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Articles

Foreword Pedro Medrano
Emma Sepulveda Pulvirenti, PhD12
Law's Labor's Lost: Failure of Peru's 1969 Agrarian Reform Law to Stimulate Agricultural Production Sean Savoy
Disposable Workers: Immigration after NAFTA and the Nation's Addiction to Cheap Labor Héctor E. Sánchez
Examining the Theoretical Linkages between Climate Change, Food Security, and Migration Derek Kauneckis and Mehmet Serkan Tosun
THE RISE AND FALL OF THE "MIGRANT SUPERHERO" AND THE NEW "DEPORTEE TRASH": CONTEMPORARY STRAIN ON MOBILE LIVELIHOODS IN THE CENTRAL AMERICAN REGION
Ninna Nyberg Sørensen90
THE ROLE OF DICONSA IN PROMOTING FOOD SECURITY IN RURAL MEXICO AND PROVIDING ASSISTANCE IN CASE OF NATURAL DISASTERS Victor Chora
Considerations for a More Comprehensive Immigration Policy: Moving the Dialogue from Border Security to Food and Livelihood Security Gail E. Emrick (with Hannah Hafter and Jill de Zapien)
CHILDREN'S CONSUMPTION OF MIGRATION: REMITTANCES AND FOOD SECURITY Ezra Rosser
Migration and the Role of Remittances in Food Security: The Case of Jamaica Elizabeth Thomas-Hope
ABOUT THE AUTHORS227

Foreword 7

Foreword

Pedro Medrano

Regional Director for Latin America and the Caribbean United Nations World Food Programme (WFP)

Migration has a long presence in recorded history. Countries such as the United States owe their dynamism and world position in large part to the creativity and work ethic of immigrants. According to the International Organization for Migration (IOM), "humane and orderly migration benefits migrants and society."

But, when population flows result from threats to individuals and families as well as denials of choice, migration poses a risk to human development. The 2009 Human Development Report addresses this phenomenon. In sending societies, such risks may include the loss of valuable human resources and productivity, together with the emotional costs of family breakups. In receiving countries, immigrants may face rejection of their human rights, poor access to education and health, economic exploitation, and political exclusion. Additionally, large, unregulated migratory movements may cause economic and political problems in receiving societies.

Involuntary migration often results from natural disasters, such as earthquakes, volcanic eruptions, droughts, floods, epidemics, and other extreme events, often related to climate change. Indeed, according to a team of researchers led by Princeton University's Michael Oppenheimer, "by approximately the year 2080, climate change is estimated to induce 1.4 to 6.7 million adult Mexicans ... to emigrate as a result of declines in agricultural productivity alone."

Man-made phenomena also cause emergencies that generate migration. Political conflict, widespread violence, and increasing criminality not

¹ Shuaizhang Feng, Alan B. Krueger, and Michael Oppenheimer, "Linkages among Climate Change, Crop Yields and México - U.S. Cross-Border Migration," *Proceedings of the National Academy of Sciences of the United States of America* (PNAS), 26 July 2010.



"Food Security and International Migration" conference participants. From left to right, seated: Derek Kauneckis, Pedro Medrano, María Eugenia Pino, Emma Sepúlveda, Carol Montenegro. Second row: Louis Forline, Linda Curcio, Sean Savoy, Héctor Sánchez, Iris West, Jeffrey Passel, Elizabeth Thomas-Hope, Ninna Nyberg Sørensen, Gail Emrick, Robert Ostergard, David Chora, Carlos Guevara Mann. Third row: Teófilo Altamirano, Ezra Rosser.

only trigger population flows across borders, but also produce massive internal displacement, with grave social and economic effects for countries. Colombia, for example, has the second largest number of internally displaced people in the world, after Sudan: three million persons. Such forced population movements may disrupt political stability and create enormous social problems, especially as regards access to food.

The United Nations World Food Programme (WFP) assists food insecure persons afflicted by such emergencies. WFP is the world's largest humanitarian agency fighting hunger worldwide. In 2010, our operations reached over 90 million persons with food aid in 73 countries. Part of our mission is to help people survive through difficulties, getting food rapidly and effectively to where it is needed and saving lives during natural calamities and human conflicts.

Inhumane and disorderly migratory flows do not only result from natural or man-made emergencies. They also originate from structural conditions: circumstances embedded in the structure of societies, such as hunger, poverty, and inequality, which translate into lack of educational and professional opportunities, poor access to health services, food insecurity, and crime, among others. These phenomena force people away from home in their own countries or other nations.

Improving the livelihoods of populations affected by structural hunger and poverty is a second major area in which WFP works. In 2009, our regular programs benefited approximately six million people in Latin America and the Caribbean. Additional numbers benefited from national government initiatives supported by WFP. These programs and initiatives include safety nets such as school feeding, mother-and-child health schemes, in-kind or cash transfers, and others with proven capacity to avert food crises and restore people, especially children, to adequate nutritional conditions.

Structural poverty does not make international headlines as do temblors and hurricanes, but it causes immense privations throughout the world, including this Hemisphere. According to the UN Economic Commission for Latin America and the Caribbean (ECLAC), in 2009, out of a total

population of 553 million, 183 million (33 percent) lived in poverty and at least 53 million (10 percent) were hungry.

Inhumane and disorderly migration will continue as long as structural poverty and hunger prevent millions of Latin Americans from feeding their children in their home countries. Larger migratory flows will be accompanied by added risks to human development, including political tensions, trafficking in persons, and other forms of criminality. To prevent these phenomena from exacerbating the security situation in the Americas, governments, societies, and the international community must join efforts to address the socio-economic situation in the southern portion of the Hemisphere. A stronger commitment to this goal and collaborative work among sectors and across borders is required to design a comprehensive policy, incorporating food security, poverty reduction, and development strategies towards humanizing and regulating migration in our Hemisphere.



Congresssman Luis Gutierrez and World Food Programme Director Pedro Medrano.

Towards this objective, WFP joined efforts with the Latino Research Center at the University of Nevada, Reno, to hold the academic conference on "Food Security and International Migration: Perspectives from the Americas," held in Reno on 3-4 September 2010. Panelists addressed several aspects of the conference theme, including causes of migration, safety nets to improve social conditions triggering involuntary migration, and the role of remittances in receiving countries. The pages that follow contain several of the contributions made by distinguished academics to advance the comprehension of the food security dimension of international migration, one of the most salient features of our contemporary global society.

Emma Sepulveda Pulvirenti, PhD Director, Latino Research Center

University of Nevada, Reno

In the past 50 years the number of immigrants who have left their home countries to seek a better future elsewhere in the world has doubled. Nearly 75 per percent of the immigration stream has sought a new life in just 28 different countries. The United States has been the place that has attracted 20 percent of this migrant population in the last decades, while the continent of Europe has received more than 33 percent of the immigrants. At the present time, more than 115 million migrants are living in developed countries and women constitute half of this migrant population. These statistics should call for reflection by all of us, but more importantly, such figures should motivate a discussion seeking answers to the questions that emerge from this continuing global migration. Questions such as: What are the causes that push people to leave their country of origin? What is the economic and social impact in the home countries that are losing significant numbers of workers? What are the social, economic and psychological barriers, immigrants face in their new environment? What challenges are presented to the countries that receive this seemingly unending flow of migrants?

Many of these questions were brought up during the presentation of papers and the subsequent discussion at the conference: "Food Security and International Migration: Perspectives for the Americas", that took place in the United States, in September of 2010, in Reno, Nevada. The conference put together by the University of Nevada Reno Latino Research Center and the United Nations World Food Program was a unique opportunity for a dialogue with a variety of experts on the topic of migration. In attendance were activists for the rights of immigrants, leaders of the labor movement, as well as researchers on the topic of immigration, elected officials and representatives of world organizations.

The discussions that took place during the conference remind us of the variety of views that emerge when the topic of immigration is analyzed. There are no easy solutions or simple proposals that will solve this

world crisis, but there are a few things that seem to be more important in attempting to find possible solutions. For example, in the discussions of forced migration, it is clear that there needs to be a dialogue, treating both sides as equal players, between governments of the countries that receive the waves of immigrant and the countries from where immigrants originate. In the same vein, more effort should be made to maintain and expand the resources of existing international programs that ultimately will help people stay in their home countries and not force them to migrate to a foreign land in order to survive.

Migration is a global crisis that touches the social, economic and political fabric of every nation in the world and needs the involvement of every country, and solidarity in finding the solutions. This special issue of Border Lines presents diverse perspectives that we hope will help with the continuous international dialogue on immigration.

Law's Labor's Lost: Failure of Peru's 1969 Agrarian Reform Law to Stimulate Agricultural Production

Sean Savoy *Andean Explorers Foundation Reno, Nevada, USA*

ABSTRACT

Peru's Agrarian Reform Law of 1969 provided peasants with property rights and put an end to the centuries-old system of debt peonage and involuntary servitude through expropriation and redistribution of land, but it was ultimately unsuccessful at invigorating agricultural production or providing the resources for the agrarian population to succeed. Reform was ineffective at solving the poverty problem overall, especially for the beneficiaries who were not afforded the education, government assistance, economic resources, or supporting labor force to keep newly acquired private lands and newly formed cooperatives productive and efficient. This led to the intensification of rural-urban migration and years of stagnation and decline in agricultural output, leaving the fate of the underprivileged agrarian sector uncertain.

Introduction

In this paper, I discuss the implementation and negative consequences of Peruvian land reform of the late 1960s and 1970s. I do this on the basis of a reinterpretation of previous research on the issue to indicate that the Agrarian Land Reform Law of 1969 was unsuccessful at ameliorating the problems it was supposed to solve and, in some cases, even contributed to furthering them. Beginning with a

summary history of land tenure under Spanish domination and after independence from Spain, I attempt to show the social and political climate that ultimately led to the comprehensive, if misguided, land reform law. I then provide an overview of the 1969 law as well as references to date in order to illustrate the effects of agrarian reform on agricultural production in particular. Lastly, I briefly discuss post-reform strategies aimed at "fixing" reform policies and conclude that many factors, in addition to the policies themselves, such as violence, stymied the success of agrarian reform.

Land Tenure in Peru

Encomienda, Repartimiento and Hacienda

By the time the 1969 Agrarian Reform Law was enacted, Peru's land tenure structure had been following the *latifundio-minifundio* model for centuries. Held as private property by landed gentry, absentee landlords, or even corporations, the *latifundios*, or haciendas (usually large landholdings of 500 hectares or more), were worked by an indentured labor force comprised primarily of indigenous peasants.

The haciendas emerged out of the sixteenth-century *encomienda*¹ system whereby conquerors called *adelantados* were granted (by the Spanish Crown) the right to become governors and justices of the specific regions they were charged with conquering. The *encomienda* was vital to support the agricultural, industrial, mining, and publicworks activities of the conquerors, who were given the right to extract tribute from peasants, but were not necessarily granted title to the land with which they were entrusted.

The indigenous people became human wards of the trustees and, in theory, were "free men," not slaves or serfs. In exchange for their labors, they were given the "protection" of their trustees and the right to use portions of the land for their own sustenance. Even though

¹ Encomienda stems from the Spanish verb encomendar, "to entrust."

the *encomienda* system was not direct slavery, in that the worker was supposed to be free, in practice, it did make them more like slaves (Yeager 1995). The sixteenth century proverb, *sin indios no hay Indias*, "without Indians, there are no Indies" (in reference to the Americas), emphasizes the importance and exploitation of native indentured labor in Spanish America (Arora 1995).

Almost from the beginning the system was harsh and corrupt. The Crown made several attempts at reform as early as the beginning of the sixteenth century in response to uprisings and revolts by the native laborers and to appeals by reformers, most notably the Dominican priest and *encomendero*-turned-advocate, Bartolomé de Las Casas. The Laws of Burgos enacted in 1512-1513 failed to curtail abuses of forced Indian labor. Spurred by this failure, Las Casas and other reformers pushed for the enactment of the New Laws of the Indies for the Good Treatment and Preservation of the Indians (1542), whose purpose was to prevent the exploitation of the natives and to establish the gradual abolition of the *encomienda* system.

The New Laws were fiercely opposed by the conquistadors and were even suspended in the Viceroyalty of Peru after their imposition by the first viceroy. Fearing loss of the American colonies, the Crown watered down the New Laws and restored the *encomiendas*.

Repartimiento (called mita² in Peru) is the process of allotting land and the native people who lived on it. Under the repartimiento policies of the New Laws, the Indians were to earn a wage. This was the Crown's answer to the corrupt encomienda system and a way of keeping the labor force alive. But since the natives had no wage tradition and the amount to be paid them was very small, the New Laws were largely ignored. Despite the good intentions of the New Laws, corruption persisted, and many native laborers still suffered inhumane treatment.

The old *encomienda* system continued to exist in Spanish America even after the *repartimiento* of the New Laws was instituted. In Peru,

The word *mita* is derived from the Quechua *mit'a*. Mita in the Inca Empire was a labor system of mandatory public service to the government—a tribute in the form of labor.

the *encomiendas* lasted significantly longer than in other regions of Spanish America (Yeager 1995). Not until 1720 did Spain legally end the *encomienda* system. The successor of the *encomienda* was the hacienda, large landholdings originally granted by the Crown to the conquistadors. As the sheer number of natives declined as a result of disease and under the harsh conditions of the *encomiendas*, and as mining activities were replaced by agricultural activities in the seventeenth century, the hacienda arose because land ownership became more profitable than acquisition of labor force (Tindall and Shi 1984).

Of great importance in the agricultural labor force of the haciendas were Indians falling outside the legal framework of the *encomienda*. Almost everywhere they soon came to be attached personally to individual Spaniards (Lockhart 1985). In reality, it did not matter whether the native *campesinos* came to work the haciendas through *encomienda* obligations, through *repartimiento*, or finally through individual arrangements, their rights were most always compromised.

Coastal and highland haciendas were run similarly, although coastal plantations were often more commercialized, producing goods for the large urban markets or for export. As the working of haciendas came to include plantation crops—sugar, cacao, cochineal, and indigo—their increasing value brought greater demand for labor control. Moreover, in the nineteenth century the cultivation of other crops on a large scale required a continuous and cheap labor supply.³

To meet demands, landowners would either hire groups of peasant farmers from the highlands for the short term or they would force their own native workers—located on any of their landholdings—to work with little or no pay. To force them to work, the landowners would put them into debt by giving them advances on their wages and by requiring the purchase of necessities from "company" stores on the haciendas. As the natives fell into debt, they were reduced to peonage and forced to work for the same employer until debts were

^{3 &}quot;Peonage," TheFreeDictionary.com. Online at http://encyclopedia2. thefreedictionary.com/Peonage, accessed 30 August 2010.

paid, which was virtually impossible. The worker became a virtual serf, but without a serf's rights.

Although the *encomiendas* were formally abolished in 1720, most Peruvian Indians remained in forced labor or debt bondage up until the mid-twentieth century, when the push for land reform reached a climax.

Pre- and Post-independence Insurrections

By the late eighteenth century, many indigenous Peruvian uprisings had occurred throughout the country. A notable example is the insurrection of 1780 led by José Gabriel Condorcanqui, a mestizo who claimed to be the great-great-great grandson of the last king of the Incas, Túpac Amaru, who was executed in 1572. Condorcanqui styled himself Túpac Amaru II after his royal predecessor.

After his many appeals for the alleviation of Indian labor conditions were unheeded, Túpac Amaru II organized a thousands-strong native army and went about looting Spanish households, killing oppressors throughout the Cuzco region. Eventually, his troops and an army of Spaniards and loyalist Indian soldiers clashed at the Battle of Sangarara. Although Túpac Amaru's forces were victorious, his troops went about uncontrolled looting and carnage of Spanish leaders and citizens. This led to lack of support for Túpac Amaru by the Peruvian creole class and, after several skirmishes around the Cuzco region, the rebel Inca was captured and brutally executed.

The Túpac Amaru insurrection illustrates the frustration, anger, and oppression experienced by the native Peruvians. His was one of many native uprisings and rebellions aimed at redressing the exploitation of the natives and gaining rights for the indigenous workers. Reform, however, would not be significantly addressed for another 150 years.

Even after Peruvian independence from Spain in 1821 (effective independence was not gained until 1824) and well into the next century, the haciendas and peonage remained a constant reality in Peruvian society. Independence did little to counter inequality, grant

Indian rights, or improve agricultural underdevelopment based on colonialism and neofeudalism. Power passed from the *peninsulares* (Spanish mainlanders) to the Spanish creole elite whose aim was to ensure their own privileged socioeconomic status (Keen and Haynes 2009). The plight of the native was for the most part ignored. That the Indians were not granted their communal lands after independence served only to strengthen unrest.

South American liberators José de San Martín and Simón Bolívar, who became Peru's first president (1824–27), attempted to remove some of the worst abuses against the indigenous population. San Martín abolished slavery and all forms of forced labor while Bolívar ordered the end to indigenous communities and the division of communal lands, but the well-intentioned reforms were ignored by the ruling creole elite. In fact, most feudal haciendas were left alone altogether. Once again, progress was stymied. In fact, the indigenous tribute tax and slavery were not effectively abolished until the election of General Ramón Castilla to the presidency (1845-51 and 1855-62) (Keen and Haynes 2009).

Peru's peasantry was not passive in accepting their condition in the latter half of the nineteenth century. Historian Wilfredo Kápsoli Escudero documented 32 peasant revolts and movements between 1879 and 1965. For the most part, these revolts were in defiance of maltreatment by landowners and their foremen. In 1920, the first official Indian community was established during the second term of President Augusto B. Leguía. From then on, communities that could prove they once held title to land under the Spaniards were allowed to repossess it, but the process was drawn out and bureaucratic, requiring continuous lobbying in Lima to gain acceptance (Hudson 1992).

Even with these advances, the haciendas with their system of forced labor continued to flourish, but the question of Indian and peasant rights reached a new high point following the disastrous War of the Pacific with Chile (1879-1883). From the ruins of the War of the Pacific and based on the re-emergence of sugar, cotton, and mining exports, as well as the reintegration of Peru into the international

economy, new elites emerged along the coast and coalesced to form a powerful oligarchy.

But not all Peruvians benefitted from profitable export capitalism that dominated the coastal plantations. Income distribution varied greatly between the booming coast and the neglected highlands, which were losing ground economically. The intensification of rural-urban migration also contributed to increasing tension among landowners and workers, and increased population growth between 1900 and 1940 (from 3.7 million to 7 million) (Hudson 1992) meant that the historically scarce labor market was now overabundant. Change was inevitable as population increased and arable land continued to be locked into the *latifundios*. As elsewhere in Latin America,

From 1850 to 1930 the hacienda system, also known as the large estate-smallholding (*minifundio-latifundio*) complex, expanded to achieve a dominant position within the Latin American agrarian structure. This expansion was often achieved at the expense of rural indigenous populations, which were displaced towards marginal zones. It was the golden age of the hacienda system and the landlords reached the peak of their economic power, political influence and social prestige (Kay 1999).

Even after World War II, Peru's land tenure system remained highly unequal. Figures from 1958 show that two percent of the country's landowners controlled 69 percent of arable land while 83 percent of landholders holding no more than five hectares (a *minifundio*) controlled only 6 percent of arable land. In addition, the government's urban bias kept prices for food from farms artificially low, which caused a decline in terms of trade in agricultural foodstuffs (Kay 1999).

Large numbers of peasants continued to migrate to coastal cities, particularly Lima, where most of the economic growth was occurring.

Lima's population tripled between 1940 and 1961, from just over 500,000 to over 1.6 million. The peasants who remained in the highlands became increasingly militant and organized, demanding access to land. Strikes and land invasions swept over the *sierra* during the 1950s and 1960s

Pre-1969 Attempts at Reform

The first round of contemporary attempts at reform came about in the 1950s under President Manuel Odría. Reform experiments, such as the Odría-approved Cornell-Peru Project (1952-1966) conducted at Vicos by Cornell University, exposed the extreme conditions imposed on natives by the hacienda system.

Vicos, a 17,000-hectare Andean estate in the Department of Ancash, had been in operation as a hacienda under various owners and renters from 1594 until the hacienda was rented in 1952 by Allan R. Holmberg, an anthropologist at Cornell University. The aim of Holmberg's project was to improve the social and economic conditions at Vicos through modernization and the introduction of democracy. Holmberg eventually became the new *patrón* of the estate, essentially governing over 380 families (a total of 1,700 people), a move that was rationalized "as a necessary step in modernizing the Vicos population." When Cornell's lease in Vicos expired, the Project recommended that the government expropriate the property and grant the land to its inhabitants. The government agreed, but a long struggle ensued. It became an arduous process to finally settle the matter. The Indians eventually were able to purchase Vicos and their freedom. Ultimately, the project was successful in eliminating the old system of debt peonage at Vicos, giving the debtors title to the lands that they worked on (Niehoff 2008).

The highly publicized Cornell-Peru Project helped spur on demands for change. Hundreds of hacienda communities subsequently requested help to gain the freedom to purchase their lands. When the conservative second government of oligarch Manual Prado y Ugarteche (1956-1962) could not meet demands, a volatile situation

unfolded, as peasant invasions of haciendas began to erupt (Hudson 1992).

By the time Fernando Belaúnde Terry assumed the presidency in 1963, Peru had entered a period of great social and political discontent. What Belaúnde attempted to do was to deal with the unrest in the highlands through a multi-pronged plan. He proposed (1) modest agrarian reform, (2) colonization projects in the highlands, and (3) the construction of the north-south Jungle Border Highway that would run the entire length of the country along the jungle fringe. Rather than dismantle the traditional *latifundio* system, his reform of 1964 sought to open up access to new land and provide new opportunities for production (Hudson 1992).

Belaúnde's reforms did little to change things, in part due to the cost involved to implement the measures. Ultimately, peasants were not appeased. By 1965, a Castroist guerilla movement—the Movement of the Revolutionary Left (MIR)—had begun, to which Belaúnde responded with armed force. After the MIR leader was killed, the movement split into three different factions, one of which would evolve into the MRTA (Movimiento Revolucionario Túpac Amaru) that took hold in the 1980s. Discouraged, Belaúnde turned his focus to large public works—including construction projects, irrigation, transportation, housing, and education—leaving agrarian reform to be dealt with by the succeeding government.

Even though agrarian reform had been discussed as far back as the 1930s by the political party APRA (Alianza Popular Revolucionaria Americana), it was difficult for democratic governments to effect change when the military favored the wealthy and powerful landowning elite (Hudson, 1992). But by the 1960s, new peasant and native movements for change were riding the crest of the period when John F. Kennedy's Alliance for Progress was also awakening widespread expectations for reform throughout Latin America (Kay 1999).

In mid-1960s Peru, there were significant rural problems that foreshadowed agrarian reform. Factors such as high underemployment,

rural unrest, and depressed rural incomes, led to a general belief by politicians and policymakers that the agrarian structure had come to represent the main reason for poor performance in the agricultural sector (Bell 1983).

The Agrarian Reform Law of 1969

General Juan Velasco Alvarado seized power from President Belaúnde in October 1968 in a coup that launched a twelve-year period of autocratic military rule. For the first time in Peruvian history, the military sought to undercut the elite. One of the most radical and prominent programs was a land reform project, "which destroyed the landholding elite in favor of rural laborers" (Albertus 2010).

Albertus cites a prominent Peruvian scholar, Enrique Mayer, who characterized the reform as the first "ever to execute significant income distribution in a society of great inequalities. It completed the abolition of all forms of servitude in rural estates, a momentous shift in the history of the Andes, akin to the abolition of slavery in the Americas."

The Peruvian economy up until the 1960s had primarily revolved around land. In 1965, 50 percent of the economically-active population was involved in agriculture. Severe inequality in the distribution of landholdings remained the norm. According to the 1961 census, the largest one percent of landowners held 80 percent of private land area, whereas 83 percent of farmers held properties of five hectares or less, representing only six percent of privately-held lands (Albertus 2010).

While the coastal plantations had to a large degree been modernized, the haciendas of the *sierra* remained for the most part feudal in structure. Workers were still cultivating small plots of land for sustenance in exchange for their labor, "typically during seeding and harvesting times when the *campesino* most needed to tend to his own plot" (Albertus 2010).

Velasco's law ruled that all landholdings larger than 150 hectares on the coast and 15-55 hectares in the *sierra* were subject to expropriation. He expropriated the large agro-industrial plantations of the coast, destroying the economic base of power of the oligarchy and its *gamonales* (bosses) in the highlands. He also dismantled the export model that had grown up after World War II, placing foreign-dominated industry and banking in the hands of state-run enterprises.

When the more conservative General Francisco Morales Bermúdez pushed Velasco out of office in 1975, he reduced some of the reform's extreme measures, although he did not reverse the law. Redistribution of land continued, especially so in 1976. That year, nearly 4,000 properties were affected by expropriation. Comparatively, about 400 properties were affected in 1969, 2,000 in 1973, and less than 100 in 1980 (Albertus 2010).

Under Morales Bermúdez, however, the size of landholdings to be expropriated was reduced to 50 hectares on the coast and 30 hectares in the highlands, and some haciendas were actually returned to their former owners, resulting in disappointment and further alienation among the *campesinos* (Hudson 1992).

During the twelve years of military rule, 45 percent of Peru's agricultural land—a total of 15,000 properties covering some eight million hectares—was expropriated.⁴ Expropriated lands were spread among peasant farmers into new agricultural units: state-run cooperatives and, to much less degree, smaller, individually owned landholdings (*minifundios*). According to Huber (1990):

The prospective beneficiaries of the land reform fell into two categories: individuals and collectives. If a hacienda had been rented out to sharecroppers, they in principle had a priority right to become individual owners of the land they rented, up to a maximum of 15 ha [hectares]. They had to fulfill the following

⁴ Cleaves and Scurrah as cited by Albertus (2010).

conditions:

- 1) be over 18 years of age
- 2) be head of a household
- 3) be a "campesino" (peasant)
- 4) not already own more land than the socalled "family unit" (93 ha. irrigated land or the equivalent)

When, on the other hand, a hacienda already had evolved into a modern plantation, sometimes with agro-industries attached to it, it was to be allocated to the workers collectively. They were invited to form agricultural production cooperatives according to government regulations and subject to government control. This meant they became owners of, but also their own employees, on the haciendas.

In the in-between situation, so common on the highland haciendas, where peasants worked for the hacienda but had their own plots as well, they were mostly defined as "workers" and invited to form agricultural production cooperatives.

Huber goes on to point out that 92.3 percent of the expropriated land was transferred to cooperatives made up of the laborers of the expropriated haciendas.

The principal aims of the new land reform law were, as outlined by Huber (1990):

- To eradicate all "antisocial forms" of access to land, for instance all contractual forms of access to land, which were deemed inequitable in terms of power and influence;

- To contribute to a new society characterized by solidarity and equality;
- To increase agricultural production.

Effects of the 1969 Agrarian Reform on Agricultural Production

Per Capita Output and Population Growth

The results of Peru's 1969 land reform were far from positive. Although agricultural production had begun to decline as early as the 1950s, the policies of redistribution and expropriation of the 1969 reform did nothing to counter the trend. Per capita output that had been making a slow recovery, reaching its 1950 levels in 1970, was by 1972 on an increasingly downward decline that continued over the next two decades (Hudson 1992).

One index indicating total per capita food production for Peru from 1961 to 1998 shows that the decrease continued all the way through the early 1990s, when per capita output once again reached pre-reform levels. Yields of cereals, roots, tubers, and pulses in the same time frame either stayed the same, increased slightly, or showed variable small increases and decreases until the early 1990s, when root and tuber yields increased slightly more significantly (World Resources Institute 2003).

United Nations Food and Agriculture Organization (FAO) statistics also demonstrate that output of major crops decreased significantly during the same time frame. For example, the yield of oats fell from 11,022 hectograms per hectare (Hg/Ha) in 1965 to 8,732 Hg/Ha in 1970, and continued a downward trend until 1990, when the yield was 1,514 Hg/Ha. By 2000, the production of oats had jumped to 10,554 Hg/Ha. Similar drops after the Velasco reforms are indicated for quinoa and barley, whereas coffee and wheat yields remained relatively steady, with no significant increase until the 1990s or early 2000s (FAO 2010).

As output continued to decline, Peru's population continued to increase. Between 1950 and 1970, the population nearly doubled from 7.6 million to almost 13.2 million. By 1980, the population had reached over 17 million and, ten years later, nearly 22 million. Estimated population for 2010 is about 29.5 million (United Nations 2008).

From the available data, it is evident that post-reform agricultural production failed to meet the needs of an exponentially increasing population.

The Economy and Food Importation

According to an FAO study, Peru's economy as a whole increased from 1970 to 1975 while the agricultural sector declined (Velazco 2001).

As regards macro-economic indicators for 1970-1995 and agricultural investment, the period of overall economic growth was not matched by growth in the agricultural sector. On the other hand, public and private investment expanded most during this period (1970-1975) and thereafter generally declined. The bulk of public investment has been directed towards land improvement (73 percent), largely in the form of large-scale irrigation works in coastal areas. The 1994 Census identified the absence of adequate irrigation infrastructure as a major constraint to capital investment. Meanwhile, private investment has focused on establishing perennial crops, livestock production and the purchase of agricultural machinery. Limited access to credit appears to be a major obstacle to buying equipment, as well as purchasing seed, fertilizer and agricultural services (Velazco 2001).

Between 1970 and 1979, agricultural GDP grew on average only by 1.53 percent each year, a far from dynamic rate (Crabtree 2002). The

resulting deficit was covered by higher food imports. By the end of the reform in 1980, one quarter of foreign exchange earnings were being devoted to food imports. In 1973-1976, imports of foodstuffs represented an estimated 35.4 percent of all imports (Bell 1983).

The lack of an export market provided little incentive for farmers to increase efficiency in production, doing little to increase productivity. By the end of the 1990s, Peruvian agriculture was satisfying an ever decreasing proportion of domestic demand for food. Imports per capita rose steadily from 1970, accounting for roughly 40 percent of food needs by 1999, "a clearly worrying trend for a country in which a large proportion of the workforce is employed in agricultural activities" (Crabtree 2002).

Whereas in 1940-1950 Peru was one-third urban and two-thirds rural, fifty years later these proportions have been inverted. Exchange-rate policies and price controls partly encouraged this "anti-agrarian bias" and increased reliance on food imports that competed with locally produced staples. As noted by Crabtree (2002),

Over the long term, changes in consumption patterns—strongly promoted by importers—would further marginalize local products, to the disadvantage in particular of small-scale producers in the *sierra*. Peruvian agro-industry resorted to importing the inputs for the food industry—notably grains, milk products and vegetable oils—used to make basic food products. In 1970, for instance, Peru imported 500,000 tonnes of food, whilst itself producing 2.7 million tonnes. By 1998, it was importing 3.2 million tonnes of food, whilst producing 3.8 million.

The increase in imports shifted the consumption patterns away from traditional crops, for the most part those crops associated with the highland agriculture, such as quinoa, kiwicha, and beans. According to Crabtree (2002), such changes they are a consequence of fifty

years of progressive urbanization and have defied attempts of various governments to persuade consumers of the value of traditional Andean crops, especially grains.

Migration and Urbanization

Peruvian agricultural production, especially in the *sierra*, has also been undermined by continuous urban migrations that began to take hold in the 1940s and 1950s. Rural migration increased the urban population from 35 percent of the total population in 1940 to 60 percent in 1972 to 74 percent as of 2005 (U.S. Department of State 2010).⁵

In 1961, with an estimated population of 4.8 million, urban dwellers constituted about half of the country's total population. In 2010, the urban population was estimated at approximately 21 million, accounting for three-fourths of the country's total population. By 2008 estimates and projections, the rural population in 1961 was an estimated 5.3 million compared with 8.3 million in 2010 (FAO 2010). The average annual population growth rate from 1980 to 2000 increased 2.6 percent in urban areas, whereas the rural population increased only 0.7 percent (World Resources Institute 2003). As noted by Hudson (1992),

Just as there are strong "pull" factors that attract persons to Lima and other major cities, there are also many conditions that "push" people out of their communities: the loss or lack of adequate farmland, disasters such as earthquakes and landslides, lack of employment options, and a host of personal reasons ...

The profound changes during the 1950-90 period, spurred by sheer increases in numbers largely resulted from a desire for better life opportunities and progress.

⁵ See also "Land Reform Revisited: Can Latin America Get it Right and Should It Even Try?," *International Affairs Review*, 4 April 2009. Online at http://www.iar-gwu.org/node/62, accessed 31 August 2010.

The intensively farmed small landholdings of the *sierra*, where technology has essentially remained unchanged since the Spanish domination, have historically depended most heavily on hand labor for production. It is evident from the data that the agrarian reform of 1969 could not quell the migration patterns already in effect. In fact, it appears that the reform contributed to the rural exodus, which continues to be a contributing factor of poor agricultural production in the *sierra* since that time (Coutsoukis 2004). Hudson (1992) notes that

On the north coast, cities such as Piura, Chiclayo, and Trujillo have attracted persons from their own regions in considerable numbers; significant growth has occurred in the southern highland cities of Arequipa, Juliaca, and Cusco, as well as in the remote jungle city of Iquitos. Despite rates of increase averaging more than 330 percent between 1961 and 1990, these cities drew few people compared to the numbers of persons drawn to greater Lima. In 1990 Lima was 14 percent larger than the next 24 cities combined, and 58 percent of all urban dwellers lived in greater Lima.

As previously indicated, the growing urban population has caused a change in consumer habits, shifting the market away from traditional crops grown in the *sierra*. The intensive migration to the urban centers, especially to Lima, has also swallowed up irrigated coastal farmland and compromised water supplies that once provided agricultural output (Hudson 1992).

