

Trade Impact Review: Mexico Case Study

**NAFTA and the FTAA: A Gender Analysis of Employment and
Poverty Impacts in Agriculture¹**

Women's Edge Coalition
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Executive Summary

The collapse of the World Trade Organization (WTO) talks in Cancun, Mexico in September 2003 reenergized the ongoing debate about the benefits of free trade for the poor. The U.S. has been a leading proponent of free trade, having negotiated more than 300 separate trade agreements and passed five major pieces of trade legislation since 1992². The U.S. has strongly linked free trade to international development assistance, arguing that “trade not aid” will enable poor developing countries to improve the lives of their poorest citizens. However, the reality of free trade has not always lived up to the rhetoric, particularly for the poor. To ensure that trade pacts benefit the wealthy and poor alike, assessments which evaluate how trade may help or harm the poor are an important tool in realizing the potential of trade to mitigate poverty.

The Trade Impact Review (TIR) and the Look FIRST Campaign

In 2002, the Women’s Edge Coalition developed the Trade Impact Review (TIR), a rigorous yet accessible framework that would enable trade negotiators, governments, and others to forecast the potential benefits and drawbacks of a trade agreement before the agreement is ratified. The TIR framework assesses the direct and indirect economic effects of a change in trade or investment policy as well as the legal and regulatory changes or conflicts that a new trade policy may pose. Using this tool, policymakers can expand on the areas where the poor will benefit and can modify trade language that would harm the poor, particularly poor women.

The Women’s Edge Coalition is advocating that the U.S. government adopt this TIR to assess the affects of trade on the poor in the U.S. and developing countries before ratifying any new trade agreements.

Purpose of the Case Study

The case study examines the effects of the North American Free Trade Agreement (NAFTA) in Mexico’s agriculture sector and forecasts the potential impact that increased trade liberalization through the Free Trade Area of the Americas (FTAA) will have on Mexico’s agricultural poor. Since Mexico has undergone economic liberalization through NAFTA, policymakers can draw lessons from NAFTA when developing new trade agreements for the region.

When NAFTA was being negotiated, 3 million producers, or 40 percent of all Mexicans working in agriculture, were cultivating corn. Mexico’s corn producers were hit the hardest by NAFTA. Mexico’s borders opened 10 years ahead of schedule to allow cheaper imports of corn and beans from the U.S. and Canada. As a result, small, poor farmers who produced for the local markets were forced to compete with cheaper imports. For those that did not lose their jobs, monthly income for self-employed farmers fell from 1959 pesos a month in 1991 to 228 pesos a month in 2003.

Poverty Effects

With this case study, for the first time, there is a quantifiable, accurate picture of the differences NAFTA had on men versus women. For example, poverty increased by 50

percent in female headed households since the implementation of NAFTA. In addition, quality of living dropped dramatically; there was a 50 percent decline in the basic goods (such as food, clothing, health, education and housing) that Mexicans could afford to buy between 1990 and 2000, exacerbating poverty issues for women.

Job Creation and Losses

NAFTA created 5.3 million jobs both in the formal and informal sectors. NAFTA resulted in the loss of 1.3 million jobs, mostly for corn and bean producers – typically small subsistence farmers.

Of the new jobs created, approximately 36 percent were in the informal sector where workers typically receive no benefits, are not entitled to vacation pay or overtime, and routinely have no contract protections. Many of the women who entered the informal sector were selling food on the streets and this "market" became flooded. Wages went down in this area considerably as a result.

The remaining jobs were created in the formal sector, primarily manufacturing jobs. Women for the most part went to *maquilas*. While these jobs may provide increased autonomy for women, many of these jobs are low-waged, precarious, and exist in difficult working conditions. Simply stated, these types of jobs do not enable women to pull themselves and their families out of poverty. Women work all day in the *maquilas* and then come home to care for the house and their children – they work a total of 18 hours a day.

Moreover, to achieve the same level of income that one farmer received in 1990 prior to NAFTA, three people now have to work to achieve the same level of income – and that is with inflation included. It should also be noted that many of the new jobs created are now going to Asia. For example, an assembly line worker earns U.S. 50-80 cents per hour in China. Her counterpart in Mexico gets U.S. \$2.50 to \$3.50.

The jobs created by NAFTA are not long-term, stable jobs.

Remittances

To compensate for the rise in prices and increase in poverty, many rural households sent family members to cities within Mexico or to the United States to earn a living. Remittances, or money sent back from migrants to their families, kept many rural families from complete impoverishment.

FTAA Forecasting

Given the impact that trade liberalization has had on poor farmers in Mexico, what will further trade liberalization under the Free Trade Area of the Americas (FTAA) mean for the rural poor who are still struggling to survive under the current trade conditions? The TIR estimated the potential job losses that may result from the implementation of the FTAA. If the current trend continues with the FTAA, at BEST, over a five year time period, 350,000 more jobs will be lost in Mexico's agricultural sector and that number could go up to 750,000. By using the TIR, policy makers can either modify a trade agreement so

that the poor do not lose their jobs or they can develop U.S. and Mexican assistance programs to help transition the displaced workers to jobs that pay decent, livable wages.

Policy Recommendations and Conclusion

The TIR demonstrates that policy matters. The Mexican government's protections of small farmers had played an important role in assisting a vulnerable sector and promoting food security within the country. When this support was dismantled under NAFTA, the sector was plunged into deep poverty with few prospects for improving their livelihoods.

The TIR also shows that policy analysis and separating the effects between women and men matters. The Mexican government could have anticipated the effect of free market trade on vulnerable sectors and initiated programs to protect these sectors or to transition to new competitive opportunities. The TIR showed that the jobs created primarily went to women workers but that the lower wages they could command in part explained their disproportionate share of new jobs. In other words, women were gaining jobs but the jobs weren't necessarily good jobs that could alleviate poverty.

In addition, the TIR demonstrates the need for careful, pragmatic new trade policies that are primarily concerned with ensuring that trade alleviates poverty for men and women. Lessons that can be drawn from this NAFTA case study for the FTAA include:

- **Conduct a Trade Impact Review Prior to Completion of the FTAA.**
The U.S. and Mexican governments should conduct a TIR on how accession to the FTAA will affect poor women and men in their countries. This review should be completed prior to finishing the FTAA. Governments should change any trade commitments that negatively affect the poor prior to completing the agreement.
- **Provide Policy Flexibility for Governments.**
Governments need policy flexibility to guide the economic and social development of a nation. Governments negotiating the FTAA should ensure that trade agreements allow sufficient policy flexibility so that governments can change direction or craft new policies or programs without fear that they will be subject to dispute-settlement measures or might have to pay restitution to other governments.
- **Protect Small Farmers.**
The U.S. and Mexico should seek to protect small farmers from the negative effects of free trade in agriculture. In the FTAA negotiations, countries should ensure that they can use special safeguard mechanisms when faced with imports of cheap agricultural goods; that they can exempt basic staple foods from agricultural negotiations, and that they can exempt small farmers who farm under 5 hectares of land or earn below US \$50,000 in the U.S. from FTAA agriculture terms.
- **Develop training programs for displaced workers.**
Governments should develop or enhance training programs for displaced workers. Using the TIR, governments can predict which sectors may be most vulnerable to lay-offs and target training programs to that sector. The training should help workers cultivate new lucrative crops as well as training them for new, highly paid jobs in burgeoning industries. Trainings should be organized to enable both women and men to benefit from the program.
- **Revise current migration policies toward low and high-skilled immigrants.**

Although migration is included in some discussions of services and investment, the U.S. needs to revisit its immigration policy to ensure that low and high-skilled workers are treated equally and that their rights are respected.

- **Create new markets for niche and fairly traded products.**

Governments should assist small farmers in marketing their products and in promoting fairly-traded products. Governments should purchase fairly-traded coffee and other fairly-traded commodities such as bananas and chocolate for government offices to increase the market share for these producers.

Introduction

The collapse of the World Trade Organization (WTO) talks in Cancun, Mexico in September 2003 to have reenergized the ongoing debate about the benefits of free trade for the poor. Since the WTO was launched in 1995, free trade proponents have claimed that unfettered trade will promote democracy, reduce poverty, and lead to better governance. Skeptics have questioned the ability of the free market to act in the public's interest and noted that the asymmetries between negotiating countries may not lead to an even playing field.

The U.S. has been a leading proponent of free trade, having negotiated more than 300 separate trade agreements and passed five major pieces of trade legislation since 1992³. The U.S. has strongly linked free trade to international development assistance, arguing that "trade not aid" will enable poor developing countries to improve the lives of their poorest citizens.

As developing country delegates observed during the WTO meeting in Cancun, the reality of free trade has not always lived up to the rhetoric, particularly for the poor. Many developing country officials noted that before negotiating further trade liberalization, it is important to assess where trade has helped the poor, and where it has hindered them. Where has trade improved the lives of the poor, and where has trade made the lives of the poor more difficult?

In particular, trade's effect on women, who make up the vast majority of the world's poorest citizens, must be carefully examined. For, if trade is to lift up the poor, then there should be positive benefits for poor women for whom a small increase in income could have an enormous impact on their quality of life.

The Trade Impact Review (TIR) and the Look FIRST Campaign

In 2002, the Women's Edge Coalition developed the Trade Impact Review (TIR), a rigorous yet accessible framework that would enable trade negotiators, governments, and others to forecast the potential benefits and drawbacks of a trade agreement before the agreement is ratified. The TIR framework assesses the direct and indirect economic effects of a change in trade or investment policy as well as the legal and regulatory changes or conflicts that a new trade policy may pose.

The TIR's economic framework assumes that trade between nations will lead to changes in the price of goods and services, in the costs of labor, and in the number of men and women working in particular sectors. The framework is a type of "feedback loop" which describes how a change in trade policy may affect relative prices— which, in turn, could affect labor demand, bring about a change in real wages, and affect consumption. Finally, the implementation of trade agreements can also decrease the revenue that a government receives as tariffs are reduced. As revenue is lost, governments may cut back on the provision of public sector services or may impose user fees to recover some of the costs of providing the service.

The economic framework clearly illustrates that any changes in trade policy cannot be neatly separated from other aspects of men and women's lives. Instead, a policy change

can set into motion a series of other economic changes that directly affect the livelihoods and well being of women and men in the Global South and the United States⁴.

The legal and regulatory section of the framework employs both a content and conflict analysis to ascertain possible gender-differentiated effects of trade and investment agreements⁵.

The TIR is an objective, rigorous framework which assesses the potential positive and negative effects of trade commitments on the poor, particularly poor women.

The Women's Edge Coalition is advocating that the U.S. Government adopt this TIR to assess the affects of trade on the poor in the U.S. and developing countries before ratifying any new trade agreements such as the Central American Free Trade Agreement (CAFTA) or the FTAA. This advocacy campaign, called the Look FIRST (**F**ull **I**mpact **R**eview and **S**creening of **T**rade) Campaign employs research, policy advocacy, media, and grassroots organizing efforts to persuade U.S. policymakers to use the TIR to make informed policy decisions about how trade policy can spur poverty alleviation.

Trade can benefit the poor if it is done in a careful manner. If trade is a tool for development, then the U.S. government should negotiate trade deals with poverty reduction in mind and proceed in a thoughtful manner so that global trade succeeds for the poor, for businesses and for wealthy and impoverished nations alike. A TIR can serve as an important tool for policymakers to marshal data that will enable them to carefully build poverty-alleviating trade rules into more trade pacts and develop appropriate development and/or trade instruments to mitigate any trade rules that may increase poverty in certain sectors.

It is our hope that other countries can adapt and modify the TIR so that governments and/or civil society groups in developing countries can measure the potential impacts of trade for the poor in their country themselves and negotiate agreements that improve the lives of the poor, particularly poor women.

Purpose of the Case Study

The Mexico case study is one of a series of investigations that the Women's Edge Coalition is conducting in collaboration with national and regional women's organizations in developing countries in order to test the TIR's ability to analyze the effects of trade on the poor and forecast the potential effects of new trade pacts. The collaborative research also enables the Women's Edge Coalition to share this tool with other civil society groups, as well as jointly develop policy recommendations and advocacy strategies with organizations.

The Mexican case study examines the effects of the North American Free Trade Agreement (NAFTA) in Mexico's agriculture sector and forecasts the potential impact that increased trade liberalization through the Free Trade Area of the Americas (FTAA) will have on Mexico's agricultural poor. Since Mexico has undergone economic liberalization through NAFTA, policymakers can draw lessons from NAFTA when developing new trade agreements for the region.

This report explores the impact of NAFTA on the agricultural sector in Mexico. With the inception of the NAFTA between Canada, the United States and Mexico in January 1994, policies to open Mexico's economy gained momentum. NAFTA created precedents for a series of trade agreements on investment, agriculture, manufacturing, telecommunications, finance, foreign ownership, and the trade in goods and services between the three countries.

The impact of trade liberalization in Mexico has largely been to free up domestic prices and gradually convert them to international prices. Tariffs and quotas were drastically reduced, restrictions on foreign ownership of Mexican firms lifted, foreign direct investment has increased, and non-tariff barriers have been renegotiated and eased.

One of the key sectors that has been affected is agriculture. The case study focuses on agriculture because the majority of Mexico's poor are concentrated in rural areas and work as subsistence or small farmers. The study illuminates the results of NAFTA-induced policy changes and commitments on poor farmers in Mexico.

The TIR seeks to answer the following economic questions:

- What aspects of trade liberalization of agriculture in NAFTA helped to alleviate poverty for small farmers in Mexico?
- What aspects of NAFTA agricultural policy did not improve poverty rates or increase impoverishment in the region?
- Did the effects differ for women and men?
- Given the consequences of liberalizing trade in agriculture under NAFTA, what might further liberalization of agriculture under the FTAA mean for small farmers in Mexico?
- What are the effects of agricultural trade liberalization under NAFTA in the United States? Are there different effects for women and men?

The results of the Mexico case study demonstrate that:

1. **It is important to assess the effects of trade liberalization on the poor.** The study illustrated that although the economy may have grown, small and subsistence farmers grew poorer. Poverty increased for both the rural and urban poor. For the same amount of work, poor families can only buy half the basic goods they could buy in 1990, before NAFTA. Poor women became poorer - with 15 percent of women-headed households reporting poverty, up from 10 percent before NAFTA.
2. **The effects of trade liberalization vary between and within sectors.** Although corn and bean producers lost their livelihoods as they struggled to compete with cheaper, imported products, agribusiness and large farmers who grew cash crops for the U.S. market increased their incomes and benefited from NAFTA.
3. **NAFTA created more new jobs than it destroyed jobs but the new jobs are out of reach of the subsistence farmers.** The jobs that were created require more education than many poor farmers have, so they are not qualified for these jobs. New jobs in manufacturing plants are often low-waged, laborious and precarious. Other new jobs have been in the informal sector with no benefits and extremely low wages.

