

Farm & Rural Communities



Hired Farm Labor: Comparing the U.S. & Mexico

As unprecedented economic expansion continues in the U.S., employers face increased competitive pressures to obtain workers necessary for their businesses. In this competitive environment, U.S. farmers are holding their own, securing similar numbers of hired laborers as in previous years and able to provide wage increases that generally keep pace with the cost of living. However, U.S. farmers rely heavily on foreign-born workers, most of whom come from Mexico and many of whom lack legal authorization to work in the U.S. This phenomenon appears to be more prevalent than in the past and reflects wage differentials for farm labor between the U.S. and Mexico, as well as differences in employment prospects.

In contrast, Mexican agriculture has access to a sizable pool of native-born workers. Farmworkers in Mexico, as in the U.S., typically complement their employment in agriculture with nonfarm work. But unlike in the U.S., farmworkers are in relatively plentiful supply in Mexico and provide a stable, legal source of labor for agriculture. This will benefit Mexican farmers as they seek out new export markets. Differences in the availability of farm labor affects the economic health of agriculture in both Mexico and

the U.S., including the extent to which agricultural producers participate in international markets.

Characteristics of Hired Farm Labor

U.S. agriculture employed an average of 890,300 hired farmworkers in 2000, according to USDA's National Agricultural Statistics Service (NASS). The number of hired farmworkers fluctuates seasonally, from roughly 700,000 in January to 1.1 million in July. Semi-annual data suggest an upward trend in the numbers of hired farmworkers from 1996 to 1999, followed by a decrease in 2000.

In October 2000, the average wage for hired farmworkers in the U.S. was \$8.29 per hour. Wages for field and livestock workers were generally lower, averaging \$7.76 per hour. (The average wage for hired farmworkers does not reflect housing and food benefits that some farmworkers receive from their employers.) At the same time, the average wage outside agriculture was \$13.69 per hour and the Federal minimum wage was \$5.15 per hour. Like the total number of hired workers, the wage for hired farm labor fluctuates seasonally, but has tended to keep pace with the cost of living since 1996.

The relatively high agricultural wage rates in the U.S. attract foreign-born farmworkers, especially from Mexico. According to data from the Department of Labor's National Agricultural Workers Survey (NAWS), people born in Mexico made up 78 percent of all U.S. farmworkers in crop agriculture in fiscal year (FY) 1998, up from an annual average of 68 percent during FY's 1993-95. People born in Central America constituted an additional 3 percent of farmworkers in crop agriculture. NAWS data also show that 57 percent of Mexican-born farmworkers were undocumented (i.e., lacked legal immigration status) in FY 1998, compared with an average of 51 percent during FY's 1994-95. The figures are similar for all foreign-born farmworkers in U.S. crop agriculture—i.e., 57 percent were undocumented in FY 1998, up from an average of 50 percent during FY's 1994-95.

Off-farm employment provides an important supplement to agricultural earnings for both native and foreign-born farmworkers. During FY 1998, farmworkers in U.S. crop agriculture were employed for an average of 34 weeks in the U.S.—31 weeks in agriculture and 3 weeks in non-farm employment. An additional 8 weeks were spent in the U.S. not working, and 9 weeks were spent outside the country. U.S.-born farmworkers devoted a greater portion of the year to nonfarm employment, while the foreign-born, not surprisingly, spent a greater portion of the year abroad. Among foreign-born farmworkers, time spent abroad averaged 11 weeks in FY 1998, up from an average of 8 weeks during FY's 1993-94. Possible explanations for this shift include heightened enforcement of U.S. immigration restrictions; improved economic conditions abroad that lure foreign-born workers to jobs in their home countries; and the possibility that increased U.S. earnings, either from farm or nonfarm employment, allow foreign-born farmworkers to spend more time in their native countries.

In Mexico, agriculture employed about 2.3 million people above the age of 12 as hired laborers in 1998, according to the Mexican Secretariat of Labor and Social Provision's *Encuesta de Empleo* (Employment Survey). An additional 136,000 workers performed specialized tasks in agriculture, such as the operation of machinery, and another 3.5 million

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Mexicans worked without pay in the farm operations of their families. The potential pool of agricultural workers in Mexico thus consists of almost 6 million people.

Agricultural employment in Mexico decreased 0.7 percent between 1996 and 1999, due primarily to urbanization absorbing land and labor in the states of central Mexico. In these states, agricultural employment is falling at an average annual rate of 7.6 percent. In the rest of the country, however, agricultural employment is growing at an annual average rate of 3.8 percent.