The Education Factor and Farming Inefficiency

The inability of farmers to significantly improve farming techniques since the reform has also been a key factor in slowing or not improving production. The lack of progress can be attributed to poor education and limited access to technology. Velazco (2001) observes that

While the economically active population engaged in agriculture appears to have grown by an annual 0.81 percent between 1970 and 1995, a large proportion has little or no education. The 1994 census indicates that 20.4 percent of farmers have no education, 59.4 percent primary education, 14.8 percent secondary education and only 3.61 percent higher education. Thus human capital investments would appear to be an obstacle to the effectiveness of extension programs and to technological change.

Part of the problem is that the reform went "way beyond the time necessary for beneficiaries to learn entrepreneurial skills and for the transformation of infrastructure necessary to evolve from haciendas to individual farms" (Janvry and Sadoulet 2002).

The following statistics in technical profiles illustrate that land reform regulations aimed at improving agricultural output have not served to significantly modernize farms. When comparing farmer technical profiles in the two FAO Agricultural Census years of 1972 and 1994, the conclusion is that in spite of the increase in use of fuel-based energy (from 2.1 to 4.3 percent of holdings), electrical power (from 0.2 to 0.6 percent), plows (from 46.66 to 58.9 percent), and tractors (from 5.4 to 15.9 percent), most farmers still use traditional farm implements. The Census also indicated that only 0.8 percent of landholdings, accounting for 2.5 percent of cultivated area, had cultivators; only 0.6 percent, accounting for 5.6 percent of cultivated area, had a wheeled tractor. Further, 1 percent had an engine-driven sprayer, accounting for 4.5 percent of cultivated area; and only 1.6 percent had a vehicle for transportation, accounting for 7.2 percent of cultivated area.

The Census also provided information on ownership of traditional farm implements, such as animal-powered iron plows, animal-powered wood plows, and human-powered plows. Respectively, these represent four percent, 32 percent and 22 percent. A mere 17

percent of farmers had a manual crop sprayer (Velazco 2001).

Other Social Indicators

Although this paper does not seek to delve into data that isn't directly related to food production, it is interesting to take note of other social indicators that may be indirectly associated with agricultural output and attributable to 1969 agrarian reform policies. A few interesting statistics are listed below.

In the years immediately following World War II, Peru's economy was able to absorb the growing urban labor force, allowing real wages to rise and probably achieving some reduction in poverty. But for twenty years following the reform, from the early 1970s to the early 1990s, change went "downhill in such respects, with falling real wages, increasing poverty, and worsening indices of underemployment" (Coutsoukis 2004).

As of 2008, practically three quarters of the total rural population was poor, that is, about 6 million of Peru's 8 million rural inhabitants live in poverty. Nearly nine out of ten rural people live in the arid Andean highlands, where they mostly produce basic food crops at a subsistence levels (Rural Poverty Portal 2009).

In the area of nutrition, calorie consumption per capita fell 5 percent from the average for 1964-66 to 1984-86. In 1988 calorie consumption per capita was 2,269, as compared with 2,328 in 1987. Hudson (1992) suggests that "because calorie consumption levels generally parallel income levels, the decrease must have been concentrated at the level of the extremely poor."

While none of these statistics are conclusive—and there are others available upon further research—they do serve to illustrate the point that agrarian reform over the decades has not had a positive impact on poverty, nutrition, and personal economy, which may be contributing factors in the food production sector.

Land Distribution, "De-collectivization," and Liberalization of the 1969 Reform

By distributing land to the peasants, the government had hoped to reduce the social conflicts in the countryside and incorporate the peasantry into the social and political fabric of the country (Kay 1999). Direct expropriation and redistribution to rural peasants in the form of collectives and cooperatives was prioritized to the exclusion of other aspects of land reform, such as land titling, but some of the poorest segments of the population—many in indigenous communities, such as those working *minifundios* and most of the landless—did not benefit from the reform (Albertus 2010). Kay (1999) further notes that

Those responsible for formulating the agrarian reform policies throughout Latin America massively underestimated the relative importance of peasant agriculture within the large properties, through share cropping and tenancy in return for labor, for example The new administrators of the reformed collective-style enterprises, who were generally named by the state, had much less authority over the beneficiaries than the landowners had had, and proved unable to avoid the collectives' gradual internal deterioration.

Prior to the reform, the plantations of the coast were more capitalized and employed a larger proportion of labor force, while the haciendas of the *sierra*, which were more oriented to the domestic market, relied more heavily on the labor of tenant farmers. It was much easier to establish centralized and collective administration systems on the plantations than on the highland haciendas. This had an important influence on the later de-collectivization process (Kay 1999).

That many of the government-run collectives had gone bankrupt or were close to becoming so by the end of the 1970s was also a determining factor in the continuing decrease in production. The backlash was a type of counter-reform whereby much of the land

was converted from a cooperative with the government back to private holdings. The changes came about in 1980 when the civilian government of Fernando Belaúnde Terry returned to power. They were put into effect after majority votes of the cooperative members in each case. It was obvious that the preferences of the farmer had come to the point of direct opposition to the Velasco reform (Coutsoukis 2004). In this regard, Crabtree (2002) emphasizes that

as a reform imposed "from above" rather than emanating "from below," it was particularly susceptible to shifts in government policy. As output levels dwindled in the years after the reform, pressure built up to change the model. In the late 1970s and early 1980s, the agrarian reform was abandoned and the process of dividing up the cooperatives began.

By 1986 the majority of coastal cooperatives, excluding the giant sugar complexes, had been parceled. The livestock cooperatives of the *sierra* also went through substantial parceling. The process turned wage laborers on the cooperatives into peasant proprietors (Tammen 1991).

Although the failure or success of "de-collectivization" is a topic for another paper, it would be fair to say that data does not support the theory that "de-collectivization" necessarily improved productivity. In fact, some econometric studies show a wide variety of results in output that demonstrate only small increases in productivity on the same lands that were once held in cooperatives (Hudson 1992). While these changes did not constitute a reversion to the pre-reform land tenure structure, there were many inhibiting factors that precluded the peasants from continuing to make progress on their lands.

For example, as recently as 1996, when President Alberto Fujimori instituted the Land Tenure Law, the State had up until that time still only recognized collective ownership of the de-collectivized cooperatives. Since individual ownership was not recognized, the

majority of the private holdings were not registered or titled and, therefore, could not be sold or mortgaged. This lack of legally defined property significantly inhibited the peasants from making progress (Tammen 1991).

The 1996 Land Tenure Law made it possible for land to be titled and, therefore, used as collateral. Despite this effort, the process is slow. As of 1998, over half the plots were still untitled (Eguren 1998). Another debilitating factor for farmers is that the current Water Law does not associate water usage with land area, as it previously had. This means that farmers must pay for their use of water, which is an extremely expensive commodity, especially on the coast.⁶

Other changes to the property system came later in the 1980s and early 1990s when Fujimori's economic advisor, Hernando de Soto, and his Institute for Liberty and Democracy (ILD) helped initiate the expropriation of additional lands through the creation of new initiatives and regulations. The new laws gave titles to more than 1.2 million families and legitimized 380,000 firms that had previously operated in the black market. By granting titles to small coca farmers in the two main coca-growing areas, the Shining Path (*Sendero Luminoso*) guerrilla was deprived of safe haven, recruits and money. Shining Path leaders were forced to cities where they were ultimately arrested.⁷

In addition to the government's unsuccessful policies toward agriculture in general, other outside factors contributed to a steady decline in production that had begun with the 1969 reforms. These would include the overall deterioration of the economy during that period, the imposition of government price controls on food and the subsidization of imports to hold down prices for the urban consumer market, and increased violence as the actions of the Shining Path and MRTA drove people off farms and out of whole villages, leaving

^{6 &}quot;Peru – Agriculture," in *Encyclopedia of the Nations*. Online at http://www.nationsencyclopedia.com/Americas/Peru-AGRICULTURE.html, accessed 31 August 2010.

^{7 &}quot;Hernando de Soto," WordIQ.com. Online at www.worldiq.com/definition/Hernando_de_Soto%28economist%29, accessed 29 August 2010.

productive land and equipment unused. In some areas, production fell by half.8

Even the free market policies of President Fujimori, beginning in 1990, that served to undo many of the expropriation and redistribution policies of the 1969 reforms, did not serve to make a sustained positive impact on agricultural production.⁹ According to Velazco (2001):

Historically, the agrarian crisis in Peru can be dated back to the 1970s when production increases failed to keep pace with population growth

Production declined 5.5 percent between 1989/90 and 1990/91, 26 percent 1990/91 and 1991/92 and 8.4 percent between 1991/92 and 1992/93 (Statistics Bulletin of the Ministry of Agriculture: selected years), along with a similar pattern in cropped areas.

Conclusion

The specter of abuses toward the Indian has hung over Peru like a black cloud while the fervor for reform has been a predominant and concurrent concern—at least for the native population. From the outset, indigenous Peruvians fought to retain their homeland from the Spanish intruders (the Incas engaged in an ultimately unsuccessful forty-year guerilla war against the conquistadors). Native uprisings, rebellions and revolts have pervaded Peruvian history, such as those of Túpac Amaru II and, more recently, terrorist movements such as the MRTA and the Shining Path have issued out of the plight of the oppressed, promising equality, economic stability, social reform, and hope. Often these insurrections have been ill-advised, violent and,

⁸ These changes did not constitute a reversion to the pre-reform land tenure structure; rather, they led to a more equal distribution of land ownership.

^{9 &}quot;Peru – Agriculture," in *Encyclopedia of the Nations*. Online at http://www.nationsencyclopedia.com/Americas/Peru-AGRICULTURE.html, accessed 31 August 2010.

ultimately, unsuccessful in and of themselves.

Measuring the success or failure of Peru's 1969 agrarian reform is a difficult and controversial question—a matter for some debate. The discussion would have to consider many other mitigating factors, including the economy, government policy, natural disasters, violence, migration, etc. However, it can be said with some certainty that the reform did not live up to expectations in terms of providing a new dynamism in food production.

The small amount of data presented in this paper illustrates the point. Others have drawn similar conclusions based on their extensive research. According to Bell (1983), the explanation for the failure lies largely in the mis-diagnosis of the agrarian problem by General Velasco and his military government.

Having accepted the structuralist argument that the fundamental problem was the existence of the latifundio-minifundio complex the reform they introduced was never likely to give an important stimulus to food agriculture (J.M. Caballero in Bell 1983).

Bell (1983) observes that if one takes a close look at the structure of the *sierra* agricultural landscape, where, he points out, one-half of Peru's food output was produced and where the hacienda was supposed to have been the most oppressive, one sees that the haciendas controlled only one-fifth of the land and an even smaller fraction of the livestock. The medium-sized commercial farms that were unaffected by the reform continued to produce as before. The redistribution of the haciendas did not significantly influence output since most production continued to take place outside the expropriated lands (Bell 1983).

Bell also points out that price controls, fixed exchange rates, and the continuation of cheap food importation up until the mid-1970s did not serve to incentivize the domestic producers. As Alvarez (cited in Bell 1983) observes, "the agrarian reform, as it was designed, was not able

to resolve the problems of production."

While there was a 51 percent expansion in the cultivated area between the census of 1972 and 1994, land was still concentrated in larger holdings. Although the agrarian reform collectivized land into groups, the present agrarian structure is predominantly made up of small farmers. In 1994, they accounted for 77 percent of the total farmer population but had holdings of less than five hectares a piece, which amounted in total to about 6.5 percent of the agricultural area. In contrast, 2.9 percent of the farmer population had holdings of more than 50 hectares and accounted for 70.4 percent of the total agricultural area (Velazco 2002). Of Peru's 1.7 million farms in 1994, occupying a total of 5.5 million hectares of agricultural land, 1.2 million were located in the *sierra*. Of those, 63 percent were less than 3 hectares in size (Rural Poverty Portal 2009).

Enrique Mayer, author of *Ugly Stories of the Peruvian Agrarian Reform*, observes that there was a fundamental difference between what the reform had intended to do and what it ended up doing. He noted that the reform did not so much distribute land as consolidate it, thus transferring many of the pre-reform problems onto a new set of actors (La Serna 2010).

It appears that the success or failure of the peasant farmer is a complex question intrinsically linked with matters of education, technology, and earning power, as well as with political unrest and, oftentimes, violence. For rural farmers and land-owning peasants, access to adequate equipment, farming technology, schooling, irrigation, labor, and funding is imperative in order to keep agricultural productivity at a level in line with maintaining a decent livelihood on the personal level and contributing to the nation's economy on the whole.

For poor rural Peruvians, the answer to the question of achieving a "better life" may be to flee their rural landscape, first, by migrating to the cities and then by leaving the country with sights toward the United States of America. But reaching the United States is far from realistic for most Peruvians who cannot afford the trip. Mostly, as is the case within Peru itself, Latin Americans tend to migrate where their family

members go (Passel 2010). For now, the migration pattern is for rural families to gather in the *pueblos jóvenes* surrounding the capital of Lima or in the rural areas surrounding other major cities, where they eke out a living in poverty.

And while poverty rates nationally seem to be on the decline as of 2009 estimates, the rate was still high at 34.8 percent. According to Peru's National Statistics and Information Institute (INEI), national poverty levels have dropped but poverty in rural zones has increased to over 60 percent. In Lima, the main urban center of the country, the *barriadas* offer a very poor quality of life with little chance of development.

It has been said that although Peru is endowed with perhaps the widest range of resources in South America, somehow they have never been coherently or effectively utilized to construct a balanced and progressive society (Hudson 1992). This observation most assuredly has applied to the agrarian question. Although the more recent land reform strategies of the 1980s, 1990s, and 2000s have attempted to redress the Peruvian agrarian problem, the issues have not yet been definitively solved.

How can food production be increased? How will rural as well as urban communities be able to sustain themselves when the agricultural labor force continues to be depleted through migration? How can some measure of control be brought to bear on the accelerated rate of urbanization? And how can the impacted cities continue to serve new populations when infrastructures remain inadequate?

For the answers to these questions, Peru must look to the future, but also likewise to the past. If there is but one lesson to be drawn from former generations, it is that while land is valuable, the most precious resource is the people whose lives are sustained by it.

[&]quot;Peru could see its poverty rate fall to 25 percent by 2015—UNDP," *The Peruvian Times*, 4 August 2010. Online at http://www.peruviantimes.com/peru-could-see-its-poverty-rate-fall-to-25-percent-by-2015-undp/047529, accessed 14 October 2010

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Disposable Workers: Immigration after NAFTA and the Nation's Addiction to Cheap Labor

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ABSTRACT

This paper analyzes the issue of migration from a different perspective by focusing on the root causes of migration. First, I examine the consequences that the North American Free Trade Agreement (NAFTA) had on the Mexican economy and how it drastically displaced people. I link economic indicators such as a decline in working wages and opportunities in Mexico to an increase of north-bound migration, all of which coincided directly with the ratification of NAFTA. On the flip side, the United States experienced an economic expansion, creating a demand for workers, in particular cheap, exploitable workers, which also contributed to a huge migration in the last two decades. Unfortunately, as anti-immigrant rhetoric increases and antiimmigrant legislation grows nation-wide, these vulnerable workers are forced deeper into the shadows, compounding the unhealthy, codependent relationship of Mexican workers and U.S. corporations. The paper concludes by suggesting several changes that should be enacted simultaneously—revise NAFTA, assist Mexico to stabilize its economy, and adopt comprehensive immigration reform—and suggests unions as a structure that could serve as a source of labor protection for undocumented workers.

Introduction

Immigration has become a toxic issue in the United States. The most serious economic crisis since the Great Depression has

increased the stress of families across the nation. In this context, immigration has been wrongly targeted and drastically affected the way the immigration debate is taking place. Immigrants have been dehumanized and the issue has been analyzed in a reactionary way. The scapegoating of undocumented workers has caused many hardships for this community: racial attacks against immigrants and Latinos have reached historical highs, families are being separated, and both Latinos and undocumented workers suffer the most wage theft and death and injuries at work.

Immigration reform is a priority and must happen soon but, so far, only short-term solutions have been proposed. For immigration reform to really work, all the factors influencing migration must be addressed simultaneously. There is little point in changing the immigration procedure without also changing the economic forces behind that migration.

There is a strong relationship between free trade policies with Mexico, as well as the serious reliance of cheap labor in various economic sectors in the United States, and the drastic increase of undocumented migration to the United States in the last two decades.

The first section of this paper will discuss the North American Free Trade Agreement (NAFTA). One of the reasons touted to support NAFTA in the early 1990s was that it would ease migration to the United States by strengthening the Mexican economy. The reality has been quite different. NAFTA ultimately destroyed local businesses. It specially had a negative effect on Mexican agriculture, and therefore it denigrated the overall economic stability of that nation. Since the passage of NAFTA in 1994 the numbers of Mexicans migrating each year to the United States has more than doubled.

The second part of the paper will focus on the U. S. addiction to cheap labor and how powerful businesses have established a deregulated system that is voracious in its demand for cheap, exploitable labor, and the impact that such a system has had on immigration. In this context, the anti-immigrant movement and enforcement-only policies have made undocumented workers more vulnerable and exploitable.

Political discussion in the near future should be focused on revising labor, trade, and immigration policies that address the root causes of economic insecurity and growing migration. Throughout this paper, the root causes of immigration will be flushed out with a focus on failed economic regional policies, mainly NAFTA, and the U.S. addiction to cheap labor. Lastly, after dissecting the factors that lead to poverty, migration, and the conditions of undocumented workers in the United States, some solutions are discussed.

The North American Free Trade Agreement (NAFTA): A Wise Policy?

A key component missing in the immigration debate is the connection between immigration and trade policies. Migration and international trade are erroneously seen as mutually exclusive issues, but they must be analyzed together because, actually, their relationship is intimately associated. The best example of this argument is NAFTA, which requires unique analysis because 59 percent of all undocumented immigrants in the nation come from Mexico (Pew Hispanic Center 2009) and, in particular, because the flow of undocumented immigrants from Mexico to the United States increased significantly after NAFTA.

When NAFTA was being negotiated it was presented on both sides as the magic solution to solve the regional economic problems. Presidents, politicians from both the Republican and Democratic parties, think thanks, and international organizations all strongly supported NAFTA and the miraculous changes it would represent for the region. At the time, it was argued that not approving NAFTA would be a terrible mistake for the region and North America was not going to be ready for global competition in the future. There was no other option but NAFTA. Some even said that this treaty was the key for Mexico to be part of a select group of developed nations in only ten years. It was often mentioned that migration from Mexico to the United States was going to be reduced because Mexicans would have no reason to migrate. These issues gained more credibility when not only Republicans but also Democratic presidents made this case.

In his push for NAFTA, President Bill Clinton argued that there was going to be "less illegal immigration because more Mexicans will be able to support their children by staying home." President Gerald Ford said that "if you defeat NAFTA, you have to share the responsibility for increased immigration into the United States, where they want jobs presently being held by Americans." President Jimmy Carter also contributed to the arguments saying that without NAFTA "illegal immigration will increase. American jobs will be lost" (The White House 1993). Unfortunately, the progressive voices of the time that warned about this kind of policy could not compete with the marketing and money that was spent lobbying for NAFTA.

NAFTA = **More Migration**

Today, after sixteen years of experience with NAFTA, we have enough data and research to show that NAFTA was a failure for working people on both sides of the border. Overall it drove wages down in Mexico and the United States, it created a huge gap between rich and poor, and produced a high concentration of wealth. Most importantly, however, today we can see the strong association between NAFTA and migration: it displaced Mexican farmers off of their land and into the already overcrowded cities in Mexico, or on a path to migration to the United States.

There has been a historical tradition of migration to the United States from Mexico. But there were serious increases early in the 1980s, once the free-market reforms started taking place and it reached historically high numbers after NAFTA. In NAFTA's first decade, the annual number of immigrants arriving to the United States from Mexico more than doubled and more than 80 percent of post-NAFTA Mexican immigrants were unauthorized. Jeff Faux, founder of the Economic Policy Institute, puts it this way: "instead of alleviating the conditions that were causing out-migration to the United States, NAFTA made them worse ... In effect, NAFTA turned a modest and manageable fate of out-migration from Mexico to the United States into a political crisis on both sides of the border" (Faux 2008, 10).

To quantify, in the years preceding NAFTA (1985 to 1989), approximately 80,000 undocumented immigrants entered the United States from Mexico annually. From 1990 to 1994 immigration increased to 260,000 annually. From 1995 to 1999, the number jumped to 400,000 annually. Between 2000 and 2004, immigrants were crossing the border at a rate of 485,000 a year (Passel 2005, 16).

In 2008, almost thirteen million Mexican immigrants lived in the United States, a seventeen-fold increase since 1970. Fifty-five percent of these immigrants are undocumented. Almost six out of every ten undocumented workers in the nation are Mexicans. Today, eleven-percent of everyone born in Mexico is living in the United States, in comparison with 1.4 percent in 1970. In 1960 Mexico ranked seventh as a source of immigrants. Now, Mexico has the largest number of undocumented immigrants in the United States (seven million, or 59 percent) and it also has the largest number of legal immigrants (5.7 million, or 21 percent) (Pew Hispanic Center 2009).

The impact that these free trade policies have had in Mexico has been so drastic that recently the World Bank considered Mexico the nation that exports the largest number of migrants in the world—more than China and India, countries than have at least ten times more people than Mexico.¹

NAFTA's Impact on Mexican Agriculture

One of the main reasons for the increase in migration was the effect that NAFTA had on Mexican agriculture. Asymmetric nations (in this case, the United States and Mexico) need treaties that make up for the drastic economic differences in order to promote real regional development, and NAFTA did not provide for that. A careful approach was needed particularly in the sensitive sector of agriculture. For example, in Mexico, about 25 percent of the labor force was employed

¹ Roberto González Amador and David Brooks, "México, el mayor expulsor de migrantes del planeta, dice el BM," *La Jornada*, 16 April 2007. Online at http://www.jornada.unam.mx/2007/04/16/index.php?section=politica&article=003n1pol, accessed 28 April 2011.

in agriculture pre-NAFTA, the largest single sector of employment in Mexico at the time (Cornelius and Myhre 1998), while it was only a maximum of 2 to 3 percent in the United States.

Also due to NAFTA, Mexico cut tariffs dramatically on both agricultural and livestock products and on almost all manufactured goods from the United States. Under NAFTA, the amount of subsidized corn that was exported from the United States to Mexico more than quadrupled in the first ten years. In the United States, US\$20 billion is invested each year to subsidize agriculture in comparison with US\$3.5 billion in Mexico. The sad reality is that this corn was sold at prices which were 30 percent below the cost of production in Mexico (Cornelius and Myhre 1998, 5).

This obviously has a serious effect on Mexican farmers. For Mexican farmers it was now cheaper to buy the corporate-grown corn and beans than grow their own. Between 1995 and 1999, real prices for wheat and corn in Mexico declined by 45 percent and between 1990 and 1999, the price of beans fell by 40 percent (Zermeño 2008). A combination of all these factors increased poverty and these farmers were pushed to the cities in search of the opportunities that were supposed to come with NAFTA. But those jobs never materialized and for many the only option was to cross the border. Some estimates indicate that 4.3 million people migrated due in large part to that influx of cheap grains from the United States "resulting in the decimation of at least two million farming jobs and eight million small farmers" (Witness for Peace 2009, 1).

This combination of factors actually made life for many Mexicans nearly impossible. The invasion of cheap U.S. grain did not really make the prices fall; the final result was the opposite. The best example is the case of tortilla prices. For example, within the first six years after NAFTA, the price for corn tortillas nearly tripled, rising 571 percent. By January 2007, tortilla prices had tripled again (Witness for Peace 2009, 8). This has a direct impact in the poorest people in the country, particularly if we consider that tortillas are the most important food in the daily diet of Mexican people. Tortillas represent 75 percent of the

caloric intake for Mexico's fifty million poor (Zermeño 2008).

This happened for a number of reasons. Under NAFTA, Mexico became an importer of, and dependent on, basic grains, which means that the country's food security is in the hands of the multinational corporations that control the market. Secondly, subsidies for the production of tortilla, which made them affordable to millions of people, were removed. The National Popular Staples Company CONASUPO (Compañía Nacional de Subsistencias Populares) was abolished instead of being reformed to better serve the Mexican poor. Under this system the government used to buy corn at subsidized prices and produced tortillas that they sold in state stores at low, subsidized prices. Wal-Mart became the largest retailer in Mexico and Grupo Maseca obtained the monopoly of tortilla production. Once corporations are in charge they have control over these products and their main goal is to maximize profits. For example, Cargill's net income increased 660 percent from 1998 to 2007 (Olson 2008), while at least two million Mexican farmers lost their jobs (Spieldoch and Liliston 2007).

Free trade has always been more beneficial to the more advanced or more industrial nations. The concept of "comparative advantages" in the context of free trade does not apply to a great majority of Mexican farmers who do not produce for the market. Corn and beans in Mexico have a historical tradition in these farming communities. Common sense dictates that if we are concerned about the livelihoods of these farmers and their jobs, then they should have been excluded from NAFTA. A General Accounting Office (GAO) study of the impact that NAFTA had in Mexico concluded that there was an urgent need for rural compensation funds. Unfortunately, there was no action; this recommendation was totally ignored. It is in the U.S. interest to reverse course. Support for local community development in Mexico can provide opportunities for small farmers, their families, and their communities to stay at home rather than join the displaced millions pushed north by this failing economic model.

Inequality and Dependency after NAFTA

The purchasing power of minimum-wage workers also was seriously affected with this kind of policy. Trade liberalization has reduced living standards for the Mexican poor since the 1980s. The minimum wage has not kept up with inflation and now it can buy just sixteen percent of what it could buy two decades ago (Muñoz Ríos 2006). In NAFTA's first decade alone the minimum wage dropped 23 percent (Wise 2003). This problem is affecting the cost of the basic food basket which, in Mexico, rose 60 percent in 2008 alone. It is estimated that because of such a drastic shift in food prices, thirty million Mexicans could be hit with hunger (Olivares Alonso 2009). Additionally, during most of the 1990s the informal sector grew importantly, to the point that in 1995 and 1996 employment in informal jobs approached 50 percent of all employment in Mexico (Polaski 2004).

Income inequality has been another serious issue. In comparison with the period before NAFTA, the top 10 percent of households have increased their share of national income, while the other 90 percent have lost income share or seen no change (Polaski 2004). These policies created drastic concentration of wealth in a few hands. Today, Mexico has the richest person in the world, Carlos Slim, while on the other hand it has 50 percent of its population living in poverty. Carlos Slim's net worth is equivalent to about 7 percent of Mexico's GDP.²

Also, NAFTA made Mexico much more dependent on migration and remittances as a source of income for the country. Today, remittances are the second highest official source of income for Mexico, just after petroleum. Remittances increased from approximately US\$3 billion in 1993 to over US\$20 billion for the last four years. This means that today in Mexico, one-third of families depend on them (Goodman 2007).

Even maquiladora (sweatshop) employment, where wages are almost

^{2 &}quot;7 Things to Know about Carlos Slim Helú," *The Week*, 16 March 2010. Online at http://theweek.com/article/index/200797/7_things_to_know_about_Carlos Slim Helu, accessed 6 April 2011.

40 percent lower than those paid in heavy non-maquila manufacturing, is on the decline. Since 2000, hundreds of factories and hundreds of thousands of jobs in this sector have been displaced as China joined the WTO and Chinese sweatshop exports gained global market share (Salas 2006).

The root cause of accelerating immigration from Mexico is the stunning opportunity and wage gap. Jobs are scarce in Mexico, but even a fully employed worker will earn only about a tenth of what a comparable worker earns in the United States. NAFTA has brutally squeezed Mexico's poorest workers and pushed millions onto the migrant trail. To be exact, when Mexican wages drop 10 percent relative to U.S. wages, attempts to cross the border illegally increase by 6 percent (Thornburgh 2007). The inverse of that relationship is also true.

The Recent Economic Crisis

The fact that Mexico has become increasingly dependent on the United States after NAFTA also makes the country much more vulnerable to changes in the U.S. economy. Currently, thanks to NAFTA, 85 percent of Mexico's exports go to the United States. This kind of high dependency is very dangerous, particularly when the United States is facing the biggest economic crisis since the Great Depression. The Mexican economy already showed the negative impact of such dependency: it is estimated that 541,400 jobs were lost in Mexico's formal sector between November 2008 and January 2009.³ The Mexican economy contracted 8.2 percent in the first quarter of 2009, which resulted in the loss of US\$55 billion, which represents the worst economic contraction for the nation in a century. There was also a decline in remittances; from January to May 2009 remittances slid 11.2 percent in comparison with the same period in 2008 (Witness for Peace 2009).

^{3 &}quot;Perdidos, 541 mil empleos en tres meses," *El Financiero*, 9 February 2009

As the economic crisis deepened and unemployment kept rising in the United States, immigrants found high levels of exclusion. Growth among the U.S. foreign-born population has slowed since the beginning of the recession in 2007 and there has been no significant increase in the undocumented population since 2006. Return migration in the last two years increased (Papademetriou and Terrazas 2009). The number of undocumented immigrants in the nation declined by nearly 1 million. The number dropped to 10.8 million in 2009 from 11.6 million in 2008, marking the second consecutive year of decline and the sharpest decrease in at least three decades, according to a report by the U.S. Department of Homeland Security (Watanabe 2010). A number of factors contributed to the slow down and reduction in immigration: the growing anti-immigrant hysteria and the increase in enforcement policies and border enforcement. The central reason has been the economic crisis and high unemployment. But as soon as the U.S. economy recovers and the free trade economic policies in Mexico continue, we can expect an increase in immigration again. The sectors that strongly depend on undocumented workers are going to increase their demand of these workers, unless better and fairer regional economic policies are put in place.

Free Trade Favors Corporations, not Workers

NAFTA and other free trade agreements are actually corporate rights agreements. They exempt businesses from many local laws including regulations on health, safety, wages, hours, pollution, and other critical business practices. Should a dispute arise, they also allow court systems, which lack transparency and an appeal process and in which corporations hand pick the judges who, naturally, can decide in favor of the corporations.

It is time to recognize that, at least when it comes to creating the jobs that would help close the widening gap in relative wages between trading partners and make migration unnecessary, NAFTA was, and continues to be, an abject failure. Truly comprehensive immigration reforms should be attuned to the interests of the majority of workers

and citizens in both Mexico and the United States. Such reforms are the only way to slow migration. Unfortunately there are major sectors that are benefitting from this system and they would oppose any change. Free trade policies keep pushing for the exploitation of workers, it is a race to the bottom instead of a race to increase the middle class, the main characteristic of a developed nation. Thus, there is ample reason to revisit and revise NAFTA, to bring stability on both sides of the border.

U.S. Addiction to Cheap Labor: Corporations vs Vulnerable Workers

Another issue that is ignored in the immigration debate in the United States is the systemic demand for cheap, exploitable and disposable illegal labor. The fierce competition of globalization requires corporate management to secure the cheapest possible products, which often comes at the expense of undocumented workers.

Most undocumented migrants who come to the United States are already poor and vulnerable. But the system here keeps most workers poor and even more vulnerable. Most undocumented immigrants are concentrated in the kind of low-skilled professions where working conditions are extremely difficult. They have the lowest wages and the highest levels of deaths and injuries at work. If we combine this environment with the constant fear of undocumented workers—the possibility of being deported—then we have the perfect formula for a large pool of people, afraid of raising their voice and unable to defend their human and labor rights. In turn, labor costs stay low and these workers are more profitable for their employers. However, jettisoning the values of basic human and labor rights to satisfy corporate interests will only push this nation into a deeper crisis.

Immigrant Workers and Low-skilled Jobs

The United States has a labor force of approximately 154 million people, and it is estimated that 8.3 million are undocumented

immigrants. This means that 5.4 percent of the labor force is made of undocumented workers (Passel and Cohn 2009, iii). Some sectors of the economy have higher ratios and depend heavily on the labor of undocumented workers. For example, the following occupations have high shares of undocumented workers (Passel and Cohn 2009, 15):

- farming: 25 percent;

- construction: 21 percent;

- building grounds keeping and maintenance: 19 percent;

- food preparation and serving: 12 percent;

- production: 10 percent; and

- transportation and material moving: 7 percent

In some of these sectors the proportion of unauthorized immigrants is higher than the proportion of U.S.-born workers. Additionally, within occupations, undocumented workers tend to be overrepresented in the lowest-skilled jobs. For example, undocumented workers are 40 percent of brickmasons, 37 percent of drywall installers, 31 percent of roofers, 28 percent of helpers in construction trades, 28 percent of dishwashers, 27 percent of construction laborers, 27 percent of maids and housekeepers, 23 percent of butchers and other meat processing workers, and 21 percent of parking lot attendants (Passel and Cohn 2009, 14, 15, 31).

A System that Keeps Them Poor

For all these reasons, poverty rates among undocumented immigrants are much higher than among the U.S.-born. And the system keeps them poor. For example, among undocumented immigrant adults, 21 percent are poor in comparison with 10 percent of U.S-born adults. Of children of undocumented immigrants, one in three is poor. Undocumented immigrants are overrepresented in extreme poverty in the nation. Undocumented immigrants and their U.S-born children represent 11 percent of all people with incomes below the poverty

level. This means that it is twice their representation, since they are 5.5 percent of the total population (Passel and Cohn 2009, 17).

As if poverty and working conditions were not bad enough, undocumented immigrants also have limited access to health insurance. Almost 60 percent of undocumented immigrants have no access to health insurance, in comparison with 14 percent of the U.S.-born. Also, 45 percent of immigrant children with undocumented parents have no access to health care in comparison with 8 percent of children with U.S.-born parents. All this means that undocumented immigrants account for one in six persons in the country with no health insurance (17 percent), which is more than three times their representation in the population (Passel and Cohn 2009, 18-19).