4. **Disaggregating results between men and women is important.** The study uncovers how NAFTA affected men and women differently and demonstrates why a disaggregated analysis of trade is needed.
5. **Realistic policy changes can be made to help those hurt by trade liberalization.** Mexico and the U.S. could create new, pragmatic trade and development policies that would improve the lives of poor farmers in both countries.
6. **Trade Impact Reviews can be done.** With a very modest budget of US \$150,000, the Women's Edge Coalition was able to study the effects of free trade in Mexico's agricultural sector and forecast the potential impact of the FTAA for Mexico's poor farmers. The U.S. government spent \$556 million for trade-capacity building efforts with developing countries in 2001 and already conducts basic environmental and labor impact assessments of trade. The U.S. government can afford to spend the time and money required to complete a TIR. Indeed, if they want trade policies to benefit the poor here and abroad, they can not afford not to do such assessments.

The Need to Assess Impacts on Men and Women Separately

As currently analyzed and regulated, trade is presumed to be gender-neutral. However, seemingly neutral market mechanisms and macroeconomic policies can reinforce social biases and inequalities. In addition, trade liberalization does not occur without adjustment costs. The removal of tariffs and quotas may expose previously protected sectors to competition and open up new areas to exchange and commodification. New trade policies are likely to produce changes in employment, price, income, and consumption patterns, which affect men and women differently.

Women may be affected differently due to social and cultural discrimination, which limits their access to education, technological training, credit, and land. In addition, women face a sex-segregated labor market; frequently, they are not hired for many jobs for which they qualify, may be considered "secondary" wage earners, often earn lower wages than men for the same or similar types of jobs, and are usually the last workers hired and the first fired. For example, in rural Tanzania men with secondary education had a 3-in-4 chance of entering formal sector employment, whereas women with the same education had only half that chance.

The ability to bear children also affects women's employment in several ways. Women of child-bearing age may be discouraged from seeking certain types of jobs or jobs in certain sectors that are considered inappropriate for pregnant women. In parts of rural Asia, North Africa and the Middle East, women's mobility is limited after menses and before menopause. It is not considered appropriate for women to travel alone or without the accompaniment of a male relative. Furthermore, many women are in the labor market for fewer years than men, entering and leaving employment more frequently than men in order to care for children and older family members.

Women and men have different rights and responsibilities at home. Women still do the bulk of "reproductive" work--caring for their families, preparing meals, and keeping the household clean and functioning. This invisible work means that women have less time to gain new job skills, to seek new jobs, or to simply relax and pursue leisure activities. This undervaluing of women's labor also translates into an inability to command equal wages for equal work. Because of women's primary role as caregivers, their consumption patterns may differ from those of men, because household resources, including food, may

be prioritized for wage earners, frequently men or boys. In addition, as mothers, women will often curtail their own consumption in order to provide additional household resources for their children. Furthermore, as caregivers, changes in the price of food, education expenses, or health care provision may affect women more than men. When prices rise or service provision declines, women may be required to compensate by expanding their role as caregivers.

Finally, race, class, ethnicity, and geography also affect the ways in which women can (or cannot) participate in the local, national, or global economy. These characteristics may overlap and some reinforce each other. The net effect, however, is that men and women may face different opportunities and constraints that affect their ability to benefit from trade and investment agreements or adjust to changes brought about by their implementation.

Because women and men participate in the economy differently, any impact assessment of trade must look closely at where men and women's experiences converge and diverge. Efforts must be made to trace the effects of a trade policy from the macroeconomic policy to the household level. Within the household, men and women may not have the same authority to make decisions for the family. This means that men may decide that a woman has to begin paid work and still maintain her household responsibilities – creating a double workload for women. Furthermore, the value of women's work caring for family members is a social good that is unrecognized in trade or economic models. Therefore, the costs of providing this care are not reflected in the economy.

Should the price of food, education, or health care rise as a result of trade pacts, women will still be expected to provide these items for family members. To cover the new costs, women often work longer hours or cut back on their own consumption. While trade agreements themselves are not responsible for the inequalities that women face, they may unwittingly reinforce or exacerbate existing patterns of discrimination, unless the effects of trade are disaggregated between men and women.

Importance of Agriculture to the Mexican Economy and for Mexico's Poor

Agriculture plays an important role in Mexico, as in other developing countries. Agriculture produces goods for the market but it also provides goods and services that are not accounted for in trade negotiations such as environmental conservation, rural development, regional development and food security⁶ (the ability of a nation to provide food for its citizens).

In addition to the role that agriculture plays in supporting sustainable livelihoods and employment, agriculture also plays a role in promoting food security. For the poor in many developing countries, food accounts for a substantial share of household spending. When faced with meager resources, women, as the caregivers in a household often reduce their food intake in order to ensure that other family members are well-fed. Any change, no matter how small, in agricultural employment or prices can have major negative consequences for the poor.

In Mexico, the majority of the poor are rural, subsistence farmers. Today, 25 million people live in rural Mexico and approximately 20 percent work in the agricultural sector⁷.

Wages in agriculture are consistently lower than in all other sectors and poverty rates highest in rural areas where the density of self-employed farmers and subsistence producers is greatest⁸.

From the 1930s until the 1970s, Mexican rural areas had been the primary source of foreign exchange for the country. As Table 1 shows, until the mid-70s, agriculture led to a positive trade balance for Mexico, peaking at US \$600.7 million dollars in 1965.

Table 1. Agricultural Trade Balance, Millions of Dollars

Years	Exports	Imports	Balance
1960	410.5	58.8	351.7
1965	642.4	41.7	600.7
1970	524.9	133.3	391.6
1974	653.2	763.3	-110.1
1975	598.8	636.5	-37.7

Source: C. Luiselli and J. Mariscal "The Agricultural Crisis After 1965", en "Development and Crisis of the Mexican Economy" FCE, 1981,p. 445.

Today, although 20 percent of the labor force works in agriculture, farming accounts for less than 5 percent of economic output⁹.

A Brief History of Mexican Agriculture

From the 1930s until the 1970s, Mexican government interventions were an integral part of the country's economic development strategy. In the 1970s, Mexico utilized an import-substitution strategy of economic development, which focused on reducing Mexico's dependence on imports by substituting domestically produced goods and services.

To support and bolster domestic producers, the government developed a series of economic and social policy measures designed to protect the interests of farmers and the urban poor. Between 1930 and the mid 1980s state intervention in agriculture included a range of policies and programs including crop price supports to staple producers; subsidies for agricultural inputs; the provision of credit and insurance; government processing of grain oils and powdered milk; state owned retailing that enabled the government to set official price floors and ceilings - selling staple foods to rural and urban poor; state production of fertilizers and improved seeds; and targeted state consumption subsidies. In one way or another, these government policies absorbed some of the costs of producing crops or purchasing food.

Another important facet of Mexico's agriculture sector was the *ejido* system. As a result of the Mexican Revolution, the country established a system of communal land ownership. Under the *ejido* system, peasants had access to land but were not allowed to rent or sell the land. Women were rarely considered the owners of *ejidal* lands¹⁰.

Traditionally women worked in the agriculture sector cultivating family gardens of fruits and vegetables. They were often responsible for selling their household's extra produce in local markets as well as assisting with crop cultivation and production.

Yet, few women owned the land that they farmed. Even today, very few Mexican women own their own land. Women own less than 20 percent of all farmed land. Furthermore, those woman that own land, tend to own smaller parcels than do men. In 2000, 56 percent of women farmers owned less than 2 hectares of land, while 35 percent of men owned less than 2 hectares of land.

Tables 2-4 reveal that the proportion of men and women farmers cultivating on less than 2 hectares of land has risen over the decade of the 1990s. The majority of this increase is made up of small farmers who are growing food for their own families' consumption.

It is clear that although there are fewer female agricultural producers, the majority of women farmers cultivate less than 2 hectares of land primarily for household consumption. As Tables 3-4 show, most women farmers tend to combine growing crops for their own consumption and for sales. With such small farms, women farmers can produce enough food for their own homes and can sell the excess at the local market but they do not own enough land to grow crops for export. Therefore, more than 56 percent of women farmers will not be able to take advantage of the Mexican government's plan to grow cash crops for export.

Table 2 Percentage Distribution of Women Farmers, by Total Land Area

Producers	1991	1993	1995	1997	2000
	100	100	100	100	100
Less than 2 hectares	45.6	48.8	52.0	43.1	56.3
2 to 5 hectares	33.4	40.1	33.3	43.4	31.5
5 to 10 hectares	14.9	9.5	10.3	7.5	8.5
More than 10 hectares	6.0	1.6	4.5	6.0	3.6

Source: Own calculations based on special tabulations of the Agricultural Module of the National Employment Survey, INEGI

Table 3. Percentage Distribution of Women Farmers, by Land Area Cultivated¹

	1991	1993	1995	1997	2000
	100	100	100	100	100
Less than 2 hectares	67.2	57.9	67.7	57.4	70.8
2 to 5 hectares	31.1	37.2	28.4	42.4	25.1
5 to 10 hectares	1.7	4.3	3.9	0.3	2.6
More than 10 hectares	..	0.5	1.5

Source: Own calculations based on special tabulations of the Agricultural Module of the National Employment Survey, INEGI

Table 4. Percentage Distribution of Women Farmers, by Land Area Used for Production for Sale

	1991	1993	1995	1997	2000
	100	100	100	100	100
Less than 2 hectares	52.0	61.0	58.5	30.1	55.4
2 to 5 hectares	30.8	34.2	29.0	47.2	31.9
5 to 10 hectares	17.2	4.8	2.7	15.6	9.2
More than 10 hectares	9.8	7.1	3.4

¹ Land includes both owned and rented land.

Source: Own calculations based on special tabulations of the Agricultural Module of the National Employment Survey, INEGI

In both the rural and urban areas, women work more hours per day than men when unpaid household labor is included. Women consume less leisure and have fewer opportunities for remunerated work than men. Nadal (2000) observes that “The duration of a typical woman’s working day is more than 18 hours and exceeds that of men by as much as 43 percent¹¹.” Men report spending on average 48 percent of their total time in economic activities while women report spending only 36 percent of their time in economic activities¹². Men spend 6 percent of their time undertaking tasks in the home. By contrast, 28 percent of women’s time is spent in household tasks. Similarly, men spend 14 percent of their time taking care of children, older people and sick household members, while women spend 30 percent of their time caretaking. Interestingly, there was little difference in the amount of time that men and women spent studying or undertaking sports and relaxing. Men however spend slightly more time in community services than women: 7 percent of their total time as compared to 5 percent of time for women. Women’s heavier workload means that they have fewer opportunities to gain new skills or to engage in cultivating labor-intensive crops.

Box 1. Testimony: Women’s Workloads

“When I am working I begin at 5 a.m. and I prepare a packed lunch, and then I take the kids and leave them in the day care center and from there I go to work. My husband goes [to work] later. Right now he is working as a bricklayer in the packing center that belongs to the patron. At midday I come back and make the food, and while it is cooking I wash some clothes, I feed my husband, collect the plates, wash them, and then I return to work—until 4 or 5 p.m., depending on what we are working on. Then I come home, I make dinner, bathe the kids, we eat, and then I get to bed at about 10 p.m.” Valentina Hernández (1999).

“The women in Ayoquezco who sell *nopal*^a in the market get up at 3 a.m. By 4 a.m. they are already in the central market in Oaxaca. They will stay there in the market, selling their goods until about 6 p.m. when they pack up to return home. Most of them will get home by 9 p.m. at night. This they do on alternative days—one day on, and one day off—because they have to do household chores and prepare the *nopal* to sell on the days when they are not in the market. On the days when they are at home they get up a little later—at about 4:30 am—to wash and clean, iron, mend clothes, care for the children, and make tortillas. They do this during the morning and into the afternoon. At about 4 p.m. they will go to harvest the *nopal* when the sun has heated the ground all day and everything is burning up. It has to be hot when you harvest *nopal*, because if it isn’t, the *nopal* tastes very acid when it is cooked. They will return to their homes by 6 p.m. and then they will make dinner and begin to clean the *nopal* and pack it in baskets or bags. They will also prepare the food for the children and their husbands for the next day too. They will go to bed at about 9 p.m. to get up in time for market. Only on Sundays do they rest a little, but then they go to church and make dinner for the family. At least the church has made it easier for us: mass is held very early during the week so that we can do all our chores and go to church. The men really don’t do household chores. In our communities it is invariably the woman who serves the man.” Candida Hernández Juárez, *Organization of Women of Ayoquezco*.

By contrast, 28 percent of women's time is spent in household tasks. Similarly, men spend 14 percent of their time taking care of children, older people and sick household members, while women spend 30 percent of their time caretaking. Interestingly, there was little difference in the amount of time that men and women spent studying or undertaking sports and relaxing. Men however spend slightly more time in community services than women: 7 percent of their total time as compared to 5 percent of time for women. Women's heavier workload means that they have fewer opportunities to gain new skills or to engage in cultivating labor-intensive crops.

Box 2. Testimony: Women's Workloads

“When I am working I begin at 5 a.m. and I prepare a packed lunch, and then I take the kids and leave them in the day care center and from there I go to work. My husband goes [to work] later. Right now he is working as a bricklayer in the packing center that belongs to the patron. At midday I come back and make the food, and while it is cooking I wash some clothes, I feed my husband, collect the plates, wash them, and then I return to work—until 4 or 5 p.m., depending on what we are working on. Then I come home, I make dinner, bathe the kids, we eat, and then I get to bed at about 10 p.m.” *Valentina Hernández (1999).*

“The women in Ayoquezco who sell *nopal*^a in the market get up at 3 a.m. By 4 a.m. they are already in the central market in Oaxaca. They will stay there in the market, selling their goods until about 6 p.m. when they pack up to return home. Most of them will get home by 9 p.m. at night. This they do on alternative days—one day on, and one day off—because they have to do household chores and prepare the *nopal* to sell on the days when they are not in the market. On the days when they are at home they get up a little later—at about 4:30 am—to wash and clean, iron, mend clothes, care for the children, and make tortillas. They do this during the morning and into the afternoon. At about 4 p.m. they will go to harvest the *nopal* when the sun has heated the ground all day and everything is burning up. It has to be hot when you harvest *nopal*, because if it isn't, the *nopal* tastes very acid when it is cooked. They will return to their homes by 6 p.m. and then they will make dinner and begin to clean the *nopal* and pack it in baskets or bags. They will also prepare the food for the children and their husbands for the next day too. They will go to bed at about 9 p.m. to get up in time for market. Only on Sundays do they rest a little, but then they go to church and make dinner for the family. At least the church has made it easier for us: mass is held very early during the week so that we can do all our chores and go to church. The men really don't do household chores. In our communities it is invariably the woman who serves the man.” *Candida Hernández Juárez, Organization of Women of Ayoquezco.*

The 1982 Economic Crisis

The 1982 economic crisis brought an end to a period of state-sponsored import substitution and protectionism. The roots of the crisis lay in the oil boom of the late 1970s. Oil prices rose sharply just as oil exploration in Mexico peaked. Mexico was able to earn substantial dollar revenues for the export of its oil, benefiting from the oil price hikes in the mid to late 70s. The rising dollar reserves led to an overvalued exchange rate that fueled a precipitous rise in imports.

