

Women and Men in Farm Work in Mexico: Trends and Gaps, 2005 - 2019*

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“Farm Workers in Mexico’s Export Produce Industry”

Mexico’s total employment in agriculture, including crops and animals, forestry, hunting, fishing and mining and all employers, employees, self-employed and unpaid labor, fell from 71.4% of the Mexican labor force in 1921 to 58.3% in 1950, 25.8% in 1980 and 13.4% in 2010¹. Over the past several decades, the farm employment share has continued to decline, but the waged farm workforce has increased in part due to the growth of farm exports.

38% of household income is from wage labor while, in the second poorest decile, wages provide 53.8% of income. All deciles above the second rely mostly on wages and salaries for most of their income.²

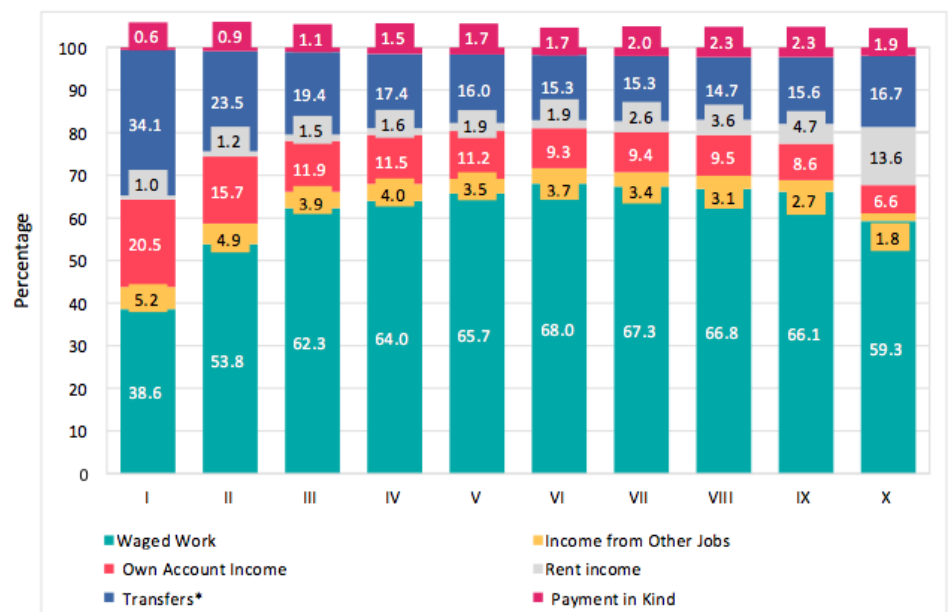
Cash transfers explain why wage income does not account for most of the income of Mexico’s poorest decile. Mexico’s poorest households, who are mostly in

rural areas, receive almost as much from transfers as they earn from wages (34.1%), with the transfer percentage falling to 23.5% in the second decile. The vast majority of transfers flow through government social programs, with PROGRESA-OPORTUNIDADES-PROSPERA the largest. This POP program alone diminished the total number of poor in Mexico by 3%, and had a much larger impact on the reduction of extreme poverty and on inequality among the poor. At its peak between 2013 and 2018, POP provided transfers to 6.5 million households and 26 million individuals. Other programs also made transfers,

² National Household Income and Expenditure Survey (ENIGH), 2018.

The overall trend in farm work has been away from a reliance on family labor and subsistence agriculture and towards much greater dependence on wage labor and government and private transfers. Wage income in rural Mexico does not derive mostly from farm work as Mexico’s rural areas urbanize. Most wage jobs in rural areas are in commerce and other services and manufacturing; working for wages on farms is one of several options for rural residents. Mexico’s poorest decile of households, including most farm workers, are the least dependent of all Mexican households on wage income. In the poorest decile, only

Figure 1. Contribution of Each Income Source to Total Household Income, by Decile. Mexico, 2018.