Wage Theft

Basic labor rights call for workers to be paid at least minimum wages, get paid overtime, access to compensation when workers suffer injuries, the right to take a break for meals, and the right to fight for better working conditions. But these rights are all but nonexistent for most undocumented migrants. A comprehensive study, "Broken Laws, Unprotected Workers," surveyed workers in New York, Los Angeles, and Chicago, cities with high density of undocumented immigrants, to look at wage-law violations. The report's findings highlight that Latino and, particularly, immigrant workers have, by far, the highest rates of minimum and overtime wage-law violations of any racial or ethnic group. Of the 4,387 workers surveyed, those in low-wage industries experienced a fifteen-percent weekly loss in pay. Immigrant Latino workers faced the highest minimum wage violation rates at 35.1 percent in comparison to 10.1 percent of their white counterparts. Also, 40 percent of Latina workers were victims of minimum wage violations. The highest incidence of these violations occurred among undocumented workers (37.6 percent) (Bernhardt et al. 2009).

Death and Injuries at Work

The number of injuries among immigrant workers and the high number of deaths highlights the cruel reality to which these workers are subjected: daily exploitation, hazardous and substandard working conditions in some of the most dangerous occupations, along with inadequate protections or none at all. The AFL-CIO report, "Death on the Job: The Toll of Neglect: National and State-by-State Profile of Worker Safety and Health in the United States," illustrates, among many things, a breakdown by race of the total number of workplace fatalities. From 1992 to 2007, the number of fatalities among Latino workers has increased by 76 percent. The total number of fatal injuries Latino workers have suffered on the job (937 deaths) places the Latino death rate on the job at 21 percentage points above the national average—higher than any other population group. Of the 937 lives lost, 634 were immigrants, reinforcing the vulnerable status of our immigrant workforce (AFL-CIO 2010).

The numbers presented by the AFL-CIO report paint a clear but grim picture of worker safety in the United States. Specifically, the construction sector—a segment of the economy that is largely represented by undocumented workers—had the largest number of fatal work injuries (1,204 deaths), a segment of the economy that is largely represented by undocumented workers. The report also highlights that the top three states in fatalities of Latino workers were Texas (211), California (179), and Florida (111), states also that have some of the largest concentrations of undocumented workers (AFL-CIO 2010).

Anti-Immigrant Hysteria Increases the Vulnerability of Undocumented Workers

Dark-skinned, undocumented immigrants have always had a difficult time being welcomed in various sectors of the United States, but this is probably one of the highest points of anti-immigrant fervor in the history of the nation. This has dire consequences for migrants: hundreds are dying in attempts to cross the border, families are regularly separated due to enhanced deportation policies, racial attacks against immigrants and Latinos have reached historical highs, anti-immigrant myths are becoming commonplace in U.S. society, and anti-immigrant hate groups in the nation have grown like never before.

Right Wing Media Influence

The attacks against undocumented immigrants have been reflected in a number of ways: through political rallies, legislation, the media, anti-immigrant movements, anti-immigrant think thanks, and more. One particular group—mainly the extremist right—decided to focus their anger against Latino immigrants.

Some members of the media have played a central role in promoting this message. Lou Dobbs was one who consistently reported erroneous information and disseminated racist myths. For years, his show on CNN served as a regular platform for anti-immigrant organizations such as the Federation for American Immigration Reform (FAIR), which has been listed as a hate group by the Southern Law Poverty Center (SPLC). His show was cancelled, but others remain, such as FOX's Glen Beck and Bill O'Reilly, who have rallied the Tea Party into believing that Latino immigrants are "treading upon us" and taking freedom from U.S. citizens. They fail to acknowledge that the immigrants "give" more than they "take."

Anti-Immigrant Laws Proposed and Passed

The anti-immigrant chatter has garnered support to the point that prejudice has been stamped into law by some politicians. As a result, discrimination isn't only practiced behind closed curtains—it's protected by the law. The policies range from prohibiting rental housing to undocumented immigrants to the legalization of racial profiling, as we've just witnessed in Arizona.

Arizona State Bill 1070 is the toughest immigration law in the country

in generations. A Federal District Judge overturned the strictest aspects of the law and that legal battle continues, but in many ways, the damage has been done. Many families picked up and moved on to "friendlier" neighborhoods and copy-cat legislation is being discussed in dozens of states around the country.

Another example of anti-immigrant legislation last year was proposed by Senator David Vitter, who pushed to amend the 2010 Census. This amendment sought to intimidate and prevent individuals from participating in the 2010 Census by asking their immigration status. It would have resulted in an inaccurate Census count and would have severely impaired the Congressional reapportionment and redistricting of congressional and state legislative districts.

While the Vitter Amendment didn't succeed, some of the worst state and local anti-immigrant measures have passed recently. Whether it is criminal penalties for illegally holding a job (Mississippi), denial of services to undocumented migrants (Prince William, VA), discriminatory housing laws (Hazleton, PA, and Farmers Branch, TX), or local police (Maricopa County, AZ, and Irving, TX) who track immigrants and find pretexts to arrest and then deport them, the message of rejection is clear.

The situation isn't much better at the Federal level, either. The events in Postville, Iowa, well-documented by Professor Erick Camayd-Freixas, show how authorities are systematically criminalizing migrants. Of the almost 400 undocumented migrants detained at that meatpacking plant, 260 were charged as serious criminals and sent to prison for five months with the inflated charge of "aggravated identity theft" and "Social Security fraud." In this process workers were "tried" en-masse and coerced into pleading guilty, a clear violation of their constitutional rights (Preston 2008).

It was just one example of Federal roundups of undocumented workers in the United States. The separation of families and deportations has reached new levels. Between September 2009 and September 2010, the United States deported a record number of undocumented immigrants. According to the Washington Post, 392,000 were returned

to their country of origin.4

Hate Crimes Against Latinos: the Violence Increases

The official sanctioning of prejudice is being echoed in what the Federal Bureau of Investigation (FBI) reports is a spike of hate crimes against Latinos. A 2008 FBI report illustrated a 40 percent increase in attacks against Latinos between 2003 and in 2007. They represented 62 percent of all victims of crimes motivated by the victims' ethnicity or national origin. For Latinos overall, but particularly for undocumented immigrants, public safety is in jeopardy.

The criminalization of migrant workers, even simply referring to them as "illegal aliens," has severe social, human and psychological implications for the Latino and migrant community. However, the research and the numbers are very clear: migrants are actually less likely to commit crimes than the native-born. For example, the incarceration rate of native-born men, ages 18 to 39, is actually five times higher than that of foreign-born men. Also among the U.S.-born, 9.8-percent of all male high-school dropouts were in jail or prison in 2000. Only 1.3 percent of immigrant men who were high-school dropouts were incarcerated.⁵

Solutions: Immigration Reform, Revision of NAFTA and Protection for Undocumented Workers

The anti-immigrant backlash in the United States is causing unforeseen levels of exploitation of immigrant workers. Most of the European

⁴ Vedantam Shankar, "US Deportations Reach Record High," *Washington Post*, 6 October 2010. Online at http://www.washingtonpost.com/wp-dyn/content/article/2010/10/06/AR2010100607232.html, accessed 10 October 2010.

^{5 &}quot;Immigrants and Crime: Are they Connected? A Century of Research Finds that Crime Rates for Immigrants are Lower than for the Native-Born," Immigration Policy Center, 25 October 2008. Online at http://www.immigrationpolicy.org/just-facts/immigrants-and-crime-are-they-connected-century-research-finds-crime-rates-immigrants-are, accessed 30 October 2008.

workers who migrated to the United States at least had the possibility to be integrated into the mainstream by receiving citizenship. For most of this country's lifespan, there were no immigration quotas. For today's immigrants, the reasons for moving are similar to those in the past, but they face more serious challenges. The problem is two-fold. Too many powerful people are benefitting from the kind of system in which millions of workers are in a continued state of exploitation. Plus, they're easily disposable when they are no longer needed. Second, there is a contingent in this country that does not welcome what appears different; some just don't want the country's aesthetic to change. This could explain why there has not been a fair and humane immigration reform in a long time.

Immigration reform makes sense politically, economically and socially for all. Some presume that immigration reform can't happen during this economic climate, but that's exactly erroneous. Evidence shows that normalizing the status of undocumented migrants is good for economic recovery because it would create income gains for workers and households. Reform would allow immigrants to have higher productivity and create more openings for legal residents in higher-skilled occupations. It would increase wages and spending, all of which generates more tax revenue. It is estimated that immigration reform could add from US\$1.5 trillion to US\$1.8 trillion to the U.S. GDP over the next ten years (Hinojosa Ojeda 2010). On the other hand, a deportation-only policy would result in a loss of US\$2.3 trillion in GDP over ten years (Dixon and Rimmer 2009).

It Is Urgent to Renegotiate NAFTA

The current political leadership could take the lead on revising NAFTA, but it seems President Barack Obama has shifted his stance on free trade since his campaign. As Senator Obama, he stated that "the current NAFTA regime lacks the worker and environmental protections that are necessary for the long-term prosperity of both America and its trading partners. I would, therefore, favor, at minimum, a significant renegotiation of NAFTA and the terms of the President's fast track

authority." As presidential candidate he reiterated his opposition to this kind of policies during a debate moderated by NBC's Tim Russert.⁶

Now more than ever the President needs to make the connection between free trade policies and the impact they have on immigration. The Obama Administration seems to have good intentions on immigration, but they have not delivered. Unfortunately it also seems that the administration has failed to address the root causes of the problem. On a number of occasions, when raising this issue with top advisors to the President, officials responded to me that they focus on immigration reform, not free trade agreements. That response illustrates that the mentality of the debate on immigration is a short term fix of what to do with undocumented workers now, but there is no effort to look at this issue in the long term. Furthermore, President Obama just re-emphasized his commitment to work on the expansion of free trade agreements, this time with Colombia, Panama, and South Korea.

At a time of economic crisis like the one we are facing, the president should be bold enough to push for NAFTA renegotiations. At the same time he should help Mexico to invest major public resources in productive projects aimed at stabilizing and even repopulating economically broken communities. Rather than raiding U.S. businesses in search of unauthorized workers or wasting money building walls, federal resources should be used to help re-train U.S. workers displaced by the same forces of globalization that have made Mexico's communities come unglued.

While These Changes Take Place Unions Can Be a Source of Protection for Undocumented Workers

As the anti-immigrant movement keeps getting stronger, and the vulnerability of undocumented workers increases, the labor movement could be one important source of protection for undocumented workers.

⁶ Transcript, "The Democratic Debate in Cleveland," *The New York Times*, 26 February 2008.

The labor movement played a central historical role in establishing the middle class in the United States. Organized workers fought for the standard forty-hour work week, safer working conditions, living wages, collective bargaining, health protection, pensions and retirement, better and more training for workers, and overall, a better environment for workers to speak up for themselves and their families. The expansion of the middle class is one of the main characteristics of a developed nation.

Looking at this historical evolution of social conditions and labor rights for workers, there is a serious contradiction today where millions of workers in the nation still lack access to any of the benefits that this movement brought. This is especially true for undocumented immigrants who, in an effort to organize, must consider the possibility of getting fired or being reported, jailed, and deported. It's a unique challenge for workers, but not an insurmountable one.

A recent report by the Center for Economic and Policy Research (CEPR) documents a large wage and benefit advantage for immigrant workers in unions relative to their non-union counterparts. The report found that unionized immigrant workers earned, on average, 17 percent more than their non-union peers. The report also found that unionization raises the pay of immigrant workers about US\$2.00 per hour. According to the report, immigrant workers in unions were also 50 percent more likely to have employer-provided health insurance and almost twice as likely to have an employer-provided pension plan than immigrant workers who were not in unions. Not surprisingly, the study also shows that unionization strongly benefited immigrant workers in otherwise low-wage occupations. Among immigrant workers in the 15 lowest-paying occupations, union members earned almost 20 percent more per hour than those workers who were not in unions. In the same low-wage occupations, unionized immigrants were more than twice as likely to have employer-provided health insurance and almost three times as likely to have a pension plan than their non-union counterparts (Schmitt 2010).

Wage theft and other workplace violations will increase throughout

the nation if workers continue to lack protection. The organized labor movement has the structure that can oppose abusive, global corporate forces that have pushed capitalism to extreme levels. Additionally, solidarity among workers has to be across borders. Otherwise, the expanding informal economies of the world will continue to grow and this will have an impact on the conditions for all workers. That would result in a race to the bottom for all in the working class.

Union representation can change this by establishing fairness in the workplace. The union movement should welcome and protect undocumented workers in a more proactive way. Furthermore, undocumented immigrants should look at the labor movement as a tool for social protection and economic advancement.

Conclusion

Some people argue that half a million immigrants a year is too many. But is anyone stopping to ask what is it for Mexico to lose half million people a year? Further, U.S. economic policy is one of the main motors that push people out of Mexico. It is a priority to go to the root causes of immigration to find a solution.

The issue of immigration has been high-jacked and misconstrued by a subset in the United States to the point of hysteria, while the causes and solutions are actually easily traceable and quantifiable. Reasoned analysis shows a strong relationship between NAFTA and the economic peril of Mexico, which in turn created migration to the United States. Therefore, NAFTA should be reevaluated and likewise, an interim solution must be enacted to integrate unauthorized workers in the United States. This will re-establish the opportunity equilibrium that can both keep Mexicans home and give others a reason to return home, while making the economies of the entire region stronger. Again, the way to rebalance the economies of North America is three-fold: each country needs to critically reevaluate the free trade agreements; the United States needs to rehabilitate its dependence on cheap, disposable labor; and comprehensive immigration reform

must be passed to bring the undocumented out of the shadows. There is little point of changing the immigration procedure without also changing the economic forces behind that migration.

As long as people south of the border have no way to feed their kids at home and the United States continues having a strong addiction to cheap labor and promoting free trade policies that displace people, no wall will be high enough. The hungry will always find a way to get to where the jobs are.

International organizations, like the United Nations and in particular the World Food Programme, should have a more active role in the conditions of undocumented immigrants in the United States. The international crisis involved Mexico's poor and U.S. wealth, but currently is being handled as a domestic issue only in the United States. The United Nations could help recalibrate that critical problem.

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Examining the Theoretical Linkages between Climate Change, Food Security, and Migration

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ABSTRACT

Among the direct impacts of climate change to human population are the potential effects on food security. Changes to hydro-ecological systems are expected to have profound impacts on food production and food delivery systems. How human populations will respond to these changes has been an active area of debate over the past decade. This paper examines the interactions between climatic events, food security and migration. It begins by outlining the theoretical relationship between the variety of expected impacts of climate change on food production systems, the factors that serve to mitigate the impact of climate events on food security, and how these might influence internal and cross-national migration patterns. A review of current empirical evidence for climate impacts on migration is presented as well as data on current migration patterns globally. The paper concludes with a discussion of the factors influencing adaptive capacity to climate change.

Introduction

Global climate change has profound implications for human well-being. The ecological systems that produce the environmental services on which agricultural, grazing, hydrological, and recreational economies are based are expected to undergo rapid change with uncertain effects. Population growth, industrialization, and an increasingly globalized economy have already stressed many of these natural systems. The addition of rapid temperature changes, shifts in precipitation patterns, and resulting impacts on natural biotic communities are expected to have dramatic effects on a broad range of human subsistence systems. Whether social and economic systems will be able to adapt sufficiently to maintain, or even improve, food security in the face of these changes will determine if populations choose migration as an adaptive response.

The link between climate change and migration has been a popular subject for discussion in both the academic and policy circles in recent years, receiving increased public and media attention. An article in The Economist highlights the "permanent emergency" of "environmentally induced migration" (The Economist 2009). Such environmentally-induced migrants are given different names including "environmental refugee," "environmental migrant," "ecomigrant," "climate refugee," "environmentally displaced person," and "forced climate migrant." A report by Brown (2008), commissioned by the International Migration Organization (IOM) notes that there could be about 200 million climate migrants by 2050. Christian Aid (2007) puts this number at almost 700 million by 2050. However, studies that attempt to provide predictive models of climate impacts to human welfare and the resulting influence on migration often assume relatively simple behavioral models that fail to include, or incorrectly measure, dynamic decision-making, important institutional factors, policy interventions, and adaptive mechanisms that have been identified in the emerging area of research on adaptive strategies.

¹ See Fritz (2010) for more on other variations. See also Brown (2008, 13) for a discussion on whether refugee or migrant is a more appropriate label.

This paper attempts to untangle the causal relationships between the impacts on the natural system due to climate change and the factors that impact human migration. It reviews the current state of research on climate, food security, and migration and highlights areas of important future research in understanding the link between climate change and migration. It is divided into three sections: a discussion of the link between climate change and human well-being, the complexity of causal processes underlying climatic induced migration, and directions for future empirical research. Because of the interaction across natural systems, human decision-making, and economic and political institutions determining the causal links involves significant research challenges. Outlining the underlying causal processes allows for an improved understanding of climate change impacts and designing effective policy interventions.

Background: Climate Change, Policy, and Migration

Researchers have focused on vulnerability as a central concept to understanding climate change impact to human populations. A recent report published jointly by the United Nations University, CARE International, and Columbia University's Earth Institute features a number of fragile regions regarding climate change and migration. These include regions below the Himalayan glaciers in Asia; drylands of Mexico; Central America; the Sahel of Western Africa; the Ganges, Mekong, and Nile delta floodplains; and low elevation small island developing states such as Maldives and Tuvalu (Warner et al. 2008). Other research has focused on identifying specific sub-populations within regions expected to be the most vulnerable to climatic change impacts (Bolin et al. 1998; Nicholls et al. 1999; Vörösmarty et al. 2000). These generally include those located in areas subject to flooding, reliant on natural resource-based economies, without access to formal or informal forms of economic insurance, and with socially marginalized populations without access to decision-making processes.

Based on scenario generation and climate simulations, the general

causal process underlying predictive models is implicitly understood as climate-induced environmental scarcity and increased livelihood risk, and resulting population movement in avoidance of new or increased costs to mitigate these new risks. The links between climate change impact and migration, however, are considerably more complex and a number of authors have critiqued the underlying assumptions (Paul 2005; Brown 2008; Raleigh et al. 2008; Piquet 2010). Most model simulations make simplistic assumptions about the ability of populations to react to changing climate-induced conditions and examine the impact of increased climatic variability to current static conditions rather than examining human-ecological interaction as a dynamic process. The direct causal linkages are often left unspecified, or assume simplistic decision-making criteria, with broad global patterns based on a small number of case studies.

A number of authors have voiced concern over both the simplicity of human behavioral response as well as the underlying conceptual understanding of vulnerability (Baer et al. 2000; Adger et al. 2006; Ribot 2009). These have ranged from discussions of the equity implication of adaptation as a policy option whose costs are borne primarily by the socially marginalized and vulnerable populations; to opening migration to industrialized regions and the cost being more directly borne by those causing environmental change (Mearns and Norton, 2009); to the social equity processes that have created the initial conditions of social vulnerability (Adger 1999; Ribot 2009). While theories of the behavioral response to climatic-induced ecological impacts are still in their infancy, the field has taken on increased importance as effective policy interventions are discussed and debated.

Policy discussions around the issue of climate change are divided into two general approaches: mitigation and adaptation. Mitigation is generally understood as the design of policy instruments to effectively reduce greenhouse gas emissions. The vast majority of public attention and international policy negotiations have been around mitigation efforts, such as the Kyoto Protocol. International

mitigation efforts have stalled in the most recent round of negotiations due to the global economic crisis, and the effectiveness of Kyoto was limited at best (Victor 2001). Greenhouse gases have a cumulative effect on the atmosphere, so that even if aggressive mitigation efforts had been undertaken in the 1990's under Kyoto, global temperatures would still be expected to rise at least 2-3°C over the next century, with an upper range of 5-6 °C without additional mitigation efforts. This has led policy to be increasingly directed toward adaptation to climate change.

Adaptation is understood as a behavioral response that maintains or improves the well-being of a population in anticipation to, or response to, a climate-induced change to their environment. Discussions of adaptive policy for climate change involve ideas of increased exposure to risk, uncertainty, and resilience. Resilience is an idea borrowed from material sciences that refers to the ability of a material that receives a stress to return to its former state. It has recently been applied to ecological and social systems in order to understand and measure the potential for a system to return to a previous level of ecological productivity, level of social welfare, or previous state after an external shock such as natural disaster, economic crisis, or climate impact (Holling 1996; Berkes et al. 2000). Resilient systems tend to have a number of common characteristics. They tend to be highly decentralized, respond quickly and appropriately to change, have multiple feedback mechanisms, maintain functional redundancy, and are able to manage complexity and uncertainty (Berkes, Colding et al. 2003). That ability to adapt and respond to new conditions is central to maintaining human and ecological well-being in the face of climate change.

Adaptive strategies can include short-term reductions in vulnerability, improved adaptive capacity, or increased resilience to uncertain impacts. Adaptive behavior needs to be further distinguished from that of coping. Coping is identified as a short term response to immediate conditions. The behavioral change in reaction to a climatic event can include one of two responses, either coping behavior or adaption. Adaption, on the other hand, is understood as a behavior response that

leads to increased resilience to future events (Smit and Wandel 2006).

The emphasis on adaptation has dominated policy approaches by local, national, and international actors (National Academy of Science 2010). Within the domestic policy-making context, state and local jurisdictions have increased methods to add climate variability into long-term planning and resource management decisions, and national agencies have begun to include climate impacts into planning and operations, even when these are not necessarily explicitly called climatic change-related activities (Rabe 2004; Russell and Dennis 2008; Kauneckis 2011; Metz and Below 2009; U.S. Global Change Research Program 2009; Kauneckis and Cuffe 2011). Internationally, the World Bank has adopted a "climate smart" strategy for targeting future funding priorities that links expected development goals to resilience to climatic variability (World Bank 2010).

The focus on adaptation has also led to increased critiques by development scholars that there are limitations to local capacity to adapt (Adger et al. 2009). Changes in the natural environment do induce behavioral changes in local populations in terms of technological and institutional innovations (Grubb 2004). However, the rate of climate change predicted is more rapid than has been experienced historically and the buffer ability of natural systems to provide ecosystem services is already highly stressed, the potential impacts are poorly understood and difficult to predict (Rosenzweig and Parry 1994; Martens et al. 1995; Schipper 2007), and the most vulnerable populations typically have few resources to mitigate the increased exposure to environmental risk and few available choice sets.

Concerns over the impact of climate change on human populations can be grouped into two general categories: maintaining livelihoods and well-being, and human security. Issues of livelihood and well-being are focused on maintaining the current level of overall well-being, or improving it, in spite of climatic change. Typical policy instruments include improved access to crop insurance, credit markets, labor flexibility and training, and climate-smart infrastructure improvements. Food security is one aspect of the broader portfolio of economic security. Aspects related to human security have noted the increase in violent conflict during periods of extended drought (Barnett 2003; Brown and Crawford 2008). While causal linkages are not always clearly specified, there are reasons to expect increased resource conflict in natural resource dependent economies on marginally productive lands (Adger 1999; Mearns et al. 2009). Physical security and increases in violent conflict are the dominant cause in mass migration, and if indeed associated with climatic change, present one of the most serious international policy challenges (Salehyan 2008). Both aspects of livelihood and well-being, and security, have important implications for understanding climate change induced migration.

Unraveling Causality in Climate-induced Migration

Linking migration to climate-induced impacts involves unraveling a complex chain of causality from climatic systems to local agroecologies and human response. Studies on international migration focus on the specific mix of push and pull factors (Castles et al. 2005). Push factors are those that create incentives for out-migration, whereas pull factors draw populations to a region. The most obvious example is that of high unemployment as a push factor, and higher wage jobs in a second region as a pull. Other well-documented examples include agricultural productivity, poverty, livelihood insecurity, water scarcity, access to transportation networks, clusters of labor specialization, crime, and violent conflict as combinations of push and pull factors. Food scarcity fits within the broader array of poverty and livelihood insecurity. The degree to which food scarcity can be linked to climate change, and subsequently to migration, involves a number of causal steps and potential mitigating factors.

Migration as a strategy for dealing with climate change has generally been understood as a failure to adapt to climate-induced environmental stress (Brown 2008) or as a coping mechanism for dealing with extreme resource scarcity and increased risk (Adger et al. 2003). Brown (2008) makes the argument that since the majority of policy interventions toward improving adaptive capacity are aimed

at keeping a population in place (such as flood mitigation efforts, sea walls, early warning systems for severe weather events, etc.), should migration occur, it represents an adaptive failure. Other authors argue that migration has always been used as a strategy for reducing risks, improving livelihoods, and gaining access to resources, and that the addition of climate-induced environmental stresses to a system should be viewed as simply another factor in our current understanding of migration push and pull factors (McLeman and Smit 2006; Massey et al. 2007; Raleigh et al. 2008).

Measuring the impact of climate on migration requires understanding current overall migration patterns. Tacoli (2007) and others argue that migration can be seen as an adaptation strategy for climate change. The key issue to understanding current migration data is how flexible (or open) governments have been at the national and subnational level in terms of their immigration policy. We start by looking at recent trends in international migration flows. We see in Table 1 a steady increase in international migrants both in number and as share of total population in almost all world regions, with the largest increases in more developed regions. While the annual rate of change in total migrant stock has also increased worldwide, it has decreased quite visibly in more developed regions, with a particularly significant decrease in North America.

The share of refugees in total international migrants has also gone down significantly over the last two decades, with most significant decreases in less developed regions. While Asia had the highest share of refugees among all world regions in 2010, Latin America and Africa have experienced dramatic decreases in the share of refugees. This is an important trend since we may see a sharp increase in environmental refugees in the near future. It looks like this could come at a time when refugees (traditionally defined) are declining as a share of total migrants.² We examine the flows of international migrants from world regions to selected developed countries in Table 2. The United States

² It is also important to note here that refugee definition of the United Nations doesn't include environmental refugees.

had the largest annual average number of immigrants (close to one million), followed closely by Germany and, to a smaller degree, by the United Kingdom, Canada, and Spain. Interestingly, only the United States, Canada, Australia, and Spain had more immigrants from less developed regions than more developed regions. In that regard, the majority of developed countries have been less open to immigration from less developed regions of the world. This is important when we consider the fact that all of the environmentally fragile regions mentioned before are in less developed regions.

Immigration policy restrictiveness has been addressed more thoroughly in a recent paper by Boussichas and Goujon (2010). In that paper, the authors develop an indicator of openness to immigration for 21 developed countries and then rank those countries according to that indicator. The indicator is essentially the difference between observed and potential (or structural) migration flows. Spain, Austria, Germany, New Zealand, Canada, and Australia are the most open countries in terms of recent migration flows, whereas Japan, the United States, the United Kingdom, Netherlands, and France are the least open in terms of migration policy restrictiveness.³ It is interesting to see that the United States, which it is often assumed has been more open to immigrants, is one of the least open among the developed countries. Migration policy restrictiveness is driven by a number of factors, including demographic differences between regions, integration problems of immigrants, and natives' changing attitudes towards immigrants (Tosun 2009; Kahanec and Tosun 2009).4

The impact of climate on human well-being and potential migration is influenced by both internal push factors from the local environmental system as well as access to countries willing to accept migrants. Figure

³ There is some sensitivity of these rankings to alternative empirical specifications. See Boussichas and Goujon (2010) for a detailed discussion on those results.

⁴ Tosun (2009) examines the economic and fiscal impacts of immigration restrictions between demographically different regions using numerical simulations. Kahanec and Tosun (2009) examine integration issues among Germany's guest workers

1 outlines the explicit linkages between climate change, the impact on local environmental services, the subsequent influence on well-being and the behavioral response of migration. It uses the example of only a single potential climatic-induced environmental stress, that of impacts to agricultural systems, and how that may lead to migration. The subsequent discussion includes those factors that influence the probability of migration as a strategy to climate change.

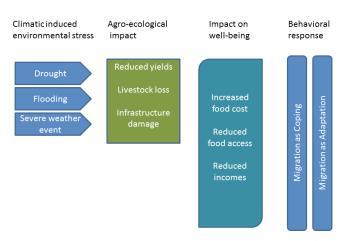


Figure 1: Causal Link between Climate-induced Environmental Stress and Migration

Three of the most obvious impacts from climate change include drought from shifting precipitation patterns; flooding from either precipitation, increased snow and ice melting in alpine regions, and sea level rises; and severe weather events including monsoons, thunderstorms, tornados, and hurricanes.⁵ The resulting impacts to local agro-ecological systems include reduced agricultural yields, loss of livestock and damage to agricultural infrastructure (roads to markets, irrigation systems, buildings, etc.). The causal link to human

There are other climate change effects with impacts on human welfares; such as human health, non-agricultural ecological services, and energy costs. However, for the purpose of this paper, the focus is on those influencing food production and food scarcity.

well-being is the resulting increase in local food costs as a portion of household budget, reduced access to specific types of food items, potentially including staples as well, and overall reduced incomes to producers as well as those involved in the broader agricultural economy.

The factors that involve the decision to migrate need to be reduced to direct impacts on well-being as weighed against the potential cost of migration. Migration as a coping strategy, or failure of adaptation, is then most likely in the case of rapid and devastating climatic impacts, such as massive flooding, severe regional droughts, and other disaster-like events. Migration as a response can include either short or long term relocation and movement along a spatial continuum of the local area, regional, or cross-border migration. Migration as adaptation is then understood as a rational calculation that the local agro-ecological system can no longer support current levels of well-being, or that alternative locations offer the potential for higher levels of well-being. For this to be climate-induced requires either long-term productivity reductions due to drought or periodic flooding, failure to invest in appropriate local infrastructure, or increased perceivable risk from climatic-related events.

Mitigating Factors, Policy Interventions, and Institutional Constraints on Migration

The question of climate-induced migration, whether from food scarcity or climate-related natural disasters is an active debate (Paul 2005; Brown 2007; Massey et al. 2007; Piquet 2010). A broad range of intervening factors can reduce the impact of climate-induced environmental stresses on agro-ecological systems, their subsequent impacts on well-being, and the overall calculus underlying the decision to migrate.

Whether a climate-induced environmental stress leads to a negative impact on the agro-ecological system depends on agricultural infrastructure development, so local systems with extensive irrigation facilities are less impacted by drought than rain-fed systems. Similarly, flood control measures minimize impacts on agricultural production. Crop diversification can improve resilience of the overall system to a dramatic reduction in productivity from a climatic event. Access to substitutes for agricultural inputs at the farm-level, such as technology, labor, or subsidized equipment and infrastructure replacement, can minimize the potential damage to local production.

Similarly, the causal link between agro-ecological impact and the impact on well-being can also be minimized by a number of intervening factors. Forms of both formal and informal crop and food insurance can mean that a poor yield year has minimal impact of food scarcity. The broader the income portfolio of households the lower the overall impact of agricultural damage. Whether such damage to local production systems results in reduced food access is dependent on the overall food distribution systems and the diversity of local food choices.

Even with an established link from a climatic impact to well-being and reduction in local food production, access, and/or income, this does not necessitate migration as a behavioral response. The push factors of scarcity or income loss need to be weighed against both the relative loss of resources from migration as well as the strength of pull factors. Migration often, although not always, involves a risk of permanent loss of land right claims, investments in the original location (such as agricultural infrastructure, households, and local social capital), travel costs, and uncertain access to resources at the destination point. The permeability of borders, availability of open lands for production, and access to social networks for employment at the destination, all influence the relative costs of migration. These are then understood as relative to the pull factors. Migration is more likely to areas of lower climate-induced risk (as perceived by the migrant), higher potential incomes, improved diversity of household income portfolios, and the existence of established social networks that lower the costs of entry into a new location.

Conclusion

Empirical work on the link between climate change and migration is in its infancy. While there are a number of compelling well-known cases, the complexity of causation makes it difficult to generalize for the purpose of predictive modeling of future climate change impacts. This paper represents the first stage of a larger project that analyzes the chain of causality between climate-induced environmental stress, human impacts, and the factors that influence the decision to migrate. Current research efforts face a number of problems, including national-level aggregation of data, whereas climate change impacts are highly localized; statistical ecological inference problems in understanding individual and household decision-making out of aggregate data, and linking human perceptions of risk from local climate events.

Current research on migration reveals that developed countries tend to favor accepting migrants from other developed countries rather than under-developed regions. The degree to which this is a preference for migrants with specific skill sets or simply an effect of developed country migrants being able to afford the financial burden of transnational travel is unknown. However, the field has been identified as critically important with additional research needed to explore the relationship between climate, human security, and migration (Paul 2005; Brown 2007; Massey et al. 2007; Piquet 2010).

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Variable	Year	World	Europe	Latin America	North America	Africa	Asia	Oceania	More Developed Regions	Less Developed Regions
Estimated	1990	155,518,065	49,400,661	7,130,326	27,773,888	15,972,502	50,875,665	4,365,023	82,354,728	73,163,337
number of	1995	165,968,778	54,717,864	6,233,506	33,595,046	17,921,345	48,768,018	4,732,999	94,123,386	71,845,392
intemational	2000	178,498,563	57,639,114	6,470,622	40,395,432	17,062,143	51,915,384	5,015,868	104,433,692	74,064,871
mid-year	2002	195,245,404	64,398,585	6,869,399	45,597,061	17,735,600	55,128,485	5,516,274	117,187,935	78,057,469
	2010	213,943,812	69,819,282	7,480,267	50,042,408	19,263,183	61,323,979	6,014,693	127,711,471	86,232,341
:	1990	2.9	6.9	1.6	9.8	2.5	1.6	16.2	7.2	1.8
Intemational migrants as a	1995	2.9	7.5	1.3	11.2	2.5	1.4	16.3	80	1.6
percentage of	2000	2.9	7.9	1.2	12.7	2.1	1.4	16.1	8.7	1.5
the population	2002	က	8.8	1.2	13.6	1.9	1.4	16.4	9.6	1.5
	2010	3.1	9.5	1.3	14.2	1.9	1,5	16.8	10.3	1.5
Annual rate of	1990-1995	1.3	2	-2.7	3.8	2.3	-0.8	1.6	2.7	-0.4
change of the	1995-2000	1.5	_	0.7	3.7	<u> </u>	1.3	1.2	2.1	9.0
migrant stock (%)	2000-2005	1.8	2.2	1.2	2.4	0.8	1.2	1.9	2.3	1.1
	2005-2010	1.8	1.6	1.7	1.9	1.7	2.1	1.7	1.7	2
	1990	11.9	2.7	16.8	2.1	33.5	19.5	2.5	2.4	22.5
Refugees as a	1995	11.1	5.5	1.6	2.4	35.5	16.7	1.6	4.1	20.4
international	2000	8.8	4.3	0.8	1.6	21	17	1.5	3.1	16.8
migrants	2005	7.1	က	0.5	1.2	16.3	15.2	1.4	2.2	14.5
		2010, 7,6, 2,3, 7,1, 1,5, 13,3, 177, 1, 1,9, 16.2	2.3	7.1	1.5	13.3	17.7		19	16.2
lable 1: Migration	ation Trends	in world Keg	gions. Source	: United Na	ıtıons, Depai	tment of Ec	onomic and	Social Atta	ırs, Populatıc	on Division,
Migration Section(.ht	ion(.http://es	ttp://esa.un.org/migration/index.asp?panel=1	tion/index.as	p!panel=1).						