Government spending increased dramatically in the wake of the oil boom. Export taxes and revenue from the state owned oil companies provided a seemingly abundant source of foreign exchange to finance government spending. The influx of foreign exchange along with rising consumer imports contributed to rapid inflation. As inflation rose, government spending was diverted from productive investments to distributional expenditures - food subsidies and agricultural subsidies became a necessity to cushion the impact of inflation on the poor.

As other oil producers came on stream, a global oil glut occurred in the early 80s. World oil prices declined, Mexico's trade deficit grew and inflation soared. Investors became concerned and capital flight increased as individuals and companies began to withdraw their savings and investments from Mexico. The peso devalued sharply against the dollar and debt denominated in dollars rose proportionately. In an attempt to stave off further capital flight, on August 13, all dollar-denominated accounts held in Mexican accounts were converted to pesos¹³.

The response of the international community was immediate. On August 17, 1982, the United States and Mexican governments negotiated a financial assistance package. On December 23, 1983 a three year International Monetary Fund (IMF) stabilization package was signed with the Mexican government. The package required the Mexican government to reduce the public sector deficit from 18 percent of GDP in 1982 to 8.5 percent in 1984 and to 3.5 percent in 1985, to reduce foreign borrowing, restrain inflation, and to phase out the dual exchange rate system¹⁴.

As loans were re-negotiated and external debt restructured according to bilateral and IMF dictates, the de la Madrid Administration (1983-88) adopted a series of policy reforms that affected the agricultural sector: producer price supports for 5 of the 12 basic crops were eliminated (copra, cotton, safflower, sunflower and sesame seeds); and Compañía Nacional de Subsistencia Popular (CONASUPO), the primary state enterprise involved in agriculture, was restructured and downsized to reduce its administrative costs.

In 1986, Mexico became a full member of the General Agreement on Tariffs and Trade (GATT). Despite the accession to the GATT, Mexico did not implement major changes in the structure of protections for agricultural products until early 1990. Until then, all products in whose markets CONASUPO intervened were subject to import licenses, which were licenses the Mexican government required foreigners to purchase in order to import to Mexico. Licensing was used as a way to limit imports and cushion domestic producers against competition.

However, the most far-reaching domestic agricultural policy reform has been the elimination of price supports for basic crops and the elimination of CONASUPO¹⁵. In 1991, guaranteed prices for wheat, sorghum, soy beans, rice, barley, safflower, sesame seed and sunflower were eliminated under CONASUPO. In 1995, CONASUPO eliminated domestic price supports and simply became the “buyer of last resort” for producers¹⁶. As a result of these policies, prices for basic crops declined while the price of agricultural inputs (fertilizer, seed, etc.) increased.

NAFTA and Mexico’s Agriculture

Although Mexico had already embarked upon an export-oriented economic policy when it accepted the IMF loans, NAFTA continued and accelerated this process of liberalization. NAFTA contributed significantly to the further erosion of price supports for farmers and consumers and the complete dissolution of what remained of the state-sponsored import-substitution model¹⁷. The NAFTA negotiations, which began in 1991, concluded before the end of the Uruguay Round, and NAFTA entered into force in January 1994. Building on the Canada - United States Free Trade Agreement, NAFTA provided a precedent for extending GATT rules to agriculture, services and intellectual property rights. The treatment of investment and intellectual property rights in both the Uruguay Round agreements and NAFTA was influenced in turn by a growing number of bilateral agreements on investment and intellectual property protection.

NAFTA differed from earlier trade agreements in that it included stronger compliance measures should a country fail to meet its commitments as outlined in the treaty. For example, if a country (or a corporation) believes that another country’s laws or regulations are a barrier to trade, the country must either change its regulation or compensate the other party in order to maintain the rule. NAFTA may constrain a country’s development options by making it difficult to renegotiate the agreement should circumstances change.

Yet, advocates of NAFTA predicted that the agreement would increase industrialization in Mexico and make the agriculture sector more productive and efficient. Policymakers predicted that the United States would increase its exports of grains, oil seed, and meat products that are land and capital intensive (and certain fruits that are more suited to northern latitudes¹⁸). Mexico would increase its exports of vegetables, fruits and nuts, as well as coffee and tropical fruits. An exception was made for a restricted list of products considered to be “sensitive.” These products would have a transition period before they were liberalized. Liberalization would precipitate the shift from a primarily agrarian to a more industrialized economy and factors of production would be reallocated to more profitable sectors.

In 1992, in preparation for NAFTA’s new investment rules, the Salinas government amended Article 27 of the Mexican Constitution, which had guaranteed farmers’ access to communal lands called “*ejidos*.”¹⁹ Under the “*ejido*” system land could be inherited but not sold outright so that land-ownership did not become too concentrated. The reforms to Article 27 meant that farmers could sell their lands or lose them because of debt²⁰.

However, the reforms to Article 27 posed some particular problems for women. By establishing individual rights to land over familial rights, the automatic rights of wives and

partners to inherit *ejido* land was eliminated. Under the reforms, owners can file a list of beneficiaries and name who is to inherit the land. In one study, men left their land to their wives 38.5 percent of the time and to their sons 38.8 percent of the time²¹. Furthermore, by bestowing individual rights over familial ones, women have no rights over land transactions.

PROCAMPO, an income support mechanism designed to compensate for some of the price declines in basic grains, was established in 1993 to cushion the impact of NAFTA in the agricultural sector. It was intended to be in effect until 2008.

Under PROCAMPO, direct payments to individual producers were set at \$100 per hectare. Since its inception in 1994, PROCAMPO has covered approximately 14 million hectares a year, including more than 95 percent of the area that had been planted in corn, beans, sorghum, and wheat²².

As direct subsidies have been phased out, the availability of credit for agricultural activities has also declined. Some credit subsidies are still available through BANRURAL – but there has been a marked contraction of available credit for agriculture. The sum of private and public credit has contracted from an average of 42,232 million pesos between 1983 and 1990 to an average of 34,935 million pesos between 1996 and 2000. Credit provided by the public sector has contracted the most sharply²³.

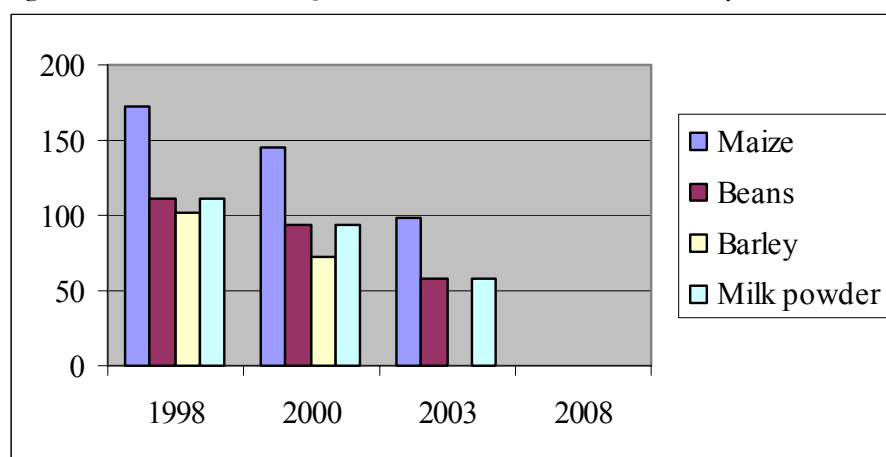
Under NAFTA, all non-tariff barriers to agricultural trade between the United States and Mexico were to be eliminated. Many tariffs were eliminated immediately, with others being phased out over periods of 5 to 15 years. All agricultural provisions in NAFTA, however, are slated to be fully implemented by the year 2008.

NAFTA was one of the first trade agreements to use Tariff Rate Quotas (TRQs) as a transition mechanism to eliminate quantitative restrictions on certain traded goods such as maize, beans, barley, and other grain²⁴. TRQs are applied to products that NAFTA governments considered sensitive. Under NAFTA, no tariffs would be applied to agricultural products that came in at an agreed-upon level and there would be a 15 year phase-out period for other products.

Quota levels were established using trade flows between Mexico and two NAFTA countries. For example, in 1994 the quota for maize was settled at 2,500 thousand MT²⁵ for the U.S. and 1,000 MT for Canada. Above quota imports received a tariff of 215 percent. The quota for beans was set at 50,000 MT from the United States and 5,500 MT from Canada. The tariffs were to be phased out over time (see Figure 1).

Since 1995, the quotas have been growing, and the above quota tariffs have been reduced. Beginning in 1995, the quotas for barley, beans and maize increased each year and their above quota tariffs have been subject to yearly reductions. Despite the existence of tariffs over quotas from the beginning of NAFTA implementation until 2000, Mexico has not charged above quota tariffs to any of the crops subject to TRQs. This has been because either its import requirements have been lower than the accorded quota, or the Mexican government has increased the quota.

Figure 1. Tariffs over Quotas for Maize, Beans, Barley and Milk Powder in Mexico



Source: Yúnez-Naude, A. (2002) “Lessons from NAFTA: The Case of Mexico’s Agricultural Sector” Final Report to the World Bank, December 2002.

NAFTA accession required the Mexican government to reduce price supports for domestic farmers and consumers and to reduce import restrictions. As a result, small farmers who produced for the local market were forced to compete with cheaper imports from the United States and Canada. Below we examine in more detail what the effects were for corn and bean producers.

Box 3. “NAFTA Was the Final Straw”

“The have really locked us up with NAFTA. NAFTA was the final straw that left all our people without work and all the land idle. We have been invaded by agricultural products from elsewhere - rice from China, corn from the U.S. These products are all much cheaper than we can produce and of far worse quality. We have completely lost our yellow corn—hardly anyone cultivates yellow corn now. But the most powerful effect is that our land is idle and many plots have been completely abandoned in Ayoquezco and much of Oaxaca. The prices have fallen so much that no one can afford to live off the land. You cannot even recover what you have invested—to say nothing of our labor. The drought has also affected us greatly. The result is that the campesino cannot sew a crop and trust that his family will be able to eat from this crop.” *Erasto Díaz, Migrants for Ayoquezco, an organization of Ayoquezcoan farmers.*

A Snapshot of corn

Corn is a central part of Mexico’s cultural heritage. As Aldo Gonzales, a poor farmer from Oaxaca who came to Cancun to protest the WTO trade agreements states: “We don’t see corn as merchandise.”²⁶ Certainly, according to the legends of several indigenous Mexican peoples, corn was the source of humankind. Corn has been cultivated for nearly 4,000 years in Mexico and is used as food, art, and in religious ceremonies. Producers have cultivated more than 40 distinct racial complexes and thousands of varieties of corn²⁷.

Many corn producers are small scale or subsistence farmers, cultivating between 2-4 hectares. In contrast, U.S. farms are normally over 250 acres each²⁸.When NAFTA was

being negotiated, 3 million producers, or 40 percent of all Mexicans working in agriculture were cultivating corn²⁹. Corn production accounted for 60 percent of cultivated land in Mexico.

Due to price supports from CONASUPO and other price-support policies, in 1993 Mexican farmers received \$240 for a ton of corn, compared to \$110 a ton in the United States³⁰. U.S. farmers can produce corn at a significantly lower cost because they rely on large-scale, mechanized production in contrast to the small-scale, labor-intensive corn production of subsistence Mexican farmers.

When Mexico opened its markets to U.S. corn imports, it provided a large quota for U.S. imports, believing that it would be cheaper to buy U.S. corn. At the same time, price supports for corn producers had been eliminated and the costs of agricultural inputs had increased. In addition to their economies of scale, U.S. corn producers had other competitive advantages as well - they received (and continue to receive) substantial government subsidies. For example, in 2000, U.S. corn producers received payments totaling \$10.1 billion, more than ten times the Mexican government's agriculture budget³¹. Although NAFTA provided a 15-year phase-in of quota elimination for corn, Mexico eliminated its corn quotas within 30 months.

In 1994, corn seeds were allowed to enter Mexico free of charge. That same year, CONASUPO reduced the amount of crops that it purchased from farmers while PROCAMPO began to provide income transfers instead of direct payments to producers.

Farmers could no longer depend upon CONASUPO for subsidies. The amount of corn CONASUPO bought fell from 45 percent of domestic corn in 1994 to 20 percent in 1995. The real price farmers received for corn declined by 26 percent between 1993 and 1995.

The drop in prices meant that small farmers could no longer cover the costs of growing corn by selling it in local markets. In Puebla, a typical corn producer earned around US \$400 last year for his crop, while the costs of production ranged from US \$460-\$520³². The fall in prices and elimination of price supports affected small and subsistence farmers the most. Within a year, Mexican corn production and other basic grains fell by half³³.

Real corn prices have fallen more than 70 percent (from 732 pesos in 1994 to 204 in 2001) since NAFTA began. This means that corn producers and their families are living on less than one-third of the income they earned in 1994³⁴. As their incomes fell, some farmers began to leave the sector.

Unfortunately, urban consumers did not benefit from the drop in corn prices. Despite the 42 percent drop in the price of corn between 1993-1999, the price of corn tortillas actually increased. In 1998, the government eliminated subsidies of tortilla mills and price controls over tortillas. Within a year, prices for tortillas rose by 50 percent in Mexico City and rural tortilla prices rose even more³⁵. Price increases for staple foods may disproportionately hurt women, who are primarily responsible for food purchases and preparations, and other household maintenance.

Table 5 reveals that overall the value of basic grains imports as a percentage of national production has risen over the period 1991-2000, but that the greatest percentage rise took place between 1994-2000 after NAFTA was implemented. This table illustrates how Mexico grew increasingly dependent upon the import of basic grains.