Source: CONEVAL estimates, from the Statistical Annex of the 2018 Poverty Estimation. *Includes transfers in cash and kind.

¹ Mexican Population Census figures.

* This text uses official data only. Our own survey (ENJOREX in Spanish or MEXAWS in English) provides data for a much more detailed gender analysis, but refers to only one point in time.

including a per hectare transfer for households farming particular commodities (PROCAMPO), a large non-contributive pension program for the elderly (70+), a small program providing a minimum income to workers willing to be employed full time who did maintenance and repairs to rural infrastructure, and others.

The other significant source of transfers is remittances. International migration was never “targeted” to the poor, so most international remittances do not go to the poorest households. International migration is less and less related to the poor, since it became an increasingly expensive enterprise and has been mostly legal since 2009. Nevertheless, international remittances do lower poverty slightly because poor households that receive remittances increase their total income by 50% or more thanks to them.

Internal remittances, on the contrary, do move mostly between poor Mexicans. They go mostly from working members of poor rural households who are away temporarily and flow to the poorest households. Most of the migrant farm workers in export agriculture send remittances to their families, emphasizing the need to **regulate both domestic and international money transfer firms**.

The AMLO government that took office in December 2018 changed the largest cash transfer programs. Transfers to poor households should have increased, but there are no official data available.

Recent changes in Mexico's farm workforce

Persons with agricultural occupations include waged workers (farmworkers), self-employed persons working on their own account (on their own or on rented land), unpaid workers (mostly family members of someone who owns or rents land, although it has been traditional, in some crops, to only nominally hire the family head and to require that the entire family work on the land), and employers.

From 2010 to 2015, Mexico's Census³ reported significant changes among those with agricultural occupations. When comparing the 2010 census to the 2015 intercensus survey, the most significant changes are:

- 1) The total population working in agriculture **diminishes**.
- 2) The absolute number and relative proportion of those working for a wage **increases**
- 3) The fall is accounted for mostly by a decrease of the self employed **and unpaid family workers**.

Among **women**, the main changes are:

- 4) The total number of women reporting farm work as their main occupation fell between 2010 and 2015.
- 5) Of all women in farm work, the proportion who report working for wages in agriculture **rose**

³ These estimates are based on Mexico's 2010 Population census, and on the 2015 Intercensus Survey. Both are carried out and published by INEGI.

from 45.6% to 69.3%. This means women's share of rural households' wage income increases (and rural income poverty falls).

6) **Women reporting working on their own account fell** from 25% to 15%, and from 1.2 million to 550 thousand.

7) The share of **women working without a wage fell from 26 to 13%** or, in absolute numbers from 124,000 to 49,000. This is positive in the sense that these women moved to the wage market and they earn an income, but it may also mean that peasant households' reliance on their own production falls.

Changes among men move in the same direction.

8) The proportion of **men working for wages** rose from 45 to 54%, and from 2.37 to 2.5 million.