	More Developed Regions	42	29	21	61	62	22	71	20	40	82	89	38	63	28	16	
	Less Developed Regions	28	33	79	37	20	42	28	20	46	15	32	28	37	42	84	
egions	Europe	23	29	17	52	70	36	29	46	34	27	29	36	99	32	12	
Flow Shares of World Regions	Oceania	18	0	~	_	_	0	0	~	_	51	~	0	_	14	_	-
Flow Share	Latin America and the Caribbean	2	က	10	က	_	4	2	12	80	_	က	41	4	2	48	-
	Northern America	2	9	2	9	4	4	က	က	2	9	80	_	2	#	2	
	Asia	46	14	61	27	13	16	22	15	23	12	21	က	26	6	32	
	Africa	80	17	œ	∞	2	39	2	24	16	_	00	14	7	10	4	11
•	Annual Average Immigrants	93,029	56,454	224,548	26,859	15,578	152,332	753,776	146,159	79,784	56,511	31,886	194,176	55,955	304,214	961.175	
	Time Period	1990-2003	1990-2003	1990-2004	1990-2004	1990-2004	1994-2003	1990-2004	1990-2000	1990-2004	1990-2004	1990-2003	1990-2004	1990-2004	1990-2003	1990-2004	
	Receiving Country	Australia	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Netherlands New	Zealand	Norway	Spain	Sweden	Kingdom	States	

Table 2: International Migration Flows from World Regions to Selected Developed Countries Source: United Nations, Department of Economic and Social Affairs, Population Division, International Migration Flows, 2005 Revision.

The Rise and Fall of the "Migrant Superhero" and the New "Deportee Trash": Contemporary Strain on Mobile Livelihoods in the Central American Region

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ABSTRACT

A basic assumption in migration studies is that a search for better livelihoods is the main cause for migratory movements. Nevertheless, few studies take in-depth research into specific livelihoods and the contexts in which they unfold as their point of departure. Such an approach would focus on the ways in which making a livelihood links up with larger scale patterns of population movement, the range and variation in mobility that such movements involve, the social institutions, networks and migration industry actors facilitating and sustaining mobile livelihoods, and the shifting physical, environmental, and geopolitical contexts in which migration occurs.

Over the last decade, migrants have come to be seen as vital agents of development by international financial institutions, various United Nations agencies, and national governments. In their efforts to "capitalize" on migrants' remittances, these entities have contributed to establishing the image of the "migrant superhero," who through hard work in foreign lands contributes to the sustenance of families

and communities in sending countries. Nevertheless, the recent international financial crisis and rising anti-immigrant sentiments have led to a criminalization of mobile livelihood strategies and mass deportations of undocumented migrants.

Using Central America and the well-developed local notion of the "migrant superhero" as point of departure, this article asks three critical questions. The first is whether poverty or insecurity best explains contemporary migration flows in the region. The second question takes issue with how remittances play, on the one hand, into local social security nets and, on the other, into increasing national and regional insecurity. The final question concerns the status decline of former migrant heroes who through the act of deportation become "trash" in the public imagery, thus suggesting the need for taking social status into account when assessing the impact of migration on living conditions.

Introduction

Over the past ten years, international organizations such as the World Bank, regional development banks, the European Union, and various United Nations offices have begun to see migration as a remedy to various development problems. In Central America, the example of El Salvador gave rise to the first UNDP Human Development Country Report to apply a human development approach to migration and to seeing El Salvador's highly mobile population as a fundamental development resource (PNUD-El Salvador 2005). In the 2009 global Human Development Report entitled *Overcoming Barriers: Human Mobility and Development* (UNDP 2009), the migration-development nexus went mainstream. In these and related analyses, the impact of international migration on development has revolved around remittances, their growth rate, and the scope for making a more effective (productive and poverty reductive) use of money transfers.¹

After the outbreak of the international financial crisis a small part of this debate became concerned with the potential harmful effect of the recession, in particular the link between the high rises in deportations of undocumented migrants,

Whether highlighted as the new development mantra (Kapur 2004) or dismissed as a short-lived potential, policy discourses have tended to focus on the financial aspect of remittances, often ignoring more complex scholarly insights and migrant perspectives (Levitt and Sørensen 2004) as well as the broader local, regional and global contexts in which migration is embedded. Migrant contributions to development are increasingly acknowledged—and sometimes even used in political campaigns directed towards maintaining migrants' loyalty towards their homelands—but the assumptions underlying the study of the asymmetrical transfers that accompany migration continue to reflect the interests of the Global North (Glick Schiller and Faist 2009) and ignore the ways in which migration has become embedded in broader development and security discourses.

Using Central America and the well-developed local notion of the "migrant superhero" as point of departure, this article asks three critical questions. The first is whether poverty or insecurity best explains contemporary migration flows. The second question takes issue with how remittances play, on the one hand, into local social security nets and, on the other, into increasing national and regional insecurity. The final question concerns the status decline of former migrant heroes who through the act of deportation become "trash" in the public imagery, thus suggesting the need for taking social status into account when assessing the impact of migration on living conditions. It also indicates a less clear-cut view on the traditional division in economic and non-economic causes of human mobility and a need to introduce what we might call the local effects of insecurity. In short, the main argument is that the impact of migrant remittances cannot be calculated without taking cultures of violence, insecurity, and deportations, as well as the securitization of migration, into account.

growing unemployment rates among those migrants that manage to stay, and a subsequent decline in remittances sent to the countries of origin (Castles 2009). By May 2010, however, the Council on Hemispheric Affairs (COHA) announced that although 45 percent of the remitters living in the United States sent less money home in 2009 compared to the year before, "remittances are likely to stabilize for 2010" (Blossier 2010).

To contribute possible answers to these questions I briefly turn towards the regional migration history; when discussing current migration trends, to relevant processes in Guatemala and Honduras; and, when contesting official discourse, to images of the Latino remittance superhero and a particular Guatemalan deity, Maximón. I derive concepts and theories for my arguments from globalization and transnational theory, in particular from texts attentive to change drivers from above as well as from below (e.g. Guarnizo and Smith 1998). The data presented consists of a mixture of migration and remittance statistics, government positions, and expressions of the migration experience in works of art and in public culture. The method deployed consists of moving back and forth between text and context and between bare statistics and human consequences.²

Central American Development and Migration

Previously characterized by repressive military regimes, revolutionary upheavals, full-scale civil wars, and collapsing economies, over the past ten to 15 years Central America has experienced a peace and demilitarization process, transitions to democracy, and economic re-stabilization under a new neo-liberal model of free market capitalism. Even so, several structural contradictions in the social order remain unresolved, such as extreme inequality and widespread poverty, marginalization of indigenous populations, problems related to corruption and impunity, and the pandemic of organized crime, drug-trafficking and extreme levels of violence in public as well as private spaces (Robinson 2003). In addition, natural disasters such as earthquakes, hurricanes, landslides, flooding, and droughts hit

From November 2005 to May 2009 I served as a senior advisor to the Danish Development Cooperation in Central America. During this time I had little time for ethnographic fieldwork in the classic methodological sense. I did have excellent access to government statistics and government officials as well as regional NGOs working with migrant rights. In October 2009 I interviewed officials in Guatemala and Mexico on deportation and outreach policies.

the region increasingly as a result of global climate change.³ Since a large proportion of crops is grown on hillsides, agricultural yields are extremely vulnerable to recurrent extreme weather conditions. According to the United Nations Food and Agricultural Organization (FAO), large areas of Nicaragua, Guatemala, and El Salvador have lately been negatively affected (Ayala 2010).

Poor livelihoods are closely associated with various forms of insecurity (including food insecurity) in Central America. According to the 2009 Human Development Report, Guatemala, Honduras, and Nicaragua rank considerably lower on the Human Development Index than Costa Rica and Panama (UNDP 2009).⁴ Relatively high life expectancy and literacy rates signal better health and educational opportunities than in low human development countries. However, and despite economic developments, half or more of the Guatemalan, Honduran, Nicaraguan, Salvadoran, and Belizean population remain poor. Whether relying on official UNDP statistics or statistics developed by the Central American Human Rights Ombudsman's offices (which

In Honduras, for example, Hurricane Mitch constituted an unprecedented catastrophe due to the devastation caused, the human and social toll, and the losses and damages to its infrastructure and productive system. Nearly one third of the highway network was affected, with the consequent isolation of cities and productive zones. Thousands of dwellings were destroyed, leaving thousands of families homeless, many of them unemployed and with no source of income. Productivity and exports, economic growth, employment, and revenues were also negatively affected. According to the National Emergency Cabinet, the hurricane caused the death of 5,657 people (without counting 8,058 missing persons), injuring another 12, 272 and initially affecting 1.5 million people (of a total population of 6.2 million) (IDB 1999-2000).

The Human Development Index ranks 182 countries in the world according to the average achievements in three basic dimensions: a long and healthy life, access to knowledge, and a decent standard of living. None of the Central American countries are in the top rank of *very high* human development, led by countries such as Norway (rank 1), Canada (rank 5), United States (rank 13), Denmark (rank 16), and Germany (rank 22). Costa Rica and Panama are among the 45 countries considered having a *high* human development, whereas the other five countries (Belize, El Salvador, Guatemala, Honduras, and Nicaragua) are considered as having *medium* human development. *Low* human development countries include several African countries and Afghanistan.

tend to be more attentive to structural barriers and inequality), GNP per capita is modest and poverty rates are high. So is unemployment (extremely high in Honduras and significantly underreported in the rest of the countries). Violence and general insecurity remain high and homicide rates now exceed those during the civil wars, especially in what is generally known as *el Triángulo Norte* (the Northern Triangle), consisting of El Salvador, Guatemala and Honduras.

Human Development	Guatemala	Honduras	Nicaragua	El Salvador	Costa Rica	Panama	Belize
HDI rank	122	112	124	106	54	60	93
GDP per capita (USD)	4,568 (1,724)	3,430 (977)	3,674 (935)	5,255 (2,129)	10,180 (4,505)	7,605 (4,434)	7,109 (4,025)
Life expectancy	69.7	69.4	71.9	71.3	78.5	75.1	75.9
Literacy	69.1	80.0	76.7	80.6	94.9	91.9	75.1
% Poor	54 (56,9)	41 (74,4)	46 (65,5)	35 (35,1)	5 (21,2)	15 -	43 (44,3)
% Unemployed	3.2	27.8	5.6	6.6	5.5	7.2	9.4
Official Development Assistance (millions of USD) per capita % GDP 1990 % GDP 2005	253.6 20.1 2.6 0.8	268.8 94.5 14.7 8.2	740.1 134.9 32.6 15.1	199.4 29.0 7.2 1.2	29.5 6.8 3.1 0.1	19.5 6.0 1.9 0.1	12.9 44.2 7.3 1.2
Homicides per 100,000 inhabit.	44.24	59.60	14.38	59.91	5.60	-	-

Table 1: Development Indicators for Central America (most recent figures 2005-2008). Sources: UNDP 2009; figures in parenthesis: CCPDH 2007; homicide rate: PNUD-Guatemala 2007; unemployment rate downloaded from Index Mundi (www. indexmundi.com) on 1 April 2008

Poverty and unemployment are conventionally considered the main push factors behind migration, whereas state violence and political persecution are understood as the common drivers behind refugee movements. This division is difficult to uphold in Central America where everyday violence has remained unabated in the countries emerging from political conflict and undergoing democratization efforts. At the same time it is a common stereotype that poverty is the primary cause of violence. Evidence provided by local and international human rights observers, however shows that inequality and exclusion, associated with unequal access to economic, political as well as social resources, intersect with poverty to precipitate violence (Federación Luterana Mundial 2009).

Such linkages do not only relate to income disparities but also to exclusionary factors such as unequal access to employment, education, health, and basic physical infrastructure. Unequal access to mobility may be added to the picture as lack of financial resources or access to transnational social networks may force new migrants into the arms of human smugglers or organized criminal networks operating en route. In addition, the absence or inadequacy of state security protection, policing, and juridical systems particularly affect the poor, the marginalized, or—as of recently—the deported undocumented migrants.

The export-oriented economies of the region that rely on free trade zone assembly manufacturing, non-traditional agricultural production, and services concentrated in call centers or tourism, have not provided sufficient foreign investments and tax revenues for the large scale reconstruction efforts needed after the devastating civil wars and natural disasters. At the same time, Official Development Assistance (ODA) has declined considerably, as many international donors have redirected their attention to Africa. Remittances surpassed U.S. aid to the region between 1978 and 1994. From around 1990, Central American governments have sought to incorporate migration and remittances into their own strategies (Robinson 2003). Given this context, some Central American republics have embarked on (El Salvador) or are beginning to pursue (Guatemala and Honduras) state-led transnational strategies aimed at forging linkages with their populations abroad (Popkin 2003).

From Internal or Regional to Transnational Migration

Migration is by no means a new phenomenon to the region as seeking employment abroad dates back to the nineteenth century. the 1970s, however, Central American migrations were generally characterized by internal or regional movements of a transborder, bi-national, and temporal character with the purpose of sustaining local livelihoods. The armed conflicts in El Salvador, Nicaragua, and Guatemala changed this pattern, first and foremost by causing massive forced displacements during the second half of the 1970s and throughout the 1980s. Most people affected by the civil wars became internally displaced; others found refuge across the border in neighboring countries, the United States, or Europe. When peace accords were finally reached, a significant outcome of the peace processes was a massive return of Central American refugees to their countries of origin (Castillo 2003), ending the refugee circle as conventional theory would have it (Black and Koser 1999). But as in other migratory movements, not everyone returned. Some migrants either stayed in the country of asylum or moved further on, thereby paving the way for later migratory movements. The presence of significant groups of Central Americans in countries such as Mexico, the United States, Canada, and Spain provided a basis for the formation of community networks and facilitated successive movements and the creation of transnational social spaces (Hagan 1994; Castillo 2003).

Post-conflict migrations are generally seen as distinct from earlier refugee movements and as driven by economic rather than political factors. But while more recent migrants no longer qualify for refugee status according to perceptions in receiving countries, they often share several experiences with earlier pioneer refugees. These include the necessity to migrate in response to decreased opportunities for personal development, blocked (if not downward) social mobility, the loss of jobs, and the need to find other ways to provide food and other necessities for family members. Other factors such as new waves of everyday violence (including feminicide) further add to the picture.

In addition to these local drivers, Central American migration must be

understood as part of a global and globalizing phenomenon. On the one hand, recent migrations were produced and favored by a global context of economic, political, commercial, technological, and cultural inter-dependence (Robinson 2003). On the other hand, we need a global approach to be able to account for the multi-dimensional effects of migration in sending, as well as receiving, societies (García-Falces 2005; Guarnizo 2004). For example, according to the first country-specific Human Development Report that took migration into account (PNUD-El Salvador 2005), migration had become the prime form of El Salvador's participation in globalization. This is increasingly also the case for Guatemala, Honduras, and Nicaragua.

Destination			Ori	gin		
Destination	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
North America	134,827	993,608	1,108,389	725,935	331,465	150,531
	(73.8%)	(86.6%)	(86.0%)	(81.8%)	(44.8%)	(81.4%)
Canada	4,296	44,744	29,971	11,151	13,360	2,555
	(2.4%)	(3.9%)	(2.3%)	(1.3%)	(1.8%)	(1.4%)
USA	127,035	942,842	1,028,951	706,085	314,643	146,371
	(69.6%)	(81.8%)	(79.9%)	(79.6%)	(42.5%)	(79.2%)
Mexico	3,496	6,022	49,467	8,699	3,462	1,605
	(1.9%)	(0.5%)	(3.8%)	(1.0%)	(0.5%)	(0.9%)
Central America	19,866	45,091	58,044	76,646	345,920	11,594
	(10.9%)	(3.9%)	(4.5%)	(8.6%)	(46.7%)	(6.3%)
Belize	115	6,886	30,890	12,089	390	39
	(0.1%)	(0.6%)	(2.4%)	(1.4%)	(0.1%)	(0.0%)
Costa Rica	-	9,926 (0.9%)	4,196 (0.3%)	7,179 (0.8%)	316,658 (42.8%)	10,270 (5.6%)
El Salvador	1,313 (0.7%)	-	8,849 (0.7%)	19,648 (2.2%)	2,784 (0.4%)	287 (0.2%)
Guatemala	1,072 (0.6%)	12,136 (1.1%)	-	11,424 (1.3%)	6,721 (0.9%)	169 (0.1%)
Honduras	1,608 (0.9%)	11,299 (1.0%)	10,873 (0.8%)	-	12,851 (1.7%)	460 (0.2%)
Nicaragua	8,202 (4.5%)	2,561 (0.2%)	1,991 (0.2%)	24,293 (2.7%)	-	369 (0.2%)
Panama	7,556 (4.1%)	2,283 (0.2%)	1,245 (0.1%)	2,013 (0.2%)	6,786 (0.9%)	-
Other	27,896	114,185	121,900	84,872	63,223	22,775
	(15.3%)	(9.9%)	(9.5%)	(9.6%)	(8.5%)	(12.3%)
Spain	2,336	18,179	17,374	11,354	4,572	2,252
	(1.3%)	(1.6%)	(1.3%)	(1.3%)	(0.6%)	(1.2%)
Pakistan	2,200	13,797	15,457	10,712	8,955	2,235
	(1.2%)	(1.2%)	(1.2%)	(1.2%)	(1.2%)	(1.2%)

Germany	2,482	10,417	12,591	9,097	6,797	2,144
	(1.4%)	(0.9%)	(1.0%)	(1.0%)	(0.9%)	(1.2%)
Kuwait	1,054	6,610	7,405	5,132	4,290	1,071
	(0.6%)	(0.6%)	(0.6%)	(0.6%)	(0.6%)	(0.6%)
Australia	493	11,044	595	436	981	139
	(0.3%)	(1.0%)	(0.0%)	(0.0%)	(0.1%)	(0.1%)
Venezuela	1,817	952	872	638	2,529	964
	(1.0%)	(0.1%)	(0.1%)	(0.1%)	(0.3%)	(0.5%)
Colombia	821	228	618	492	478	1,836
	(0.4%)	(0.0%)	(0.0%)	(0.1%)	(0.1%)	(1.0%)
Other	16,693	52,958	66,988	47,011	34,621	12,134
	(9.1%)	(4.6%)	(5.2%)	(5.3%)	(4.7%)	(6.6%)
Total	182,589	1,152,884	1,288,333	887,453	740,608	184,900
	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)

Table 2: Migrants per Country of Origin According to Region and Country of Destination 2006. Source: Orozco 2008.

Currently, more than 10 percent of the Central American population is involved in international migration. For some countries, as for example El Salvador, it is assumed that up to 40 percent of the population lives abroad (PNUD-El Salvador 2005). A lower but considerable percentage of Nicaraguans lives abroad, primarily divided between two major destinations, the United States and Costa Rica. The figures in Table 2 show that Central America is highly affected by migration, but not in a uniform way. The armed conflicts of El Salvador, Guatemala, and Nicaragua have produced higher migration rates than more stable countries such as Costa Rica and Panama. In addition to the generalized country specific figures, it is the most conflict-ridden zones within countries that have produced most migrants (Mahler and Ugrina 2006).

In the Guatemalan case it is assumed that some 1.2 million people (approximately 10 percent of the population) live abroad, primarily in the United States (PNUD-Guatemala 2005). Of these, 60 percent are believed to be undocumented. Increasing poverty levels among rural families have led to a feminization of migration, with growing numbers of younger women (single mothers and heads of families) moving northward. Other women stay put in Guatemala, where they have become known as *viudas blancas* (white widows) experiencing social control from abroad or by in-laws locally and, occasionally,

abandonment. According to the International Organization for Migration (IOM), 71.5 percent of all Guatemalans living in the United States are male and 28.5 percent are female. Around a third of the population in Guatemala receives remittances; 57 percent of them live in rural and indigenous areas (OIM 2005).

It is estimated that more than one million Hondurans (approximately 15 percent of the population) live abroad. The majority have migrated to the United States while other destinations such as Spain, Mexico, and Canada are beginning to attract considerable numbers. National Forum for Migration in Honduras estimates that less than 30 percent of Honduran migrants in the United States have legal status (11.5 percent are permanent residents and 11.8 percent enjoy currently under Temporary Protection Status) (FONAMIH 2006). The rest carve out a living as undocumented migrants. Currently, some 100,000 Hondurans leave their country every year, of which only 17 percent are expected to make it to their destinations. Deportation rates are high. Most of these migrants are in their most productive age (25-34 years old) and, generally, have low levels of formal education. Nevertheless, an estimated 30 percent of these migrants are believed to be qualified or highly qualified, and the number of women is rising fast. For instance, 51 percent of undocumented Honduran migrants are believed to be middle class women (Zúñiga 2009).

From Migrant Exodus to Remittance Influx

For decades, the literature on Central American migration centered attention on the lack of local development prospects and on how Central Americans, despite their often marginalized situation, found better livelihood opportunities abroad, either in neighboring countries or up North (Rocha 2008). The transnational turn in migration studies led to a greater awareness of the significance of migration for local development. Researchers began focusing on the formation and maintenance of long-distance social ties as well as the development of transnational social spaces linking families and communities across national boundaries and enabling the expansion of personal

or household livelihood practices to two or more localities (Sørensen and Olwig 2002). Jaqueline Hagan's (1994) and Sarah Mahler's (1995) pioneering studies of the Guatemalan and Salvadoran migrant communities in the United States, respectively, are representative of this transnational turn and of how transnational social spaces are created from below. Eric Popkin's analysis of Guatemalan and Salvadoran state-led transnationalism aimed at winning the economic and political support of the migrant populations in Los Angeles provides a case of transnationalism from above (Popkin 2003).

Currently, scholars are no longer the sole providers of evidence of the transnational projects accompanying Central American migrations. Inter-American Development Bank and World Bank reports argue that remittances are crucial to the survival of families and communities in many developing countries. Academic studies confirm that remittances may be a powerful resource for development as well as for post-conflict reconstruction (for an overview, see Sørensen, Van Hear, and Engberg-Pedersen 2002). Once mass migration has taken off and migrant communities are established abroad, transnational economic and informational resources begin flowing back to the home countries. These resources range from various types of remittances transferred by individuals to collective funds transferred through hometown associations which, in addition, may act as agents of development through political lobbying activities (Orozco 2000; Goldring 2003). In Central America, the cumulative effects of these dynamics received attention by the Salvadoran government in the mid-1990s (see Mahler 2002) and, later, by the Guatemalan and Honduran governments, which claim to have reoriented their diplomatic efforts through their embassies, consulates, and missions in order to recapture the loyalty of their national population abroad and rely on remittances for national development.

Country	Population 2007	Migrant population 2007	Remittances 2003 (millions of USD)	Remittances 2007 (millions of USD)	Remittances per inhabitant	Remittances (% GDP)
Guatemala	13,105,448	1,200,000	2,200	4,128	315	10
Honduras	7,326,496	1,050,000	800	2,561	350	15
El Salvador	6,756,800	820,000- 2,680,000	1,800	3,695	547	16
Nicaragua	5,570,129	1,002,623	778	990	178	12
Costa Rica	4,075,261	-	-	560	137	1.7
Panamá	3,191,319	-	-	320	100	1.8

Table 3: Migration and Remittances in Central America. Source: National statistics provided by BID 2007.

Official state discourse has over the last five years included remittances (their yearly increase and contribution to the national economies) alongside foreign investment and exports. During 2007, approximately US\$12 billion were transferred by Central American migrants to their families back home. In absolute amounts, Guatemala received the largest share, followed by Honduras, El Salvador, Nicaragua, Costa Rica, and Panama. In relative terms, El Salvador received the highest amount per capita, followed by Honduras, Guatemala, and Nicaragua. Remittances are less significant in Costa Rica and Panama.

In Guatemala, remittances constitute the second most important source of foreign currency, contributing approximately 12 percent to the country's GNP. Remittances account for a similar share of Nicaragua's GNP and even higher shares in El Salvador and Honduras. In other words, these money flows constitute a very important part of the national economy in the majority of the Central American countries. Thus far the evidence seems to indicate that remittances are helping reduce overall poverty levels, albeit maybe not at a rate compatible to their volume. For example, among the female family

members remaining in Guatemala (either because they decided to or because they had no legal or economic means to leave), less than half of the remittances received are used for food and other daily consumption commodities. Compared to other studies claiming that the bulk of remittances are used for conspicuous consumption only. Guatemalan women apparently know how to invest the *migra-dollar* to benefit their families. Approximately 23 percent are invested in property, construction or renovation of housing, machinery, livestock or savings, 15 percent in rent, and 14 percent in health and education, investments not only contributing to the economic and productive development of the country (e.g. by generating employment in the construction sector), but also to human development (by generating higher levels of education, better health, etc.) (UN-INSTRAW and OIM 2007). Recent evidence from Honduras suggests that the crisis generated by the coup d'état against President Manuel Zelaya induced Honduran migrants to increase their remittances slightly (Facundo 2009).

The Rise of the Migrant Superhero

The historical and statistical data presented thus far indicates that remittances play an important role at the family, community and national level in Central America. Their continuous flow is vital to secure the balance of payments and to cushion against the adverse effects of economic crisis and a lack of macro-economic policies that can guarantee access to decent livelihood opportunities. One way of securing a continuous remittance flow is to celebrate their providers. I propose, however, that such celebrations at times are subject to strong contestation, as may be seen from the following incident, which at a first glance seems to be about religion and proper ways of clothing but turns out to be about migration and proper ways of developing the indigenous highland communities of Guatemala.

Saint Maximón⁵ is usually understood as an indigenous (Maya)

⁵ The name Maximón is interpreted by some as the reincarnation of the Mayan God Mam. With the imposition of Catholicism over other creeds, Mam

deity, a saint of multiple and negotiable identities. Local *cofradias* (religious confraternities) can be found in various places, such as San Juan de la Laguna, Zunil, Santiago de Atitlán and San Andrés Iztapa. Devotees, first and foremost men, attribute miraculous powers to him and make offerings of tobacco, *aguardiente* (cane liquor), money, and even food to request protection, good *milpa* (maize) harvests, healing of sickness, and solution to emotional problems.⁶ Favors received are often acknowledged through a commemorative tablet. The thankful inscriptions on these tablets increasingly make reference to migration with statements such as "Thanks to brother Simón for getting me to Los Angeles, California and all other favors received." Discovery of such migration-related inscriptions was actually what first stirred my interested in the cult of Maximón

Throughout highland Guatemala, the images of Maximón consist of a clay mask attached to a small body made of rags, at times dressed as ladino, at times in *traje indígena* (indigenous attire), and on occasion—as in the deity's San Andrés Itzapa transfiguration—in military uniform. More often than not, the dressing style is mixed, e.g., an embroidered indigenous trouser under a European or military style jacket, straw hat on top, hand-woven indigenous *faja* (belt) around the stomach, and black leather boots. Guatemalan cultural analyst Mario Roberto Morales (2008) interprets these mixtures of clothing as an expression of identity transvestitism: of the conflictive indigenous self perception (as oppressed and seduced by colonization and ladinization), but also of the self perception of the ladino, whose identity constitution is articulated through the painful assimilation of certain indigenous cultural traits. As such, Maximón, in all his variants, expresses the intercultural *mestizaje* of Guatemala as well

became San Simón. Depending on the village, he may personify San Judas Tadeo, Pedro de Alvarado, or Judas Iscariot. For an interesting analysis of the figure of Judas in the Guatemalan town of Sacapulas, see Shoaps 2009.

The favors are obtained through prayers and offerings which are symbolized by different color candles representing a wish: red for love, yellow and white for protection, green for prosperity, blue for good luck, pink for health, light blue for money, black for jealousy and witchcraft, and purple to eliminate bad thoughts.

as its conflictivity, evidenced by an identity neurosis or ambivalence: negation/adoption; shame/pride, etc. The ethnic cross-dressing theme introduced by Morales directs our attention to the ambiguities associated with being a superhero. At times power is achieved through dressing up as the enemy. At other times, the superhero may show out to be traitor if stripped of his/her disguise.

In Santiago Atitlán—an indigenous highland locality globalized by international migration and tourism—Maximón resides in one of the *cofradía* member's home all through the year. During Holy Week, the image is moved to a little chapel next to the Catholic parish church, from where on Easter Saturday it will be moved to the house of another *cofradía* member. An important part of this yearly ritual includes a change of clothes, usually paid for by the new hosts. On Holy Thursday 2008, I happened to visit Maximón's chapel at the same time as a group of local Mayan authorities (dressed in the local fashion mix of European-style shirts and knitted short trousers with local fauna embroidery). The men were visibly disturbed by the change of clothes chosen. The felt hat used the preceding year had been replaced by a cowboy hat. The original black boots had been changed by cowboy boots made of cow skin. The deity's traditional silk scarf had been replaced by a flashy Gucci accessory.

Discontent among these men was expressed more or less like this: "What happens is that today the young people do not know how to dress Maximón. They come for the Easter holiday; they come with their *migra-dollars* and their U.S. ideas." This year the migrants had dressed Maximón Tex-Mex style! My co-visitors stated their displeasure by saying that "nowadays the migrants have captured Maximón's image" ... and that "his magic powers may be lost."

This defense of a local cultural/religious practice marks a discursive shift away from syncretism toward a more essentialist approach. *Migra-dollars* are welcomed if they—like much of the international development aid reaching this region—are invested in the maintenance of indigenous Maya culture and in the strengthening of local traditional power structures. The development model expressed by

the elders is one of continuity, of rebuilding structures lost to civil war and poverty, and of maintaining a gender and generational hierarchy including proper clothing. That young men involved in international migration have the economic means to maintain tradition by paying for Maximón's new clothes simultaneously entails their potential power to resist the ways of the Mayan elders and democratize access to religious deities and other providers of miracles. In the present transnational era of Guatemalan life, it may be necessary to trace such discursive moments and cultural clashes to show how the repositioning of development is performatively staged and comprised in narratives that at first glance have nothing to do with development.

Another way of approaching the issue of remittances' contribution to development by attention to "cross-dressing" can be found in the exhibition La verdadera historia de los superhéroes ("The True Superhero Story"). The project is based on an idea linking Latin American migration to the United States and consists of photographs picturing real migrant workers in their daily chores. The images picture them disguised as superheroes that work long hours in order for their families to have better lives at home. A window cleaner, disguised as Spiderman, climbs a building; a pizza delivery man, dressed as Superman, rides a bike. Each photo is accompanied by a text making reference to remittances: Alvaro Cruz works as a cook and runs with the New York Compadres (Godfathers) team; he sends US\$300 each month. Noé Reves works as a fast-food delivery person in Brooklyn, he sends US\$500. Bernabé Méndez works as a window cleaner in the New York skyscrapers; he sends US\$500 per month. Adalberto Lara is a construction worker in New York; he sends US\$300 each week.⁷

While the artist's idea probably was to create a humorous anti-thesis to current U.S. anti-migrant politics and to the worldwide hostility

The photos by artist Dulce Pinzón search for inspiration in nostalgia, in identity questioning and in political and cultural frustrations; and they portrait multidimensional scenes of the migrant experience. Most of her work uses Mexicans living in the United States as the main character, but easily apply to any other migrant of any nationality. The pictures were downloaded from www.dulcepinzon. com/es projects superhero.htm on 16 December 2009.

to migrants *from below*, the image of the migrant as Superhero simultaneously catches the discourse *from above* of several Central American governments. This is the image of the absent citizen who, through remittances, contributes to the daily survival of family members and to local development. *He* does so through a moral obligation to provide for his family, thereby maintaining his role as father and husband in absentia and restoring his public honor vis-à-vis his local community and the state. To be a migrant superhero is, in other words, strongly connected to a masculine universe.

The feminization of migration, however, is altering this picture, as women no longer only migrate to reunite with their spouses, but increasingly to provide for their children and other family members. Minerva Valencia, another image from the "True Superhero" exhibition, works as a nanny in New York and sends US\$400 every week. Despite the fact that she, like her male colleagues in the superhero business, is imbued with super powers, her cat-woman character and latex outfit is ambiguous. Though modern feminist interpretations may attribute her activities and costumed identity as a response to a history of abuse, a survivor with nine lives, as an adversary of Batman, the other side of Catwoman is a whip-carrying burglar with a taste for high-stake thefts. An anti-heroine rather than a contributor to development, a woman out of her domestic place, a woman taking care of other women's children, leaving her own behind. Such cultural images spill into both popular and official images of the migrant superhero in form of a masculine character whose legitimacy stems from being a provider and a feminine one being associated with family breakdown and the destruction of the domestic order (see Sørensen 2006; Sørensen and Guarnizo 2007).