Table 5. National Summary for each Agricultural Year in Irrigated and Non-irrigated Crops 1991 -2000 (Percentages)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Area Cultivated (Ha.)										
PALAY RICE (%)	0.6	0.6	0.4	0.6	0.5	0.5	0.7	0.6	0.5	0.5
BEANS (%)	14.4	12.4	14.7	14.5	14.2	13.1	13.6	13.9	14.3	12.7
CORN IN GRAIN (%)	50.5	53.3	56.2	56.0	55.0	51.5	53.4	49.9	50.5	50.0
SORGHUM IN GRAIN (%)	9.9	9.7	6.6	8.7	9.6	14.0	12.4	12.9	12.7	13.2
SOY (%)	2.3	2.2	1.6	1.8	0.9	0.3	1.0	0.6	0.5	0.5
WHEAT GRAIN (%)	6.6	6.4	6.1	6.2	5.9	5.1	4.2	3.7	4.2	4.4
T O T A L (Ha)	15,321,631	15,011,586	14,682,178	16,409,376	16,520,453	16,784,782	17,114,597	17,065,648	16,827,682	16,554,251
Area Harvested (Ha.)										
PALAY RICE (%)	1	1	0	1	1	1	0.80	0.65	0.56	0.61
BEANS (%)	14	10	14	14	14	13.02	11.41	13.67	11.97	10.67
CORN IN GRAIN (%)	50	54	56	56	54	51	52.30	50.15	50.29	50.50
SORGHUM IN GRAIN (%)	10	10	7	9	9	14	13.26	12.44	13.43	13.67
SOY (%)	2	2	2	2	1	0	0.87	0.60	0.57	0.50
WHEAT GRAIN (%)	7	7	7	7	6	5	4.64	3.86	4.58	5.04
T O T A L (Ha)	14,019,420	13,293,823	13,334,371	14,632,272	14,730,104	15,732,805	14,160,633	15,705,815	14,241,957	13,893,083

Source: SAGARPA-SIACON; INEGI

Table 6. Imports and Prices

Value of Imports as Percentage of National Production	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BEANS (%)	2.0	0.4	0.6	5.0	3.5	11.4	8.2	15.5	12.3	8.6
CORN IN GRAIN (%)	5.3	4.4	1.5	10.4	12.0	31.2	11.9	21.4	22.3	19.9
SORGHUM IN GRAIN (%)	59.0	71.3	107.1	88.8	41.6	32.3	37.4	48.4	72.8	72.2
WHEAT GRAIN (%)	8.5	22.7	32.9	25.3	44.5	54.1	65.1	101.9	77.8	61.7
T O T A L (%)	16.1	22.1	20.4	29.4	31.3	42.8	37.3	41.1	42.4	45.3
Average Rural Price (\$ / Ton.) at 1994 Prices	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
PALAY RICE	765.3	635.3	564.4	666.1	679.4	806.7	653.8	596.4	574.8	435.9
BEANS	2571.8	2537.4	2236.5	1840.7	1393.2	2128.0	2359.1	2196.3	1700.0	1544.0
CORN IN GRAIN	886.6	852.4	796.0	635.5	695.6	716.0	583.8	525.8	470.8	450.4
SORGHUM IN GRAIN	539.0	492.1	444.0	394.0	600.0	569.4	423.4	370.2	316.9	312.4
SOY	1588.8	1144.6	1031.5	830.4	939.1	1061.4	961.1	831.2	797.8	535.7
WHEAT GRAIN	734.8	688.8	637.6	591.5	575.2	885.7	563.3	499.0	443.0	436.4

Source: SAGARPA-SIACON; INEGI

A Snapshot of Beans

Beans are an integral part of Mexican peasants' lives. Corn tortillas and black beans are staples for many of the peasants and subsistence farmers in the region. Mexican small and subsistence farmers have cultivated hundreds of different varieties of black, red, and yellow beans for their own consumption and for sale locally and nationally.

NAFTA's effect on bean producers followed the same trajectory as that of corn. In 1994, bean seeds were allowed to enter Mexico without being subject to import licenses, tariffs or quotas. Simultaneously, CONASUPO eliminated the guaranteed price for beans. As a result of these policies, CONASUPO bought 30.5 percent of beans in 1993 and only 18.3 percent in 1995. The real price farmers received for beans declined by 20 percent between 1993 and 1995. By 1996, CONASUPO bought only 8 percent of beans. As a result, bean prices fell by a further 44 percent between 1996-1998.

A Snapshot of Non-Traditional Agriculture Exports (NTAEs)

Unlike the corn and bean sectors, the non-traditional agricultural exports (NTAEs) experienced growth under NAFTA as producers began to increasingly supply the U.S. market with fruits and vegetables.

Proponents of NAFTA predicted that the agreement would create new jobs and new markets for products in which one country had a comparative advantage. In Mexico, NTAEs grew under NAFTA. Fruits and vegetables such as jitomate, onion, cucumber, chile, squash, peppers, strawberries, mango, oranges, melon and watermelon flourish in Mexico's climate and are desirable products year-round in the U.S. About 57 percent of total U.S. fresh or frozen vegetable imports and 37 percent of fresh or frozen fruits imports came from Mexico in 1999. Between 1985 and 2000, Mexican exports of

horticultural products alone have risen from a little under US\$1 billion in 1985 to a little over US\$ 3.5 billion. With less than 2.5 percent of the total land area dedicated to vegetable production, it produces a little over 17 percent of the total value of all agricultural products marketed and exported³⁶.

By 1997, the agro-industrial sector (including horticulture, fruit, and industrial food production) provided 17 percent of all agricultural jobs and contributed approximately 64 percent of the value of agricultural exports, or 10 percent of total exports³⁷. After NAFTA was implemented, child labor in this industry decreased whereas that of adult, between the ages of 20 and 30, gained employment in this industry³⁸. While the data does not track individuals, it is likely that some displaced farmers and members of rural households gained new jobs in the NTAEs. In 1993 there were 608,343 jobs in horticulture, 680,671 jobs in industrial food production, and 472,082 jobs in fruit production. Approximately 37 percent of the labor force engaged in horticulture, 18 percent of the labor force in industrial food production and 17 percent of the labor force in fruits are women³⁹. Estimates for 2000, place total employment in these three sectors at approximately 1,847,680, representing an approximate increase of 329,555 jobs since 1994, or 20 percent of pre-NAFTA employment in the sector.

Although horticulture jobs for women decreased by 23,686, women's employment in the fruit sector increased by 37,181 jobs and in industrial food production by 259,626 jobs. Men have have lost approximately 136,767 fruit production jobs over the NAFTA period, but they have gained 103,231 jobs in horticulture and approximately 89,970 in industrial food production. Women have gained 83 percent of the job that have been created in NTAEs.

However, the new jobs that women have gained have been highly sex-segregated: men typically assume the tasks of supervision, transportation, storage, and operate machinery, while women concentrate disproportionately in propagating, cleaning, sorting, quality control, and packaging. In general, work in the agro-industrial sector is paid by the piece, not per work period, meaning that workers tend to work the necessary hours to fill their quota. Although men and women in the same job category earn the same amount, in traditionally feminized activities, women receive payments that are between 25-30 percent lower than those of men⁴⁰.

Table 7 provides estimates of the breakdown of employment in fruit and vegetable industry. The INEGI employment data and the agricultural data reveal similar results. Over the decade of the 1990s employment for women workers in this sector fell by 72,300 jobs while employment for men rose by 79,100 jobs. The total number of producers in this sector also declined by 141,200 - the majority of these losses were male producers.

Male employment increased most post NAFTA. Although the data is somewhat erratic, the majority of the decline in female employment in this sector took place prior to NAFTA. Thereafter, women's employment has actually risen.

Table 7. Employment in Fruit and Vegetable Production (thousands of people)⁴¹

PRODUCERS	1991	1993	1995	1997	2000	Change 1991-2000
TOTAL						
Total	520.8	535.7	336.6	341.4	379.7	-141.2
For Household Consumption	16	36	14.2	18	17.8	1.7
For Sale	504.8	499.7	322.4	323.4	361.9	-142.9
MEN						
Total	504.4	520.5	323	332.8	366.7	-137.7
For Household Consumption	15.3	34.1	13.4	17.1	17.1	1.8
For Sale	489.1	486.4	309.5	315.7	349.6	-139.6
WOMEN						
Total	17	11.4	12.2	8.4	16.7	-0.3
For Household Consumption	0.4	0	0.4	1	1.7	1.3
For Sale	16.6	11.4	11.8	7.5	15	-1.6
WORKERS	1991	1993	1995	1997	2000	
TOTAL						
Production For Sale	1053.4	1063.6	824.8	1269	1060.1	6.8
MEN						
Production For Sale	717.8	822.3	632.5	489.2	796.9	79.1
WOMEN						
Production For Sale	335.5	241.3	192.3	779.8	263.2	-72.3

Source: Own calculations based on special tabulations of agricultural module of the National Employment Survey, INEGI

Effects of NAFTA on Mexico's Rural Sector

“Prices have been falling ever since we joined NAFTA, and the best we can do is make enough money to eat poorly,” *Jesus Godinez, a day worker from Hidalgo who cultivates corn, alfalfa and beans.* Source: Case, Brendan “NAFTA and Globalization is Killing Mexico’s Farmers” The Dallas Morning News, August 9, 2001.

For small farmers and subsistence producers, the effects of NAFTA are far-reaching. When they could no longer afford to cover the costs of production through crop sales, many farmers left the sector. Table 8 reveals that between 1991 and 2000 the total number of corn producers for household consumption declined by 670,000. The number of producers cultivating corn for sale declined by 343,000 over the same period. The total number of producers for household consumption and sale declined by a little over a million. Clearly, the majority of those affected directly are men, since only 11 percent of the total decline represents activities held by women.

Table 8. Change in Corn Producers 1991-2000 (thousands)

	Total	Men	Women
For Household Consumption	-670,000	-597,000	-73,000
Production for Sale 1/	-343,000	-309,000	-34,000
Total	-1,013,000	-906,000	-107,000

Source: Special Tabulation from Agricultural Module of National Employment Survey 1991 and 2000, INEGI

Although the numbers of men and women in agriculture appear to be declining, the total land area under basic grains has not declined, but has actually risen. Furthermore, while the total cultivated land area has risen, the total harvested area has actually declined. This indicates either that land is being left in fallow, or that the intensity of cultivation is decreasing. While it might be more environmentally sound to allow land to lay fallow or become reforested, in this case, idle land may be a harbinger of desperation more than of rational land use. Rural producers may be cultivating more marginal lands in an attempt to increase yields or use lands for other income-producing activities.

The wages agricultural workers earned in this sector fell dramatically between 1991-2003. As Table 9 illustrates, monthly income fell from 535 pesos a month in 1991 to 483 pesos a month in 2003 for production workers. For self-employed farmers, the fall in wages was even more dramatic. In 1991, self-employed farmers earned 1959 pesos per month, while in 2003, they earned only 228 pesos for the same amount of work. Conversely, employers' wages rose from 626 pesos in 1991 to 1165 pesos in 2003. The table demonstrates that while agricultural employers gained under NAFTA, subsistence farmers suffered a massive loss of income. Some farm leaders state that farmers who are still growing corn and beans subsist on an average of 35 cents per day⁴².

For women it was even worse. For example, poverty increased by 50 percent in the poorest, female headed households since the implementation of NAFTA. In contrast, poverty increased by two percent in the poorest male headed households⁴³.

Table 9. Wages and Hours Worked in Agriculture, 1991 and 2003, Constant 1994 Pesos

1991	FarmWorker	Employer	Self-Employed Farmer
Monthly Income	535	626	1959
Hours Worked Per Week	44	39	41
Wage per Hour	2.8	3.5	10.9
2003	Farm Worker	Employer	Self-Employed Farmer
Monthly Income	483	1165	228
Hours Worked per Week	40	36	41
Wage per Hour	2.8	7.6	1.3

Source: Special Tabulations from INEGI, ENE 1991 and ENE 2003 (first quarter)

Dire poverty reduced subsistence farm families' access to health care, education, and food. Many families can no longer afford to purchase books, uniforms and other materials that are required for children to attend school and are pulling their children—especially girl children out of school⁴⁴. Other families have had to sacrifice health care in order to pay their bills. Other families have sacrificed food –selling the corn that they would normally retain for their own meals to earn extra income.

Poverty increased in the urban areas as well. Table 10 below shows the wages for men and women with a primary education from 1990-2000. Although men's wages fell by 256 pesos between 1990-2000 whereas women's wages only fell by 76 pesos during the same period, women workers with a primary school education were already much poorer than men who had attained the same level of education. For example, men's wages fell to 871

pesos in 2002 which was still 237 peso more than women’s highest earnings of 634 pesos in 1996 and 339 pesos more than women’s earnings in 2000. This means that poor urban women started off poorer than men and got even poorer during the NAFTA time period. Under NAFTA, urban female-headed households where women only had a basic education fared dramatically worse than men over the same period. Women with basic education are segregated in jobs that pay far less than men with a basic education, indicating that it will be very difficult for these women to escape poverty. The difference in men and women’s wages in 2000 is more than two weeks wages for a woman with basic education, meaning that a woman must work 2 ½ weeks more than a man to make up the difference in wages.

Table 11. Monthly wages from 16 cities in pesos⁴⁵.

	1990	1994	1996	2000
Men with basic education	1027	997	701	871
Women with basic education	608	634	438	532

Poverty increased for both urban and rural households. To earn more money, many families sent wives, daughters, and sons to work. As Tables 11-12 illustrate, the numbers of homes with three or more income-earners almost doubled between 1992 and 2000⁴⁶. This means that in 2000, among the poorest families, more people had to be working just to earn the same amount as they earned in 1992 with fewer people working⁴⁷. This growth is most visible in the poorest households. Women who work outside the home still must maintain the home cooking, cleaning, caring for family members – once the paid work is over for the day. As a result of these dual roles, many Mexican women have little time to rest or pursue their own interests.

Table 11. Households And Their Quarterly Regular Monetary Income In Rural Populations, By Number Of Income Earners According To Household Deciles In 1992 a/

CATEGORY	TOTAL	DECILES												
		I	II	III	IV	V	VI	VII	VIII	IX	X			
TOTAL														
HOUSEHOLDS	100.0	10	10	10	10	10	10	10	10	10	10	10	10	10
INCOME	100.0	1.7	3.0	4.0	5.2	6.4	7.9	9.9	11.6	16.6	33.7			
NUMBER OF INCOME EARNERS														
1 INCOME EARNER														
HOUSEHOLDS	63.1	8.2	7.5	7.5	7.1	7.1	6.6	5.2	5.3	4.5	4.2			
INCOME	51.5	1.3	2.3	3.1	3.7	4.6	5.1	4.9	5.7	7.2	13.6			
2 INCOME EARNERS														
HOUSEHOLDS	23.5	1.5	2.1	2.2	2.4	2.2	2.1	3.1	3.0	2.7	2.2			
INCOME	25.6	0.3	0.6	0.8	1.1	1.4	1.7	3.1	3.6	4.4	8.5			
3 OR MORE INCOME EARNERS														
HOUSEHOLDS	13.4	0.3	0.4	0.3	0.6	0.7	1.3	1.6	1.7	2.8	3.6			
INCOME	22.9	0.1	0.1	0.1	0.3	0.4	1.1	1.8	2.3	5.0	11.6			

Source: National Institute Of Statistics, Geography, And Computing, Engh, 1992

a/ Households in areas of less than 2500 inhabitants are arranged in deciles according to their regular monetary quarterly income. Households with zero income are not included.

