	3.00%	2.90%
	(0)	(0)	(0)	(4)	(4)	(8)
1 Designation towards Development	100.00%	100.00%	100.00%	88.80%	73.90%	82.80%
	(4)	(8)	(20)	(95)	(99)	(226)

	2 Designations towards Development	0.00%	0.00%	0.00%	7.50%	23.10%	14.30%
		(0)	(0)	(0)	(8)	(31)	(39)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(8)	(20)	(107)	(134)	(273)
	0 Designation towards Consumption		0.00%	0.00%	7.70%	5.10%	5.80%
			(0)	(0)	(4)	(4)	(8)
7	1 Designation towards Development		100.00%	100.00%	92.30%	94.90%	94.30%
			(4)	(4)	(48)	(75)	(131)
	Total		100.00%	100.00%	100.00%	100.00%	100.00%
			(4)	(4)	(52)	(79)	(139)
	1 Designation towards Development		100.00%	100.00%	100.00%	91.80%	93.50%
			(9)	(27)	(80)	(405)	(521)
17	2 Designations towards Development		0.00%	0.00%	0.00%	8.20%	6.50%
			(0)	(0)	(0)	(36)	(36)
	Total		100.00%	100.00%	100.00%	100.00%	100.00%
			(9)	(27)	(80)	(441)	(557)
	1 Designation towards Development					100.00%	100.00%
24						(9)	(9)
	Total					100.00%	100.00%
						(9)	(9)
	0 Designation towards Consumption			0.00%	11.80%	0.00%	8.00%
				(0)	(2)	(0)	(2)
	1 Designation towards Development			50.00%	88.20%	100.00%	84.00%
25				(2)	(15)	(4)	(21)
	2 Designations towards Development			50.00%	0.00%	0.00%	8.00%
				(2)	(0)	(0)	(2)
	Total			100.00%	100.00%	100.00%	100.00%
				(4)	(17)	(4)	(25)

	0 Designation towards Consumption			0.00%	5.80%	5.20%
				(0)	(10)	(10)
	1 Designation towards Development			100.00%	76.70%	79.20%
				(20)	(132)	(152)
28	2 Designations towards Development			0.00%	11.60%	10.40%
				(0)	(20)	(20)
	3 Designations towards Development			0.00%	5.80%	5.20%
				(0)	(10)	(10)
	Total			100.00%	100.00%	100.00%
				(20)	(172)	(192)
	1 Designation towards Development			50.00%	34.50%	36.20%
				(16)	(90)	(106)
	2 Designations towards Development			50.00%	59.00%	58.00%
57				(16)	(154)	(170)
	3 Designations towards Development			0.00%	6.50%	5.80%
				(0)	(17)	(17)
	Total			100.00%	100.00%	100.00%
				(32)	(261)	(293)
	1 Designation towards Development	0.00%			44.40%	40.00%
		(0)			(8)	(8)
58	2 Designations towards Development	100.00%			44.40%	50.00%
		(2)			(8)	(10)
	3 Designations towards Development	0.00%			11.10%	10.00%
		(0)			(2)	(2)
	Total	100.00%			100.00%	100.00%
		(2)			(18)	(20)
91	0 Designation towards Consumption				6.00%	6.00%

					(16)	(16)
	1 Designation towards Development				29.50%	29.50%
					(79)	(79)
	2 Designations towards Development				11.60%	11.60%
					(31)	(31)
	3 Designations towards Development				29.50%	29.50%
					(79)	(79)
	4 Designations towards Development				23.50%	23.50%
					(63)	(63)
	Total				100.00%	100.00%
					(268)	(268)
	1 Designation towards Development			25.00%	43.90%	42.70%
				(38)	(1008)	(1046)
	2 Designations towards Development			50.00%	28.00%	29.30%
				(76)	(642)	(718)
97	3 Designations towards Development			25.00%	26.50%	26.40%
				(38)	(608)	(646)
	4 Designations towards Development			0.00%	1.70%	1.60%
				(0)	(38)	(38)
	Total			100.00%	100.00%	100.00%
				(152)	(2296)	(2448)
	1 Designation towards Development				26.20%	26.20%
					(199)	(199)
98	2 Designations towards Development				69.50%	69.50%
					(316)	(316)
	3 Designations towards Development				4.40%	4.40%
					(20)	(20)
	Total				100.00%	100.00%