From Migrant Hero to Deportee Trash

Central America is currently experiencing one of the region's most intense moments in its migration history, from being a region of emigration, transit and destination to being a recipient of high numbers of deported nationals. After 11 September 2001, the U.S.

Immigration and Naturalization Service (INS) was absorbed into the U.S. Immigration and Customs Enforcement (ICE), under the umbrella of the U.S. Department of Homeland Security (DHS), with the purpose of targeting more aggressively illegal immigrants within the United States. It was not until 2008, however, that the ICE began raiding border towns and job sites further north in an attempt to track down illegal workers. One such raid occurred in Postville, Iowa in May 2008, where some 390 Central Americans (of whom 290 were Guatemalans) were captured with excess force, imprisoned during months and later deported. Several of the apprehended migrants had lived in the United States for as much as twenty years (Camayd-Freixas 2009).

	2003	2004	2005	2006	2007	2008
Caribbean	7,637	8,544	8,067	6,515	6,763	
Central America	23,144	27,686	40,773	62,298	70,060	
North America	156,814	177,401	170,629	188,151	210,259	
South America	9,990	13,618	14,535	12,103	11,988	
US Total	211,098	240,665	246,431	280,974	319,382	
Costa Rica	514	599	676	795	655	
Cuba	76	465	730	124	76	
Dominican Republic	3,472	3,760	4,210	3,107	2,990	
El Salvador	5,561	7,269	8,305	11,050	20,045	
Guatemala	7,726	9,729	14,522	20,527	25,898	28,051
Honduras	8,182	8,752	15,572	27,060	29,737	30,017
Mexico	155,812	175,865	169,031	186,726	208,996	
Nicaragua	820	947	1,292	2,446	2,307	

Table 4: US Deportations of Migrants by Latin American country and Year. Source: 2003-7: Orozco 2008; 2008 figures: Personal interviews in March 2009 with Guatemalan and Honduran immigration officials, Dirección General de Migración de Guatemala February 2009 (also available through www.gob.gt) and Dirección General de Migración y Extranjería de Honduras (also available through www.migracion.gob.hn) March 2009.

The total number of deportations reported by the DHS increased dramatically in 2008, during which year more than 154,000 Central Americans and Mexicans were returned to their countries of origin. In the Honduran case, up to 75 percent of all migrants crossing the border are deported from Mexico. Approximately 1 percent stay on in Guatemala or Mexico, leaving the prospects of a successful journey at less than 25 percent. The high number of deportations leaves us with the impression that Honduran migration is repetitive and that the cost of undocumented migration must be multiplied by the number of attempts necessary to make it to the final destination. It also indicates that the forms of organization of Honduran migration to a large extent rely on networks of professional traffickers or human smugglers and not so much on transnational family or community networks and other more protective mechanisms.

The control of migratory routes by criminal networks implies higher levels of danger and exploitation. The high number of detained, injured, amputated, 8 or dead migrants is one of the detectable negative impacts of this reality. A lack of adequate public policies is further adding to this rather grim picture.

In the Guatemalan case some 7,000 migrants were deported from the United States in 2004, rising four times to around 28,000 in 2008. According to the Human Mobility Pastoral of the Guatemalan Episcopal Conference, an average of 6.5 flights per week carrying deportees arrived at the Aurora International Airport and the Guatemalan Air Force Base in the latter half of 2008. The Guatemalan Foreign Ministry reported receiving around 500 deportees a week throughout 2009. The only public services the state has managed to offer thus far include a medical check, one free phone call, and transportation to the Central Bus Terminal. Local officials say that ten years ago roughly half of the deported migrants came home with criminal records. As

⁸ Amputation of arms and legs may happen to Central American undocumented migrants if they fall off, or are pushed off, the fast running freight trains connecting southern Mexico to the northern border.

⁹ Author's personal communication with Bishop Alvaro Leonel Ramazzini Imeri, March 2009.

The Rise and Fall of the "Migrant Superhero" and the New "Deportee Trash":
 Contemporary Strain on Mobile Livelihoods in the Central American Region

shown in Table 4, the number of felons has decreased considerably as ordinary migrants become apprehended at home or in their jobs in factories and farms.

Central American deportees have generally opted to try to return to the United States as soon as possible upon deportation. Jobs are scarce and salaries low on the Central American job market. Apart from that, many have left spouses, children, and even businesses behind in the United States. But the stakes have become high. A deported illegal migrant risks a felony conviction and up to twenty years in prison if caught.

From a social remittance perspective (Levitt and Sørensen 2004) deportees, like returnees, potentially bring back intangible valuables such as a North American education and job skills, cosmopolitanism, and English language skills. However, as they come directly from jail, most deportees travel lightly, with no suitcases, shoes loose without shoelaces, and pants without belts. They enter their countries of origin in clothes quite distinct from the superhero disguises referred to earlier, a dress code commonly associated with the deportation of street gang members, the so-called maras or pandilleros. Apart from being traumatized by the deportation experience, these forcedreturn migrants face prejudice and discrimination through association with transnational criminal networks in the public imaginary. From being a migrant superhero, provider of family and community development, imbued with the authority and prestige that comes with living in prosperous foreign lands (Sørensen and Stepputat 2001) and, as such approached in official government discourse directed at the migrant population abroad, they become deportee trash overnight. Domesticated or failed migrants, like the rest of the poor and marginalized local population, only get state attention through populist policies providing the fortunate ones with food or smaller cash gifts from the government at election time.

The Cost of Being a Superhero in Times of Insecurity and Economic Recession

So what about the successful migrants, those who manage to stay abroad or those who chose to return and as such to end the migration circle? Which geographies of power (Pessar and Mahler 2003)—local as well as global—are crucial for our understanding of the potential and limitations in the migration-development nexus? Stricter border enforcements, violence, and insecurity seem crucial additional elements for any analysis in search of the developmental impact of migration. As discourses on violence and insecurity habitually are linked to migration, the exclusion of these matters in remittance debates becomes conspicuous.

El Triángulo Norte currently experiences violence levels considerably higher than Colombia, the only Latin American country still suffering from armed conflict. At the city level, the Guatemalan capital has homicide rates well above other violent cities (108 homicides per 100,000 inhabitants, compared to 30.6 in Bogota). A comparison at the department level shows that the Department of Guatemala has higher homicide levels (77.3) than the Department of San Salvador (68.7) in El Salvador and the Department of San Pedro Sula (61.5) in Honduras (for country specific homicide rates, see Table 1).

In all countries feminicide rates are high and rising. Other forms of violence such as threats, extortions, abductions, and armed robberies are also increasing. Evidence suggests that corrupt police forces and former elite soldiers who lost their jobs to the peace processes are involved in the illegal drug trade, as violent aggressors towards youth and minorities on the margins, and as participants in the proliferation of social cleansing and mob lynching (PNUD-Guatemala 2007). When households connected to transnational migrant resources become visibly better off, they become victims of robbery and extortions. The same criminal networks increasingly control the undocumented migrant routes and abductions on the Guatemala-Mexico and Mexico-U.S. borders have become common. The victims are held in capture for two to three weeks, women are often raped, and captured migrants

are only released if their family members pay the ransom.

Criminal networks have entered the migration industry and as crossing the border becomes more difficult—as a result of enhanced controls the cost of undocumented migration increases correspondingly. These costs are not deducted from the official remittance statistics registered by national banks and reported by the Inter-American Development Bank or the World Bank. How much money do Central American individuals and families invest in failed migration attempts? What is the real cost of having to travel two, three, four and even ten times with covotes and other clandestine services to get to the North? How much money is used for paying ransoms? And how much money is sent from Guatemala, Honduras, and other Central American countries to support family members who have not been able to find a job in the United States, who have been laid off, who have been injured or sick during months of their undocumented stay? Few people probably know. But if the superheroes remit US\$500 a month or US\$6,000 a year, and the cost of undocumented travelling has risen from around US\$3,000 to US\$10-15,000, it seems that the remittance balance must be somewhat negative during the first two to three years of migration.

Another missing calculation in the debate on the development impact of remittances is the cost of failed returns due to a lack of security in countries such as Guatemala, Honduras, and El Salvador. From 2006 onwards, it has become commonplace to encounter returned migrant families, who after having invested during several years in a house with a small store on the side, have had to leave everything behind, to flee to protect themselves from murder threats when they no longer have been able to pay the rising extortion fees. Migrant housing, even if not of the *show off* quality often referred to in studies of conspicuous consumption, attract the attention of gangs and criminal networks. After filing reports with local authorities to no effect and unable to pay ever rising security taxes, return migrants are increasingly forced to remigrate. The product of a long working life outside the country of origin is lost over night. In addition, Guatemalan newspapers have lately reported several cases of illicit appropriation of property certificates for houses and land plots belonging to migrants living abroad. These and other criminal acts directed towards Central American migrants have not been given priority in local law enforcement politics. The migrant investments lost are not deducted from the remittance statistics.

Conclusion

The transnational turn in migration studies has provided important tools and concepts for enlarging our understanding of lives lived in different places, dreams and aspirations connecting people across state boundaries, and for freeing conceptual tools from methodological nationalism (Wimmer and Glick Schiller 2002). Transnational migration studies have opened our eyes to the huge efforts migrants and their families invest in development in areas often abandoned by state development policy. At the same time, transnational migration studies have tended to focus on the social ties and networks that link migrants and refugees to the communities or nation states of their birth. While continuous back-and-forth movements are not necessarily what connect migrants to local development processes, forced deportations and the criminalization of undocumented migration represent transnational theorizing with a huge challenge. What happens, for example, to growing numbers of people—large proportions of the youth—who grow up having their minds and mental geographies set on elsewhere while at the same time they find themselves unable to move towards their aspirations?

It seems beyond discussion that remittances contribute to poverty alleviation and development in Central America. Such cash flows now reach marginalized areas with high food insecurity and contribute to restore the means of survival for poor families. The flow will probably not fall drastically in the near future, as some economists predict. However, as the costs of maintaining transnational lives and local investments are not deducted in official statistics, it is possible that their real value is overstated.

Financial volumes aside, it may be of more crucial importance to study the socio-cultural qualities connected to financial remittances.

Remittances have traditionally enabled migrants to challenge local power hierarchies and hereby alter their social status. The sudden fall from migrant hero to deportee trash severely affects migrants' ability to draw on bi- and transnational repertoires and may alter their position in local development processes. Such changes need to be studied closely, as do diverging preferences for particular development projects. Migrants and locals may not share the same visions. Several definitions of what development is or should be are competing: a diverse set of actors disagree on the purpose, the direction, and the end product of development.

Personal and societal insecurity paired with poor livelihood prospects have mobilized millions of Central Americans. The securitization of migration—as is evident from stricter border controls and aggressive deportation rallies—makes migration a risky affair. Instead of providing security, the securitization of migration has paved the way for criminal networks' entry into the migration industry (as service providers to migrants en route) and has heightened the risk of exploitation and of violations of basic human rights (including migrant rights).

Finally it is worth highlighting that return and repatriation—be they a personal choice or an effect of deportation—are rarely a sustainable development practice, particularly not when the countries of origin maintain high levels of structural inequality and insecurity. The examples of deportation and extortions of returned migrants remind us that a successful return is only possible when basic security in guaranteed. The prospects of this happening in the near future are poor.

The cultural images of superheroes, local saints and deportee trash may seem too postmodern for policy makers looking for operational recommendations. However, as such images are extremely powerful at the local and everyday level of migrant sending societies, paying attention to them is crucial for the planning and execution of integrated migration-development policies. The rising levels of deportations of Central American migrants highlight the dual problem of poor

development policies in the South and inadequate migration policies in the North. Effectively tackling the problem requires bi-national efforts that combine domestic development plans and adequate security measures with migration reform and changes in deportation policies. When policies are drawn up by migration-security over migration-development concerns, we may miss out on the fact that the North's obsession with security is leading to insecurity for the world's migrants.

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The Role of DICONSA in Promoting Food Security in Rural Mexico and Providing Assistance in Case of Natural Disasters

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ABSTRACT

This paper reviews some of the determinants of migration from Mexico to the United States, emphasizing the importance of income differences between the two countries and underlining that the typical Mexican migrant may not be as poor as many think, given that migration is a costly investment. Even if the typical Mexican migrant is not under the poverty line, poverty is still a significant problem in Mexico. In this context, the paper describes Mexico's current povertyfighting policy with a focus on DICONSA's Rural Supply Program, a program supplying basic goods to rural isolated localities and providing assistance to populations likely to migrate when affected by natural disasters, and *Oportunidades*, which is a conditional cash transfer program. The outcomes of this policy have been mixed: poverty slightly increased from 2006 to 2008 but, on the other hand, without conditional cash transfer programs, the number of people in extreme poverty would have been even more in 2008 (21.3 instead of 19.5 million people). Thus, cash transfer programs prevented more people from falling into poverty and may have had positive effects on inhibiting migration flows during these years, although this has yet to be proved.

Introduction

With more than 23,000 rural stores throughout the country, DICONSA—a government-owned company coordinated by the Ministry of Social Development of Mexico (SEDESOL)—is the largest network of its kind in Latin America.¹ DICONSA's network reaches communities of less than 2,500 people in the most isolated areas of Mexico, providing them with an affordable food supply, nutritional assistance, help in case of natural disasters, and a safety net when substantial increases in grain prices occur.

The purpose of this work is to describe the main characteristics of DICONSA's Rural Supply Program, as well as Mexico's current social policy, assuming that this policy may have had some positive effects on inhibiting migration flows from Mexico to the United States, through its impacts on poverty. The following section reviews some of the determinants of migration, emphasizing the importance of income differences between Mexico and the United States. The evolution of poverty in Mexico is also analyzed in this section, serving as an introduction to the review of Mexico's current social policy in the ensuing section. This part begins with a description of the general strategy to reduce poverty during the administration of President Felipe Calderon, *Vivir Mejor*, followed by a description of the main social programs included in the strategy.

Subsequently, DICONSA's Rural Supply Program (RSP) is described with a focus on its main function of providing an affordable supply of food for isolated rural localities. Next, a focus on DICONSA's role of assisting people in case of natural disasters is provided. The part that follows describes DICONSA's current efforts to extend the benefits of its network, through the provision of financial services in its stores. Considering that poverty could be an important determinant of emigration from Mexico to the United States, the following section shows some of the effects that social policy strategy and its instruments

¹ DICONSA originally stood for Distribuidora e Impulsora Comercial CONASUPO. The longer name is no longer utilized; the acronym DICONSA serves to identify the company in all business.

may have had on poverty during 2008. The paper concludes with final remarks

Migration and Poverty

Human migrations have occurred throughout history, beginning with the movements of the first human groups from their origins in East Africa to their current locations in the world. Currently, one of the most salient examples of human migration is from Mexico and other Latin American countries to the United States. An estimated 12 million unauthorized immigrants live in this country.

Most unauthorized immigrants in the United States come from Mexico (59 percent). Others come from Central America and the Caribbean (15 percent), Asia (11 percent), South America (7 percent), Canada and Europe (4 percent), and other countries (4 percent).

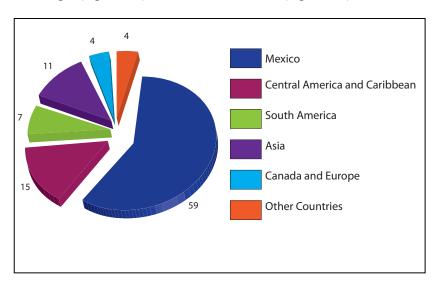


Figure 1. Origin Countries of Unauthorized Immigrants to the United States (percent of total immigrants). Source: Pew Hispanic Center.

Determinants of Migration

People migrate for a variety of reasons including: i) economic (e.g., to find better work); ii) political (e.g., to escape from war); iii) environmental (e.g., driven by the effects of climate change or natural disasters); and iv) cultural (e.g., in pursuit of religious freedom or education). In the case of the unauthorized migration from Mexico and other Latin American countries to the United States, family or community networks are a very important factor increasing the probability of a successful migration to the United States. This is so because previous migrants help new arrivals in the settlement process, provide information about the labor market in host region, and contribute to reduce the costs and risks related with the migration process.

This process also responds to migration patterns. Historically, migration from Mexico to the United States mostly came from states located in the western central part of Mexico. However, these migration patterns have evolved during the last years to cover the entire country.

The main determinant of the migration from Mexico and other Latin American countries to the United States is the income differences between the United States and all other Latin American countries. Foreign workers can earn much more in the United States than they can at home. For example, a young urban Mexican male who has completed middle school can increase his annual income an estimated two and a half times simply by moving to work to the United States, even after controlling for cost of living differences between the two countries (Clemens et al., 2008). Given this fact, in order to understand migratory flows from Mexico to the United States, it becomes relevant to consider income evolution in Mexico and, especially, the income evolution of the poor.

The Evolution of Poverty in Mexico

The National Social Policy Evaluation Council (CONEVAL) is Mexico's agency responsible for estimating poverty levels. According to CONEVAL (2009), poverty in Mexico reached a maximum in 1996, right after a deep economic crisis that followed a devaluation of the Mexican peso and other critical economic and political events. In 1996, an estimated 69 percent of the total population lived in poverty, with 37 percent of the people living in extreme poverty (Figure 2).²

This means that at the time almost 64 million people in Mexico were in poverty and some 35 million were in extreme poverty.

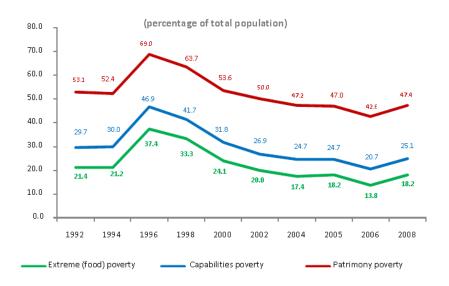


Figure 2. Mexico's Income Poverty Evolution, 1992-2008. Source: CONEVAL Significant economic growth rates contributed to reduce poverty during

Mexico uses three income poverty lines based on food, capabilities, and patrimony. The food line represents the income needed to acquire the goods included in a basic basket. The capabilities line represents the income needed to acquire the goods included in a basic basket plus expenses in health and education. The patrimony line includes the previous two plus clothing, housing, and transportation expenses. In this work I refer to the food line of income poverty as extreme poverty (CONEVAL 2009).

the following years and in 2001 the percentage of people in poverty was back at the levels prevailing prior to the economic crisis of 1995. However, economic growth rates decreased during subsequent years. As a result, poverty reduction slowed down.

In addition to intermittent economic growth, other factors that may have contributed to the improvement in household income were the public conditional cash transfers—in particular *Oportunidades*, formerly *Progresa*—and private transfers, mainly remittances from Mexicans living in the United States.

Mexico's poverty reduction stopped and was even reversed in 2008 because of the world food crisis. CONEVAL's poverty estimates show that in that year 47 percent of the total population lived in some type of poverty and 18 percent—nearly 19 million people—were in extreme (food) poverty. Most of people in extreme poverty—about 12 million—reside in rural localities while the rest live in urban areas.³ However, if we consider the least severe definition of poverty (i.e., patrimony), 27 million of the 50 million people in poverty reside in urban localities while 23 million live in rural localities.

What these numbers mean is that millions of Mexicans may have had no better option than migrating to the United States in search of higher incomes and wellbeing for their families.⁴

However, it must be noted that the typical Mexican migrant is not necessarily as poor as we might assume. According to some studies, migration rates appear to be higher among individuals with earnings in the top half of the wage distribution. This would be consistent with

³ Urban localities on Mexico are those with more than 2,500 inhabitants.

However, evaluating Mexico's social policy results only in terms of household income may show a simplistic vision of poverty. There are other dimensions of well being in which there have been some important improvements. For example, according to CONEVAL life expectancy increased from 71.7 years in 1992 to 75.1 in 2008. During the same period, middle school coverage increased from 37 to 61 percent while school attendance for children between eight and 12 also increased. Homes with soil floor decreased from 16 to 6 percent. These improvements were generally more significant for the poorest 20 percent.

a positive selection of migrants in terms of observable skill (Hanson, 2005).

A possible explanation to this is that migration is a costly investment. Although the very poor have the most to gain by migrating to high-income countries, they are also the least able to meet the resources needed to complete migration. The poor are more likely to face credit constraints and incur in higher borrowing expenditures than individuals above the poverty line. As a consequence, high costs may constitute an impediment to the migration of poor people (Cattaneo 2009).

In the case of unauthorized migration, the best example of the soaring costs faced by migrants is represented by the price they pay for smuggler services. If we consider that the price for smuggler services in the US-Mexico border was estimated at US\$2,750 in 2008 and considering that the average annual income of a rural family living in extreme poverty that year was US\$3,038, we can infer that a poor person willing to migrate to the United States would have had to save his or her full family income during 11 months in order to afford the smuggling fees.

Even if the typical Mexican migrant is not under the poverty line, it is a fact that poverty is still a significant public policy problem in Mexico. The next section describes Mexico's current social policy, followed by a description of particular social programs included in this strategy.

Mexico's Social Policy as an Instrument of Poverty Mitigation

The social policy strategy of President Felipe Calderon's administration—known as *Vivir Mejor*—rests on four strategic lines: i) development of people's basic capabilities; ii) safety net consolidation; iii) construction of links or "bridges" between social and economic policy; and iv) improvement of people's physical and social surroundings.

The first strategic line refers to government actions implemented in order to improve feeding and nutrition, education and health mainly, but it also includes actions on housing, basic infrastructure and even generation of official IDs. The second line refers to actions seeking to reduce people's vulnerability due to conditions of inequality that may be related to gender, age, disability, or ethnic origin, including assistance in case of natural disasters. The third strategic line refers to actions aimed at developing people's productive capabilities and easing their entrance to labor market. Finally, the fourth strategic line refers mainly to the generation and rehabilitation of the public areas where families get together. These four basic strategic lines are described in Figure 3.

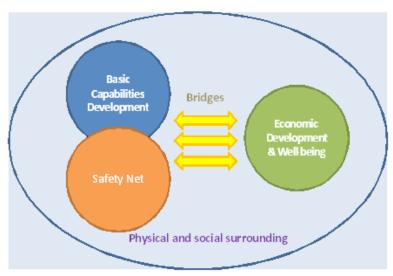


Figure 3. Mexico's Social Policy Strategy "Vivir Mejor." Source: Presidency of Mexico.

All federal social programs group around these four basic strategic lines. All actions and social programs included in this strategy are also designed to meet the objectives and goals established in the National Development Plan and the United Nations' Millennium Development Goals

Mexico's Social Programs: A Description

Figure 4 shows how some of the existing social programs in Mexico fit in every one of the four strategic lines mentioned above.

Basic Capabilities Development

- Oportunidades (Education, health, nutrition)
- Apoyo Alimentario (Food Support)
- Abasto Rural (Rural Supply, DICONSA)
 - Abasto Social de Leche (Milk Supply, LICONSA)
- Desayunos Escolares (School breakfast)
- Becas Educativas (Education Support)

Physical and Social Surrounding

- Desarrollo de Zonas Prioritarias (Priority Zones Development)
- Rescate de Espacios Públicos (Recovery of public areas)
- Hábitat (Urban Development)
- 3x1 para Migrantes (3x1 for migrants)

Safety Nets

- 70 y Más (70 years and above)
- Jornaleros Agrícolas (Seasonal Workers)
- Empleo Temporal (Temporary employment)
 - Seguro Popular (Popular medical insurance)

Bridges Between Social and Economic Policy

- Estancias Infantiles (Day care)
- Opciones Productivas (Productive options)
 - FONART (Crafts Promotion National Fund)

Figure 4. Mexico's Social Programs Included in the *Vivir Mejor* Strategy. Source: Presidency of Mexico.

Programs Included in the Basic Capabilities Development Strategic Line

Oportunidades

Oportunidades is Mexico's largest and best known social program. It seeks to develop people's basic capabilities through its educational, nutritional, and health components. Cash transfers in this program are conditioned on parents' obligation to send their children to school and attend periodical medical checkups.

In 2009, with a budget of 47.8 billion pesos (US\$3.6 billion), *Oportunidades* reached an estimated 5.2 million poor families, 90

percent of which lived in localities with less than 15,000 inhabitants. Evaluation results show that this program has had positive outcomes by improving children's height, increasing family consumption, preventing children from leaving school, reducing sickness days, reducing mortality rates among mothers and children, and even promoting savings, investment, and entrepreneurship among beneficiaries.

Apoyo Alimentario (Food Support)

A program also based on conditional cash transfers to target populations living in communities outside the reach of *Oportunidades*, owing to lack of schools or clinics in these localities. Up to end-2009 this program was operated by DICONSA. Beginning in 2010, the program is operated by *Oportunidades*.

Desayunos Escolares (School Breakfasts)

As suggested by its name, this program provides breakfasts to children in schools and is operated by the National System for the Comprehensive Development of Families (DIF). DICONSA also participates in this program by providing breakfasts when there is an agreement with a State's DIF.

Abasto Social de Leche de LICONSA (Milk Supply)

LICONSA contributes to the development of basic capabilities by improving the nutrition of poor people through enriched milk distribution. Beneficiaries of this program can purchase LICONSA milk at 4 pesos (US 30 cents) per liter. During 2009, LICONSA distributed more than 1 billion liters of milk to more than 6 million beneficiaries.

As seen in Figure 5, this strategic line also includes DICONSA's Rural Supply Program (RSP). This program will be subsequently explained in detail.

Programs Included in the Safety Net Strategic Line

70 y Más (70 Years and Above)

This is a non-contributive pension system for people older than 70 years living in rural and semi-rural localities with less than 30,000 inhabitants. The cash benefit is 500 pesos per month (US\$37.5). In 2009 this program supported more than two million seniors in more than 76,000 localities with a budget of 13,176 million pesos (US\$989 million). It is operated by SEDESOL.

Jornaleros Agrícolas (Seasonal Workers)

The program consists of rehabilitation of seasonal workers' shelters and cash transfers for the families of seasonal workers conditioned to children's school attendance. In 2009, this program, operated by SEDESOL, supported more than 520,000 workers in 24 of the 32 Mexican states. It provided more than 25,000 education scholarships.

Empleo Temporal (Temporary Employment)

As suggested by its name, this program employs people for short periods of time in community projects, usually construction of basic infrastructure. In 2009, it benefited more than 230,000 workers. This program, operated by SEDESOL, also supports the acquisition or leasing of tools, material and equipment.

Seguro Popular (Popular Medical Insurance)

The program offers medical insurance to families not covered by the Mexican Social Security Institute. It covers a basic health protocol that has grown over the years and recently covers chronic diseases such as AIDS and cancer. Its goal in 2012 is to cover all families not covered by other social security system. It is managed by the National Commission for Social Protection in Health.

Programs Included in the Bridges between Economic and Social Development Strategic Line

Estancias Infantiles para Madres Trabajadoras (Day Care)

The objective of the program is to provide day care services to working mothers, students, and single male parents in order to facilitate their access to and permanence in the labor market or school. The program supports both demand and supply of day care services. The monthly subsidy for day care installation costs is 35,000 pesos (US\$2,628) while the monthly subsidy per child assisted is up to 700 pesos (US\$52.60). In 2009 the program generated nearly 44,000 jobs and assisted about 260,000 children, 240,000 working mothers, and 4,000 single male parents in 1,193 municipalities, with a budget of 2.7 billion pesos (US\$204 million). The program is operated by SEDESOL.

Opciones Productivas (Productive Options)

The program provides economic support to productive projects for people in poverty. It also offers technical assistance and entrepreneurial skills generation. It supports beneficiaries in four modalities: i) financing fund (up to 25,000 pesos or US\$1,923 per beneficiary and 300,000 pesos or US\$23,077 per project); ii) comprehensive projects (for groups of at least fifty people in patrimony poverty, up to 25,000 pesos or US\$1,923 per beneficiary and up to 5 million pesos or US\$384,615 per project; iii) local development agencies; and iv) a mentors' net. In 2009 this program operated by SEDESOL supported more than 10,000 projects with a budget of almost one billion pesos or US\$77 million. Most supported projects belong to the financing fund modality.

FONART (Crafts Promotion National Fund)

Its goal is to improve income and productivity of artisans in poverty.

Programs included in the Physical and Social Surroundings Strategic Line

Desarrollo de Zonas Prioritarias (Priority Zones Development)

This program seeks to provide basic infrastructure in lagged areas classified as being a priority. One of the most important actions performed by this program operated by SEDESOL is to substitute soil floors with floors made of cement or concrete. The goal is to substitute all soil floors before 2012. Up to 2009 more than 1,350,000 floors have been constructed, which accounts for 56 percent of the estimated shortage. The program had a budget of 8,2 billion pesos (US\$613 million) in 2009.

Rescate de Espacios Públicos (Recovery of Public Areas)

This program, operated by SEDESOL, seeks to improve people's living conditions trough rehabilitation of public parks, gardens and other public areas. Since the beginning of this program in 2007, more than 3,700 areas have been rehabilitated.

Hábitat (Urban Development)

This program supports infrastructure projects (sewage, water, electricity, street lighting, etc.) for urban areas and is operated by SEDESOL. It also supports community counseling through community development centers. In 2009, the program benefited more than 1.6 million families in 1,222 deteriorated urban zones in 340 municipalities.

3x1 para Migrantes (3 x 1 for Migrants)

The program finances migrants' basic infrastructure projects for their own communities, through monetary resources coming from the Federal Government, local governments, and migrants' associations. In 2009, this program supported 3,421 water supply, electricity, and

road projects, among others.

The paper next describes DICONSA and the Rural Supply Program.

DICONSA

DICONSA is a government-owned company coordinated by SEDESOL. The company's goal is to contribute to the development of fundamental capabilities of people living in highly isolated rural localities through the supply of basic and other complementary goods, offering competitive prices, with community involvement. This goal is very similar to the general objective of the social program operated by DICONSA, i.e., the Rural Supply Program (RSP).

The objectives of DICONSA and the RSP are described in Mexico's National Development Plan 2007-2012, specifically in its Strategy 3.1, which aims to assure "that all Mexicans in poverty can cover their food, housing, basic services, education, and health necessities."

In addition, DICONSA participates in Strategy 3.4 of the Social Development Sector Plan 2007-2012: "to protect and assist people affected by natural disasters in coordination with civil society". This responsibility is accomplished through DICONSA's "Special Programs."

DICONSA's Rural Supply Program

The RSP operates through DICONSA rural stores located throughout the country. There are two criteria for selection of eligible localities: 1) the community's population must be less than 2,500 inhabitants, and 2) the locality must have a "very high" or "high" index of isolation as determined by the National Population Council (CONAPO).⁵

At a minimum, each DICONSA rural store must have available what is

⁵ CONAPO's Localities Isolation Index contains five categories: Very low, Low, Medium, High, and Very High.

known as "DICONSA's basic basket," consisting of 21 non-perishable products including corn, beans, rice, sugar, powdered milk, corn and wheat flour, and soap, among others (Figure 5).

1. Corn	8. Powdered milk	15. Corn flour
2. Beans	9. Powdered chocolate	16. Wheat flour
3. Rice	10. Instant coffee	17. Cookies
4. Sugar	11. Tuna fish	18. Washing powder
5. Vegetable oil	12. Sardines	19. Toilet paper
6. Pasta	13. Vegetable shortening	20. Soap
7. Canned green peppers	14. Salt	21. Washing soap

Figure 5. DICONSA's Basic Basket (Products). Source: DICONSA

In addition to the basic basket products, DICONSA supplies a variety of products depending on community's demand. DICONSA's catalog includes more than 200 different products and more than 3,000 articles, if we consider all different brands and product presentations.

The operational rules of the RSP establish that savings transfers to beneficiaries must be above 10 percent.⁶ This means that if a beneficiary buys the complete DICONSA basic basket of 21 products, this basket must cost the buyer at least 10 percent less than the cost of acquiring the same basket of products at a private store located in the same or a nearby town.

Finally, it is very important to consider the fact that rural stores are not DICONSA's property but community property. When a locality meets the eligibility criteria established in operational rules and the store is solicited by a number of community members, DICONSA establishes and supplies the rural store, accordingly to the operational

⁶ All social programs receiving fiscal resources must have operational rules which set several criteria that must be accomplished through the program, such as goals, indicators, and a defined target population.

⁷ The premises where the store is established are either community property or the property of a particular resident of that community. DICONSA provides the brand's image, basic furniture and equipment, training, and the first set of products

structure described in the next section.

DICONSA's Structure and Operations

In order to reach its goal of supplying more than 23,000 stores throughout Mexico, DICONSA has an infrastructure of 28 central warehouses, 270 rural warehouses, and 35 administrative offices in all 32 Mexican states, as well as a fleet of 3,500 vehicles for delivery of goods and store supervision. DICONSA has 7,700 workers.⁸

Once a DICONSA store has been installed in compliance with the eligibility criteria established in RSP operational rules, DICONSA's distribution process consists of: i) identifying the locality's demand for specific goods; ii) acquiring goods and inputs from both national and regional suppliers, who regularly deliver these goods directly to DICONSA's central warehouses; iii) transferring goods from central warehouses usually located in large Mexican cities adjacent to DICONSA's administrative offices to rural warehouses located in smaller cities or towns, using DICONSA's fleet; and iv) delivering goods to the stores, also using DICONSA's own fleet. This process is described in Figure 6.

to sell, as demanded by the community.

⁸ Only 4,200 of these 7,700 workers are employees of DICONSA while the rest of them (3,500) are "community workers." This arrangement is fundamental for the success of DICONSA.