Table 12. Households And Their Regular Quarterly Monetary Income In Rural Populations, By Number Of Income Earners According To Household Deciles In 2000, Percentage Composition a/

CATEGORY	TOTAL	DECILES													
		I	II	III	IV	V	VI	VII	VIII	IX	X				
TOTAL															
HOUSEHOLDS	100.0	10	10	10	10	10	10	10	10	10	10	10	10	10	10
INCOME	100.0	1.4	2.8	4.0	5.0	6.2	7.4	9.1	11.6	16.1	36.4				
NUMBER OF INCOME EARNERS															
1															
HOUSEHOLDS	36.7	6.2	4.2	4.4	4.0	2.9	3.1	3.6	2.9	2.8	2.6	2.9	2.8	2.8	2.6
INCOME	32.3	0.8	1.2	1.8	2.0	1.8	2.3	3.3	3.4	4.5	11.3				
2															
HOUSEHOLDS	30.7	2.5	3.4	2.9	3.1	3.1	3.3	3.2	3.4	2.8	3.0	3.4	2.8	3.0	3.0
INCOME	31.2	0.4	1.0	1.2	1.6	1.9	2.4	2.9	3.9	4.4	11.5				
3 or MORE															
HOUSEHOLDS	32.7	1.3	2.4	2.6	3.0	4.0	3.7	3.2	3.7	4.5	4.4	3.7	4.5	4.4	4.4
INCOME	36.5	0.2	0.7	1.0	1.5	2.5	2.7	2.8	4.3	7.2	13.5	4.3	7.2	13.5	5

a/ Households in areas of less than 2500 inhabitants are arranged in deciles according to their regular quarterly monetary income. Households with zero income are not included.

Source: National Institute of Statistics, Geography and Computing. Enigh 2000.

As poverty increased, rural families began to diversify their sources of income. As noted before, it may take as many as three family members today to earn what one family member was able to bring in prior to NAFTA. Many women have begun working in the informal sector to supplement their family's household income. Women work in the informal economy - selling food, crafts or other products in local open-air markets or on street curbs. These jobs are not counted in the formal economy and are unprotected by labor laws. Most women in the informal sector work long hours and earn very little from their businesses. Women take these jobs when they cannot find work in the formal sector or when they need to combine work with child-care. There has been an increase in the informal sector in Mexico.

One example of how the informal economy has increased is that there are more people selling food from the roadside than in the past. Between 1992 and 1996, the National Survey of Micro-Businesses confirms that micro-businesses grew at an annual rate of 4.8 percent.⁴⁸ As the informal economy grows, women selling food or other items often earn just enough to cover their costs and add a few pesos to the family's household budget. However, as more women enter the informal market, they often inadvertently crowd one another out – meaning that to increase sales, women must either cut into their own meager profits or lose sales to someone who is selling the same item for less.

Although more family members were working, many families still found it difficult to meet their basic needs. Between 1992 and 2000, the consumption patterns for households changed substantially throughout the country and particularly in rural areas. The percentage of expenditures in food decreased due to increased spending for housing, utilities, education, recreation, transportation and personal care. The increase in education expenditures may indicate the importance which families place on education as a means to a better life for their children. Parents may curtail other expenses in order to keep children in school or to seek training themselves. However, when the costs of education increase, families often first pull girls out of school.

There was a growth in food sales from street stands which may indicate that urban consumers switched from more expensive food to purchases of cheaper food at stalls as a way of reducing household expenses. The percent of household budgets spent on food has declined over the NAFTA period, a fact that may be consistent with household's switching to cheaper food, or producing more for self-consumption. When households switch to cheaper foods, the caloric intake of women and girl children often falls disproportionately as households choose to allot male bread-winners and sons a greater proportion of food.

At the same time, expenditures on health and medical services and clothing decreased as a percentage of total expenditures. The decline in health expenditures may indicate that indigent families are waiting longer to seek medical treatment or are trying home or folk remedies before seeking medical attention. When families cut back on medical expenses, women, as the primary family caregivers, must often compensate by spending more time ministering to sick family members. Moreover, women are often the first ones to forgo medical treatment so that other family members can go to the doctor. Studies have found that when young children get sick, if the mother is unable to care for these children because of work commitments and existing time burdens, teenage girls and not boys are required to

increase their time providing care. As household income falls, women's unpaid work hours may increase to compensate for lower wage income.

Table 13 shows how expenditures have changed in urban and rural areas between 1992-2002. In both rural and urban areas, families have reduced the amount of money spent on food, health care, and clothing, while increasing the amount spent on education.

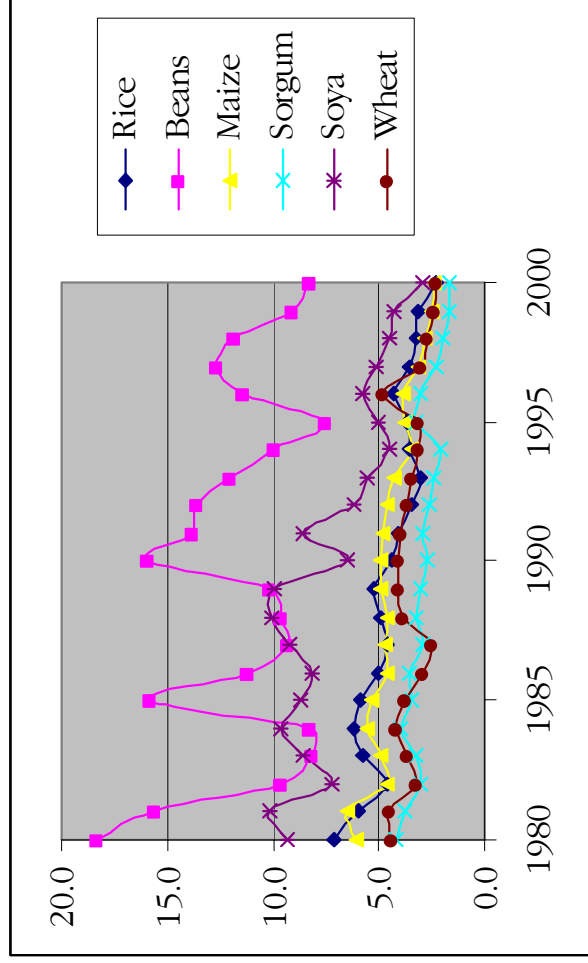
Table 13. Current Expenditures as a Percentage of Total Expenditures

	SIZE OF THE LOCALITY					
	2,500 INHABITANTS AND MORE			LESS THAN 2,500 INHABITANTS		
	1992	2000	2002	1992	2000	2002
Current Expenditures	100	100	100	100	100	100
Food and Beverages	34.2	28.6	29.6	45.8	41.2	38.6
Housing and housing services	8.1	8.5	10.1	5.1	6.6	7.0
Cleaning and household care	8.2	8.1	6.9	9.4	9.0	7.6
Health care and medical services	3.4	3.4	3.0	4.5	5.2	3.8
Education and training	13.9	18.4	15.8	6.5	8.1	9.5
Clothes and shoes	7.8	5.7	6.0	8.2	6.5	6.5
Transport	16.6	18.2	19.1	13.3	14.3	17.7
Personal care	7.7	9.1	9.5	7.1	9.1	9.3

Source: INEGI, ENIGH 1992, 2000 y 2002.

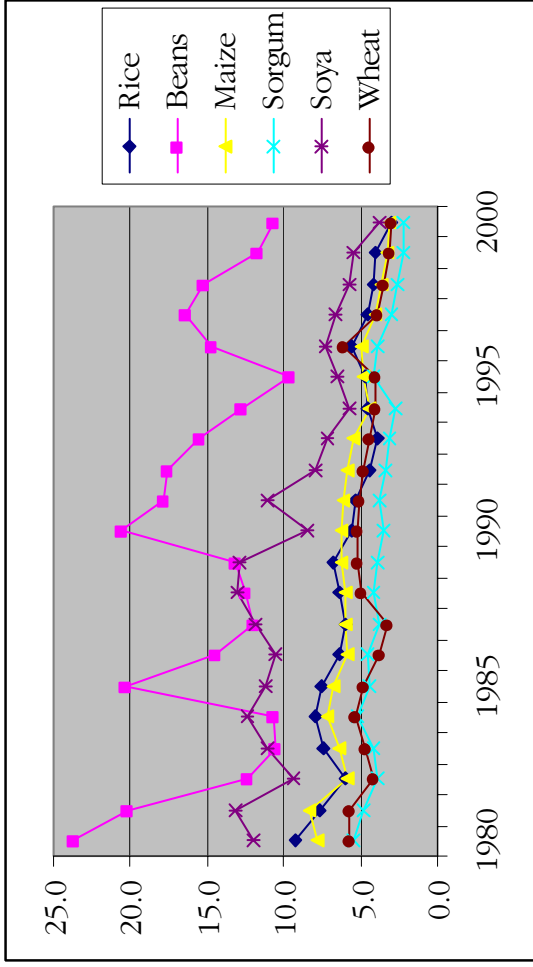
Despite cutbacks in household spending, families quality of life fell. Poor rural families struggled to maintain their standard of living. Figures 2 and 3 compare the number of baskets of basic goods that one ton of basic grains can purchase between 1980 and 1990 with the same number of baskets that can be purchased between 1991 and 2000. For example, the table shows that small and subsistence farmers need more money or must work more hours to maintain the same or similar standard of living that they had in 1980. As the table shows, in 1980, one metric ton of corn could purchase 6.1 baskets of basic goods. By 2000, one ton of corn would only purchase 2.4 baskets of basic goods⁴⁹. Poor farmer's standard of living fell between 1980-2000.

Figure 2 Baskets of Basic Goods That Can Be Purchased at Given Production Levels 1980-1990 (Cost of Urban Basic Basket of goods)



Notes: All agricultural products are for grains and not seeds.

Figure 3 Baskets of Basic Goods That Can Be Purchased at Given Production Levels 1980-1990 (Cost of Rural Basic Basket of goods)



Note: The value of the Market Basket of Goods and Services is based on the updated value of that basket in August 2000.
 Source: SAGARPA-Siacon and Technical Committee to Measure Poverty, Measuring Poverty. Methodological Variables and Preliminary Estimates. SEDESOL, Documentos de Investigación No. 1, Julio 2003

The distribution of poverty in both urban and rural areas is increasing. The poor are becoming poorer. By 2000, according to Hernandez Laos, 86 percent of the people living in the countryside were living in poverty. As Tables 14-15 shows, poverty rose in urban areas as well, particularly for female-headed households. The number of poor, female-headed households in both urban and rural areas rose from 10 percent to 15 percent between 1992-2000⁵⁰.

Table 14. Proportion of the Urban Population in Poverty 1992-2000, Percentages

	1992	1994	1996	1998	2000
Households	35.6	35.6	53.2	47.7	37.4
Individuals	44.0	43.6	61.9	55.8	43.8

Table 15. Gender Dimension of Poverty Nationally

	1992		1994		1996		1998		2000	
	Not Poor	Poor	Not Poor	Poor	Not Poor	Poor	Not Poor	Poor	Not Poor	Poor
Female Headed Households (percent)	16.7	10.5	16.8	12.5	19.4	14.1	19.8	15.8	20.7	15.6
Index of Economic Dependency	1.8	3.0	1.6	2.7	1.5	2.4	1.4	2.3	1.4	2.4

Notes: Poverty is defined as that income which fails to meet a basic basket of goods that includes expenditures for food, clothing, health, public transportation, housing and rental estimates. The basic basket includes primary and secondary education, school supplies and uniforms.

The Index of Economic Dependency: the average number of people who do not work for every wage earner. Based on ENIGH data published by INEGI in 1992,1994,1996,1998 y 2000

Source: F. Cortés, D. Hernández, M. E. Hernández, M. Székely y H. Vera, Evolución y características de la pobreza en México en la última década del siglo XX. Serie Documentos de investigación 2, SEDESOL, p. 128.

As Table 16 shows, the proportion of rural households in poverty increased from 56 percent in 1992 to 60.7 percent in 2000. Poverty also increased for individuals. In 1992, 65 percent of rural individuals were in poverty. By 2000, 69.9 percent of rural individuals were in poverty.

Table 16. Proportion of the Rural Population in Poverty 1992-2000, Percentages

	1992	1994	1996	1998	2000
Line 3, households /a	56.7	64.2	73.4	68.6	60.7
Line 3, individuals	65.0	72.0	80.8	74.9	69.9

For many Mexican producers, the income they could earn in the countryside was negligible. Many families decided that one or more members of the household should move to a Mexican city or to the United States to increase the household's income.

The Importance of Migration and Remittances in Mexico

NAFTA's impacts in the agricultural sector are clearly visible in the number of people arriving at the U.S. Mexico border waiting to enter the U.S. to find work and support the family left behind in Mexico.

Increasingly, migration is the safety valve that mitigates poverty in rural areas and provides much-needed cash in the form of remittances. In 2001, Mexican immigrants to the U.S. sent roughly \$9.9 billion to Mexico. Remittances are not only sent from abroad, however. Internal remittances generated in towns and cities are also sent to rural areas to support family members. Approximately 40 percent of the total rural income⁵¹ is attributed to remittances from migrants in urban areas of Mexico as well as immigrants in the United States.

Between 1990 and 2000, census data in the U.S. reveals that the number of Mexican born residents has risen by more than 80 percent. Currently, there are about 20.6 million Mexican-born residents living in the United States. Many are recently displaced farmers from rural areas.⁵² Table 17 reports the educational level of working age non-student Mexican-born U.S. residents. From 1950 to 2002 the proportion of Mexican migrants with less than a high school education has increased. This is consistent with an increase in the proportion of rural residents with limited access to educational opportunities migrating northwards.