Agriculture employs a large proportion of the population in some parts of Mexico. This is particularly true in the southern states, which have relatively high levels of poverty and a larger indigenous population. For example, agriculture represents 56 percent of employment in Chiapas, Mexico's poorest state.

Labor productivity in Mexican agriculture is roughly one-fifth the productivity in the rest of the economy. About 20 percent of the workforce is engaged in agriculture, but the sector contributes just 5 percent of GDP. Labor productivity tends to increase as production shifts from basic grains to more export-oriented crops such as fruits and vegetables. Government efforts to raise productivity in agriculture concentrate on training and technology transfer

by private extension services supported by the Mexican government.

The wage differential between Mexican and U.S. agriculture is huge. The daily wage for 8 hours of farm work in Mexico is about \$3.60 in U.S. currency, compared with the U.S. average of \$66.32 in October 2000. However, these figures overstate the real wage differential between Mexican and U.S. agriculture, because the cost of living in Mexico is lower than in the U.S.

Agricultural wages in Mexico decreased in real terms at an average annual rate of 4.3 percent between 1989 and 2000, while wages in manufacturing rose at an average annual rate of 0.6 percent. Despite this growing disparity, there is little evidence of a single commodity or activity in Mexico's agriculture facing difficulties in obtaining hired labor.

Labor markets are highly seasonal in Mexican agriculture. Most rural workers are employed part-time in agriculture and work the rest of the time in nonagricultural sectors such as construction, manufacturing, and services, particularly in the southern states where there is only one crop-growing season due to limited infrastructure for irrigation. Rural workers generally shift from one economic activity to another, and usually none of these activities becomes a permanent job.

Some rural Mexicans—mostly young people—leave their villages in search of employment and find work in a wide variety of economic sectors, either in Mexico or the U.S. Personal contacts and social networks often are deciding factors in the search for work. Of the 2.3 million hired farmworkers in Mexico, around 1.4 million are migrants, most of whom range in age from the early 20's to mid-30's.

The migration of farmworkers within Mexico follows three main routes, generally from communities of origin in the south to farm operations in the north. Along the Pacific coast, migrants work seasonally in the production of fruits and sugar cane, and year-round in vegetables. In north-central Mexico, migrant labor helps produce key crops such as cotton, apples, and various vegetables, primarily between August and January. Along the Gulf coast, farm operators employ migrants to produce sugar cane, cotton, oranges, and coffee, except during July, August, and September.

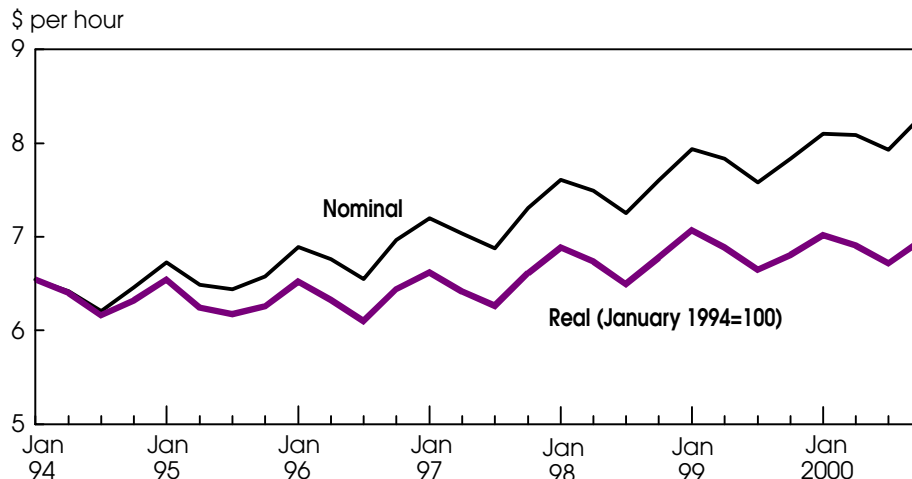
The Link Between Farm Labor & Trade

Hired farm labor is a major input for U.S. agriculture. The most recent U.S. census of agriculture indicates that expenditures for hired farm labor in 1997 totaled \$14.8 billion, 10 percent of total farm production expenses. Hired labor is the third largest of the expenditure categories defined by the census, following livestock and poultry and animal feed.

Hired labor accounts for an especially high percentage of production expenses in three sectors of U.S. agriculture—greenhouse, nursery, and floriculture (40 percent); fruit and tree nut farming (27 percent); and vegetable and melon farming (23 percent). Each of these sectors is engaged in international trade, with both exports and imports of vegetables and preparations experiencing particularly rapid growth during the 1990's.