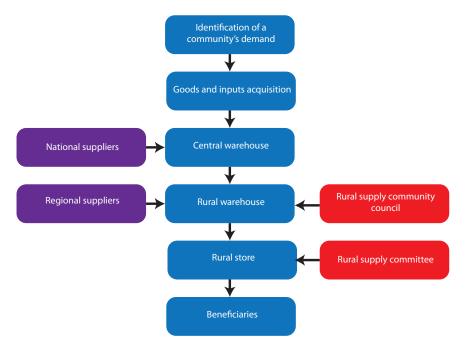


Figure 6. DICONSA's Distribution Process. Source: DICONSA.

Community participation is a fundamental element of this program and every rural warehouse has a Rural Community Supply Council whose main responsibilities are: i) monitoring resources, infrastructure, and materials used in warehouse operations; ii) informing the company about problems detected, and iii) promoting participation among the communities involved in the program. Every rural store also has a Rural Supply Committee whose main responsibilities are to: i) help the store manager comply with all administrative, financial, and operational responsibilities; ii) persuade members of the community about the importance of social monitoring; and iii) support all DICONSA programs aimed at benefiting the assisted communities. Before a rural store opens, an assembly is held in which the store manager is selected among the community members.

Within this structure and operational system, DICONSA reported sales to its rural stores amounting to US\$573 million (5.7 billion pesos) in 2009 (Figure 7).

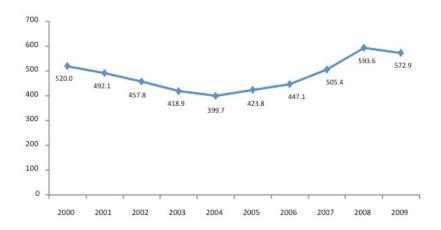


Figure 7. DICONSA's Annual Rural Store Sales (2000-2009). Source: DICONSA.

DICONSA's total sales in 2009 amounted to US\$737.5 million, including sales to other government agencies and local governments. This figure comprises all sales related to natural disaster assistance.

Rural Supply and Savings Transfers to Beneficiaries

DICONSA's main function is to provide an affordable supply of goods to rural isolated localities. In order to supply the goods throughout the country, DICONSA has a presence in more than 21,200 Mexican communities, which means that only a few localities served by DICONSA have more than one DICONSA store. DICONSA is the only food provider in approximately in 4,000 localities.

DICONSA's presence is highly focused and aligned with other government programs. For example, 60 percent of the stores are located in 94 percent of municipalities defined by SEDESOL as microregions; 95 percent of the localities covered by DICONSA are also assisted by *Oportunidades*; and 90 percent of municipalities classified as indigenous by the Indigenous Peoples Development Commission (CDI), have a DICONSA store (Figure 8).

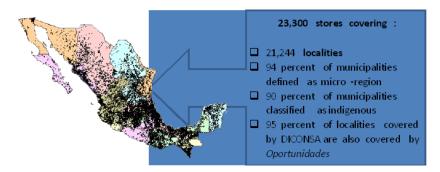


Figure 8. DICONSA's Rural Supply Program Coverage and Focalization. Source: DICONSA.

The total target population of DICONSA's RSP in terms of localities is 20,165, while covered localities amount to 10,285. Thus, DICONSA still has a significant growth potential in isolated rural communities of Mexico. However, as the presence of the program is not determined by DICONSA but by public demand for a store, it could be that eligible localities without DICONSA's presence: i) do not have a strong problem of affordable food availability (i.e. already have private stores selling at market prices), or ii) these localities are excessively isolated and DICONSA has not been able to reach them (i.e. there is no road access to that community or the locality is far enough from an existing delivery route of DICONSA,) among others.

In order to offer an affordable supply of goods, DICONSA exploits its significant purchasing power to obtain discounts and low prices from national suppliers. In this context, DICONSA's basic basket of 21 products has an average cost to beneficiaries of US\$19.7 at a DICONSA store, while the same basket of goods has an average cost of US\$23.6 at private stores in those same localities. Therefore, the average savings margin transferred to beneficiaries is about 20 percent in the basic basket (Figure 10).

 The Role of DICONSA in Promoting Food Security in Rural Mexico and Providing Assistance in Case of Natural Disasters

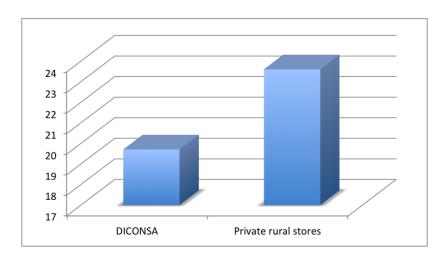


Figure 9. Basic Basket Price Comparison: DICONSA vs. Rural Stores (U.S. Dollars). Source: DICONSA.

If we consider that the average quarterly income of a family in rural areas is US\$1,140 and this family spends approximately 40 percent of that income on food consumption, this means that this family could afford a total of 23 basic baskets at the DICONSA store, while it could only afford 19 baskets at the private store. Therefore, buying at the DICONSA store means a total savings for the average family—without considering savings in transportation costs—of US\$90 quarterly or US\$360 per year. If we consider transportation costs, total estimated savings would be US\$506 (Figure 10).

Additional Services in the Rural Stores and Coordination with Other Government Agencies

In addition to supplying goods, DICONSA also helps to provide some basic services to localities that lack them because of their isolation. These include telephone, postal mail, non-prescription drugs, utility bill payments (water and electricity), and delivery of conditional cash transfers to beneficiaries of other social programs, such as *Oportunidades* and *Apoyo Alimentario* (Food Support).

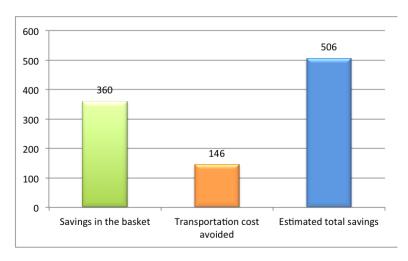


Figure 10. Estimated Annual Savings of DICONSA Beneficiaries in Food Expenses and Transportation (U.S. Dollars). Source: DICONSA.

In 2006, nearly 60 percent of localities with a DICONSA store lacked telephone service. In order to contribute to the provision of this service, DICONSA made agreements with Telmex and Telecomm. Between 2008 and 2009 nearly 7,000 telephones serving approximately 10,000 rural localities were installed. In 2009, approximately 86 percent of the stores offered three or more services.

In addition, DICONSA has made agreements with other government agencies such as *Correos de México* (the Mexican Postal Service), the Ministry of Health, and the National Institute of Indigenous Dialects (INALI) among others, to provide postal mail service, distribute folic acid and preservatives, and translate nutritional information from Spanish to indigenous languages spoken in these rural localities.

DICONSA's Intervention in Natural Disasters

Natural disasters generate temporary and permanent displacements of people and their communities, strengthening migratory pressures in states where migration was not significant. To minimize the migratory effects caused by natural disasters, DICONSA protects and assists people through the distribution of a variety of products that contribute

to reduce vulnerability and, therefore, migration.

Taking advantage of its nation-wide network of warehouses and stores as well as its fleet and workers, DICONSA assists urban and rural localities that suffer natural disasters caused by hurricanes, floods, snowfalls, and even earthquakes. For this purpose, DICONSA distributes a variety of products such as food aid packages, bottled purified water, blankets, galvanized sheets, shovels, pads, and others, always in coordination with the National Fund for Natural Disasters (FONDEN).

In recent years, DICONSA has made significant improvements in procedures implemented to assist natural disaster situations. The inputs purchasing procedure is a clear example of this. Before 2007, DICONSA acquired these inputs during the days following the event; thus the acquisition prices for these inputs were regularly high. Starting in 2010, inputs are purchased through open bidding during the first months of every year. Thus, DICONSA is able to obtain better prices and create an inputs reserve which can later be used during critical months of the year, such as the hurricane season (i.e., the last six months of every year).

As opposed to store sales, sales derived from natural disaster events are highly irregular (Figure 11). For example, during 2007 there were five hurricanes. Chiapas and Tabasco recorded the biggest floods in the last fifty years. DICONSA put in place a mechanism that enabled the delivery of two million food aid packages to the same number of families.

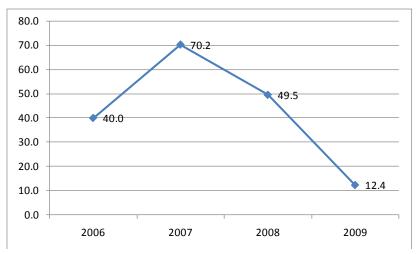


Figure 11. DICONSA's Sales to FONDEN, 2006-2009 (U.S. millions of dollars). Source: DICONSA.

While in 2008 and 2009 the number and severity of this type of events decreased, 2010 was a tough year in terms of natural disasters. These included Hurricane "Alex" in the north of Mexico and the earthquake in Haiti. DICONSA assisted relief efforts in Haiti by transporting many of the items donated by Mexico.

DICONSA in the 21st Century: Social Programs and Financial Services

In 2008, DICONSA launched a pilot program to offer financial services to its beneficiaries through its nationwide network of rural stores, aiming to reach people in rural communities that currently lack access to basic financial services. The initial stage of the program consists of distributing *Oportunidades*' conditional cash transfers.

Currently, many *Oportunidades*' beneficiaries must travel long distances to distribution centers to collect their payments in cash. Considering that nearly 75 percent of *Oportunidades*' beneficiaries live less than 2.5 miles from a DICONSA store, DICONSA developed an electronic dispersion system through its rural stores using point of sale (POS) terminals to biometrically identify *Oportunidades*'

beneficiaries with their fingerprints.

DICONSA's network allows beneficiaries to pick up their payments in their own communities or at least closer to home, reducing travel time and associated costs such as food and transportation. It has been estimated that under the new system, *Oportunidades* beneficiaries spend 88 percent less on these two items (Figure 12), in addition to time savings, given that beneficiaries usually need between five and six hours, on average, to receive their payments.

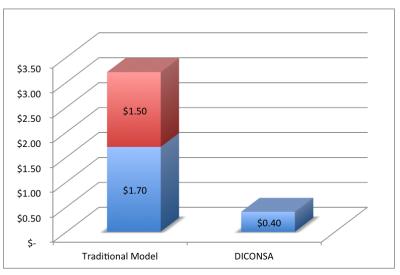
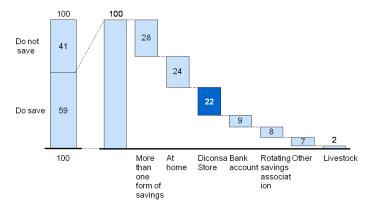


Figure 12. Food and Transportation of *Oportunidades*'s Beneficiaries Expenses (U.S. dollars every two months). Source: Centro de Investigación y Docencia Económicas (CIDE).

Built upon the dispersion of *Oportunidades* payments, the next stage is to transform the DICONSA stores into correspondent bank branches. Correspondent banks offer four basic transactions: balance inquiries, deposits, withdrawals, and telephone payments. During its six months of operation, the pilot plan has successfully registered over 12,000 transactions, reaching 2,389 beneficiaries. One of the main objectives is to encourage beneficiaries to save part of their income (Figure 13).



1 229 beneficiaries were surveyed in june 2010 in the state of Mexico

Figure 13. Savings Behavior Amongst Surveyed Beneficiaries*. DICONSA's Correspondent Stores Project. Source: DICONSA.

Even though the pilot program is fairly young, the DICONSA correspondent model has been chosen as an exclusive savings mechanism by 22 percent of the surveyed beneficiaries. In the near future, DICONSA plans to expand the pilot plan to 350 stores in ten Mexican states, offering a wider range of financial services, such as receiving and processing remittances from Mexican migrants in the United States and facilitating payments for utility services (such as cell phone airtime).

The Impact of Mexico's Social Programs on Poverty and Economic Crisis Alleviation

All these efforts would be worthless if they wouldn't translate into poverty reduction or improvements in the wellbeing of people living in rural isolated areas. In the case of *Oportunidades*, according to CONEVAL there is a measurable impact of this program in terms of additional people not falling into poverty during 2008.

The number of people in extreme (food) poverty amounted to 19.5 million that year. However, without *Oportunidades* that number would have increased to 21.3 million people (a 9.6 percent increase):

Without cash transfer programs in place, the number of extremely poor Mexicans would have risen to 22 million (a 13.5 percent increase) (Figure 14).

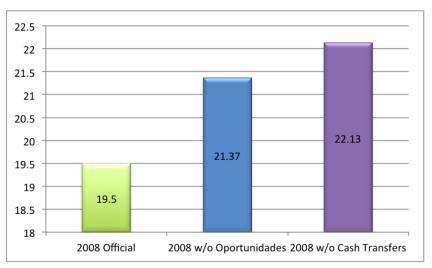


Figure 14. Official Extreme Poverty Estimations in the Absence of *Oportunidades* Subsidies and Other Cash Transfers (2008) (Millions of people). Source: CONEVAL.

This means that Mexico's cash transfer safety nets prevented 2.6 million people from being added to the extreme poverty ranks in that year. If we consider poverty as a cause of migration, a proportion of these people not falling into poverty due to cash transfers may have opted not to migrate. However, this is an issue that has not been measured yet.

On the other hand, although DICONSA's Rural Supply Program (RSP) is not a cash transfers program, it may have had also a positive effect for families during that year. When there is an economic crisis people in poverty react in different ways. Poor families apply several strategies to face economic crisis. Some of these strategies have long-term implications for the development of people's basic capabilities. Figure 15 shows poor people's reactions before an economic crisis, in terms of changes in consumption and other types of modifications.

Changes in consumption

- •Food substitution (i.e. eating lees protein, low quality food)
- Reducing consumption (i.e. two meals instead of three)
- Change shopping habits (i.e. eliminate expenses other than food)

Other changes

- Take kids out from school and send them to work
- Migration and increases of remittances
- Increasing use of informal credit

Figure 15. Poor Families' Reactions to Economic Crises. Source: Moser 1998.

When there is an economic crisis, people tend to substitute high quality with low quality meals in terms of nutritional content. DICONSA's contribution to mitigate this substitution has been to purchase and deliver high quality products. Thus, 50 percent of groceries distributed by DICONSA are products with high nutritional content. Additionally, in some cases DICONSA has begun to distribute its own commercial brands of high quality products.

Examples of DICONSA brand products of this kind include *Mi Masa* corn flour, enriched with protein, vitamins, minerals, iron, and folic acid, according to a formula designed by the National Nutrition Institute of Mexico (INN). *Mi Sopa*, a pasta product made according to an INN special formulation, was developed in 2009. Impact evaluations performed on these products show that people—especially children—who consume them have had positive results in terms of growth (according to age) using internationally accepted measures.

Another way poor people react to economic crises is through reducing consumption (i.e. two meals instead of three) and changing shopping habits (i.e. eliminate expenses other than food). In this case, DICONSA contributes through the savings margin that is transferred to beneficiaries which, as we have seen, amounts to an average US\$360 per year, which represents approximately 7 percent of a rural family's average annual income. Additionally, the savings margin transferred

to families in extreme poverty represents, on average, 12 percent of their annual income.

New measures implemented by DICONSA in recent years could increase the benefits of this network even further. Financial services including savings accounts, credit, and even receipt and processing of remittances will contribute to improve the wellbeing of rural families and provide them better conditions so they can remain in Mexico, instead of considering migration as a better option.

Final Remarks

Migration—especially unauthorized migration—is an important issue in Mexico and the United States, given that an estimated 12 million unauthorized immigrants live in that country and most of them come from Mexico. There are multiple reasons for migration, but in this case the most important is the significant differences in the potential for obtaining personal income between the two countries. Family and community networks also play an important role.

Income evolution data show that poverty is still an important public policy problem in Mexico: 47 percent of the country's population live in poverty and 18 percent live in extreme poverty. Mexico's strategy to reduce poverty includes cash transfers (e.g., *Oportunidades*) and other of programs (e.g. DICONSA's Rural Supply Program). The objective of these programs is to develop basic capabilities while providing a safety net to people in poverty, a proportion of which is likely to migrate.

The outcomes of this strategy in terms of poverty reduction have been mixed. Poverty increased from 2006 to 2008, due in part to that year's food crisis. Without conditional cash transfer programs such as *Oportunidades*, however, in 2008 there would have been even more people in extreme poverty (21.3 million) than the actual number of extremely poor (19.5 million). In the absence of all cash transfer programs, more people would have been extremely poor (22 million). Cash transfers programs thus prevented more people from falling

into poverty and could have had some positive effects on inhibiting migration flows during these years, although this remains to be proved.

DICONSA provides assistance in cases of natural disasters such as hurricanes, floods, snowfalls, and earthquakes, distributing a variety of products such as food aid packages, purified bottled water, blankets, galvanized sheets, shovels, and pads, among other. In this way, DICONSA may contribute to prevent temporary internal migration, although this also would have to be evaluated.

Evaluating Mexico's social policy results only in terms of household income may be simplistic. There are other dimensions of wellbeing that have seen important improvements (life expectancy, middle school coverage, school attendance). Further research should evaluate if these improvements have had any effect on the migratory flows that take place from Mexico to the United States.

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Considerations for a More Comprehensive Immigration Policy:

Moving the Dialogue from Border Security to Food and Livelihood Security

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ABSTRACT

This paper explores food security and migration in the Americas from a historical perspective, considering the role of past and current U.S. economic and food policies on migratory patterns, and argues that an investment in sustainable, locally-driven food systems in Mexico and Latin America would not only improve community well-being but also mitigate migration north to the United States by addressing key root causes. Recommendations at the end of the paper apply the lessons learned from model programs and from history to a concrete policy framework relevant for government programs and the international aid community.

It is our hypothesis that if living conditions are improved on a larger scale and in a sustainable manner, the need for migration as a safety net will decrease. However, more research is needed in this area. We hope that this paper will encourage deeper reflection and discussion on the complex issue of migration and provide insight into possible strategies, apart from border security, which may lead to improved quality of life for all of us, wherever we call home.

Introduction

The World Food Summit of 1996 defined food security as existing "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life" (World Health Organization 1996). The authors of this paper believe that we can and should do much more to address food insecurity, and that these efforts will have a profound impact on immigration by mitigating some of its root causes.

This paper will address:

- 1. Salient issues that should be included in an Americas dialogue on migration and considerations for the formulation of a comprehensive immigration policy in the United States;
- 2. A case study highlighting the relationship between migration and safety nets for food insecure families in rural Central America; and
- 3. Some strategies and recommendations for making long-term, sustainable improvements to food security in rural Latin America.

This paper will not address in any depth the roles and responsibilities of Latin American countries in addressing migration or food and livelihood security. While the authors recognize the critical importance of this issue, this paper focuses on recommendations for U.S. policies and international development programs.

The paper is based on both academic research and the leading author's professional experience working in food security and development in the U.S.-Mexico border region and Central America, particularly in rural communities where migration to the United States is a predominant phenomenon. It illustrates the complexity of migration and factors that should be considered when formulating a comprehensive U.S. immigration policy that goes beyond the shallow discourse of border

security and the border wall.

The first part of the paper examines the complex issues that have contributed to the South-to-North migration in our Hemisphere. These include the history of colonization of the Americas; the social isolation, impoverishment, and genocide of its indigenous peoples; political and military intervention by the United States in much of Latin America; extreme inequities within Latin America; and economic policies promoted by the United States (including NAFTA and CAFTA) and their subsequent impact on rural peoples in Mexico and Central America.

The second part provides a case study that highlights the importance of remittances as a food safety net for rural households in Central America. Over 65 percent of the 3,253 households interviewed in Guatemala, El Salvador, Honduras, and Nicaragua reported having family members in the United States who sent monthly remittances, and that the majority of the remittances (75 percent) is spent on food. These findings have direct implications for the future of these rural families as the United States increases border security and remittances are no longer as effective a survival strategy for rural poor.

Taking this into account, the final section provides case studies of model programs and recommendations that the U.S. government and international and local development community could utilize to enhance food and livelihood security in Latin America both immediately and for the long-term. These include increasing government funding for water, sanitation, and hygiene programming and for local sustainable agriculture, interventions which have demonstrated improved community and family wellbeing through increased income, enhanced agricultural productivity, and improved health outcomes.

While confronting the global economic crisis, which has exacerbated the global food crisis, governments and the international development community have an opportunity to rethink the food system. Instead of just increasing aid, imposing larger agro-business practices or "unfree" free trade, we could consider restructuring the way food is produced, distributed and consumed.

Salient Issues in Developing a Comprehensive Approach to Migration

The issue of migration, its causal factors and the strategies used to curb it are very complex and include historical, political, economic, and cultural factors in both sending and receiving countries. Yet the current shallow discourse on immigration taking place in the United States focuses almost solely on the issues of border security and safety—issues relevant to immigration but failing to consider why people migrate in the first place. This section provides an overview of these complex factors including the historical context of migration in the Americas, colonization and discrimination faced by indigenous populations, U.S. military involvement in the region, and the economic inequities exacerbated by both U.S. policies towards Latin America and national policies in many countries in Latin America. These complex factors have directly contributed to decisions made by vulnerable populations to migrate even though many of them literally risk their lives in order to provide food and a better life for their families back home. It is the hypothesis of the authors that an investment in addressing these causal factors will do more both to decrease migration and to improve lives than the billions currently being invested in border security.

History of Migration in the Americas

The colonization of the Americas and the subsequent five hundred years of discrimination, social isolation, and genocide against indigenous peoples are either not understood or ignored in the dialogue on U.S.-Latin American policy. In particular, how these factors relate to immigration is not taken into account. In the context of immigration policy, it is not discussed or understood that many of the immigrants from Latin America going North are of indigenous descent, have been displaced by industrial development, and are those whose children are the most likely to suffer from malnutrition (Yescas Ángeles Trujano 2008).

Historically, migration has served as a safety net both for the sending

and receiving countries, with those leaving seeking to improve their economic livelihood or security and those receiving seeking to obtain low wage labor. Changes in migration patterns have come in phases, based on pull factors adjusting to labor needs in the receiving country and push factors depending on the socioeconomic and political circumstances of migrants' home countries.

Examining Mexico, the country with the most migration to the United States in recent decades, shows that immigration has seen several distinct periods. In a first phase, prior to 1929 Mexican laborers were recruited to the United States for agricultural work, railroad construction, and temporary labor. From 1890 to 1930 the number of Mexicans working in the United States grew from 103,000 to 640,000. In 1917, the first migration policies as well as the first "quota laws" were established. From 1929 to 1941 the United States and much of the rest of the world experienced a monetary crisis, reducing the need for Mexican labor and resulting in the expulsion and repatriation of millions of Mexicans and other immigrants.

From 1942 to 1964, beginning with World War II, agricultural labor demands increased, paving way for the *bracero* program. In 1949 alone, over 4.5 million Mexican migrants were recruited and, over 14 years, 500,000 workers per year migrated north. From 1964 to the 1980s labor demand continued to guide migratory patterns and family and social networks developed between Mexico and the United States. With the ratification of the North American Free Trade Agreement (NAFTA) in 1994, migration patterns have changed and labor "contractors" (or middlemen) have been responsible for identifying a temporary labor source to meet changing demands of agriculture and industry in the United States (Gameros 2007).

During the past century, Latin American migration North has primarily been from Mexico, but Central American migration has occurred as well, most notably initiating and precipitated during the Salvadoran civil war and years of conflict in the 1970s-1990s, when over 500,000 Salvadorans and other Central Americans left their region to seek asylum in the United States (Castles and Loughna 2003). Migration

from South America to the United States is much less common.

In decades of work in rural poor communities in Latin America, the leading author and her collaborators have consistently heard from people migrating and their families that most of them do not want to migrate permanently and would much rather stay home. Migration is predominantly viewed as a means to improve living conditions for their families through remittances.

With the 9/11 terrorist attacks in the United States and, more recently, the global economic crisis, U.S. attitudes and policies towards security and immigration have altered greatly. The United States now views migration as a topic of national security. As border security and anti-immigrant sentiment have increased, so have the cost to travel North, human trafficking, and the number of deaths associated with border crossings. Since 2001, more than 2,000 bodies have been found in Arizona's deserts alone, as border crossers seek out areas which are less patrolled (McCombs 2010). In Arizona's deserts, compared to other border states, crossers are less likely to be apprehended, but these areas have extreme temperatures and people succumb to heat exhaustion and dehydration in the summer, or freezing temperatures at night in the winter.

Political Context and Diplomacy

The historical context of U.S.-Latin American relations has largely been ignored in the U.S. "debate" on immigration and when pursuing strategies for economic and social development in the Hemisphere. One crucial statement was the 1823 Monroe Doctrine, which declared that any European intervention in the Western Hemisphere would be viewed as an act hostile to the United States (Dent 1999). As the United States became a world power, the Monroe Doctrine justified defining the Western Hemisphere as its sphere of influence. Since that time, the United States has militarily intervened on a regular basis in Mexico, Central America, and the Caribbean. More recently, in the 1980s the U.S. government provided support to the Salvadoran government during the civil war. An estimated 75,000 persons were

killed and an estimated 500,000 fled as political refugees to the United States during the 1980s (Rosenfelder 1996).

U.S. relations in the Hemisphere have focused primarily on economic and political agendas and the United States has not demonstrated parallel interest for social development at national or regional levels. Health and wellbeing are not prioritized, as is reflected in the agendas of NAFTA and CAFTA which have focused on economic development largely for multinational companies (Krupp 2009).

Recommendations:

- 1. When developing its immigration policy, the United States should enter into dialogue with Mexico (and other countries in the Hemisphere) with a better understanding of the complexities of immigration. This could be a unique opportunity for the United States to present itself as a serious and informed partner on the issue of migration and the related contributing factors, including the history of colonization, U.S. and Latin American history, and military intervention, as well as current economic policies and their implications. In doing so, the United States can ask more of its Latin American partners—including increasing their budgetary allocations to social issues and helping reverse migration trends while promoting food and economic security in the region.
- 2. The United States should take a more diplomatic approach to Latin America and utilize sound economic and social development strategies to address issues of inequalities, security, and migration. Policymakers should be well versed in historical and political context of the Hemisphere and not operate in an "issue-focused" vacuum.

Economic Factors

Several of the economic factors contributing to the migration patterns from Latin America to the United States are discussed below. These include the historic pattern of inequitable distribution of wealth among populations in the Americas, U.S. international economic policies which have helped perpetuate this system of inequitable distribution, and the quantity and quality of programs which the U.S. has historically funded for development, including for food security.

Equity

The poverty rates in many areas of the region and the inequitable distribution of wealth paint a stark picture. In countries like Guatemala, 72 percent of the rural population live below the poverty line, unable to meet basic needs, while 10 percent control access to 42 percent of the country's wealth (World Bank 2011). In Mexico, the wealthiest 10 percent earn 41 percent of the country's income while 67.5 percent of rural Mexicans live in poverty and struggle with food insecurity (Schreiner 2009). It is within this context that people make the decision to migrate.

U.S. International Economic Policies

Economic development patterns of neo-colonialism have resulted in policies giving unfair advantage to the disproportionately stronger economies to the North, while interfering with the social support that Mexico and other Latin American governments were providing to their farmers. NAFTA opened Mexico as a market to U.S. agro-industry, which has sold millions of bushels of cheap, subsidized corn to Mexico, distorting both U.S. and Mexican markets. According to a 2003 Carnegie Endowment report, imports of U.S. agricultural products caused at least 1.3 million Mexican farmers to lose their work. At the same time, these policies have allowed U.S. industries to buy up Mexican farms and then export the fruits and vegetables to the United States. Ironically, NAFTA and CAFTA have created a legal framework for business and agro-industry to be globally mobile but do not allow people to follow

this same model of migrating to where the economy suits their needs. At the same time, these policies drive migration, as people are forced to search for better opportunities outside their communities of origin (Bacon 2008).

U.S. Funding for Development, Including Food Security

The United States is recognized as being the largest contributor to development programs in dollar amounts (US\$21.8 billion in 2007). However, this obscures the fact that as a percentage of Gross National Income (GNI), U.S. development assistance is one of the lowest among developed countries (0.17 percent of GNI) and far below the United Nations target of 0.7 percent (Organization for Economic Cooperation and Development 2007). Examining actual U.S. budgetary allocations for fiscal year 2007, 20.5 percent went to social security, 26 percent was combined for Medicare and income security, 18.4 percent was allocated to defense, and health, transportation, education, and veteran's benefits made up the remainder. As a percentage of the federal budget, international affairs represented only 1.7 percent, or US\$33.27 billion (Office of Management and Budget 2007). Of the International Affairs budget, approximately 45 percent (\$15 billion) is allocated to development, humanitarian assistance (including that to international organizations), and to emergency food aid. The remainder goes to the State Department (20.9 percent), military (15.7 percent), drug war (4.3 percent), security and economic (8.9 percent), and multilateral uses (4.7 percent) (U.S. Department of State 2008).

The Commitment to Development Index (CDI) of the Center for Global Development examines quantity of aid (proportional to a country's GNI as well as quality of aid, penalizing donors for giving aid to rich or corrupt governments and for overburdening recipients and "tying" aid (spending it on the donor country's own goods rather than shopping around for the lowest prices or supporting local production). In terms of "Commitment to Development," the U.S. ranks 17th out of 22 nations categorized as donor countries. Sweden, Denmark, and Norway are ranked 1, 2, and 3 respectively (Center for Global Development 2009).

Two of the reasons the United States ranks low on the CDI are its policies and programs tied to food aid. Following World War II, the United States began to overproduce food and surpluses were sent to Europe during reconstruction. With the spread of new technologies (fertilizers, pesticides, and mechanization), the United States now continues to produce more than it consumes, and the U.S. Government continues to use subsidies, tariffs, and price supports which ensures U.S. prices are below other international producers. This benefits agro-industry but not the U.S. small or medium farmer and has a significantly negative impact on small farmers in Latin America who lose their ability to compete in their local market

Farmers have steadily declined in number both in the United States and in Latin America. As small farmers abandon their fields because they cannot compete, their country's food economy becomes more dependent on these subsidized U.S. exports. Agro-industry is also a large beneficiary of international development programming as 99.3 percent of food aid in 2007 from the U.S. Government was purchased from U.S. companies (Holt-Giménez and Patel 2009). Between 2002 and 2007, the Title II Food Aid Program, administered by USAID, averaged US\$2 billion in expenses annually. The 2008 Farm Bill both raised the annual authorization level for Title II to US\$2.5 billion and approved US\$60 million in mandatory funding for a local or regional purchasing pilot program over four years. At US\$15 million a year now going to local purchasing of food aid, that is still only 0.6 percent of Title II's annual food aid budget (Hanrahan 2008).

Recommendations:

1. The United States should increase funding allocated to local and regional development in the Americas as part of its comprehensive approach to immigration policy and as a means of promoting economic and social development in the region. The United States has recently taken a step in the right direction by providing the opportunity for local purchases of food aid commodities in the 2008 Farm Bill. However, additional

Considerations for a More Comprehensive Immigration Policy:
 Moving the Dialogue from Border Security to Food and Livelihood Security

resources should be dedicated to the purchase of foods grown locally in Latin America, which will stimulate local markets, increase opportunities for local famers and help decrease the economic need for migration.

- 2. International cooperation and development strategies should be freed of country-of-origin requirements which undercut local economies and circulate a large part of the development funding back to the donor nation.
- 3. In developing a comprehensive policy on immigration, the United States should promote an integrated regional strategy that addresses the extreme economic inequalities (between and within countries) and promotes a regional system for accountability in investment (private sector and public sector development). The United States could do well to promote regional development that would improve food security and reduce the need for migration.

Migration as a Safety Net: A Case Study from Central America, 2008 (Baseline study for "Global Water Initiative"—Buffett Foundation/Catholic Relief Services)

Background

In 2008, the leading author was contracted by Catholic Relief Services to conduct a baseline study for the Howard Buffett Foundation's Global Water Initiative (GWI) for a project called "My Watershed." Partners of the GWI include: Catholic Relief Services (CRS), CARE, and International Union for Nature Conservancy (UICN). Local partners include CARITAS and FIDER. This section presents a summary of findings.

The goal of the "My Watershed" project is to improve quality of life of poor rural communities in El Salvador, Guatemala, Honduras, and Nicaragua by reducing vulnerabilities to water-related shocks through integrated water resource management. A primary focus is to meet the water-related needs of communities in the region, centered on growing demands for increased quantities, improved quality, and better access to water in areas increasingly stressed by global climate change.

Desired outcomes of the project include:

- local community leadership (with increased knowledge and skills in disaster preparedness and prevention);
- strengthened community capacity to manage and use natural resources equitably, sustainably and with technical proficiency; and
- advocacy and action in support of protection, provision and access to water and natural resources management.

The study used two methodologies: quantitative surveys at family, community, and municipal levels, and qualitative community discussion to interpret perceptions of climatic change, vulnerability and risk, as well as migratory patterns, remittances and food insecurity.

General Description of the Study Population

The baseline included 106 communities. Of these, 24 were in Nicaragua, 33 in Honduras, 14 in El Salvador, and 35 in Guatemala. A total of 3,253 individual households were interviewed in the study; 27 percent were from Honduras, 23 percent were from El Salvador, 16 percent were from Guatemala, and 34 percent were from Nicaragua (see Chart 1). Seventy-five percent of participating households identified as having a male head of household and only 25 percent identified as having a female head of household (see Chart 2). Among participating households the primary source of income was farming, followed by day labor, with only a small percentage of families depending on salaried jobs, business, or cattle (see Chart 3).

Considerations for a More Comprehensive Immigration Policy:
 Moving the Dialogue from Border Security to Food and Livelihood Security

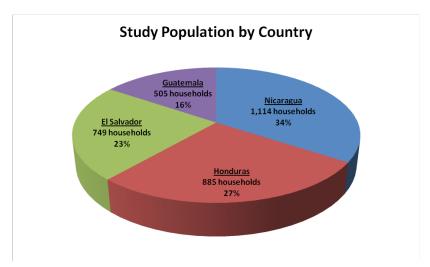


Chart 1: Study Population by Country.