Table 17. Education Level and Year of Arrival (percentage of non-student workers 16 and over)

	Less Than High School	High School	Some College	College	Advanced	Total
1950-69	44.2	29.7	15.7	6.5	3.8	100.0
1970-79	56.9	24.0	13.6	4.7	0.8	100.0
1980-89	56.3	28.6	10.2	3.4	1.5	100.0
1990-99	58.6	28.1	8.6	3.7	1.1	100.0
2000-02	60.3	26.5	8.0	3.8	1.4	100.0

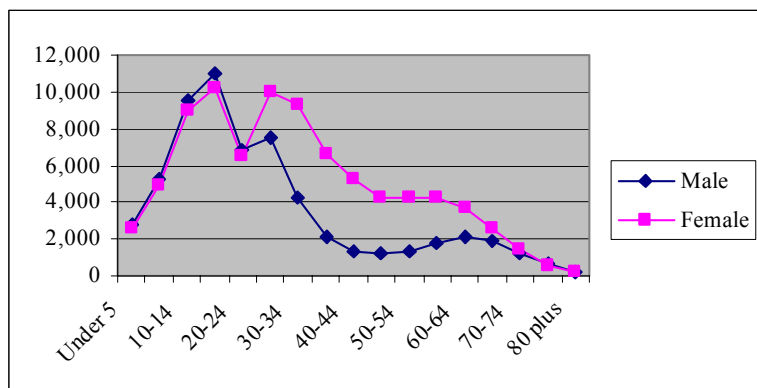
Source: Author's calculations from the CEPR extractions of the Current Population Survey—Outgoing Rotation Group

Many migrants are undocumented. To make this journey into the United States without documents is a difficult and costly endeavor. In 2000, there were between 388 and 430 known migrant deaths along the US-Mexico border⁵³. Between 1995 and 2000 there were over 1,400 known migrant deaths. Although border crossings declined temporarily after September 11, today nearly 500,000 Mexicans enter the United States annually; roughly 60 percent of them are undocumented⁵⁴.

The majority of recent undocumented find work in low-skilled, low paid and precarious service, agriculture, and construction jobs^{55, 56}. Average wages for these occupations are low and benefits rare⁵⁷.

Like most processes, migration affects men and women differently. The household dynamics between male and female family members play an important role in determining who migrates and when, under what circumstances and with what resources⁵⁸. Men and women may experience migration differently. Both men and women migrate from Mexico. In 1999, 58.4 percent of documented migrants admitted were women and 41.6 percent were men. In fact, women between the ages of 24 and 74 dominate the migration flows of documented immigrants (see Figure 4).

Figure 4. Documented Mexican Immigrants Admitted to the United States, Fiscal Year 1999



Source: Statistical Yearbook of the Immigration and Naturalization Service

While women may dominate the flows of documented immigrants, men tend to dominate the flows of undocumented immigrants (see Table 18). As the cost of undocumented migration rises and the border becomes increasingly militarized, young men disproportionately assume the risk of crossing. Between 1992 and 2000, the percentage of female-headed households in rural areas of Mexico increased, growing from 9 percent to 15 percent of all heads of households⁵⁹. Moreover, the percentage of women who are employed and heads of households also grew. This is consistent with a pattern of male migration to urban areas or to the U.S.

Table 18. Characteristics of Migrant Cohorts Leaving Fifty Mexican Communities on a First Trip to the United States

Characteristics	1942-64	1965-1981	1982-1986	1987-1996
Percent female	15.1	30.2	27.2	37.4
Percent under age 15	16.9	22.2	15.2	13.1
Average age	20.4	19.6	21.1	22.4
Percent migrating with:				
Legal documents	65.3	25.9	18.5	17.3
Bracero contracts ⁶⁰	45.8	0	0	0
No documents	32.8	68.6	75.0	76.3
Fraudulent documents	1.1	4.3	5.4	5.1
Percent employed in:				
Skilled work	5.6	10.6	12.0	14.4
Unskilled work	11.9	30.7	35.7	35.1
Agricultural work	66.8	31.6	25.9	14.1
Not in labor force	7.4	14.6	13.0	22.4
Number of migrants	1,847	6,075	2,587	3,759

Source: Donato and Carter (1999) based on data collected in 50 communities. Within each community, 150-200 households were randomly selected and interviews between 1987 and 1996.

Once the migrant arrives at his/her destination, the next goals are to find work, a home, and to begin to send back money. Data from the Mexican Migration Project record that 60 percent of respondents report sending money home⁶¹.⁶² The median amount of monthly remittances ranges between US \$200-249.

In rural areas money transfers from urban areas or from abroad are an increasing portion of total income. In 1992, 10.4 percent of total monetary income comprised transfers. By 2002, this figure had risen to 19.4 percent of total monetary income⁶³. Transfers are a greater proportion of total income for the lower four income deciles than for the upper two income deciles⁶⁴. In other words, poorer households are much more dependent upon remittances than wealthy households.

Remittances are especially important for female-headed and female-maintained households. Remittances disproportionately accrue to female-headed households in Mexico. While approximately 19.6 percent of all households that do not receive remittances in Mexico are female headed, 43.5 percent of those receiving remittances are female-headed⁶⁵. Furthermore, households that report receiving remittances have a greater proportion of women. In 2000, national household survey data revealed that nationally households that report receiving remittances have 55.9 percent women and only 44.1 percent men⁶⁶.

The importance of these remittance flows for female-headed households underscores the importance analyzing the different impacts of migration on household formation, decision-making, investment and consumption in the sending communities⁶⁷. Certainly, a growing body of literature confirms that resources in the hands of women are more likely to be channeled towards household expenditures that secure the welfare and well-being of other family members⁶⁸. The welfare of households with migrants abroad may be better not just because of access to remittance income, but also because female-headed households may make different spending decisions which prioritize the well-being of other family members.

Remittances mitigate poverty and compensate for the lack of economic opportunity and the contraction of domestic agriculture in rural communities. Rural Mexican households with better access to non-agricultural employment and remittances are less likely to have total incomes below the poverty line⁶⁹. In contrast, those households that do not have access to remittances or non-agricultural employment are more likely to be poor.

Remittances provide investment capital, allow for savings, permit other family members to continue their education, purchase medicine, and compensate for the absence of employment opportunities. The largest single reported use of remitted or saved funds was for health-care expenses for family members. NAFTA created an opportunity for U.S. health-care providers to partner with Mexican hospitals to offer health-care services. Increasing emphasis on cost recovery, the combination of state and private insurance, and targeted income transfers has increased the cost of health-care to all users.⁷⁰ Certainly

between 1994 and 2000, the percentage share of health expenditures in each decile as a percent of total expenditures in each decile has risen for all deciles⁷¹(see Table 19).

Table 19. Household Expenditures on Health Care 1994 and 2000

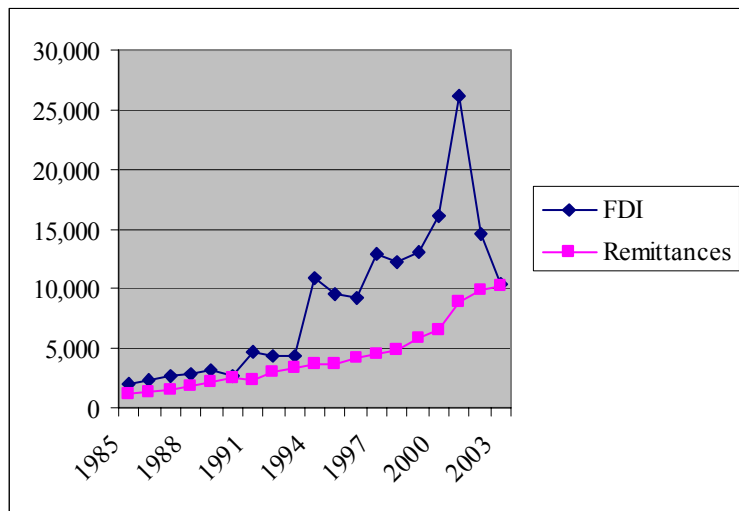
Income Decile 1994	Percentage Share of Health Expenditure in Each Income Decile as a Percent of		
	Total Expenditure of Each Decile	Total Health Expenditure of All Households	Total Health Expenditure of All Households (cumulative)
1	3.0	2.4	2.4
2	2.5	3.0	5.4
3	2.7	4.2	9.6
4	2.6	4.9	14.6
5	2.5	6.0	20.6
6	2.3	6.5	27.0
7	1.9	6.7	33.8
8	2.6	10.7	44.5
9	3.0	17.7	62.2
10	3.1	37.8	100.0
Total	2.7	100.0	

Income Decile 2000	Percentage Share of Health Expenditure in Each Income Decile as a Percent of		
	Total Expenditure of Each Decile	Total Health Expenditure of All Households	Total Health Expenditure of All Households (cumulative)
1	7.0	2.8	2.8
2	5.8	3.4	6.2
3	7.1	5.2	11.5
4	5.0	4.5	16.0
5	5.6	6.1	22.0
6	5.9	7.6	29.6
7	6.7	9.9	39.6
8	5.3	10.0	49.5
9	6.5	15.8	65.4
10	7.1	34.6	100.0
Total	6.4	100.0	

Source: Corbacho and Schwartz 2002, based on INEGI data

Money from abroad can also provide financial capital in communities that support investment and growth which are beneficial both for households with migrants and those without. Remittances have exceeded revenue from tourism since 1998. Currently, tourism garners US \$4.9 billion, while remittances in 2003 are likely to exceed US \$10 billion. Similarly, as Figure 5 reveals, remittances tracked foreign direct investment fairly closely until 1994, and have remained at approximately 50 percent of FDI over much of the late 1990s. Because of a downturn in the global economy, FDI in Mexico is declining, and remittances are likely to surpass FDI in the coming few years. In fact, remittances rose by 29 percent in the first half of 2003 to US \$6.3 billion, outstripping the US \$5.2 billion sent in foreign direct investment⁷².

Figure 5. Foreign Direct Investment and Remittances



Source: data from the Central Bank of Mexico and Orozco 2003

A study of a Mexican migrant village conducted by Adelman, Taylor and Vogel in 1988 estimated remittance multipliers from international migration to be equal to 1.78. That is for each US \$1 sent back in remittances an additional US \$1.78 was generated in village income. The additional income was created as the result of expenditures by households and individuals receiving remittances and demanding locally produced goods and services in the community of origin. The authors also found that remittances created new rural-urban growth linkages by increasing the demand for manufactured goods in Mexican cities. Another study estimated that remittances are responsible for almost 20 percent of the capital invested throughout urban Mexico⁷³. Within the ten Mexican states with the highest rate of migration to the United States, almost one third of the capital invested in micro-enterprises derived from remittances.

Remittances are not only money and goods sent from migrants abroad to individuals or households in their communities of origin. Increasingly, remittances are being channeled through remittance networks and home-town associations to leverage development in communities: pave roads, provide potable water, and ensure that outlying communities have access to telephones and communications infrastructure⁷⁴. There are currently more than 600 Mexican hometown associations and clubs registered in 30 cities in the United States each sending back collective remittances to communities of origin (Bada 2003). The amounts of money sent back through hometown associations (HTAs) is significant. For example, HTAs from the Federation of Michoacano Clubs in Illinois have sent back more than \$1 million to support public works in their communities of origin. These collective remittances are proving to be increasingly important for receiving communities in the states of Guerrero, Jalisco, Zacatecas, Guanajuato, Oaxaca, and Michoacán - primarily because they compensate for the lack of public sector investment in basic infrastructure in underserved areas. Although rural areas have always been underserved and received the least investment in basic social infrastructure in Mexico, social expenditures for basic infrastructure have decreased over the NAFTA period⁷⁵. The percent of GDP allocated to social expenditure programs, including basic social infrastructure, decreased slightly from 1 percent of GDP in 1994 to 0.9 percent of GDP in 2000. Over the same period basic social infrastructure as a percentage of total social

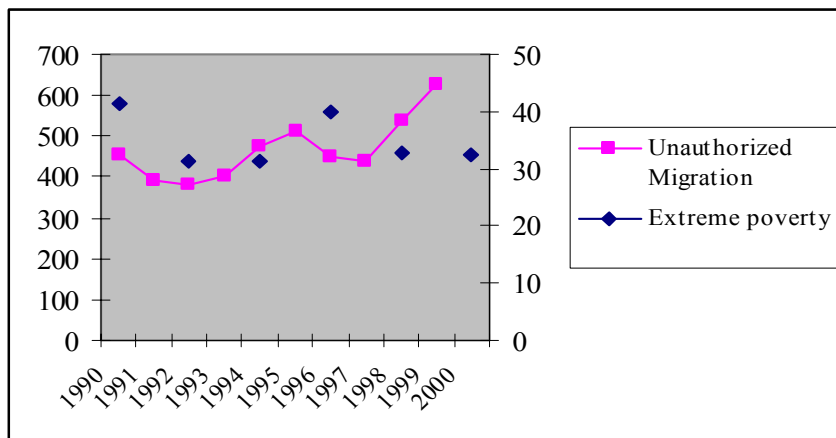
welfare, social assistance and anti-poverty programs declined from 47.1 percent of the total to around 35.5 percent of the total.

The Mexican government is aware of the importance of migrants abroad (Goldring 2001, 1998) and the individual and collective remittances that they send, and has established the Program for the Attention of Mexican Communities Abroad which aims to reincorporate Mexican nationals living abroad into economic and political life. This program has instituted two-for-one and three-for-one programs to match funds sent by hometown associations for public infrastructure projects in Mexico. The state of Zacatecas led the field with their three-for-one program in 1997, managing a budget of approximately US \$300,000. One year later, the Zacatecas state government was managing nearly US \$5 million to support 93 projects in 27 municipalities (Bada 2003).

Clearly both individual and collective remittances have the potential to mitigate poverty and stimulate investment. Individual remittances provide income directly and may increase consumption in receiving households. Individual remittances can also indirectly alleviate cash flow problems and create new sources of local income for investment. Collective remittances can leverage development and growth directly by laying down critical infrastructure and improving access to markets, or indirectly by securing better opportunities for investment in human capital.

Although it is difficult to say much about the causality without a more complete analysis, it is interesting to note that unauthorized migration from Mexico to the United States broadly tracks extreme poverty from 1990 to 2001 (see Figure 6). That is to say that as poverty increases, migration increases as well. This highlights one potential push factor which displaces workers and expels individuals from their communities and homes in search of economic opportunity in precarious and unstable secondary labor markets in the United States.

Figure 6. Unauthorized Migration and Extreme Poverty in Mexico



Source: “Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990-2000,” Immigration and Naturalization Service 2000; Hernandez Laos, E. (2003) ‘Distribución del Ingreso y Pobreza,’ in de la Garza, E. and C. Salas (eds) *La Situación del Trabajo en México, 2003*, DF: Instituto de Estudios del Trabajo.

Figures 7 and 8 plot undocumented migration against the price of beans and corn. The co-movements in these two variables indicate that as the price of both beans and corn falls, undocumented migration tends to rise. Migration is strongly correlated to the prices that producers received for beans and corn.

Figure 7.