					(455)	(455)
	1 Designation towards Development		100.00%	36.40%	46.30%	45.30%
			(1)	(4)	(19)	(24)
	2 Designations towards Development		0.00%	9.10%	9.80%	9.40%
			(0)	(1)	(4)	(5)
99	3 Designations towards Development		0.00%	18.20%	26.80%	24.50%
			(0)	(2)	(11)	(13)
	4 Designations towards Development		0.00%	36.40%	17.10%	20.80%
			(0)	(4)	(7)	(11)
	Total		100.00%	100.00%	100.00%	100.00%
			(1)	(11)	(41)	(53)
	1 Designation towards Development			100.00%	51.90%	53.60%
				(6)	(83)	(89)
107	2 Designations towards Development			0.00%	40.00%	38.60%
				(0)	(64)	(64)
	4 Designations towards Development			0.00%	8.10%	7.80%
				(0)	(13)	(13)
	Total			100.00%	100.00%	100.00%
				(6)	(160)	(166)
	0 Designation towards Consumption				9.50%	9.50%
					(44)	(44)
120	1 Designation towards Development				54.70%	54.70%
					(254)	(254)
	2 Designations towards Development				29.70%	29.70%
					(138)	(138)
	3 Designations towards				4.30%	4.30%

	Development				(20)	(20)
	4 Designations towards Development				0.90%	0.90%
					(4)	(4)
	5 Designations towards Development				0.90%	0.90%
					(4)	(4)
	Total				100.00%	100.00%
					(464)	(464)
	1 Designation towards Development		50.00%	55.70%	55.40%	
			(4)	(83)	(87)	
122	2 Designations towards Development		50.00%	38.90%	39.50%	
			(4)	(58)	(62)	
	3 Designations towards Development		0.00%	5.40%	5.10%	
			(0)	(8)	(8)	
	Total		100.00%	100.00%	100.00%	
			(8)	(149)	(157)	
	1 Designation towards Development			50.60%	50.60%	
				(39)	(39)	
	2 Designations towards Development			24.70%	24.70%	
				(19)	(19)	
123	3 Designations towards Development			16.90%	16.90%	
				(13)	(13)	
	4 Designations towards Development			7.80%	7.80%	
				(6)	(6)	
	Total			100.00%	100.00%	
				(77)	(77)	
124	1 Designation towards Development			52.40%	52.40%	

					(86)	(86)
					36.60%	36.60%
					(60)	(60)
					5.50%	5.50%
					(9)	(9)
					5.50%	5.50%
					(9)	(9)
	Total				100.00%	100.00%
					(164)	(164)
	0 Designation towards Consumption	0.00%	0.00%	0.00%	2.10%	1.70%
		(0)	(0)	(0)	(13)	(106)
	1 Designation towards Development	100.00%	94.40%	93.70%	71.50%	51.00%
		(4)	(34)	(74)	(433)	(2766)
	2 Designations towards Development	0.00%	5.60%	6.30%	18.60%	29.90%
		(0)	(2)	(5)	(113)	(1622)
Total	3 Designations towards Development	0.00%	0.00%	0.00%	7.10%	14.70%
		(0)	(0)	(0)	(43)	(800)
	4 Designations towards Development	0.00%	0.00%	0.00%	0.70%	2.60%
		(0)	(0)	(0)	(4)	(140)
	5 Designations towards Development	0.00%	0.00%	0.00%	0.00%	0.10%
		(0)	(0)	(0)	(0)	(4)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(36)	(79)	(606)	(5425)
						(6150)