Trade in these sectors runs in both directions. In 1999, the U.S. was a net exporter of fruits and preparations and of nuts and preparations, and a net importer of vegetables and preparations and of nursery and greenhouse products. Thus, changes

Wage Gains for Hired Farmworkers Have Kept Pace with Inflation



Source: Quarterly data from USDA's National Agricultural Statistics Service and the Bureau of Labor Statistics. Economic Research Service, USDA

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Farmworkers in U.S. Crop Agriculture Average 8 Months of Work per Year

	In U.S.				Unaccounted
	Farm work	Nonfarm work	Not working	Abroad	
	Weeks				
All farmworkers	31	3	8	9	1
U.S.-born	30	4	13	3	1
Foreign-born*	31	2	7	11	1
Undocumented	29	2	5	15	1

* Primarily Mexico-born.

Data for fiscal year 1998.

Source: National Agricultural Workers Survey, U.S. Department of Labor.

Economic Research Service, USDA

in the availability of hired farm labor are likely to influence U.S. trade in these sectors and the extent to which imports meet domestic food consumption needs. Increased availability of hired farm labor should facilitate greater domestic production of these labor-intensive products, while decreased availability should have the opposite effect.

During the 1990's, the Mexican government intensified its efforts to orient the country's agricultural sector toward the export market. By pursuing Mexico's comparative advantages in fruits, vegetables, and some specialized processed foods, the government expected to increase rural income and employment, reduce migration from rural areas, and alleviate poverty.

Agricultural labor has provided an important base for these efforts, since the production of fruits and vegetables in Mexico is labor intensive relative to other agricultural commodities, just as it is in the U.S. For fruits and vegetables, the labor requirement from soil preparation to harvest ranges from 42 worker-days per hectare for carrots to 216 per hectare for tomatoes. In contrast, wheat, sorghum, and barley each require about 10 worker-days per hectare. Maize and beans, two traditional staples of Mexican agriculture, require 26 and 22 worker-days per hectare.

To secure greater market access for its agricultural products, Mexico negotiated a series of free trade agreements with 34 countries. The most prominent of these accords, the North American Free Trade Agreement (NAFTA), was implemented in 1994 and provides for substantially

freer trade among Canada, Mexico, and the U.S. In addition, a culture of standards and quality high enough to enable Mexico's products to compete in international markets has emerged and is spreading rapidly.

Within this context, the modern sector of Mexico's agriculture is capturing the benefits of freer trade while offering seasonal employment to farmworkers from the traditional agricultural sector. Export growth of several labor-intensive commodities has been dramatic. Mexico's asparagus exports climbed rapidly between 1993 and 1999, rising from \$41 million to \$248 million. Also, tomato exports from Mexico averaged \$555 million annually

during 1995-99, compared with an annual \$395 million in 1993-94. However, the gap between modern and traditional farms has widened due to large differentials in organization, technology, and financing.

Keys to the Future

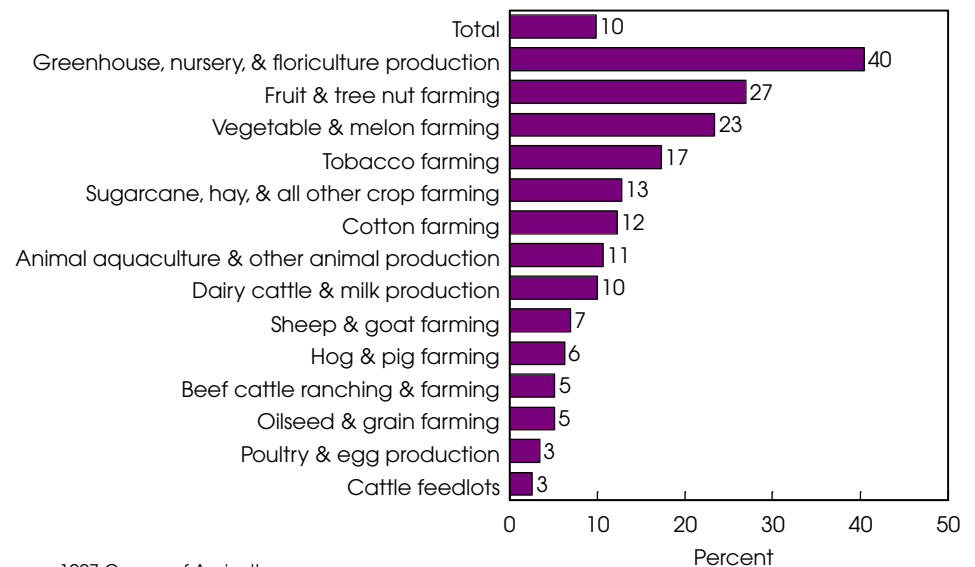
Factors that influence the market for hired farm labor also affect the future of agriculture in both Mexico and the U.S. Some of these factors are specific to agriculture; others are related to the general economy and government policy.