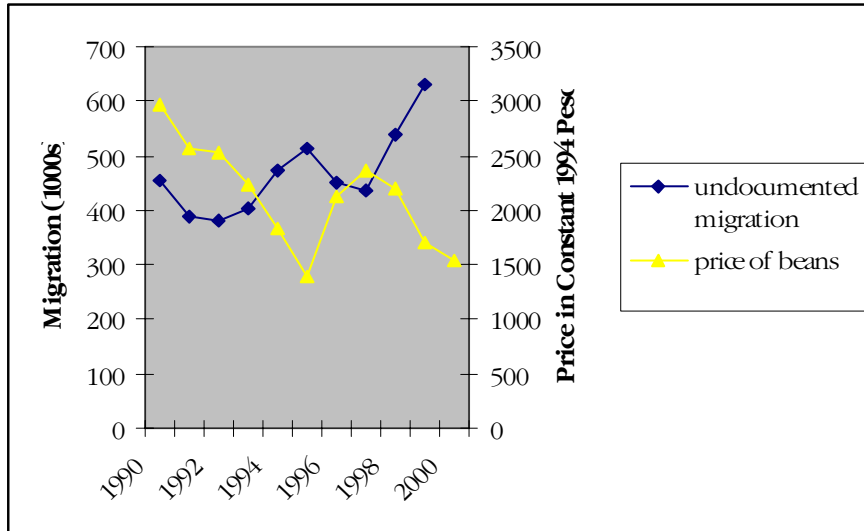
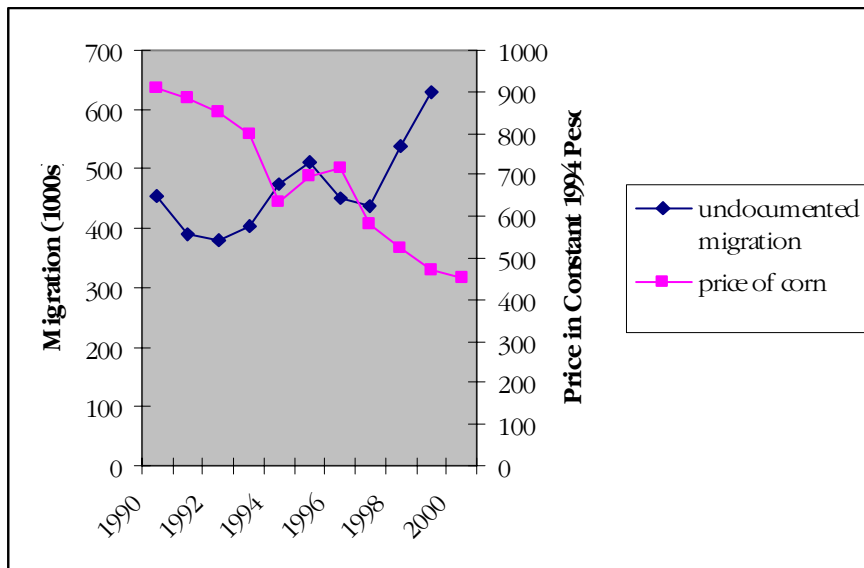


Figure 8.



Impact of NAFTA on U.S. Farms

While the evidence suggests that U.S. farmers have benefited from NAFTA, in fact, NAFTA trade rules have disproportionately benefited large agricultural corporations rather than family farmers. So, while NAFTA policies led to cuts in domestic programs such as price supports that benefit independent farmers, export subsidies for large corporate farms remained intact. Proponents of the 1996 Freedom to Farm Act argued that export growth would eliminate the need for price supports for small farmers. Instead, independent

farmers in the U.S. found themselves without price supports and having to compete with large agricultural corporations that still benefited from export subsidies.

As a result of these policies, nearly 33,000 farms with sales under \$100,000 a year failed between 1993-2000⁷⁶. This decline is six times steeper than the five-year period before NAFTA (1989-1993)⁷⁷. During this same time period, profits for agricultural corporations rose steeply. For example, ConAgra's profits grew 189 percent from US \$143 million in 1993 to US \$413 million in 2000 and Archer Daniel Midland's profits nearly tripled from US \$110 million in 1993 to US \$301 million in 2000. In 2002, a revised Farm Bill was passed through Congress, which provides export credits to agricultural corporate farms. More than 60 percent of the subsidies written into the 2002 farm bill will go to the top 10 percent of agricultural corporations⁷⁸.

Many small family farms failed from 1993-2000 while thousands of other family farmers struggled to maintain their farms. Historically, women farmers have played a number of important roles on farms including work in the fields, tending animals, book-keeping, and household maintenance. Between 1980-2001, the number of women working off the farm nearly doubled. In 1980, 31 percent of U.S. farm women worked off of the farm, while in 2001, 62 percent of farm women had a paid job in addition to their farm work⁷⁹. The majority of women surveyed noted that they needed the income to pay for farm household expenses and to provide healthcare benefits and other benefits (pension, life insurance, etc.) for their families. U.S. farm women are working long hours each day combining paid work with their farm and family responsibilities as part of a family strategy to retain the family's farm.

Winners and Losers: Job Gains and Losses over the NAFTA Period 1995-2000

Since NAFTA was implemented, Mexico's exports (not including the *maquila* industry) have grown from US \$60.9 billion in 1994 to US \$158.4 billion in 2001⁸⁰. In that same time period, imports more than doubled from US \$79.3 billion dollars to US \$168.4 billion dollars annually⁸¹. Today, Mexico has a significant trade surplus with the United States⁸². But at the same time, Mexico has developed a large and growing trade deficit with the rest of the world. In fact, Mexico's net imports from the rest of the world substantially exceed its net exports to the United States. While unemployment has declined, many Mexicans have immigrated to the United States in search of better job options. Employment in the low-income activities in Mexico has grown rapidly. This may be due to women or other family members entering the workforce as part of a family's survival strategies.

Tables 20-21 shows that since NAFTA took effect, approximately 5.3 million new jobs were created in both formal and informal employment in Mexico.⁸³ Approximately 36 percent of these jobs were created in the informal sector where workers typically receive no benefits, are not entitled to vacation pay or overtime, and typically have no contract protections (Salas 2003). The remaining jobs were created in the formal sector, primarily manufacturing jobs. Women for the most part went to *maquilas*. While these jobs may provide increased autonomy for women, many of these jobs are low-waged, precarious, and exist in difficult working conditions. Simply stated, these types of jobs do not enable women to pull themselves and their families out of poverty. Women work all day in the

maquilas and then come home to care for the house and their children – they work a total of 18 hours a day.

It should also be noted that many of the new jobs created in the *maquilas* are now going to Asia. For example, an assembly line worker earns US 50-80 cents per hour in China. Her counterpart in Mexico gets US \$2.50 to \$3.50.

The jobs created by NAFTA are not long-term, stable jobs.

Of these new jobs, 2.8 million employed men and 2.5 million employed women. Despite this job growth, however, the population is growing more rapidly. The Mexican labor force (aged 15 to 64) has grown at an annualized rate of 1.25⁸⁴ million persons per year or by 7.5 million between 1995 and 2000. Mexico now must create 1.2 million to 1.5 million jobs each year to keep the economy from shrinking⁸⁵. Consequently, there was a net deficit of jobs of 2.2 million. These people either retreated from the labor force, became unemployed, or out-migrated. Estimated growth of the Mexican labor force working in the United States—including documented and undocumented workers - was 1.1 million over the NAFTA period. Estimating that approximately 0.2 million Mexicans found employment in Canada, Australia and Europe, we can arrive at an estimated 900,000 job deficit over the NAFTA period.

Table 20. Estimates of Job Increments and Losses in Mexico: 1995-2000

Sector	Job Increment	Job Decline
Agriculture		1,280,795
Extractive Industry	14,364	
Transport and Communications	275,329	
Construction	749,114	
Electricity	108,694	
Manufacturing: domestic production and non-maquila	1,727,108	
Manufacturing: Maquila	699,873	
Trade	275,329	
Services ⁸⁶ : Formal	1,455,899	
Services: Informal ⁸⁷	928,461	
Other		
Total	6,563,094	1,280,795
Net increment	5,282,299	

Table 21. Estimates of Job Increments and Losses in Mexico, by Gender: 1995-2000

Sector	Job Increment		Job Decline	
	Men	Women	Men	Women
Agriculture: basic grains and domestic production			1,035,968	244,827
Extractive Industry	14,815			451
Transport and Communications	241,295	34,034		
Construction	733,365	15,749		
Electricity	89,633	19,061		
Manufacturing: Domestic Production and non-maquila	821,868	905,240		
Manufacturing: Maquila	313,543	386,330		
Trade	449,922	154,330		
Services: Formal	798,291	692,168		
Services: Informal	402,418	525,517		
Other				
Total	3,865,150	2,732,429	1,035,968	245,278
Net increments	2,829,182	2,487,151		

Source: Salas 2003 from INEGI data; and data provided by the Secretaría del Trabajo y Previsión Social

Table 22 shows the numbers of female and male corn producers whose jobs were lost between 1991-2000.

Table 22. Corn Producers and Workers (in thousands)

Producers	1991	1993	1995	1997	2000	Change 1991-2000
For self consumption	2534	2883	2273	2113	1864	-670
For market sale	1198	1131	1196	1369	856	-343
Total	3732	4014	3468	3482	2720	-1013
	Male					
	1991	1993	1995	1997	2000	
For self consumption	2413	2728	2152	1997	1816	-597
For market sale	1150	1100	1144	1307	841	-309
Total	3563	3828	3296	3304	2658	-906
	Female					
	1991	1993	1995	1997	2000	
For self consumption	121	155	120	116	48	-73
For market sale	48	31	51	62	14	-34
Total	169	186	172	178	62	-107
Workers	1991	1993	1995	1997	2000	-361
Total	2857	3029	3407	3556	2495	-361

Source: Author's calculations with data from Módulo Agropecuario, Encuesta Nacional de Empleo, INEGI

FTAA Forecasting: What will be the Impact of Further Integration on the Rural Poor in Mexico?

Given the documented effects of NAFTA's free trade policies on small and subsistence farmers, what will further trade liberalization via the FTAA mean for Mexico's agricultural sector? Where can Mexican producers gain from agricultural trade? Which sectors might be harmed?

The FTAA is a hemispheric-wide trade agreement between 34 nations in the Western Hemisphere (Cuba is not part of the negotiations). The FTAA is modeled on NAFTA as well as provisions within the WTO. The goal of the agreement is to develop a free trade zone within the hemisphere. The FTAA is scheduled to be completed by 2004 and implemented in 2005. The FTAA would have little impact in the short run according to Economic Research Services (ERS, 1998). A lesson learned from the implementation of NAFTA, is that trade in agriculture, with a short timeline for domestic adjustment to competition, can be very disruptive of the living and earning conditions of agricultural laborers, aside from the fact that trade opening has removed an important share of employment from agricultural activities.

It is important to note that as the FTAA takes force, Mexican farmers will still be grappling with tariff liberalization of key products that were negotiated under NAFTA. In 2008, agricultural tariffs on products like maize and beans will be lifted.

In January 2003, the U.S. and Mexico reached an agreement to ease trade in chicken parts. Under that accord, Mexico imposed a safeguard on imports of chicken legs and thighs from the United States and set tariffs at 98.8 percent on those parts rather than eliminating them as they were scheduled to do early this year⁸⁸. The accord was reached because Mexico officials stated that the influx of cheaply imported chicken parts would devastate Mexico's poultry sector. However, this tariff may be lifted in the FTAA negotiations.

Under the FTAA, Mexico's agriculture sector will face two primary challenges. Mexican farmers will have to compete with other Latin American and Caribbean countries that will have access to the U.S. market. Another challenge will be competition between other Latin American and Caribbean countries for a share of intra-regional trade. But at the same time, the trends already unleashed by trade opening in general and NAFTA in particular will be still operating. These new challenges are taking place as Mexican farmers are still struggling to adjust to the NAFTA economic and trade policies.

Overall, the context under which FTAA is being negotiated is marked by an atmosphere that was reflected at the WTO Cancun meetings: one of profound concern about the inequalities in market access and the right to maintain subsidies, and a general preoccupation with the impact of trade upon the poor.

This section examines the current status of agricultural trade in the Continent, with special reference to Mexico's share of continental trade, and estimates the employment losses in agriculture over the NAFTA period.

The estimates are based on three possible scenarios:

1. **A best case scenario** - this assumes that job losses will be confined to the corn sector, but that a moderate growth in fruit and vegetable sectors is likely that will be equivalent to the job growth rate between 1997-2000;
2. **An intermediate case scenario** - this assumes that only corn producers would be negatively effected as a result of increased U.S. imports and that no job growth is experienced in other agricultural sectors; and,
3. **A worst case scenario** - this assumes that corn producers will lose their jobs at the same rate as job losses incurred over the past decade, and that fruit and vegetable producers will face increased competition from other Latin American countries. The increased competition in fruits and vegetables is assumed to be small, however, because of the structure of transportation costs in this sector. Transportation and refrigeration costs for vegetables increase with distance. Mexican's long growing season and proximity to the United States confer a comparative advantage on Mexican producers of horticultural and fruit products.

Intra-regional trade in Latin America is significant. The trade data reveals that: 25 percent of all U.S. agricultural exports go to Latin America, but that Latin America generates 45 percent of the region's total agricultural imports. The U.S. dominates NAFTA's agricultural trade. The U.S. producers sell 66 percent of all agricultural imports of Canada and Mexico. Exports from the U.S. account for 40 percent of agricultural imports of Central America and the Caribbean countries. For the Andean countries, U.S. exports account for 25 percent of those countries imports.

As shown in the Table 22, Mexico's share of Latin America agricultural exports to the U.S. is significant for a number of products, in particular for fruits and vegetables. In particular, 83 percent of U.S. imported fresh vegetables are from Mexico. Similarly, 66 percent of processed fruit and vegetable imports to the U.S. are from Mexico.