Table B.6: Purposes of Savings by Household Development by Community Number

**Purposes of Savings by Household Development by Community Number**

Community Number	Household Development						Total	
	No Development	Low Development	Low Development	Developed	Developed	Highly Developed		
3	0 Designation towards Consumption			0.00%	16.70%	11.80%	6.80%	9.10%
				(0)	(3)	(13)	(10)	(26)
	1 Designation towards Development			72.70%	55.60%	53.60%	53.40%	54.40%
				(8)	(10)	(59)	(79)	(156)
	2 Designations towards Development			27.30%	27.80%	34.50%	34.50%	33.80%
				(3)	(5)	(38)	(51)	(97)
6	3 Designations towards Development			0.00%	0.00%	0.00%	2.00%	1.00%
				(0)	(0)	(0)	(3)	(3)
	4 Designations towards Development			0.00%	0.00%	0.00%	3.40%	1.70%
				(0)	(0)	(0)	(5)	(5)
	Total			100.00%	100.00%	100.00%	100.00%	100.00%
				(11)	(18)	(110)	(148)	(287)
6	0 Designation towards Consumption		100.00%	0.00%	25.00%	19.40%	18.70%	20.50%
			(4)	(0)	(4)	(20)	(20)	(48)
	1 Designation towards Development		0.00%	100.00%	25.00%	57.30%	47.79%	50.40%
			(0)	(4)	(4)	(59)	(51)	(118)
	2 Designations towards Development		0.00%	0.00%	50.00%	23.30%	22.40%	23.90%
			(0)	(0)	(8)	(24)	(24)	(56)
6	3 Designations towards Development		0.00%	0.00%	0.00%	0.00%	11.20%	5.10%
			(0)	(0)	(0)	(0)	(12)	(12)
	Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

			(4)	(4)	(16)	(103)	(107)	(234)
	0 Designation towards Consumption			0.00%	50.00%	12.50%	24.70%	20.40%
				(0)	(4)	(8)	(20)	(32)
	1 Designation towards Development			100.00%	50.00%	68.80%	75.30%	72.00%
7				(4)	(4)	(44)	(61)	(113)
	2 Designations towards Development			0.00%	0.00%	18.80%	0.00%	7.60%
				(0)	(0)	(12)	(0)	(12)
	Total			100.00%	100.00%	100.00%	100.00%	100.00%
				(4)	(8)	(64)	(81)	(157)
	0 Designation towards Consumption			0.00%	0.00%	42.90%	32.10%	31.40%
				(0)	(0)	(27)	(200)	(227)
	1 Designation towards Development			100.00%	100.00%	57.10%	48.10%	51.50%
				(18)	(18)	(36)	(300)	(372)
17	2 Designations towards Development			0.00%	0.00%	0.00%	17.00%	14.70%
				(0)	(0)	(0)	(106)	(106)
	3 Designations towards Development			0.00%	0.00%	0.00%	2.90%	2.50%
				(0)	(0)	(0)	(18)	(18)
	Total			100.00%	100.00%	100.00%	100.00%	100.00%
				(18)	(18)	(63)	(624)	(723)
	0 Designation towards Consumption		50.00%	40.70%	50.00%	22.40%		37.30%
			(5)	(11)	(49)	(22)		(87)
20	1 Designation towards Development		50.00%	59.30%	50.00%	77.60%		62.70%
			(5)	(16)	(49)	(76)		(146)
	Total		100.00%	100.00%	100.00%	100.00%		100.00%
			(10)	(27)	(98)	(98)		(233)

	0 Designation towards Consumption	0.00%	0.00%	0.00%	8.90%	0.00%	4.00%
		(0)	(0)	(0)	(5)	(0)	(5)
21	1 Designation towards Development	100.00%	100.00%	100.00%	91.10%	100.00%	96.00%
		(14)	(19)	(28)	(51)	(9)	(121)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(14)	(19)	(28)	(56)	(9)	(126)
	0 Designation towards Consumption					60.40%	57.50%
						(29)	(77)
23	1 Designation towards Development					39.60%	42.50%
						(19)	(57)
	Total					100.00%	100.00%
						(48)	(134)
	0 Designation towards Consumption				0.00%	6.90%	5.60%
					(0)	(4)	(4)
24	1 Designation towards Development				100.00%	93.10%	94.40%
					(4)	(54)	(67)
	Total				100.00%	100.00%	100.00%
					(4)	(58)	(71)
	4 Designations towards Development		100.00%		33.30%	31.60%	41.40%
			(2)		(2)	(6)	(12)
25	5 Designations towards Development		0.00%		66.70%	68.40%	58.60%
			(0)		(4)	(13)	(17)
	Total		100.00%		100.00%	100.00%	100.00%
			(2)		(6)	(19)	(29)