Commodity prices. The demand for hired farm labor and other inputs is influenced, in part, by the value of farm output. Thus, when commodity prices are low, wage rates for hired farmworkers are more likely to be low. Similarly, a marked upswing in commodity prices would strengthen the demand for hired labor and place upward pressure on wages. This effect would be felt most strongly in the labor-intensive sectors of U.S. and Mexican agriculture.

Technologies that substitute for labor.

The pace at which technologies that substitute for labor are implemented is likely to differ between Mexico and the U.S. due to the different resource endowments

Hired Labor as Share of U.S. Production Expense Was Highest for Greenhouse and Nursery, Fruit and Vegetable Farms, Lowest for Livestock in 1997



Source: 1997 Census of Agriculture.

Economic Research Service, USDA

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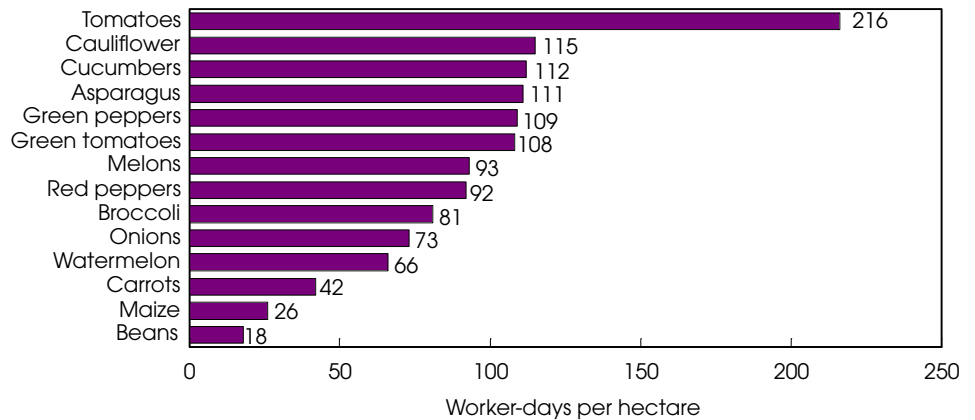
of the two countries and their disparate levels of economic development. However, with freer trade and more integrated markets under NAFTA, new technologies should be available at roughly the same time to producers in all three NAFTA countries, regardless of whether they originate in Canada, Mexico, or the U.S. Ultimately, the pace of technological change is likely to be dictated by the potential impact of new technologies on farm balance sheets, as well as perceptions of farm operators about the future availability of farm labor.

Differential wage rates. The extent to which agriculture is able to obtain the services of hired labor depends in part on the attractiveness of relative compensation offered for farm work versus nonfarm jobs. This is particularly true in the U.S., where labor markets are relatively tight. Compared with agricultural work, non-farm jobs in the U.S. tend to offer higher wages, as well as year-round employment, employee benefits, and more predictable working conditions. Where workers have a choice, these attributes likely draw some prospective farmworkers away from agriculture, including both U.S. natives and persons born abroad.

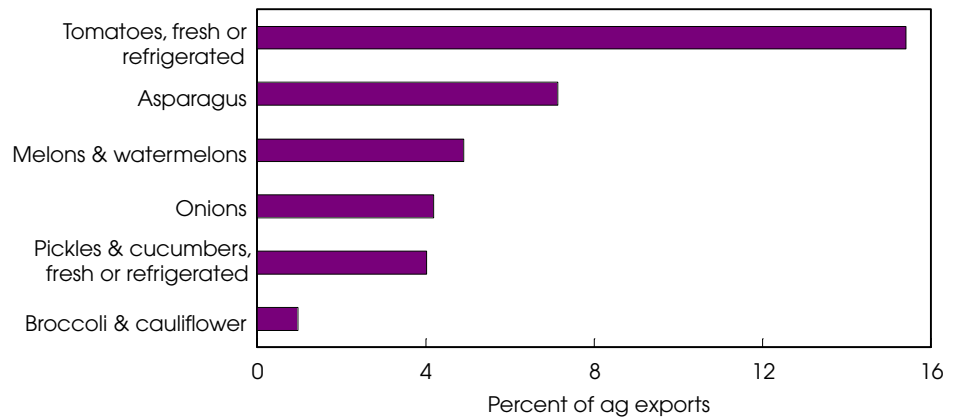
In 1999, median weekly earnings for full-time workers engaged in farm work and full-time workers in all occupations differed by \$255, as measured in October 2000 prices. Over the last 10 years, this gap has not changed appreciably when earnings are adjusted for inflation. Between 1990 and 1999, the farm-non-farm differential ranged from a low of \$247 in 1990 to a high of \$264 in 1992.