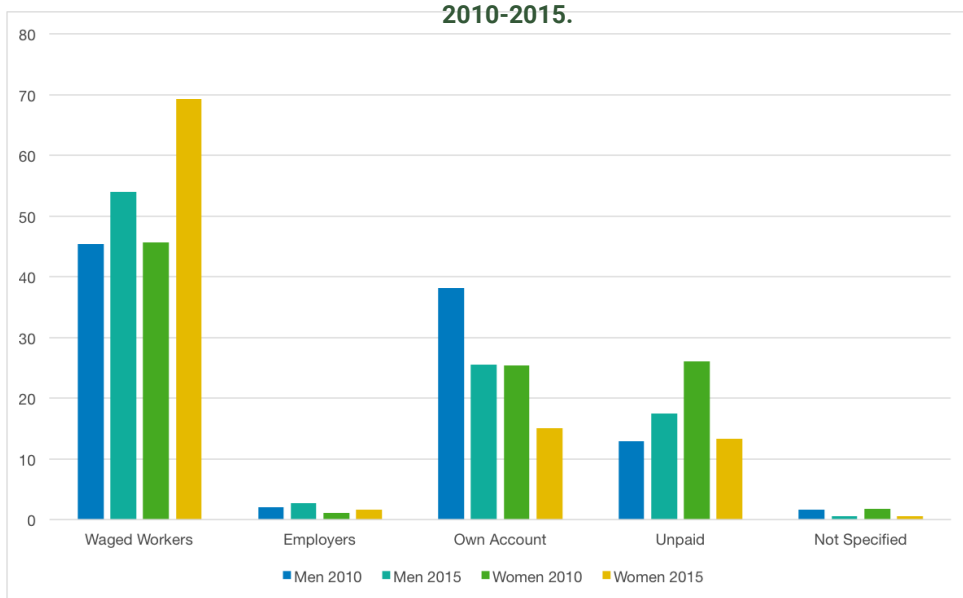
9) **Men working on their own account** fell from almost 2 million to 1.18 million, and from 35 to 28% of the total.

10) Finally, contrary to women, **men working in agriculture without a wage** increased from 13 to 17% of the total.

The overall trend from 2010 to 2015 is for the number of people with agricultural occupations to decline, but the number and share of those working for wages rises.

Nevertheless, the census and the intercensus survey stop in 2015, so change since that date can't be analyzed in those sources. To explore the waged farm workforce and analyze changes taking place until 2019, we use the National Occupation and Employment Survey

Figure 2. Changes in Women’s and Men’s Participation in Mexican Agriculture 2010-2015.



Source: Own calculations based on Mexico’s 2010 Population Census, and on the 2015 Intercensus Survey.

(ENOE). Our analysis is based on a very large database compiled by this project with 60 government microdata sets extending from 2005 to 2019.

Women and men in the waged farm work force

Mexico’s National Occupation and Employment Survey (ENOE) is a quarterly survey of all Mexican workers and offers a very good representation of waged and salaried workers.

From 2005 to 2019, the total number of waged farm workers⁴ rose from 1.6 million to 2.4 million. Table 1 divides these farm workers by state, separating six states with “high export intensity,” Baja California, Guanajuato, Jalisco Michoacán, Sinaloa, and Sonora, from the other 26 states with “low export intensity,” and finds that overall employment

in high and low export intensity states rose by 50 percent between 2005 and 2019, with export states maintaining a one-third share of hired workers. The ENOE does not distinguish whether a respondent is employed on a farm producing for the domestic or export markets.

Between 2006-2008 and 2017-2019, total Mexican horticultural production increased by a third, from 30 to 40 billion tons, with half the increase exported to the US, and a sizable portion of the rest sent to other export markets. Exports

are also increasing from other states including San Luis Potosí, Puebla, Zacatecas, Tamaulipas, Baja California Sur and Veracruz, sometimes faster than those from traditional export areas (Zahniser, 2020⁵).

Table 2 shows that farm work has been an occupation for workers with low or no schooling. Farmworkers have the lowest schooling of any major occupation in Mexico. Over the 15-year period in the table, the average years of schooling of farm workers has increased by about two years. Years of school have always been higher in the traditional export states, but women in non-traditional export states, which are poorer, have made the largest gains, from 4.57 to 6.64 years. The Progres – Oportunidades – Prospera programs⁶ aimed to increase

⁵ Zahniser, Stephen (2020) “Changes in Commodity Composition and Location of Mexican Horticultural Production” Paper delivered at LASA 2020.

⁶ The program was initially called PROGRESA. It was renamed Oportunidades and, later, Prospera. It provided basic grants and scholarships to individuals in poor households, provided they attended school, underwent regular check-ups in public health clinics, and adhered to nutrition supplements provided by the program.

Table 1. ENOE: Total Number of Farmworkers in Export and Non-Export States, 2005 - 2019.