						0.00%	19.90%	18.10%
						(0)	(39)	(39)
						100.00%	64.80%	68.10%
						(20)	(127)	(147)
28						0.00%	10.20%	9.30%
						(0)	(20)	(20)
						0.00%	5.10%	4.60%
						(0)	(10)	(10)
					Total	100.00%	100.00%	100.00%
						(20)	(196)	(216)
						0.00%	7.80%	6.80%
						(0)	(17)	(17)
						67.70%	45.90%	48.60%
						(21)	(100)	(121)
57						32.30%	41.70%	40.60%
						(10)	(91)	(101)
						0.00%	4.60%	4.00%
						(0)	(10)	(10)
					Total	100.00%	100.00%	100.00%
						(31)	(218)	(249)
							75.00%	75.00%
							(6)	(6)
58							25.00%	25.00%
							(2)	(2)
					Total		100.00%	100.00%

							(8)	(8)
	0 Designation towards Consumption						5.60%	5.60%
							(16)	(16)
	1 Designation towards Development						27.80%	27.80%
							(79)	(79)
91	2 Designations towards Development						27.80%	27.80%
							(79)	(79)
	3 Designations towards Development						22.20%	22.20%
							(63)	(63)
	4 Designations towards Development						16.50%	16.50%
							(47)	(47)
	Total						100.00%	100.00%
							(284)	(284)
	1 Designation towards Development					33.30%	15.80%	17.10%
						(38)	(228)	(266)
	2 Designations towards Development					0.00%	21.10%	19.50%
						(0)	(304)	(304)
97	3 Designations towards Development					66.70%	28.90%	31.70%
						(76)	(418)	(494)
	4 Designations towards Development					0.00%	28.90%	26.80%
						(0)	(418)	(418)
	5 Designations towards Development					0.00%	5.30%	4.90%
						(0)	(76)	(76)
	Total					100.00%	100.00%	100.00%
						(114)	(1444)	(1558)
98	0 Designation towards Consumption					0.00%	6.70%	6.50%

				(0)		(40)	(40)
	1 Designation towards Development			100.00%		56.60%	58.00%
				(20)		(336)	(356)
	2 Designations towards Development			0.00%		16.70%	16.10%
				(0)		(99)	(99)
	3 Designations towards Development			0.00%		13.30%	12.90%
				(0)		(79)	(79)
	4 Designations towards Development			0.00%		6.70%	6.50%
				(0)		(40)	(40)
	Total			100.00%		100.00%	100.00%
				(20)		(594)	(614)
	1 Designation towards Development			0.00%	40.00%	24.10%	25.70%
				(0)	(2)	(7)	(9)
	2 Designations towards Development			100.00%	0.00%	24.10%	22.90%
				(1)	(0)	(7)	(8)
99	3 Designations towards Development			0.00%	0.00%	3.40%	2.90%
				(0)	(0)	(1)	(1)
	4 Designations towards Development			0.00%	40.00%	48.30%	45.70%
				(0)	(2)	(14)	(16)
	5 Designations towards Development			0.00%	20.00%	0.00%	2.90%
				(0)	(1)	(0)	(1)
	Total			100.00%	100.00%	100.00%	100.00%
				(1)	(5)	(29)	(35)
107	0 Designation towards Consumption				0.00%	3.70%	3.40%
					(0)	(6)	(6)
	1 Designation towards Development				50.00%	23.20%	25.00%
					(6)	(38)	(44)

	2 Designations towards Development				50.00%	46.30%	46.60%
					(6)	(76)	(82)
	3 Designations towards Development				0.00%	26.80%	25.00%
					(0)	(44)	(44)
	Total				100.00%	100.00%	100.00%
					(12)	(164)	(176)
	0 Designation towards Consumption				0.00%	19.90%	19.70%
					(0)	(64)	(64)
	1 Designation towards Development				100.00%	40.80%	41.50%
					(4)	(131)	(135)
	2 Designations towards Development				0.00%	22.10%	21.80%
					(0)	(71)	(71)
120	3 Designations towards Development				0.00%	14.60%	14.50%
					(0)	(47)	(47)
	4 Designations towards Development				0.00%	1.20%	1.20%
					(0)	(4)	(4)
	5 Designations towards Development				0.00%	1.20%	1.20%
					(0)	(4)	(4)
	Total				100.00%	100.00%	100.00%
					(4)	(321)	(325)
	1 Designation towards Development				0.00%	38.90%	37.50%
					(0)	(42)	(42)
122	2 Designations towards Development				100.00%	34.30%	36.60%
					(4)	(37)	(41)
	3 Designations towards Development				0.00%	23.10%	22.30%
					(0)	(25)	(25)
	4 Designations towards Development				0.00%	3.70%	3.60%