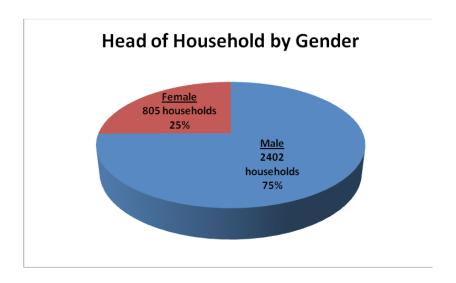


Chart 2: Head of Household by Gender.

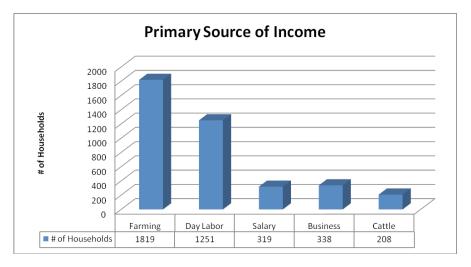


Chart 3: Primary Source of Income by Number of Households.

Food Insecurity, Migration, and Remittances in Central America

Food insecurity was prevalent among rural poor communities in the project area, as indicated by the fact that 53 percent of households reported not having sufficient food throughout the year. Having family members in the exterior who send remittances back home was an important coping strategy for the households in the survey. Of the 40 percent of households that had family living in the exterior, 65 percent reported receiving remittances. The importance of remittances on household food security is noteworthy: 75 percent of the households reported spending money flows on food.

Overall findings mask some of the unique conditions of each of the countries within the region. Findings of particular interest include variation in percentage of population in the exterior, level of food insecurity in a given country, and use of remittances. For example, while in the overall study population, 40 percent of households had a family member in the exterior, in El Salvador 73 percent had family members abroad, 94 percent of those for economic reasons. This had implications on household structure, as 31 percent of households interviewed in El Salvador reported a female head of household

(compared to 25 percent overall). In Guatemala and Honduras, fewer households reported external migration (29 percent), yet of those that did, almost all, or 97 percent, said it was for economic reasons. In Honduras, a startling and revealing finding is that of those who receive remittances (65 percent of households with someone in the exterior), 93 percent spend it on food. Finally, a most alarming finding is that 82 percent of participating households in Nicaragua did not have access to sufficient food throughout the year.

Summary of Findings as They Relate to Migration and Food Security

While the overall goal of the project was to improve the quality of life of rural people in Central America's poorest communities, the findings in the baseline are poignant and relevant to understanding the pattern of migration and its importance as a mechanism to promote food security among vulnerable families. Given that the primary motivation for migration was economic and that 75 percent of households reported spending the remittances they received on food, the importance of remittances in assuring food security is clear. The economic recession has recently diminished demand for temporary labor in the United States, reducing some of the "pull factors" for migration. At the same time, U.S. border security is tightening; particularly in Arizona, border crossers seek out isolated areas for passage where their risk of exposure to the elements creates a "Russian roulette" as migrating members of families risk their lives to put food on the table.

Results of the baseline study highlight the importance of remittances as a safety net for rural households in Central America. As the United States increases border security, migration will be less able to function as a safety net because there will be a decrease in the flow of remittances which has been an important survival strategy for rural poor in the region. U.S. immigration policy and the international donor and development community should take these factors into consideration, since there will be an even greater need for both safety net programs and long-term food security strategies in Latin America as remittances decrease.

Strengthening Social Safety Nets to Promote Food Security

Governments and the private sector must address and respond to the root causes and structural factors contributing to migration in the Americas and should simultaneously increase provision of safety nets in a manner that promotes food and livelihood security. Investment in these areas will prevent further erosion of human development potential in the region. The need for increased safety nets for food security is even more critical today given the current global economic recession and the focus on tightening immigration policies and increased deportation practices within the United States (for example, Arizona's Senate Bill 1070). The potential damages for future generations and the economic, political and social costs of hunger are well documented (ECLAC and WFP 2007). A response should be balanced and take immediacy of food insecurity into consideration while implementing a long-term plan to address structural issues of poverty and economic development. An overview of how food security programming has evolved over the last forty years indicates that we are moving in the right direction, but there is much that still needs to change.

The Evolution of International Food Security Programming

In the 1970s, much of international assistance for development was focused on food supplies at national and global levels, as the international donor community responded to drought, desert encroachment, and other factors in Africa and elsewhere (Frankenberger and McCaston 1998). This primary focus on lack of food supply as the major cause of food insecurity was given credence at the 1974 World Food Conference, but transfer of agricultural goods from the United States and Europe to neighbors to the South had more negative consequences than intended. By displacing local agriculture, much food aid actually increased food insecurity, as the example of Mexico and the collapse of the local corn market illustrates (Holt-Giménez and Patel 2009).

However, with more research and programs related to food security, agencies became aware that national transfers of food (or an adequate food supply at the national level) did not necessarily translate to food

security at the local household or community level. Food availability and access to food at the family and community level was incorporated into development programming. Into the 1990s, international development expanded food security programs to include concepts of biological utilization (in other words, the body's ability to ingest and absorb the nutrients of the food being consumed), environmental factors, and cultural/behavioral factors. More recently, models of food security and livelihood now incorporate concepts of coping mechanisms and resiliency that vulnerable populations utilize when confronted with food shortages and other crises (Frankenberger and McCaston 1998).

The "community and household livelihood security" model designed by CARE comprehensively addresses the relationship between the political economy behind poverty and malnutrition, and the complex strategies that the poor use to negotiate survival. While focusing on meeting immediate needs, it works to address underlying causes of poverty and vulnerability of marginalized families. It addresses food, nutrition livelihood, and rights within a regional and national context.

This livelihood model is based on the notion that relief, rehabilitation/ mitigation, and development interventions are interrelated activities, often occurring simultaneously and are not separate and discrete initiatives. The model focuses on: expanding the income and resource base of the poor (means), empowering households and communities to improve their access to services, expanding the access of poor households to basic services, and using a "rights-based approach" to attack the root causes of poverty (ActionAid 2008). If the food aid and economic policy failures of the last three decades have taught us anything, it is that development assistance should "think globally and act locally" by involving local communities in creating their own development agendas and in designing their own programs (ActionAid 2008). Groups that have often been left out—particularly women and indigenous people—need to be at the forefront of prioritizing, designing and implementing safety net programs, as they are the most likely to directly benefit from them, or lose out if they are not included.

Strategies for Improving Food Security

There are a variety of strategies that have been effective in improving food security in the long-term, many which combine efforts in agriculture, income-generation, sanitation, health care access, education, political advocacy, and more. This paper highlights two of these interventions: Water, Sanitation, and Hygiene (WASH) and Locally Sustainable Agriculture.

Water, Sanitation, and Hygiene

Water, sanitation, and hygiene (WASH) should be a front-line strategy for improving food and livelihood security (in both safety net and development assistance) as it influences health, dietary intake, and nutritional outcomes. Oftentimes, however, it is not given priority because it is considered too costly. Furthermore, the relationship between WASH and health is not widely known. However, the benefits of implementing community-managed and maintained water and sanitation systems are well-documented. Studies by the Pan-American Health Organization (PAHO) and the Nutrition Institute of Central America and Panama (INCAP) indicate that the introduction of potable water has saved women and girls over 700 calories per day, a direct enhancement of their nutritional status and family livelihood, as time previously invested in collecting water (up to three hours daily for many rural girls and women) is invested in attending school and meeting other needs (Fischer 1999). Moreover, the introduction of safe water reduces diarrheal disease, still the number one killer of children under five in most developing countries (World Health Organization 2004).

Improved access to water and sanitation is a key to improving health and food security and should therefore be integrated into health and food security programming. Key activities for sustainability of water and sanitation systems include the establishment of a local water board, establishment of legal rights to water source and land access, establishment of a transparent tariff or user fee system with community participation and training of a community-based water

systems maintenance team that includes women.

Locally-Based Sustainable Agriculture

As the concept of food security evolved from global and national production to local production and consumption, so has agricultural development evolved to reconsider the critical need to involve local people in local decision-making. While definitions vary somewhat, concepts of sustainable agriculture usually integrate environmental health, economic viability, and social equity to ensure long-term productivity of natural resources and improved livelihoods (Gold 1999). Commonly used practices include: minimal use of pesticides and herbicides by applying integrated pest management, crop rotation and crop diversification; vermiculture; and proper treatment of solid waste, manure and waste water, to name a few (Altieri 1995). Sustainable agriculture considers the impact agricultural production and processing have on communities and ecosystems.

Contrary to conventional wisdom, small farms are more productive and resource conserving than most large-scale monoculture farming. If total output is considered rather than yield from a single crop, small farms are more productive per hectare. An integrated farm system where a farmer can integrate grains, fruits, vegetables, and animal products on a single farm produces four to ten times more than large-scale mono-crop systems (Rosset 1999). Small farms can reduce vulnerability of people during natural disasters (mitigating their need to migrate) as large-scale agriculture is pushing small farmers to precarious farming conditions on terrains that are vulnerable to flooding, landslides, and other natural disasters (Holt-Giménez and Patel 2009).

The following section highlights successful integrated food security programs which demonstrate long-term impact. It is hoped that these serve as examples of the type of initiatives that can be scaled-up and replicated in order to address rural food security needs.

Successful Programs for Integrated Food Security

Integrated food security programs that incorporate activities to improve agricultural practices, health, nutrition, access to water and sanitation, and mitigate disaster risks within a targeted area have been successful in the immediate and long-term.

Development Assistance Program in Jinotega, Nicaragua

A final evaluation study of an integrated USAID funded Title II Development Assistance Program implemented by Project Concern International (PCI) in the Department of Jinotega, Nicaragua in 2002-2009 demonstrated significant results in improving the lives of 75,257 rural beneficiaries. The program emphasized improving organizational capacity of communities, increasing participation of women and improving literacy of adults. The main interventions of this program included agriculture, health, water, and sanitation. Farmers trained in improved agricultural practices were then supported to train other farmers to spread the knowledge of systems such as vermiculture and aquaculture. Irrigation systems were improved and livestock options were increased. The introduction of silos reduced post-harvest loss and adding crop processing on-site improved prices for small farmers. Resources such as microcredit loans enabled farmers to expand and diversify crops and livestock.

The greatest impacts achieved by the program include 111 percent increase in average household income of participating farmers; 20 percent reduction in the prevalence of diarrhea for children three years of age and under, due to improved water and sanitation systems; and a 35 percent reduction in chronic malnutrition of children three years of age and under. Increased access to food and medicine, together with improved health and nutrition knowledge and practices, improved access to water and sanitation services, and stronger community organization, have collectively contributed to significantly improving the level of food security of beneficiary families in rural Jinotega (Eder and Argüello 2009).

Bolivia Development Assistance Program

A 2008 Post-Project Sustainability Study, conducted by PCI on its USAID funded Title II Development Assistance Program in Bolivia (1997-2002), demonstrated how these interventions can have impact many years after the program ends. The study looked at the lasting impact on behavioral, livelihood, health, and infrastructure interventions in 15 participating communities. Findings demonstrated strong evidence of sustainability of interventions in agricultural productivity, water and sanitation, and maternal and child health. Specifically, 80 percent of the community water systems were in good working condition and 98 percent of the communities' water and sanitation committees were still functioning. Agriculture and irrigation systems were found to be in good condition, grain storage silos were working well, and household incomes demonstrated continued increases since the end of the program (Murguía et al. 2009).

These findings indicate that when interventions are community-driven and maintained, long lasting impact is possible. This study serves as but one example of the type of integrated community and household livelihood programming that does have long term impact on the food security of families and their ability to provide a dignified life for their families and future generations within their own country.

Although programs such as these demonstrate significant results in improving incomes, reducing disease, and improving food security, funding for these programs remains relatively low when compared with the funds allocated for border protection. The construction of the U.S.-Mexico border fence alone has cost over US\$2.4 billion already and so far covers only 700 miles of the nearly 2,000 mile-long border, and the government's own estimates for maintenance costs vary from US\$6.5 billion to US\$49 billion over the next 20-25 years (Associated Press 2009; Shifflet 2010). The Border Patrol's annual budget has progressively grown from US\$326 million in FY 1992 to nearly US\$3 billion in FY 2009 (American Immigration Council 2010).

Despite this investment, the undocumented immigrant population in the United States grew from 3.5 million in 1990 to 11.9 million in 2008, more than tripling (Passel 2009). The entire USAID budget for Latin America and the Caribbean was US\$963 million in 2009, less than a third of the Border Patrol budget for that year (USAID 2009). Considering that relatively little funding supports economic opportunities and regional food self-sufficiency in addition to addressing the immediate impacts of hunger, a shift of priorities from increased enforcement to addressing root causes has the potential to more efficiently reduce new migrants from Mexico and Central America than the current strategy (as well as improve lives) and deserves further research.

Recommendations:

- 1. U.S. foreign assistance policies should include increased funding for community-based water, sanitation, and hygiene programming, with potential to scale up to regional and national levels, and local and national governments should be encouraged to participate, co-fund, and meet agreed-upon standards.
- 2. The U.S. Government should ensure that immigration reform and development policies include increased and sufficient funding for integrated food security programs in Latin America. As food security and income generating opportunities improve at the household level, people may no longer need to search for better opportunities outside of their communities.
- 3. Local community members from rural, poor communities should be involved in the international dialogue on migration, its causes, and consequences and in planning possible solutions to address food security, migration, and quality of life issues in the Hemisphere as well as the implications of this hypothesis for development.
- 4. Further research is needed to explore the hypothesis—and associated implications for government strategies regarding

Considerations for a More Comprehensive Immigration Policy:
 Moving the Dialogue from Border Security to Food and Livelihood Security

immigration and development—that improvements in quality of life and food security in rural, poor communities of Latin America will lead to reduction in migration as it relates to food security.

Conclusion

Latin America and the United States have a long history of relationships-political, economic, and social relationships that have grown more complex and have contributed to an imbalanced economic development system. Migration has served as one of many coping strategies for poor people in search of improving their livelihoods. Ironically, in search of a better life, people are literally dying on our border, as efforts to secure the U.S.-Mexico border have led migrants to cross in isolated areas with extreme climates. In Arizona alone, over 2,000 people have died from exposure to the elements in the last decade during their border crossing.

Both the U.S. and Latin American governments have an ethical responsibility to address this humanitarian issue and could well do so through a comprehensive and strategic approach to development. Recommendations for policies and programs which may impact food security and migration proposed in this paper include:

- 1. When developing comprehensive immigration policy, the United States will be more effective if policies demonstrate a better understanding of the complexities of immigration and contributing factors, including: the history of colonization; U.S. and Latin American history, and military interventions, as well as current economic policies and their implications on migration.
- 2. The United States should take a more diplomatic approach to Latin America and utilize sound economic and social development strategies as opposed to military strategies to address issues of inequalities, security, and migration.

- 3. The United States should promote an integrated regional strategy that addresses the extreme economic inequalities (between and within countries) and promotes a regional system for accountability in investment (private sector and public sector development).
- 4. The United States should increase funding allocated to local and regional development in the Americas, as part of its comprehensive approach to immigration policy and as a means of promoting economic and social development and security in the region.
- 5. International cooperation should include local purchases of food aid commodities that will stimulate local markets, increase opportunities for local famers and help decrease the need for migration.
- 6. International cooperation and development strategies should be freed of country-of-origin requirements that undercut local economies and circulate a large part of the development funding back to the donor nation.
- 7. A response should be balanced and take immediacy of food insecurity into consideration while implementing a long-term plan to address structural issues of poverty and economic development.
- 8. The U.S. Government should ensure that its approach to immigration reform and the development policies include sufficient funding for integrated food security and water, sanitation and hygiene programs in Latin America.
- 9. Groups that have often been left out—particularly women and indigenous people—need to be at the forefront of designing and implementing safety net programs, as they are the most likely to directly benefit from them, or lose out if they are not

included

- 10. Local members from rural, poor communities should be involved in the international dialogue on migration, its causes, and consequences and in planning possible solutions to address food security, migration, and quality of life in the Hemisphere.
- 11. Further research is needed to test our hypothesis that improvements in quality of life and food security in rural, poor communities of Latin America will lead to reduction in migration as it relates to food security.

While building a bigger wall and bringing in the troops may appease the calls for more border security, we cannot expect to stop migration until we address why people migrate in the first place. The United States should be leading the way in promoting development throughout the Hemisphere and broaden the focus from border security to promoting food security.

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Children's Consumption of Migration: Remittances and Food Security

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ABSTRACT

Remittances are a significant source of income for many families in Latin America and are worthy of close attention by those who care about food security in the region. This brief article explores the complicated relationship between remittances, food intake among recipient families, and food security.

Sonia Nazario's coverage of the positive and negative impacts of a mother's decision to leave her son behind in Honduras, so that she could work in the United States to support her family, captures the difficult choice faced by many in Latin America. Sending money home from the United States enabled her to ensure that her son, Enrique, was fed and could go to school. But the price—separation—was high for both mother and son.¹ Enrique's experience is but a snapshot of a much larger phenomenon of transnational families linked by love and remittances. Drawing upon the extended discussion of immigrant remittances found in an earlier article, this short paper addresses the relationship between remittances and food security, as informed by recent studies on the use of remittances.² The goal of this paper is to review the literature on the relationship between immigrant remittances and children's food security in the Americas and to suggest that some of the debates in the remittance literature should be tabled when it

¹ Sonia Nazario won a Pulitzer Prize for her reporting and subsequently published the story as a book. See Sonia Nazario, *Enrique's Journey: The Story of a Boy's Dangerous Odyssey to Reunite with His Moth*er (New York: Random House, 2007).

² The article upon which this paper draws is Rosser 2008.

comes to children's access to food.3

It is beyond the scope of this paper to explore the root causes and consequences of international migration. People migrate for a host of reasons—economic opportunity, natural disasters, war—and the nature of the transnational families created by migration is similarly diverse and unique. The literature on these topics is wide-ranging and extensive; my goal for this paper is relatively modest and narrowly-focused. In what follows, I begin with an introductory overview of remittances and then delve into how remittances are spent and the connection between remittances and food security. As I show, for many countries of Latin America, any analysis of national development and food security would be incomplete if the impact of remittances was not considered.

Introduction to Remittances

Immigrant "remittances" are defined as the sending of goods or money by immigrants to their country of origin (Orozco 2002, adding that the money is earned by immigrants abroad). The typical remittance comes in the form of money sent, often via money transfer service companies such as Western Union, from an immigrant worker to family members still living in the immigrant's country of origin. There are other sorts of remittances—if you fly between the United States and El Salvador, you will often see many passengers traveling with new televisions as their luggage on the way South—but most remittances are monetized.⁴ (Perhaps ironically, given this paper's focus on food security, the most common luggage immigrants seem to bring with them on their return flight is fried chicken from a local chain restaurant, whose smell fills most flights North.) The scale of local and regional remittances is

³ The term "remittances" is broader than "immigrant remittances" as remittances can be any transfer of funds, but for the purposes of this paper, remittances refer to immigrant remittances.

El Salvador is not a random choice. For personal reasons, it is the country in Latin America I know best; after marrying a Salvadoran, I have lived here periodically and made countless visits.

impressive and particularly so in Latin America which is the number one remittance-receiving region in the world (Acosta et al. 2008, 89). Global remittances to developing countries were US\$328 billion in 2008 (Neagu and Schiff 2009, 2),⁵ with US\$69 billion of that going to Latin America and the Caribbean (Orozco 2009a, 3). Remittances exceed foreign aid, foreign direct investment, and lending flows to Latin America (Rosser 2008, 4), and for many countries exceed even the sum of all of these (Rosen and Shapouri 2009, 39, 41). For a number of Latin American countries—Haiti, Honduras, Nicaragua, El Salvador, and Jamaica—remittances amount to more than 10 percent of national GDP (Orozco 2009b). For these countries and for recipient families, remittances are a fundamental part of the economy (Asociación Demográfica Salvadoreña 2004).⁶

Children are among the most important beneficiaries and motivators of remittance sending. Although people have emigrated out of Latin America for many reasons—among Salvadorans, for example, the 1979-1993 civil war drove many to leave their homeland⁷—a desire to provide for children economically has contributed to making the Latin American emigration rate the highest in the world (Clark et al. 2004, 1871). Children left behind by parents or other relatives who have emigrated often directly or indirectly receive remittance support. Children in remittance recipient families are, for example, more likely to attend school than children whose families are not

⁵ Amount taken from Dilip et al. 2009. Note that because remittances are often sent through informal channels, it is impossible to know precisely the correct amount of remittance sending. The "true value of remittances, including unrecorded flows via formal and informal channels, should be substantially higher" than accounts based on official counts only (Siddiqi 2008, S14).

In El Salvador, at the macroeconomic level, family remittances have become one of the fundamental pillars of the economy. Additionally, 19.3 percent of Salvadoran households received remittances according to the same census (Asociación Demográfica Salvadoreña 2004, Table 3.21).

⁷ See Asociación Demográfica Salvadoreña 2004, which notes the role of the armed conflict on emigration from El Salvador); Hecht et al. 2006 ("The war was instrumental in triggering massive international and urban migration which was central for developing the subsequent economy of remittances.")

receiving remittances (Acosta et al. 2007, 5). While remittances often benefit children, the question should not be whether children are better off receiving versus not receiving remittances from a relative who emigrated. Rather the proper counterfactual is whether children would be better off if their relative, often a parent, had not emigrated in the first place. The recognition that immigrant remittances ought to be compared with the family member's contributions had he or she stayed with the family in the country of origin obviously complicates how remittances are understood. Remittances cannot simply be treated as purely additional family income, but depending on their scale and the jobs available to would-be-migrants in their home country, or lack thereof, remittances can make up for the economic opportunity costs of migrating.

Consumption of Remittances

There are two broad themes in the literature on immigrant remittances. The first involves an exploration of whether remittances help recipient countries develop or are somehow *wasted* or *merely* consumed. The second attempts to label the immigrant's decision to remit money to relatives as being motivated by either altruism or a desire to purchase or repay insurance.⁹ I come down on the side of altruism, as I wrote and still believe, "remittances are first and foremost about love" (Rosser 20).¹⁰ But, when it comes to food security, this debate, as

See Acosta et al. 2007, 2, who indicate that "before leaving their home countries migrants are likely to have contributed to their households' income, which should be taken into account when calculating counterfactual poverty rates in a scenario of neither migration nor remittances." See also Gibson et al. 2009, 4: "If migration purely resulted in an exogenous increase in income for the remaining household members, the sign of the expected impact on many outcomes of interest would be easily determined. However, migration can also have a number of other impacts on the sending household. Most obviously, an absent migrant earns no domestic wage and provides no time inputs into household production. These effects may counteract the effect of remittances received."

⁹ For an example of an article focused on insurance attributes of remittances, see Stark and Lucas 1988.

See also Rosser 2008 (noting that "[r]emittances ultimately reflect the love

well as the idea that consumed remittances are necessarily wasted remittances, is a tired and largely unproductive one. When it comes to how the poor spend their income, including money received in the form of remittances, access to food and attempting to meet basic needs easily trumps savings and investment. As one literature review noted, "[s]tudies in Latin America found that remittances tend to increase expenditures, especially increased subsistence consumption" (Clayton and Warin 2010, 3).

Scholarly reaction to the fact that remittances are being consumed often for the most basic of needs—food—is oddly apologetic, as if it would be better if recipients were using the money for other purposes. Allen Jennings and Matthew Clarke's work on Nicaragua is illustrative: they feel compelled not only to argue against the idea that "spending on food, clothes, health, and education [is] 'unproductive,'" but also to buttress their argument with consumption's multiplier effects: "even though spent largely on consumption, the economic impact of remittances is felt far more widely than the pool of direct recipients" (Jennings and Clarke 2005, 688). Similarly, Richard H. Adams, Jr. puts wasting in quotes when he concludes that "households receiving more remittance income as a result of favorable exchange rate shocks are not 'wasting' such income on increased food consumption" (Adams 2007, 13). Adams' use of quotes shows the challenge to the assumption that consumption amounts to waste, for even as he rejects the term through the use of quotes, his analysis seems to accept the framework of consumption as waste. As Jennings and Clarke (2005, 688) argue, the role that remittances play "feeding, clothing, and educating ... must be regarded as a positive development outcome." Perhaps the best reaction to the development versus consumption debate can be found in a World Bank working paper: "if remittances are private money, households should know better how to spend it for their own benefit. If people prefer consumption to investment, as they usually do, this choice should be efficient and so be it" (McKenzie and Sasin 200 12).

that transnational families have"). According to Chami et al. 2005, "family ties in the form of mutual caring are probably a prime motivation for remitting."

The data on how remittances are used is somehow limited and differs by study and by country. A recent summary of existing research notes, "[m]ost empirical analyses find that remittances are primarily used to finance day-to-day consumption needs, such as food, clothing and shelter" (Arnuedo-Dorantes and Mazzolari 2010, 325). Survey results from 2003 on remittance spending in Mexico and El Salvador shows the following:

Туре	Mexico % of Remittances	El Salvador % of Remittances
Family Maintenance	79	80
Food/Basic Consumption	67	69
Education	2	5
Health	9	6
Familial Investment	6	3
Build a Home	2	1
Improve Family Home	3	0
Buy Land	1	1
Initiate/Expand Business	0	1
Familial Leisure	3	2
Familial Debt	1	1
Don't Know the Purpose	12	14
Total	100	100

Table 1: Total Value of Remittances by Expenditure Type. Source: Rosser 2008; Cortina and La Garza 2004, 28 (Table 6).

A breakdown of how remittances were spent in El Salvador in 1994 based on the results of a national census gives similar figures, although the categories are not as well defined. See Siri and Delgado 1995 (finding that families use on average 74 percent of funds that they receive to cover subsistence needs, 4 percent on education and health, 8 percent on acquisition of housing, less than 1 percent on farming and other such artisanal or agricultural implements, 5 percent on savings, and 6.5 percent on other costs).

See also Suro 2002 (stating that immigrants send money "to help their families pay ordinary living expenses, such as rent, utilities, and food, rather than for savings or to support a business endeavor").

According to this survey, approximately two-thirds of remittances are being spent on food or basic consumption. As a U.S. Department of Agriculture article on food security notes, "[r]emittances often provide income for the poorest segment of society and are spent on basic necessities like food" (Rosen and Shapouri 2009, 41). But surveys also reveal differences in remittance use: while almost eighty percent of Haitian recipients spend part of remittances received on food, more than fifty percent of Haitian recipients spend only US\$40 or less of every US\$100 received on food. Considering the crushing poverty of the country, the non-food consumption use of remittance money is surprising. In general though, remittances are a critical aspect of basic consumption: "nearly 80 per cent of all remittance recipients reported using remittances to purchase food for their households." Even among college graduate recipients the figure is still 70 percent and it amounts to 90 percent of those who did not complete primary schooling (Orozco 2009b, 327, 326).12

Impact on Health and Nutrition

With the poorest recipients spending remittances "on basic necessities like food (Rosen and Shapoury 2009, 41), one could predict that children's caloric intake and nutrition levels would undoubtedly be improved by receipt of remittances. Unfortunately, few studies investigate the relationship between remittances and nutrition (Babatunde and Martinetti 2010, 25) and separating out remittance spending from general household spending can be challenging. Potential agency problems migrant senders might be concerned about are minimized by close family ties and perhaps—most importantly—the basic consumptive needs of most recipients (Rosser 2008, 13).¹³

There is a selection bias issue here because the percentages are of people receiving remittances. More educated people have a "higher capacity to generate income autonomously" which might explain why education is negatively related to remittance income (Janvry and Sadoulet 2000, 402).

Note that surveys show that recipients spend money in ways reflective of the purposes migrants sent money. Of course, in some cases there may be particular negotiations among transnational family members surrounding how to spend

14

Studies on remittance use in El Salvador and Ghana suggest that remittance money is treated the same as money earned locally by recipient households. If "households receiving remittances spend their remittance income just like any other source of income" (Acosta 2006, 8; Adams et al. 2008, 21), any impact on children's nutrition and health is driven by the effect remittances have on total household income. On the other hand, a recent study based on Latin American household surveys concludes that "children from households that report receiving remittances tend to exhibit higher health outcomes than those from non-recipients households with similar demographic and socio-economic characteristics" (Acosta et al. 2007, 32).

Numerous studies document improved health and nutrition outcomes among remittance recipients in Latin America, whether caused by an income effect or particular remittance-earmarked spending. Household weight, immunizations, and doctor visits among Guatemalan households are all higher in remittance recipient households (Antón 2010, 274). 14 Remittance-tied health improvements in both Guatemalan and Nicaraguan children are particularly felt by low income families (Acosta et al. 2007, 33). Another study shows that infant mortality and birth weight are better for remittance receiving households compared to non-receiving households in Mexico (Orozco 2009b, 326). Raphael Babatunde and Enrica Martinetti's study of remittance use in Nigeria found that "remittance income has a positive and significant effect on calorie consumption, but has no effect on dietary quality, micronutrient and child nutritional status" (Babatunde and Martinetti 2010, 2). In contrast, Manuel Orozco reports that children and the elderly in particular benefit from the diversification of diet made possible by remittances. Orozco explains that remittances allow households "to add vegetables and meat to their diets rather than relying upon inexpensivs staples such as rice and beans" (Orozco 2009b, 327, 328). In support, Orozco provides the following informative table:

remittances. See Schmalzbauer 2010 (arguing that negotiations across gender and generational lines determine control over remittance use).

	Guatemala		El Salv	/ador	Jamaica	
	Meat	Milk	Meat	Milk	Meat	Milk
Remittances	84.6	7.7	40.0	33.3	62.9	22.2
No Remittances	37.5	0.0	20.0	20.0	22.2	11.1

Table 2: Remittance Recipients Families Who Regularly Purchase Meat and Milk. Source: Orozco 2009b, 328.

The improved access to more expensive and diverse foodstuffs documented by Orozco in Guatemala, El Salvador, and Jamaica does not diminish the importance of remittances even in countries where remittances are primarily purchasing high caloric food. Though in their study of remittances in Nigeria, Babatunde and Martinetti found that "remittance income is not extended to meeting child nutrition requirements beyond the provision of calorie for the household," they also found that "that children in households with remittance income have higher *Z*-scores and thus better nutritional status than children in households without remittance income." In Nigeria this meant a reduced frequency of stunted growth, wasting, and underweight problems among children in remittance recipient households (Babatunde and Martinetti 2010, 24, 16).

Although generally researchers seem to agree that remittances improve children's health and nutrition, there are a few studies with nuances or approaches that diverge from this general conclusion. In a study of the impact of remittances on children's health in Ecuador, José Ignacio Antón found mixed results. According to Antón's results, "remittances have a positive effect on short- and middle-term nutritional status of Ecuadorian children, but do not significantly affect long-term indicators, except for those children with highly educated mothers." Antón concludes that this may reflect the use of remittances as a way to smooth consumption in the presence of income shocks (Antón 2010, 292, 270). It is not clear from the study why smoothing is considered separate from long-term effects

of children's nutritional status. A more damning study done by John Gibson, David McKenzie, and Steven Stillman makes use of a randomized immigration program in New Zealand to examine closely the counterfactual of non-migration compared to remittance sending. Although the results are somewhat colored by the fact that only shortrun data was available, Gibson, McKenzie, and Stillman found that "the amount received in remittances and the reduction in household size is not enough to compensate for the lost labor earnings of the migrants." Families who won a visa lottery suffered an immediate drop in income of 20-25 percent upon migration of a family member and this drop translated into decreased consumption of vegetable and fatty foods and an increase in consumption of relatively cheap rice and root-type foods (Gibson et al. 2009, 27, 3).15 Their results are almost the opposite of Orozco's table: following migration of a family member, "consumption of rice doubles, consumption of roots goes up by 20-25 percent, and consumption of fruits and vegetables declines by 38-40 percent." The unique features of New Zealand's visa lottery program gave Gibson, McKenzie, and Stillman a unique dataset which provides for randomized control of the decision to migrate, and they acknowledge that their results differ from that found in most remittance literature (Gibson et al. 2009, 21, 28).

Remittances and Food Security

Though some people may leave their home country and migrate to a wealthier nation because they have a falsely positive image of the opportunities they will find,¹⁶ others leave for non-economic reasons or have been living and making a home in their destination country for years. Though it has been suggested that studies should confine themselves to the broad question, "what is the impact of migration

The opposite is true as well: "Consistent with stayer ballot loser households being wealthier, they have a diet richer in more expensive fruits and vegetables, and eat less rice and roots, which are cheap sources of calories" (Gibson et al 2009, 21).

But see David McKenzie et al. 2007, who find that emigrants significantly under-estimate earnings in destination countries, based on data from the same New Zealand visa lottery program.

on poverty and/or human capital?," such a question assumes away the ex post aspect of remittance sending.¹⁷ Stated differently, there is value in studies linking remittances to children's nutrition and to food security in Latin America, regardless of whether a study finds the decision to migrate is economically rational or not. There can be little doubt that the Latino population living in the United States and other emigrant-receiving countries positively impacts food security in Latin America.

While remittances have been criticized as not being adequately put to productive use or helping countries develop, remittances do reduce poverty in recipient countries (Orozco 2009b, 336). There is disagreement about the degree of poverty reduction¹⁸ and not all countries necessarily see the same benefit of remittances, but "remittances generally lower poverty" (Acosta et al. 2008). Even authors who highlight that the difficulty in asserting that "remittances are directed mainly towards the poor" and that "in about half of the countries analyzed remittances do not have a significant impact on poverty" (Acosta et al. 2007, 4, 2, 5) also implicitly acknowledge that, in the other half of the countries, remittances do significantly impact poverty. Remittance-based "reductions in poverty are achieved mostly through the higher levels of income of migrant-sending households," not through significant reductions in Latin American inequality (Acosta et al. 2008, 110). Given mostly uniform findings that remittances reduce poverty figures and severity and are used—as Orozco (2009b, 339) found in a study of six Latin American village communities—for "basic food items," it is not surprising that remittances contribute to Latin American food security.¹⁹

¹⁷ See McKenzie and Sasin 2007, who argue in favor of keeping research to this broad question.