Table 23. US Imports From Latin America And Mexico (In Thousands of Dollars)

	LATIN AMERICA	MEXICO	%MEXICO IN US IMPORTS FROM LATIN AMERICA
PRODUCT			
BULK AGRICULTURAL TOTAL	1,940,230	229,503	12%
INTERMEDIATE AGRICULTURAL TOTAL	1,084,807	466,171	43%
CONSUMER-ORIENTED AGRICULTURAL TOTAL	9,514,401	4,592,336	48%
FRESH FRUIT.	3,714,452	662,390	18%
FRESH VEGETABLES	1,815,999	1,510,666	83%
PROCESSED FRUIT & VEGETABLES	674,857	448,549	66%
FRUIT & VEGETABLE JUICES.	374,626	69,731	19%
NURSERY PRODUCTS & CUT FLOWERS	495,344	43,235	9%
FOREST PRODUCTS (EXCL. PULP & PAPER)	1,907,033	297,214	16%
FISH & SEAFOOD PRODUCTS, EDIBLE	2,420,025	427,492	18%
AGRICULTURAL PRODUCT TOTAL	12,539,438	5,288,010	42%
AGRICULTURAL, FISH & FORESTRY TOTAL	16,866,495	6,012,715	36%

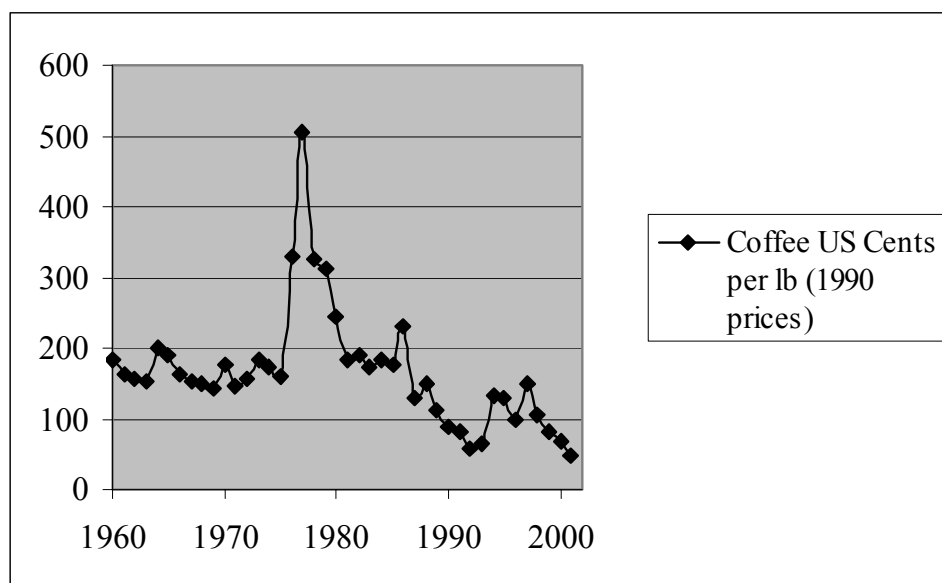
Source: U.S. Bureau Of The Census Trade Data, BICO Reports At www.fas.usda.gov

In principle, this would imply that Mexico could be vulnerable to trade diversion under FTAA as a result of competition from other Latin American countries. The important products exported from Mexico to the United States are fresh fruit and vegetables. These products are more costly to transport and refrigerate the greater the distance between producers and markets. Consequently, Mexico has a comparative advantage by virtue of its location. Another potential threat for trade diversion arises from flowers and fruit juices produced in the Andean countries and Brazil. The employment impacts of trade diversion are varied. The employment impact of greater competition in fruit and flower production is relatively small, since the share of workers that produce flowers in Mexico is less than 1 percent of the total number of agricultural workers, and approximately 14% of workers are absorbed in fruits and vegetables. Unfortunately, estimates are not available for the number of workers producing fruit juices for export, but to get a gross figure, one can assume that the number of export oriented fruit and vegetable producers is around 25 percent⁸⁹. Coffee producers, however, could face a strong competition from Brazilian

producers, which in the midst of the current crisis in worldwide coffee prices, could displace a substantial number of Mexican producers and workers.

The likelihood of further job losses in coffee production is particularly high. Certainly, prices for coffee on world markets have declined precipitously over the decade of the 1990s. Even prices for the comparatively more valuable Arabica coffee have declined from a high of over US \$5 in the late 1970s to around US 50 cents per pound in constant 1990 prices (see Figure 9). Many producers have been affected worldwide.

Figure 9. World Coffee Prices for Arabica and Other Milds, US Cents per Pound, 1990 prices



Source: Authors' calculations from data provided by the USDA and the United States Council of Economic Advisors.

According to Yunez (2002), domestic prices for agricultural products follow international prices closely, with minor deviations due to exchange rate movements. This means that the floor of domestic prices are international prices. Since most prices in agriculture are at or near international prices, only competition that comes from productivity and efficiency differences, and not from price differences, is relevant in any estimation of job losses or gains from FTAA.

Based on our assumptions, if we extrapolate job losses and job gains, based on the averages from the later stage of adjustment between 1997-2000, we arrive at the following forecasts:

- **Best Case Scenario** – There are losses in the corn sector but gains of approximately 40,000 new jobs in the fruit and vegetable sector. Net job loss would equal 70,000 per year. Over a five year time period that is a loss of 350,000 jobs.
- **Intermediate Scenario** – Only corn producers would be affected from increased U.S. imports. Net job loss would equal 110,000 per year. Over a five year time period that is a loss of 550,000 jobs.

- **Worst Case Scenario** – Corn producers as well as fruit and vegetable producers will be affected by increased competition from other Latin American countries. Net job loss would equal 150,000 per year. Over a five year time period that is a loss of 750,000 jobs.

Moreover, if increasing productivity and efficiency are the only means by which Mexico's agriculture sector can remain competitive, it is likely that there will be increased mechanization of agriculture and further concentration of land held by agribusinesses. Small and subsistence farmers may be forced to work longer hours to produce more on their land, and there is likely to be an increase in the use of pesticides and other chemical inputs by medium-sized and larger farmers.

Conclusion

As the 10 year anniversary of the start of NAFTA draws close, it is imperative that policymakers examine the impact of NAFTA on the poor to inform their policy choices as they seek to continue to negotiate the FTAA. Using the Women's Edge Coalitions' Trade Impact Review (TIR) framework to analyze how NAFTA affected subsistence and small producers, we can conclude that:

- **The Mexican economy grew overall, but so did the trade deficit.**
- **Small and subsistence farmers lost their livelihoods at an alarming rate.** Nearly 1.3 million agriculture jobs were lost in Mexico due to NAFTA. New jobs were created in the NTAEs but did not offset the jobs lost in the rural sector.
- **Poverty increased by five percent for female-headed, rural households.**
- **The very poor became poorer.** There has been a 50 percent decline in the basic goods (such as food, clothing, health, education and housing) that Mexicans could afford to buy between 1990 and 2000. For example, in 1990 one metric ton of corn could buy 6.3 baskets of basic goods and by 2000 that number was reduced to 3.1 in basic goods
- **There are different effects for women and men.** Mexican women and men faced different employment options and choices as a result of NAFTA's economic policies. Many women were pulled into jobs in services, Non Traditional Agricultural Exports (NTAEs) and in the *maquila* as part of their family's coping strategy as incomes fell and prices rose throughout the NAFTA period. While these jobs may provide increased autonomy for women, many of these jobs are low-waged, precarious, and in difficult working conditions. These jobs are not the type of jobs that will enable women to pull themselves and their families out of poverty in the long term.
- **Migration is increasingly the primary survival strategy for families—particularly in rural areas.** Although both men and women migrate, disproportionately more men migrate initially. While migrant remittances help to cushion poor families from greater indigence, migration is accompanied by financial and social costs as families are separated and communities fragmented.
- **If the current trends continue, the FTAA will bring increased competition to an already struggling agricultural sector in Mexico.** Estimates for further job losses for small farmers range from 350,000-750,000 over a five year time period.

The NAFTA case study also demonstrates that:

- **Policy matters.** Government interventions in Mexico's agriculture sector had protected small and subsistence producers from the vagaries of the market. To join NAFTA, Mexico had to revise certain laws and policies to conform to the free trade paradigm enshrined in NAFTA. The Mexican government needs the ability to create new laws that protect certain vulnerable populations within the country but under NAFTA, the government cannot create new regulations or standards that are considered to be non-tariff barriers to trade. Trade agreements should be crafted in such a way that countries can maintain a greater level of policy flexibility should their development policies or priorities change. In particular, countries should be allowed to use protections such as quotas, subsidies and price supports to alleviate poverty and cushion the impacts of trade policy on the poor. In 2003, the Vicente Fox Administration did negotiate a safeguard measure on chicken parts under NAFTA and provided \$10 billion in support for small farmers, nearly double what Mexico had budgeted for its farmers in 2003. These policy measures should be available under NAFTA and the FTAA.
- **Policy analysis matters.** Had the Mexican government had the time and staff resources to conduct a TIR, they could have anticipated what sectors might be adversely affected and developed additional resources to cushion the transition to a free trade, export-oriented model. It is important that policy analysis be objective and balanced.
- **Enforcement matters.** The Mexican government had a 15 year period of time to phase-out quota restrictions for corn but instead, they subjected corn to the international market within 30 months. The government did not enforce the quotas when they could have, which contributed to the "dumping" of corn from the U.S.
- **Disaggregating the effects is important.** Men and women face different opportunities and challenges that are created or amplified by trade agreements. To produce the type of trade policies that will benefit the greatest majority of citizens, impact assessments should disaggregate by sex, and include in the analysis other factors such as race, ethnicity, indigenous group, and geographic location to ascertain what policies will best alleviate poverty and what policies may unwittingly exacerbate it?

Policy Recommendations

Overarching Policy Recommendations

1. Conduct the Trade Impact Review Prior to Completing the FTAA.

The U.S. and Mexican governments should conduct a trade impact review on how accession to the FTAA will affect poor women and men in their countries prior to finishing the FTAA.

2. Change Trade Agreements to reflect results of impact reviews.

Once the impact assessments are completed, governments should use the findings to modify their trade policy commitments, develop complementary programs or reject the trade pact if it is too harmful to the poor.

3. Revise development assistance programs accordingly.

Similarly, the U.S. should revise its development assistance programs based on the results of these assessments –targeting programs to meet the needs of those displaced

by new trade pacts. Mexico should use the results to develop appropriate domestic policies for potentially displaced workers.

4. Provide policy flexibility for governments.

Governments need policy flexibility in order to guide the economic and social development of a nation. FTAA countries should ensure that the trade agreement allows sufficient policy flexibility so that governments can change direction or craft innovative policies and programs without fear that they will be subject to dispute-settlement measures or might have to pay restitution to other governments.

5. Collect disaggregated data and statistics.

In order to examine how trade affects women and men differently, it is important to collect data that disaggregates by sex. The U.S. should collect disaggregated statistics for its domestic analysis and support the collection efforts of Mexico and other FTAA countries.

Economic Policy Recommendations

- 1. Protections for small farmers.** The U.S. and Mexico should both seek to protect small farmers from the negative effects of free trade in agriculture. Countries should pursue a variety of mechanisms such as renegotiating NAFTA's agriculture chapter to increase subsidies to Mexican producers of basic grains. For the FTAA, countries should be able to invoke special safeguard mechanisms when faced with surges of cheaply imported agricultural products; and an exemption of small farmers who farm under 5+ hectares of land or earn below \$50,000 in the U.S. from FTAA agriculture terms. Governments should be able to exempt basic staple foods from agriculture negotiations.
- 2. Take into account the needs of female-headed rural households.** Government agricultural programs should ensure that the particular needs of female-headed rural households are taken into account. For example, extension services should ensure that funds flow to male and female-headed households. Government programs to transition farmers to more lucrative cash crops should take into account women's paid and unpaid workloads and develop markets for cash crops that women can grow while caring for their families. For example, green beans are a crop grown in Kenya that women can cultivate in family gardens and which is a highly valued export.
- 3. Develop training programs for displaced workers.** Governments should train displaced workers to cultivate new lucrative crops as well as train them for new, highly paid jobs in burgeoning labor markets. Trainings should take into account women's time constraints and be organized in a way that both men and women can take advantage of the training programs.
- 4. International Trade Adjustment Assistance Program.** The United States should establish an International Trade Adjustment Assistance Program (ITAA) through the U.S. Agency for International Development (USAID). The ITAA would target development assistance funds to workers in developing countries who may be displaced due to trade agreements. The funds could provide education and retraining for displaced workers.
- 5. Migration of low-skilled workers.** Migration is an important coping strategy for many poor Mexican families. While migration is included in some discussions of services and investment, the U.S. needs to revisit its immigration policy to ensure that low and high-skilled immigrants are treated equally.

6. **Maintain or increase social safety nets.** Many small and subsistence producers saw their incomes fall at the same time that prices were rising for food, health care and education. Governments need to maintain or expand subsidies during times of economic transition. Governments should reject cost-recovery mechanisms that are levied on the very poor.
7. **Increase investments in infrastructure and training.** If small farmers are to switch to export crops from basic grains, they will need access to credit and investment. Governments should increase programs that provide job-training for displaced workers.
8. **Increase investments in education.** Education can serve as a path out of poverty for indigent rural households. Governments should increase their investments in basic and secondary education and develop programs to support poor women and men in achieving higher levels of education.
9. **Marketing of niche and fairly-traded products.** Governments should assist small farmers in marketing their products and in promoting fairly-traded products. Governments should procure coffee and other commodities which are fairly traded for government offices to increase the market share for these products and ensure a fair wage for some producers. The U.S. should target some of its development assistance toward promoting fairly traded products and marketing niche products to U.S. consumers and immigrant enclaves in the U.S.

ii This summary is based on research conducted by Carlos Salas for the Women's Edge Coalition. Salas, Carlos "Employment, Wages, and Income Distribution in Mexico Since NAFTA" Women's Edge Coalition background paper, (forthcoming) 2003.

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- ⁶⁰ The Bracero program derived from the Bracero Accord signed in 1942 which permitted Mexicans to migrate temporarily for agricultural employment in the United States.
- ⁶¹ Desipio, L. (2000) “Sending Money Home...For Now: remittances and Immigrant Adaptation in the United States”, Inter-American Dialogue and the Tomás Rivera Policy Institute, Washington, D.C.
- ⁶² For more information about the Mexican Migration Project, refer to http://www.nichd.nih.gov/about/cpr/dbs/res_mexican2.htm
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- ⁷⁹ ⁷⁹ Findeis, Jill L "Penn State Survey of U.S. Farm Women" Agricultural Outlook Forum 2002, February 21, 2002
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- ⁸² Salas, Carlos "Employment, Wages, and Income Distribution in Mexico Since NAFTA" Women's Edge Coalition background paper, (forthcoming) 2003
- ⁸³ This is the gross estimate of persons who are economically active. These jobs may be full or part time.
- ⁸⁴ Annualized growth of the labor force calculated from World Bank data reported in the world Development Report for 2000/2001.
- ⁸⁵ Borden, Tessie and Sergio Bustos "Crushed by NAFTA, Mexican Farmers Head North" The Arizona Republic, June 18, 2003.
- ⁸⁶ Services include Restaurants and Hotels, Personal Services, Domestic Services and the Sale of Food in the Street.
- ⁸⁷ Informal services comprises employment of all individuals selling items and food in the streets, plus individuals working in establishments of less than 5 employees without benefits.
- ⁸⁸ Nagel, John "Mexico to Seek Side Accords with U.S. on NAFTA Agriculture Trade, Officials Say." online
- ⁸⁹ Schwentesius and Gomex, 2003. This is based on the assumption that 25% of the total fruit and vegetable production goes for export.