						(0)	(4)	(4)
	Total					100.00%	100.00%	100.00%
						(4)	(108)	(112)
	1 Designation towards Development						50.00%	50.00%
123	2 Designations towards Development						(19)	(19)
							50.00%	50.00%
							(19)	(19)
	Total						100.00%	100.00%
							(38)	(38)
	0 Designation towards Consumption						10.30%	10.30%
	1 Designation towards Development						(9)	(9)
	1 Designation towards Development						49.40%	49.40%
124	2 Designations towards Development						(43)	(43)
							29.90%	29.90%
							(26)	(26)
	5 Designations towards Development						10.30%	10.30%
							(9)	(9)
	Total						100.00%	100.00%
							(87)	(87)
	0 Designation towards Consumption	0.00%	25.70%	12.00%	26.50%	16.10%	10.80%	12.20%
		(0)	(9)	(11)	(65)	(123)	(489)	(697)
	1 Designation towards Development	100.00%	68.60%	84.80%	65.30%	58.70%	37.20%	42.40%
Total		(14)	(24)	(78)	(160)	(447)	(1694)	(2417)
	2 Designations towards Development	0.00%	0.00%	3.30%	5.70%	12.30%	22.30%	19.70%
		(0)	(0)	(3)	(14)	(94)	(1012)	(1123)
	3 Designations towards Development	0.00%	0.00%	0.00%	0.00%	10.00%	16.10%	14.20%
		(0)	(0)	(0)	(0)	(76)	(730)	(806)

4 Designations towards Development	0.00%	5.70%	0.00%	0.80%	1.00%	11.70%	9.60%
	(0)	(2)	(0)	(2)	(8)	(534)	(546)
5 Designations towards Development	0.00%	0.00%	0.00%	1.60%	1.80%	2.00%	1.90%
	(0)	(0)	(0)	(4)	(14)	(89)	(107)
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	(14)	(35)	(92)	(245)	(762)	(4548)	(5696)

Table B.7: Purposes of Remittances by Household Development by Year of Survey

**Purposes of Remittances by Household Development by Year of Survey**

Year of survey	Household Development					Total	
	Low Development	Low Development	Developed	Developed	Highly Developed		
1988	0 Designation towards Consumption	0.00%	0.00%	0.00%	3.90%	4.70%	3.90%
		(0)	(0)	(0)	(11)	(16)	(27)
	1 Designation towards Development	100.00%	100.00%	93.60%	89.30%	80.40%	85.70%
		(4)	(25)	(44)	(250)	(275)	(598)
	2 Designations towards Development	0.00%	0.00%	6.40%	5.70%	14.00%	9.60%
	(0)	(0)	(3)	(16)	(48)	(67)	
	3 Designations towards Development	0.00%	0.00%	0.00%	1.10%	0.90%	0.90%
		(0)	(0)	(0)	(3)	(3)	(6)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(25)	(47)	(280)	(342)	(698)
1989	0 Designation towards Consumption					6.70%	6.70%
						(7)	(7)
	1 Designation towards Development					70.20%	70.20%
					(73)	(73)	
	2 Designations towards Development					23.10%	23.10%

					(24)	(24)
	Total				100.00%	100.00%
					(104)	(104)
	1 Designation towards Development	100.00%	100.00%	100.00%	90.30%	92.60%
		(9)	(27)	(80)	(337)	(453)
1991	2 Designations towards Development	0.00%	0.00%	0.00%	9.70%	7.40%
		(0)	(0)	(0)	(36)	(36)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%
		(9)	(27)	(80)	(373)	(489)
	0 Designation towards Consumption		0.00%	5.40%	4.40%	4.50%
			(0)	(2)	(10)	(12)
	1 Designation towards Development		50.00%	94.60%	82.30%	83.50%
			(2)	(35)	(186)	(223)
1992	2 Designations towards Development		50.00%	0.00%	8.80%	8.20%
			(2)	(0)	(20)	(22)
	3 Designations towards Development		0.00%	0.00%	4.40%	3.70%
			(0)	(0)	(10)	(10)
	Total		100.00%	100.00%	100.00%	100.00%
			(4)	(37)	(226)	(267)
	1 Designation towards Development				100.00%	100.00%
1993					(17)	(17)
	Total				100.00%	100.00%
					(17)	(17)
1995	1 Designation towards Development				100.00%	100.00%
					(9)	(9)