¹⁸ Compare Cáceres and Saca 2005, 5, who cite studies reporting a 4.2 percent reduction in poverty attributable to remittances, with Acosta et al. (2008, 4), who argue that once the counterfactual of non-migration is considered, extreme poverty reduction attributable to remittances falls from 14 to 3 percent.

See, for instance, Downes 2007, fn. 82, who states that "The future food security of Honduras, for example, is considered to be dependent on remittances sent by Honduran immigrants working in the U.S."

192

Children's Consumption of Migration: Remittances and Food Security

Ironically, studies that criticize remittances as contributing to or allowing needless consumption support the idea that food security is aided by remittances. The ability of recipients to decide to focus on non-food expenditures or even to consume remittances in "bad" ways suggests that in the event recipients became food insecure, remittance spending could be shifted to meet food needs.²⁰ Accordingly, Richard H. Adams' finding that "households receiving international remittances actually spend less at the margin on food than do households with no remittances" (Adams 2007, 15),²¹ while saying something interesting about spending behaviors does not undermine the linkage between food security and remittances. The ability of remittance recipients to spend more on investment itself shows that, if needed, such funds could be used for consumption.²²

The ability of remittance sending to be shifted depending on recipient needs can be seen in the role remittances play in smoothing recipient consumption patterns. At a macro level, remittances are countercyclical with respect to receiving countries; that is, everything else being equal, an economic downturn in a Latin American receiving country is likely to mean more remittances are sent by migrants abroad.²³ Although counter-cyclicality has nation-level impacts, the importance is particularly acute at the level of the family. Surveys from El Salvador show "that negative income shocks significantly

Remittance recipients are often faulted in El Salvador for wasting money or for engaging in conspicuous consumption. See, for instance, Kent 2008.

²¹ See also Adams et al. 2008, who report a similar finding for Ghana.

In some ways this is analogous to the observation that many wealthy people in the United States drive cars that are less expensive than individuals with less wealth; the fact that the wealthy are not consuming their money in one particular way does not negate their spending ability. Similarly, Richard Adams' finding that recipients invest more than non-recipients does not mean they do not have the resources needed to meet their consumption needs. See Adams (2007, 17) who discusses recipient investment levels.

See, for instance, Chami (2005 56), based on data from 13 countries; Vargas Silva (2008, 302), who discusses Mexico; and Quartey 2006, who discusses Ghana.

increased remittances from relatives abroad" (Carling 2008, 582, citing work by Rafael Pléitez-Chávez). When Guatemala was hit by a hurricane in 2005, the country experienced a 15 percent increase in remittances (Orozco 2009b, 335). The same can be said of droughts—"drought is estimated to be significantly, positively associated with amount remitted: the worse the drought, the more is remitted" (Stark and Lucas 1988, 476)—or other forms of welfare shock. For recipients, remittances serve an insurance-esque function and help poor households smooth their consumption after economic downturns or natural disasters.²⁴ The consumption smoothing aspect of remittances and the possibility of money to weather income shocks reduces the vulnerability of recipient families.²⁵

Remittances are pro-cyclical with respect to the destination country, however. This means a recession in the United States will also be experienced by remittance receiving households. The current global recession is causing remittance sending to decline, both in terms of the amount migrants remit to family members in their country of origin and the frequency with which remittances are sent (López et al 2009; Orozco 2009c, 7, 8).²⁶ Migrants who have lost jobs and are not making as much money in the United States cannot send remittances. Additionally, the U.S.-caused recession has gone global, leading to economic downturns in some developing countries that now have less of a remittance cushion.²⁷ The downturn with the related reduction

See, for instance, Mohapatra et al. (2009, 5), who assert that "remittances have an important consumption-smoothing effect"; Hemrich (2003, 17), who notes that "remittances play a key role in the short-term coping capacity of some vulnerable livelihood groups" in Somalia; and Babatunde and Martinetti (2010, 16), who note the smoothing aspect of remittances.

This is true not just with South-North migration, as it can also be true with intra-country migration or developing-developing country migration. See Zhu and Luo (2008, 6), who focus on rural China and Macours and Vakis 2010, who focus on South-South temporary migration of mothers.

López et al. (2009) observe that "Among Hispanic immigrants who sent these remittances in the last two years, more than seven-in-ten (71 percent) say they sent less in the past year than in the prior year."

A recent study on El Salvador, for example, uses a destination country pro-

194

Children's Consumption of Migration: Remittances and Food Security

in remittances threatens children's nutrition²⁸ and—through the relationship between remittances and receiving-nation's foreign capital levels—even the ability of countries to import needed food (Rosen and Shapouri 2009, 39). As the U.S. Department of Agriculture's *Food Security Assessment 2008-2009* highlights, the global recession is likely to lead to "increases in the number of food-insecure people" in countries highly dependent on remittances. As the report notes, the "most severe effect" of remittance declines will be experienced by poor households whose food security will be adversely impacted (Shapouri et al 2009, 15, 16).

Conclusion

There are conflicting ways in which the connections between remittances, food security, and children's nutrition can be viewed. One could be concerned that remittance dependence itself exposes families to vulnerability when economies of remittance sending countries go into recession. Similarly, some theorists might explain the incomesmoothing aspects of remittances in terms of either the insurance or altruism frameworks. Taking a less theoretical perspective, my view is that the barriers that separate transnational families should be lowered or brought down as much as possible. Technology can do some of the work (Navarrete and Huerta 2006, 7), as can efforts to lower the price of sending remittances or to make immigration laws more humane.²⁹

cyclical model to predict the impact of rising U.S. unemployment on remittances (Trigueros Argüello 2009, 3). The global recession has its roots in problems in the U.S. housing and financial markets that spread via investor and supplier connections to other nations. The conflagration has hit some but not all of Latin America (see Romero 2010).

- Antón (2010, 271) notes that "If money sent by emigrants has a positive impact on households' welfare—and, particularly, on child health—a reduction of remittance flows could have negative consequences on child nutritional status. This is a cause of concern since the current global economic crisis is negatively affecting the amount of money sent to Latin America from Europe and the United States and large falls of remittance flows are expected in the future."
- Manuel Orozco deserves a lot of the credit for making transparent the high costs of sending remittances and for keeping money transfer service companies

Food security is something everyone should care about, regardless of their country of origin. In this paper I have resisted the use of the term "home country" to describe migrant's country of origin. I did so for two reasons. First, because when it comes to the transfer of money among family members, even family members divided by international boundary lines, it does not necessarily make sense to think of one home country. Transnational families occupy a distinct space that is obscured when terms like "home country" negate the connection such families have to destination countries. Finally, as the story of Enrique's journey from Honduras to the United States shows, home is often contested and highly dependent upon access to a livelihood, to food, *and* to family. Remittances are an important part of this "economy of affection" (Hecht et al. 2006, 311), but it is important that the economic aspects not overshadow the affection evident in remittances.

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Migration and the Role of Remittances in Food Security: The Case of Jamaica

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ABSTRACT

Migration has an impact on both rural and urban food security in the Caribbean through the remittances sent back to the source countries of migrants throughout the region. Although remittances chiefly take the form of small sums of money to both urban and rural households, collectively they account for considerable proportions of the GDP of the poorest Caribbean countries. Additionally, in many parts of the region, remittances contribute to the revenue base of small farming which then has a direct impact on the food security of rural households and communities. The impact of migrant remittances on food security in the Caribbean, as elsewhere, is complex but, in summary, could be conceptualized to occur in the short-term through the improvement in the direct receipt of food and cash remittances spent on food for the household; and in the long term, since food security is improved through the indirect impact of migrant remittances on investments that increase income and work, including farming. This paper will provide an overview of the characteristics of remittance-sending behavior and food security in the Caribbean. Taking Jamaica as an example, it will discuss the pattern and levels of remittance receipts and their direct and indirect linkages with food security.

Introduction: Migration and Food Security

There are varied ways in which migration relates to food security. In some situations, issues relating to food insecurity are causal factors in migration decisions. In other cases, food security or insecurity are

the consequences or impacts of migration. In the Caribbean, food insecurity indirectly influences migration as a causal factor where the decision to migrate is influenced by the desire to improve one's material circumstances. Sufficient food and a varied diet are either directly or indirectly part of those circumstances. However, this only applies to some groups of migrants. Many Caribbean migrants are highly skilled or professional persons who leave secure jobs and materially-secure livelihoods and to whom food security is not a factor contributing to their migration.

Among the Caribbean migrants whose material circumstances are more economically marginal and vulnerable, migration is conditioned by the motivation to reduce this vulnerability. It is in the case of such migrants, therefore, that the issue of food security is most relevant and is the focus of this paper. It is also among the poor that the impact of remittances on food security is greatest.

The impact of migrant remittances on food security in the Caribbean, as elsewhere, is complex, but in summary, could be conceptualized to occur in the following ways:

- Short-term impact: Food security is improved through the direct receipt of food and cash remittances spent on food for the household
- b) Long-term impact: Food security is improved through the indirect impact of migrant remittances on investments that increase income and work, including farming.

Within these two general scenarios, there are direct and indirect connections between migration, poverty, and food security depending on how migration affects different aspects of food security. There is also the important issue of whether the positive or negative effects of migration on food security in the short run necessarily lead to an improved situation in the long run. In other words, where food insecurity is a feature of poverty, does the relief brought about by

migrant remittances fundamentally alter the circumstances associated with food security, or does it simply have a "band-aid" effect and, in indirect ways, contribute to the perpetuation of poverty? This is a dilemma associated with migration itself and which has implications for food security as well as many other aspects of life. The issue refers to the extent to which the short-term relief that migration brings to individuals is compensated for by the long-term dependency that is perpetuated both at the individual and societal level.

Aspects of Food Security

Any assessment of food security is an integration of many factors that incorporates the agro-ecological, environmental, socio-economic, political, and biological circumstances within which people live (WFP 2002). Described as access by all people at all times to enough food for an active, healthy life (World Bank 1986), food security implies the assurance of food to meet needs throughout every season of the year (UNICEF 1990).

The concept of food security has been generalized to comprise three main aspects: a) Availability of food; b) Access to food; c) Utilization of food.

Availability of Food

Food availability itself is complex and includes:

- The amount/sufficient quantity of food available
- the nutritional balance of the food available
- the stability or regularity of supply in terms of quantity and nutritional balance through the week, month, year
- sustainability of the supply with the prospect of being

maintained throughout the lifetime/life cycle of the household.

Well documented in the literature is the consideration that availability of food in a population does not necessarily ensure food security for all individuals. First, access to food in appropriate quantities and of appropriate quality is not the same for all societal groups or, within groups, equally for all households. Even within households there is individual variability in access to food based, for example, on age and gender. In addition to the availability of food, another essential element of food security is biological utilization of food emphasizing sanitation, clean water, and a generally healthy environment in which to function. Many people living in conditions of poverty lack the environmental support and physiological status to maximize the absorption of nutrient intake. Small children and the elderly are two population cohorts that suffer most from poor absorption of food, especially among the poor and those living under conditions of overcrowding and lack of proper hygiene and safe drinking water. Food security, therefore, depends on the appropriate conditions relating to all of these factors.

Food availability is determined by supply- and demand-oriented aspects of the domestic unit. While supply of food is conditioned by domestic production and imports (public, private), it has also been found that availability of food cannot often measure what people actually obtain. In this case, access to food depicts people's capacity to grow food and/or their purchasing power to buy food. Poverty is one of the main obstacles affecting both these means of achieving the secure availability of food.

Stability in the Food Supply

Household food supplies are said to be stable when they can be obtained in adequate amounts on a regular basis, even in the events of crises. Crises may include loss of food or of income, due to hurricanes or a sudden rise in price of essential food items. Stability of food security

would imply that food supplies would be interrupted by such shocks for a minimum time and that normal access to food would be restored quickly, before any deleterious effects were felt.

Sustainability of Food Supply

Food security is sustainable when the appropriate supply can be maintained over the long term. Sustainable food production systems and appropriate levels of access to food (through sustainable farming practices and/or household income) are essential to maintain food security in the long run.

Access to Food

This aspect of food security is dependent on the environment within which food has to be obtained in the particular national, local, or societal situation, together with the strategies employed by the household to acquire food, whether through farming and producing or purchasing food. Even farming households would not usually be able to produce all the food required. In order to acquire the food not produced by subsistence, it has to be purchased or exchanged. Exchange is sometimes in the form of farmers allowing other farmers access to their land, through exchange of labor or other gifts, or by selling other assets or one's own labor from which the proceeds are used, at least in part, for purchasing food.

Utilization of Food

Access to food is not enough to ensure food security and utilization of food involves the capacity to absorb and utilize nutrients in the food consumed. Utilization of food is determined through caring practices, eating habits, hygiene, and access to health and sanitary facilities (WFP 2002). This, therefore, implies food that is free from contamination by parasites and toxins and of the proper nutritional range required by the body. Many factors influence a person's nutritional

requirements, including age, sex, level of activity, and physiological status. Poor living conditions and an unsanitary environment have been substantiated as elements of food security. Food intake has to provide sufficient energy and protein, and sufficient micronutrients to maintain good health. Finally, food has to be culturally acceptable and palatable. Otherwise, it will not be consumed.

Food Security: The Case of Jamaica

In urban centers, food security is very heavily dependent upon income, whereas in the rural areas it is a combination of subsistence and income. There are no studies on urban food security in Jamaica and it is generally assumed that the situation is worse among urban populations than rural. Yet, a study in the Rio Grande Valley (Jamaica), indicated that 50 percent of households in the area reported food scarcity (Reid 1999). This was chiefly due to the poor opportunities for obtaining employment so as to supplement subsistence supplies. This suggests that cash income is critical in maintaining food supplies, though availability is not necessarily stable. Subsistence farming alone could not supply all dietary needs and not all rural households had access to enough land to produce more than a minimum or even any food at all. By contrast, urban households, however poor they may be, had a greater opportunity of at least one member obtaining work, even intermittently or obtaining money by "hustling" (engaging in itinerant self employment including vending etc.). This would help to explain why the indicators of poverty show that the greatest concentration of poverty in Jamaica is rural (Table 1).

Regions	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
KMA*	3.6	12.5	18.2	17.2	14.7	15.8	12.8	26.3	20.3	21.2	19.8
Other Towns	3.1	15.0	12.5	16.0	13.7	15.7	13.2	9.0	9.5	13.1	8.9
Rural Areas	3.3	72.5	69.3	66.8	71.6	68.5	74.0	64.7	70.2	65.7	71.3

Table 1: Jamaica: Distribution of Poverty by Region, 1997-2007 (as percentages of the total for each year).

Source: Planning Institute of Jamaica 2008.

* KMA: Kingston Metropolitan Area.

Not only is food insecurity closely linked with poverty, but it would appear to be associated with the economic marginality of small farmers.

Farming in Jamaica is, for the majority of farmers, an occupation seen to be of low social status and this is reinforced by its poor financial returns. This is largely because farms are fragmented, with the size of the majority (66.4 percent) of farms in 2007 occupying less than 1 hectare (2.471 acres) of land. Furthermore, almost 13 percent of farms were landless (Table 2).1 Additionally, small farmer lands in Jamaica are usually on slopes that are in many cases very steep, as plantations traditionally used the more fertile sedimentary soils of the coastal plains. Portions of the land farmed by small farmers are leased or squatted on, which means that there is minimal effort put into the farm and concentration on the cultivation of quickly harvested crops. There is also some sharing of crops between members of different households. There was seasonal variation in the types of crops eaten from the farm plot and, while sometimes there was a wide variety of food available, at other times there was very little that could be harvested

¹ Landless farms are defined as farms of which the holder is in possession of animals but no specific land is dedicated to their rearing.

Years	Landless	Under 1 ha.	1 to under 5 has.	5 to under 50 has.	50 to under 200 has.	200 and more has.
1996	8.0	61.4	27.1	3.2	0.2	0.2
2007	12.3	66.4	19.1	2.0	0.1	0.1

Table 2: Percentage of farms by size (1996 and 2007).

Source: Statistical Institute of Jamaica 2000, 2007.

Except for the very smallest, farms are usually comprised of more than one plot—the house (or home) garden, a plot dedicated to a cash crop (sometimes orchard), and agro-forest. At least one plot of land is usually devoted to orchards or cash crops and the plot on which the house stands is dedicated to subsistence crops (Thomas-Hope and Spence 2003, 2007). House-gardens are multi-storey configurations of food trees, fruit, root crops, herbs, and medicinal plants. Some of the cash crops are also consumed by the household when there is surplus after the market sales. Where income is derived from such a system, it would usually be small and intermittent. Likewise, the food supplies tend to be limited in variety and irregular in supply. Added to this is the fact that many farmers have no alternative but to use marginal land, often without ownership, and that once cleared becomes highly vulnerable to the risk of erosion and landslides. Soil fertility declines over time and poor farmers lack the resources to restore fertility levels. Farming under such conditions is valuable in the short term for subsistence or to contribute to household food supply but invariably is not sustainable.

Rural Food Security

Food insecurity in the rural areas of Jamaica is typically associated with seasonal variations and uncertainties in food supply as well as in a lack of nutritional balance in the types of food available and the types of food habitually consumed in the diet. Food security is also conditioned by the educational levels and age of the person who manages the household's diet. Malnutrition among infants, for

example, is invariably associated with the education and age of the mother, which intensifies the effects of material poverty. This was reinforced by the findings of malnutrition in the Rio Grande Valley of Portland, Jamaica (Reid 1999).

In Reid's study in the Rio Grande Valley, food shortages were commonly reported to be on specific days of the week—for example, food purchased on Friday would run out by Wednesday. For some households shortages were seasonal—when the cash crop was being reaped or, "for the first six months of the year," referred to as a specific period associated with livelihood and farming activities or when the main food provider was working abroad. The fact that food security was reduced when the main food provider was abroad indicated an additional association between food security and migration. This would be a temporary situation, indicative of transitory food insecurity, and the situation would be reverted when that person returned.

Food Security Coping Strategies

While proxy measures of consumption, poverty, and malnutrition can be used as indicators of food security, these do not measure vulnerability and lack of stability in food security. Frequency and severity of consumption-related coping strategies used by households, therefore, provide valuable indicators of food security and add an important dimension to assessing the real nature of the situation (Maxwell 1996; Reid 1999).

Reid's study showed that in the population of the Rio Grande Valley there was no evidence of chronic food insecurity but a common experience of *transitory food insecurity*. During times of transitory food insecurity, the food providers in the households employed coping strategies to cushion themselves against the negative effects of the shortages. The coping strategies of the households in the sample showed that 71.4 percent cooked one pot (less elaborate meals); 42.9 percent ate fewer meals per day; and 35.0 percent borrowed money from friends and relatives. These were consistent with the categories

of food security coping strategies identified by Maxwell (1999) which were:

- a) dietary change strategies
- b) food seeking strategies
- c) rationing strategies.

Most households in Jamaica chose the least severe strategy—that is, dietary strategies, such as cooking one-pot meals. Few resorted to the most severe strategies—namely, borrowing money or seeking credit from the shop. Those who resorted to this measure, like those who resorted to begging, especially in the urban areas, were faced with the risk of entering a vicious cycle from which they could not easily break out.

Contribution of Food Produced by the Household to Daily Calorie Protein Intake

In Reid's study, the calorie consumption of 38 percent of households in her sample exceeded the recommended amount per day. There were 19 percent of households that consumed more than 80 percent of the recommended daily calorie intake per day; the remaining 44 percent were well below the recommended levels. Some 13 percent had protein intake deficiencies.

In general, home-grown foods made only a small contribution to the protein consumed. An average of 23 percent of the calories and 12 percent of the protein consumed were derived from the farm plots. This has been observed in Java by Soermarwoto (1985) where Javanese home gardens supplied 18 percent of calories and 14 percent of protein consumed by the farming households. The reasons for this were that the farmers who produced eggs, livestock, and vegetables would sell them rather than eat them because they brought in more money per weight than did the bulky, starchy foods. Diets tended not to include eggs and other protein that could be produced but instead prefer rice, flour, cornmeal, salt fish (cod and mackerel), and powdered milk, all

of which are imported, and chicken, mostly purchased locally. Some households in the Rio Grande Valley collected molluscs ("bussu") and caught crayfish from the river nearby, which would have supplemented their protein intake. The main crops found on house plots were starchy roots and tubers and in some cases callaloo (a leafy vegetable), which added considerably to fiber and nutrients, even though not necessarily to calories. The fruits that were under-reported contribute to essential minerals, vitamins, and dietary fibers. The under-reporting of fruit could be explained by the fact that people forget about them because they are not part of the formal meal in the usual rural household diet, but are eaten on an ad hoc basis at any time of the day.

Overall, as indicated above, there is little evidence of chronic food scarcity and the food insecurity in this area is chiefly related to seasonal variations in crop patterns and income. One of the main aspects of this pattern is related to the migration of the principal providers in households. When they are abroad, farming declines temporarily and income levels are reduced. When they return both are increased.

Migration: The Case of Jamaica

Migration has been demonstrated throughout the world, and in every age, to be a strategy which people use to improve their circumstances in the present or opportunities for the future. As indicated above, both circumstances and opportunities differ significantly between social classes, between different occupational groups, age groups and gender, between urban and rural dwellers, and between farmers and non-farmers.

Opportunities for both the urban and rural poor to migrate are generally limited at the present time to those persons who already have family members abroad. Otherwise, the best opportunities for migration are associated with the seasonal contracts organized through the Government of Jamaica. In the past this was mostly for men who worked on farms in the United States and Canada and, in recent years, for women who occupy seasonal domestic work in the

hotel industry. Over the period 1994-2003, for example, some 95,000 men and 15,000 women obtained such seasonal work in the United States and Canada (Ministry of Labour of Jamaica N.D.).

Migration and Remittances

Taking the case of Jamaica, at the national level, there is no doubt that remittances contribute substantially to the gross domestic product (GDP). By 2003, remittances had exceeded earnings from sugar and bauxite as the leading sources of foreign currency (Kirton 2005). The impact of such remittances on labor market indicators has been little researched in Jamaica, and they are likely to have limited effects on development, as they are used primarily for the consumption of imported consumer goods, including food. Thus, while the amounts of remittances in most cases are too small to significantly increase savings or investments, their greatest impact is on domestic expenditure and living standards. An aspect of this consumption that has not been given due credit by researchers is the use of remittances on food for the household. It is therefore widely assumed that the greatest economic impact of migration to households is based on the amounts of remittances sent back by migrants and the ways in which these funds are used by the recipients to help improve the material circumstances of themselves and their households

The amounts of money remitted peaked in 2008 (with receipts of US\$1.71billion) and subsequently declined to US\$1.5 billion in 2009 and 2010 since the global financial crisis (Bank of Jamaica 2010). However, it is not possible to tell how this has affected the receipt of small sums by households and the extent to which food as a consumption item has been affected.

Short-term Effects of Migrant Remittances on Food Security

A study based on a national survey conducted in both rural and urban areas of Jamaica in 2007 observed that approximately two thirds of the absent migrants were remitting funds to the households from which

they had left at the time of migrating (Thomas-Hope et al 2009).² Of those who were sending remittances, about 70 percent sent funds to be used for the entire household.

In addition to remittances received from persons living abroad, there were some intra-island remittance flows, with 20 percent of the respondents reporting receiving funds from within Jamaica. These amounts were, on average, J\$16,815 (US\$240) annually and ranged between J\$98 and J\$144,000 (US\$1.40-US\$2,057). These internal remittances chiefly represented the flow of money from urban migrants back to their family in rural areas. In return, it is a common practice for food produced in the rural home base to be sent to the migrant to the city.

Amounts Of Remittances Received From Absent Migrant Household Members

During the year prior to the survey, about half of the absent migrants who remitted funds (52.4 percent) sent amounts totaling J\$20,000 (US\$285) or less (Table 3). Only 14.2 percent sent amounts totaling J\$100,000 (US\$1,428) or more. The highest amount reported to have been received from absent migrants in the twelve month period was J\$250,000 (US\$3,572). The average amount remitted over the previous twelve month period was J\$44,801 (US\$640), with the median at J\$20,000 (US\$285). The total modal amount for these funds was J\$20,000 (US\$285). Furthermore, since most of the funds were transferred through money transfer companies, costs were incurred for these services, ultimately reducing the amounts finally received.

Given the very small amounts of money received by households, in most cases, while the remittances were unlikely to generate a direct or

The national survey was part of a pilot study for the Institute of Public Policy Research (IPPR) and the Global Development Network (GDN) project "Development on the Move: Measuring and Optimising Migration's Economic and Social Impacts."

major developmental impact, they were of major significance to the recipients themselves because of the typically low income levels of recipient households and the immediate use to which even such small sums of money were put in meeting expenses for basic needs.

Funds Received (J\$)	National Survey Percentage	Rio Grande Valley* Percentage
Less than 20,000	52.5	94.0
20,001-40,000	23.0	
60,001-80,000	2.7	
80,001-100,000	7.7	
More than 100,000	14.2	

Table 3: Total Funds Received in the Past Twelve Months from Absent Migrants Source: Thomas-Hope et al. 2009.

Frequency of Remittance Receipts

It was reported that approximately 55 percent of the absent migrants who remitted funds did so only for special occasions. Almost 49 percent sent funds at least 12 times per year. A fifth of respondents indicated that funds were remitted by absent migrants only three times per year. Not unexpectedly, results show that absent migrants who sent money regularly were more likely to have sent larger amounts in total over the year than those receiving occasionally. Some 89 percent of the absent migrants who sent less than J\$20,000 (US\$285) did so on special occasions only. Over 70 percent of those that remitted over J\$100,000 (US\$1,429) over the year had sent funds on a regular basis (Table 4).

^{*}The Rio Grande Valley survey comes from Ishemo 2005.

			Frequency of Remittances	
			Regularly	Special Occasions
months	Less than 20,000	% Total Funds Received in past 12 months	10.8	89.2
20,001-40,000		% Total Funds Received in past 12 months	70.4	29.6
eived in (J\$)	60,001-80,000	% Total Funds Received in past 12 months	40.0	60.0
Total Funds Received in past 12 months (J\$)	80,001-100,000	% Total Funds Received in past 12 months	100	
Total Fu	More than 100,000	% Total Funds Received in past 12 months	73.1	26.9

Table 4: Amount of Funds Received From Absent Migrants by Regularity of Transfers.

Source: Thomas-Hope et al. 2009.

In general, therefore, small sums of less than J\$20,000 that were remitted made a major impact to the food security of the average or typical household of migrants. Some of the funds were also in the form of occasional gifts and contributions to special occasions, such as Christmas festivities (including food) and birthdays.

Remittance Receipts Other than from Absent Household Members

In addition to remittances received from absent household members, some were received from other migrants. These are most likely to have been relatives who had migrated from a different household. Of the respondents in the sample survey, 36.8 percent indicated that they benefited from migration through receipt of remittances in cash and/or kind from persons other than absent migrants from their own households.

Use of Remittances—National Sample

Nearly two thirds (61.5 percent) of the respondents indicated that the funds received from remittances were not used any differently from other household income. Funds were used by household members mainly for the purchase of household goods, including food (35.4 percent), medical expenses (15.4 percent), and child support (22.6 percent) (Table 5).

Use of Remittances	Percentage
Child support	22.6
Education	6.6
Medical expenses	15.4
Funeral	3.6
Household business	5.2
Purchase of household goods including food	35.4
Other	10.8

Table 5: Purposes for Which Remittances Were Used by the Household (all households).

Source: Thomas-Hope et al 2009.

Studies from Asia and the Pacific also showed that the primary use of remittances was for consumption, much of which would be for food (Connell and Conway 2000).

Impact of Migration Remittances on Farming (especially in small-farmer households)

In the case of Jamaica's small farming population, where there is a lack of adequate land or secure alternative income, migration provides a means of increasing ownership of land or of improving farm income and, at the same time, improving the living standard of the household.

Farming and migrant remittances are the two main sources of income in the Rio Grande Valley. A study conducted by Ishemo (2005) showed that remittances in the form of cash were received by 39.4 percent of

the households in his sample; 26.0 percent of households received foodstuffs and 18.6 percent received clothing. Most of the cash receipts (74 percent of households) were on a monthly basis, whereas nearly all (95 percent) of the food receipts were on an occasional basis (Table 6).

Of those households in receipt of cash on a monthly basis, 67 percent received the equivalent of less than J\$5,000.00 (US\$35) and only 27 percent received an average of between J\$5-10,000 (US\$35-70). This pattern is consistent with the findings of the 2007 national survey previously indicated, and for the same reason, namely that the migrants were in non-professional jobs abroad, with low wages.

Remittance Type	Number of Households in Receipt of Remittances	Households in Receipt of Remittances on a Monthly Basis	Percentage	Households in Receipt of Remittances Occasionally	Percentage
Cash	159	117	74	42	26
Foodstuff	105	10	10	95	90
Clothing	75	0	0	75	100

 Table 6: Proportion of Households in Receipt of Remittances.

Source: Ishemo 2005.

The food items sent directly to the households by members abroad, were usually canned and packaged items and normally sent home in cylindrical hard cardboard containers, termed "'barrels." In addition to the food items that were sent, much of the cash remitted is also used for the purchase of food, especially items that cannot be grown by the household. This included sugar, sweetened (condensed) milk, cornmeal, flour, chicken, salt-fish, and salted mackerel. The cash remittances, therefore, supplemented the diet in important ways.

In the case of the Rio Grande Valley, consistent with what was found in the national survey remittances sent home by migrants were principally small amounts that provided economic benefits for the individuals and their households in terms of maintaining, and even possibly raising, living standards through enhancing levels of consumption (Ishemo 2005). Therefore, in this farming area, as more generally at the national level, remittances functioned as an important welfare input and contributed to meeting basic needs that otherwise would have been poorly satisfied.

Remittances Used for Farming

Despite the apparent lack of remittances used for savings and investments and, therefore, the negligible effect on long-term development, it has been observed that remittances to rural areas do sometimes play an important part in supporting agricultural production. This is probably because a small cash input can make a relatively large impact in the context of small-farming. The Rio Grande study showed that while 57 percent of cash remittances were spent on family maintenance, including the purchase of food, 43 percent were spent on farm-related activities (Ishemo 2005).

On the negative side, it was also observed in some cases that there was reduced farm activity of the non-migrant household members because of remittance receipts. The reduced farming activity served to indicate that recipients were relying heavily on the remittances for food. Nevertheless, Ishemo's study showed that more than 53 percent of households in receipt of remittances extended their farm acreage at some stage. Among the young cohort of farmers (under 45 years), remittances led to greater involvement in farming. Even though much of this expanded acreage was used for cash crops, it could be assumed that food security in those households would be enhanced, either through the additional cash from marketing the crops as well as from the surplus food after the market sales.

Receipt of cash remittances was a critical factor in the expansion of farming by famers over 45 years of age. This would, undoubtedly, have an important impact on the sustainability of the household's food security.

Other studies (for example, Hills 1988) have suggested that remittances caused the elderly farmers to reduce farm size and concentrate on subsistence. In contrast, Ishemo's study showed that many older farmers did in fact expand their farm. In either case, the remittances received had a potentially positive impact on household income and, one would expect, its food supply. Remittances clearly saved farming in the case of many elderly farmers. This was chiefly because the older farmers used remittance money to pay for wage labor. This is indicated by the observation that 69.8 percent of the household in receipt of remittances hired farm labor (Table 7). Alternatively, if the farmers were not able to continue farming due to age, especially for cash crops, then remittances were the means (perhaps the only means) of supplementing incomes for household purchases, chiefly food.

Labor Arrangement	Frequency	Percentage
Land Tenancy	20	12.6
Inter-household Exchange of Labor	4	2.5
Hiring	111	69.8
Household Labor	24	15.1
Total	159	100

Table 7: Farm Labor Arrangements of Households in Receipt of Remittances. Source: Ishemo 2005.

Where the expanded acreage or increased activities led to cash cropping, income from farming increased, and where the continuation or expansion of farming among older farmers was for subsistence, the food directly available to the household also increased. In either case, through the increase in farming the food security of the household could be expected to improve (Ishemo, Semple, and Thomas-Hope 2006).

Conclusion

One aspect of the impact of migration on food security is the tendency towards under-productivity among households in receipt of remittances in the country of origin. The argument is that the greater the amount of remittances received, the greater is the likelihood of

under-producing. This includes the under-productivity of farming as well as other livelihood activities. Brana-Shute (1982) refers to the decline in agricultural activity and productivity, the removal of land from cultivation, declining interest in farming, encouragement of land speculation for housing and other land-uses, and a shift in consumption patterns towards a reliance on canned and fast foods (Ishemo 2005; Brierly 1988). Migration also provides an alternative to farming altogether with potentially negative implications for food security. Seasonal migration improves farming of main actors in the labor force but at the same time, many do return to being better and more innovative farmers with more capital to invest.

These two sets of processes have been observed to occur in both urban and rural areas of Jamaica. In urban locations, remittance receipts have been associated with people opting out of the labor force and in rural areas, with undermining the focus on farming and the use of cash receipts to purchase less nutritional alternative foods. However, it is evident that remittance receipts have also been used in ways that stimulate production and, therefore, have contributed to short-term food security as well as to its longer-term sustainability. Multiple occupational households are effectively supported in their food security by migrant remittances and financial transfers on the return of migrants. In rural areas, remittances allow household achievements outside of farming and in more profitable and high status occupations while at the same time providing some subsistence production for household food.

There is a need for a more balanced view of the role if remittances in farming and, by extension, in food security, both at the level of the local farm household as well as the wider national level. Undoubtedly, both short-term and long-term processes are at work in areas and in populations that have become heavily dependent on migration.

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