The wage differential narrows considerably when earnings of farmworkers are compared with workers in nonfarm occupations that require little or no advanced education. While drywall installers, construction laborers, and butchers and meat cutters earn substantially more than farmworkers, the earnings of janitors and cleaners and textile sewing machine operators are comparable to those of farmworkers. Moreover, these figures may misstate the actual earnings differential since they do not account for regional differences in the cost of living. Nevertheless, these statistics provide further evidence that U.S. agriculture has the capaci-

Some Highly Labor-Intensive Commodities Produced in Mexico . . .



. . . Are Important to Mexico's Agricultural Exports



Total agricultural and forestry exports in 1999=\$3.5 billion. 1 hectare=2.5 acres. Source: Worker-days from National Institute of Agricultural, Livestock, and Forestry Studies (INIFAP) and Postgraduate College, 1994. Share of agricultural exports based on data from Mexico's Secretariat of Economy and National Institute for Geography, Statistics, and Informatics (INEGI).

Economic Research Service, USDA

ty to compete in the market for hired labor.

The promise of prosperity in Mexico. Sustained expansion of Mexico's economy, accompanied by real growth in wages and salaries, should diminish the relative appeal of the U.S. labor market and draw workers back to jobs in Mexico. In early 1996, the Mexican economy began a gradual recovery from the recession caused by the peso crisis. During the first three quarters of 2000, Mexico's annual rate of real GDP growth has exceeded 7 percent, compared with an average annual rate of 5.1 percent from first-quarter 1996 to fourth-quarter 1999. Wage growth, however, has been slow to follow.

Economic growth in Mexico is likely to be accompanied by continued efforts to broaden the country's economic development. Increased public and private investment in the poorest areas of the country should reduce outmigration from rural Mexico to urban areas.

In addition, illiteracy among some rural workers has been a major constraint inhibiting the transfer of labor from agriculture to more productive sectors of the Mexican economy. Public expenditures in education and training should enable rural Mexicans to increase their off-farm work activities and to obtain better paying jobs.

As urbanization absorbs land and labor from rural Mexico, jobs in Mexican agri-

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U.S. Farmworker Wages Are Comparable to Some Nonfarm Jobs Requiring Little Formal Education



Source: Selected wage rates from Bureau of Labor Statistics, *Employment and Earnings*.
Economic Research Service, USDA

culture could become more available to less skilled urban workers. Continued public and private investment in infrastructure, such as roads and communications, should facilitate labor mobility between regions and link areas of economic activities.

Mexican financial development.

Agriculture in Mexico is a very risky business. As a result, private financial capital does not usually flow to agriculture, except for large and modern farms. Mexico's system of public "development banks" is in poor health, although various trust funds have been created to restructure bad loans and to write off certain

debts for agricultural producers. The development of a stronger and more vibrant financial sector in Mexico is likely to increase capital flows to agriculture, thereby increasing agricultural activity and employment.

Immigration policy. In recent years, U.S. decisionmakers have considered a wide range of legislative proposals concerning the status of foreign farmworkers. Most of the proposed legislation would increase the number of authorized foreign-born farmworkers in the U.S., either by providing legal immigration status to some number of undocumented persons already in the country or by allowing additional

The U.S. Department of Labor conducts the annual National Agricultural Workers Survey (NAWS) to examine the demographic and employment characteristics of farmworkers in crop agriculture, including field workers in nursery products, cash grains, field crops, and all fruits and vegetables, along with field packers and supervisors. NAWS does not include secretaries or mechanics employed by farm operations or workers in the H-2A program. The H-2A program enables U.S. employers to hire temporary, nonimmigrant farmworkers from abroad if they can certify that sufficient laborers are not available in the U.S. and that employment of these workers will not adversely affect wages and working conditions of U.S. workers.

workers to enter the U.S. temporarily as guestworkers. Mexico's president advocates a long-term goal of transforming NAFTA into a common market in which labor would move freely across national boundaries. **AO**

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Hired farmworkers make up about 30 percent of the U.S. farm work force

For data and details on:

*their ethnicity and nationality...
their ages and wages...
and other characteristics...*

See the recently released Economic Research Service report
Profile of Hired Farmworkers, 1998 Annual Averages

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