	Total			100.00%	100.00%
				(9)	(9)
	1 Designation towards Development	0.00%	50.00%	35.10%	36.40%
		(0)	(16)	(98)	(114)
1998	2 Designations towards Development	100.00%	50.00%	58.10%	57.50%
		(2)	(16)	(162)	(180)
	3 Designations towards Development	0.00%	0.00%	6.80%	6.10%
		(0)	(0)	(19)	(19)
	Total	100.00%	100.00%	100.00%	100.00%
		(2)	(32)	(279)	(313)
	0 Designation towards Consumption			6.00%	6.00%
				(16)	(16)
	1 Designation towards Development			29.50%	29.50%
				(79)	(79)
2002	2 Designations towards Development			11.60%	11.60%
				(31)	(31)
	3 Designations towards Development			29.50%	29.50%
				(79)	(79)
	4 Designations towards Development			23.50%	23.50%
				(63)	(63)
	Total			100.00%	100.00%
				(268)	(268)
2003	1 Designation towards Development	100.00%	25.60%	41.00%	40.20%
		(1)	(42)	(1146)	(1189)
	2 Designations towards Development	0.00%	47.00%	34.50%	35.10%
		(0)	(77)	(962)	(1039)

	3 Designations towards Development		0.00%	25.00%	22.90%	23.00%
			(0)	(41)	(639)	(680)
	4 Designations towards Development		0.00%	2.40%	1.60%	1.70%
			(0)	(4)	(45)	(49)
	Total		100.00%	100.00%	100.00%	100.00%
			(1)	(164)	(2792)	(2957)
	1 Designation towards Development			100.00%	51.90%	53.60%
				(6)	(83)	(89)
	2 Designations towards Development			0.00%	40.00%	38.60%
2004				(0)	(64)	(64)
	4 Designations towards Development			0.00%	8.10%	7.80%
				(0)	(13)	(13)
	Total			100.00%	100.00%	100.00%
				(6)	(160)	(166)
	0 Designation towards Consumption				1.50%	1.50%
					(4)	(4)
	1 Designation towards Development				50.80%	50.80%
					(134)	(134)
	2 Designations towards Development				37.10%	37.10%
					(98)	(98)
2007	3 Designations towards Development				7.60%	7.60%
					(20)	(20)
	4 Designations towards Development				1.50%	1.50%
					(4)	(4)
	5 Designations towards Development				1.50%	1.50%
					(4)	(4)
	Total				100.00%	100.00%

					(264)	(264)
	0 Designation towards Consumption			0.00%	6.80%	6.70%
				(0)	(40)	(40)
	1 Designation towards Development			50.00%	55.50%	55.40%
				(4)	(328)	(332)
2008	2 Designations towards Development			50.00%	30.10%	30.40%
				(4)	(178)	(182)
	3 Designations towards Development			0.00%	5.10%	5.00%
				(0)	(30)	(30)
	4 Designations towards Development			0.00%	2.50%	2.50%
				(0)	(15)	(15)
	Total			100.00%	100.00%	100.00%
				(8)	(591)	(599)
	0 Designation towards Consumption	0.00%	0.00%	0.00%	2.10%	1.70%
		(0)	(0)	(0)	(13)	(93)
	1 Designation towards Development	100.00%	94.40%	93.70%	71.30%	51.00%
		(4)	(34)	(74)	(433)	(2765)
	2 Designations towards Development	0.00%	5.60%	6.30%	18.60%	29.90%
		(0)	(2)	(5)	(113)	(1623)
Total	3 Designations towards Development	0.00%	0.00%	0.00%	7.20%	14.70%
		(0)	(0)	(0)	(44)	(800)
	4 Designations towards Development	0.00%	0.00%	0.00%	0.70%	2.60%
		(0)	(0)	(0)	(4)	(140)
	5 Designations towards Development	0.00%	0.00%	0.00%	0.00%	0.10%
		(0)	(0)	(0)	(0)	(4)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%
		(4)	(36)	(79)	(607)	(5425)
						(6151)

Table B.8: Purposes of Savings by Household Development by Year of Survey

**Purposes of Savings by Household Development by Year of Survey**

Year of survey	Household Development						Total	
	No Development	Low Development	Low Development	Developed	Developed	Highly Developed		
1982	0 Designation towards Consumption	0.00%	17.20%	20.00%	34.00%	25.70%	53.30%	30.80%
		(0)	(5)	(11)	(54)	(55)	(48)	(173)
	1 Designation towards Development	100.00%	82.80%	80.00%	66.00%	74.30%	46.70%	69.20%
		(14)	(24)	(44)	(105)	(159)	(42)	(388)
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
		(14)	(29)	(55)	(159)	(214)	(90)	(561)
1988	0 Designation towards Consumption		100.00%	0.00%	26.20%	14.80%	14.90%	15.70%
			(4)	(0)	(11)	(41)	(50)	(106)
	1 Designation towards Development		0.00%	84.20%	42.90%	58.50%	57.00%	57.20%
			(0)	(16)	(18)	(162)	(191)	(387)
	2 Designations towards Development		0.00%	15.80%	31.00%	26.70%	22.40%	24.40%
			(0)	(3)	(13)	(74)	(75)	(165)
	3 Designations towards Development		0.00%	0.00%	0.00%	0.00%	4.20%	2.10%
		(0)	(0)	(0)	(0)	(14)	(14)	
	4 Designations towards Development		0.00%	0.00%	0.00%	0.00%	1.50%	0.70%
			(0)	(0)	(0)	(0)	(5)	(5)
	Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
			(4)	(19)	(42)	(277)	(335)	(677)
1989	1 Designation towards Development						100.00%	100.00%
							(1)	(1)

	Total					100.00%	100.00%
						(1)	(1)
	0 Designation towards Consumption	0.00%	0.00%	42.90%	26.30%	26.40%	
		(0)	(0)	(27)	(133)	(160)	
	1 Designation towards Development	100.00%	100.00%	57.10%	52.60%	55.90%	
		(18)	(18)	(36)	(266)	(338)	
1991	2 Designations towards Development	0.00%	0.00%	0.00%	17.60%	14.70%	
		(0)	(0)	(0)	(89)	(89)	
	3 Designations towards Development	0.00%	0.00%	0.00%	3.60%	3.00%	
		(0)	(0)	(0)	(18)	(18)	
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	
		(18)	(18)	(63)	(506)	(605)	
	0 Designation towards Consumption	0.00%	0.00%	0.00%	33.80%	29.40%	
		(0)	(0)	(0)	(106)	(106)	
	1 Designation towards Development	0.00%	0.00%	51.30%	51.00%	49.90%	
		(0)	(0)	(20)	(160)	(180)	
	2 Designations towards Development	0.00%	0.00%	0.00%	11.50%	10.00%	
		(0)	(0)	(0)	(36)	(36)	
1992	3 Designations towards Development	0.00%	0.00%	0.00%	3.20%	2.80%	
		(0)	(0)	(0)	(10)	(10)	
	4 Designations towards Development	100.00%	33.30%	15.40%	0.60%	3.30%	
		(2)	(2)	(6)	(2)	(12)	
	5 Designations towards Development	0.00%	66.70%	33.30%	0.00%	4.70%	
		(0)	(4)	(13)	(0)	(17)	
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	
		(2)	(6)	(39)	(314)	(361)	

1995	1 Designation towards Development				100.00%	100.00%
					(4)	(4)
	Total				100.00%	100.00%
					(4)	(4)
1998	0 Designation towards Consumption			0.00%	7.50%	6.60%
				(0)	(17)	(17)
	1 Designation towards Development			67.70%	47.10%	49.60%
				(21)	(107)	(128)
	2 Designations towards Development			32.30%	41.00%	39.90%
				(10)	(93)	(103)
	3 Designations towards Development			0.00%	4.40%	3.90%
			(0)	(10)	(10)	
	Total			100.00%	100.00%	100.00%
				(31)	(227)	(258)
2002	0 Designation towards Consumption				5.60%	5.60%
					(16)	(16)
	1 Designation towards Development				27.80%	27.80%
					(79)	(79)
	2 Designations towards Development				27.80%	27.80%
					(79)	(79)
	3 Designations towards Development				22.20%	22.20%
				(63)	(63)	
	4 Designations towards Development				16.50%	16.50%
					(47)	(47)
	Total				100.00%	100.00%
					(284)	(284)

	0 Designation towards Consumption			0.00%	0.00%	1.90%	1.80%
				(0)	(0)	(40)	(40)
	1 Designation towards Development			95.20%	34.20%	27.70%	28.70%
				(20)	(41)	(572)	(633)
	2 Designations towards Development			4.80%	0.00%	19.80%	18.60%
				(1)	(0)	(410)	(411)
2003	3 Designations towards Development			0.00%	63.30%	24.10%	26.00%
				(0)	(76)	(499)	(575)
	4 Designations towards Development			0.00%	1.70%	22.80%	21.40%
				(0)	(2)	(471)	(473)
	5 Designations towards Development			0.00%	0.80%	3.70%	3.50%
				(0)	(1)	(76)	(77)
	Total			100.00%	100.00%	100.00%	100.00%
				(21)	(120)	(2068)	(2209)
	0 Designation towards Consumption				0.00%	3.70%	3.40%
					(0)	(6)	(6)
	1 Designation towards Development				50.00%	23.30%	25.00%
					(6)	(38)	(44)
2004	2 Designations towards Development				50.00%	46.30%	46.60%
					(6)	(76)	(82)
	3 Designations towards Development				0.00%	26.80%	25.00%
					(0)	(44)	(44)
	Total				100.00%	100.00%	100.00%
					(12)	(164)	(176)
	0 Designation towards Consumption				0.00%	10.00%	9.80%
2007					(0)	(24)	(24)
	1 Designation towards Development				100.00%	37.50%	38.50%

						(4)	(90)	(94)
	2 Designations towards Development					0.00%	29.60%	29.10%
						(0)	(71)	(71)
	3 Designations towards Development					0.00%	19.60%	19.30%
						(0)	(47)	(47)
	4 Designations towards Development					0.00%	1.70%	1.60%
						(0)	(4)	(4)
	5 Designations towards Development					0.00%	1.70%	1.60%
						(0)	(4)	(4)
	Total					100.00%	100.00%	100.00%
						(4)	(240)	(244)
	0 Designation towards Consumption					0.00%	15.60%	15.40%
						(0)	(49)	(49)
	1 Designation towards Development					0.00%	45.90%	45.30%
						(0)	(144)	(144)
	2 Designations towards Development					100.00%	26.40%	27.40%
						(4)	(83)	(87)
2008	3 Designations towards Development					0.00%	8.00%	7.90%
						(0)	(25)	(25)
	4 Designations towards Development					0.00%	1.30%	1.30%
						(0)	(4)	(4)
	5 Designations towards Development					0.00%	2.90%	2.80%
						(0)	(9)	(9)
	Total					100.00%	100.00%	100.00%
						(4)	(314)	(318)
Total	0 Designation towards Consumption	0.00%	25.70%	12.00%	26.40%	16.10%	10.80%	12.20%
		(0)	(9)	(11)	(65)	(123)	(489)	(697)
	1 Designation towards Development	100.00%	68.60%	84.80%	65.40%	58.80%	37.30%	42.50%

	(14)	(24)	(78)	(161)	(449)	(1694)	(2420)
2 Designations towards Development	0.00%	0.00%	3.30%	5.70%	12.30%	22.30%	19.70%
	(0)	(0)	(3)	(14)	(94)	(1012)	(1123)
3 Designations towards Development	0.00%	0.00%	0.00%	0.00%	9.90%	16.10%	14.10%
	(0)	(0)	(0)	(0)	(76)	(730)	(806)
4 Designations towards Development	0.00%	5.70%	0.00%	0.80%	1.00%	11.70%	9.60%
	(0)	(2)	(0)	(2)	(8)	(533)	(545)
5 Designations towards Development	0.00%	0.00%	0.00%	1.60%	1.80%	2.00%	1.90%
	(0)	(0)	(0)	(4)	(14)	(89)	(107)
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	(14)	(35)	(92)	(246)	(764)	(4547)	(5698)