Year-Quarter	TOTAL (Million)	High Export Intensity States	Low Export Intensity States	High Export Share
2005-IV	1.566	0.482	1.084	31%
2011-IV	2.024	0.643	1.381	32%
2019-IV	2.35	0.72	1.63	31%
Change	0.784	0.238	0.546	
Change %	50%	49%	50%	

Source: All ENOE tables have been prepared by Omar Stabridis from original microdata sets.

⁴ This classification includes workers in non-ag primary sector occupations (cattle raising, fishing, mining).

Table 2. Farmworkers' Age and Schooling, 2005-2019.

	2005 Q4		2011 Q4		2019 Q4	
	Age	Years of Schooling	Age	Years of Schooling	Age	Years of Schooling
Low Export Intensity States						
Mean	36.35	4.57	35.88	5.74	37.78	6.64
High Export Intensity States						
Mean	34.74	4.80	33.94	5.76	36.16	6.90
Total						
Mean	35.86	4.64	35.27	5.75	37.29	6.72

Source: Own elaboration from ENOE

schooling, nutrition and health among Mexico's poorest families, and girls especially. Evaluations found significant impacts of this program on schooling, and particularly on girls' schooling. In export areas, women in farm work have higher schooling than men.

Farm workers in Mexico have aged only slightly. While in the US the Mexico – born farm workforce is 42 years old on average in 2020, in Mexico this same workforce is younger by six years, and the average age is only increasing slightly by about one and a half years over the 15 year span in the table.

Table 3 reports real wage trends and gender wage gaps in both high-export and low-export areas. Real

farm wages were flat from 2005 to 2011 (a detailed revision actually shows that wages increased from 2005 to 2008, and then fell). From 2011 to 2019, wages rose significantly.

Real farm worker wages increased significantly from 2005 to 2019, and faster in the low-intensity export states, narrowing the wage gap between poorer and richer farming states from 47% in 2005 to 39% in 2019. Real wages have risen 7.8% in high-export intensity states, and by almost twice as much (14%) in low-export intensity states. This might be a consequence of a much more active labor market: high wage states attracted more migrant farm workers, and this made labor scarce in low-export intensity states. Also,

labor demand is increasing in states that did not export much in the past, such as Veracruz and Puebla. In all, these trends depict a dynamic, tight, more unified labor market.

It is also possible that, as Taylor and others⁷ have pointed out, demand for farm labor in the U.S. is also putting upward pressure on Mexican farm wages.

Real wages fell in high-export intensity states between 2005 and 2011. The explanation seems to be that 1) there was much less international outmigration, and therefore the labor supply grew, allowing employers to lower wages, and 2) that the market for fruit and vegetables slumped in both Mexico and the U.S. after the Great Recession of 2008-10.

Tables 4 and 5 allow us to estimate the trends in real earnings for men and women, and what's happened to the gender wage gap.

Women's real wages increase significantly after being flat in low-

⁷ Taylor, J., D. Charlton and A. Yunez-Naude (2012) "The end of farm labor abundance" Applied Economic Perspectives and Policy 34(4), Winter, pp. 587-598.

Table 3. Monthly Real Farmworkers Wages 2005-2019 (Base= 2018 Q4).

	2005 Q4	2011 Q4	2019 Q4
	Monthly Real Wage	Monthly Real Wage	Monthly Real Wage
Low Export Intensity States			
Mean	2,958	2,872	3,372
High Export Intensity States			
Mean	4,357	3,940	4,698
Total			
Mean	3,386	3,312	3,777

Source: Own elaboration from ENOE

Table 4. Monthly Real Farmworkers Wage 2005-2019, Women.

	2005 Q4	2011 Q4	2019 Q4
	Monthly Real Wage	Monthly Real Wage	Monthly Real Wage
Low Export Intensity States			
Mean	2,404	2,417	3,051
High Export Intensity States			
Mean	4,254	3,267	4,489

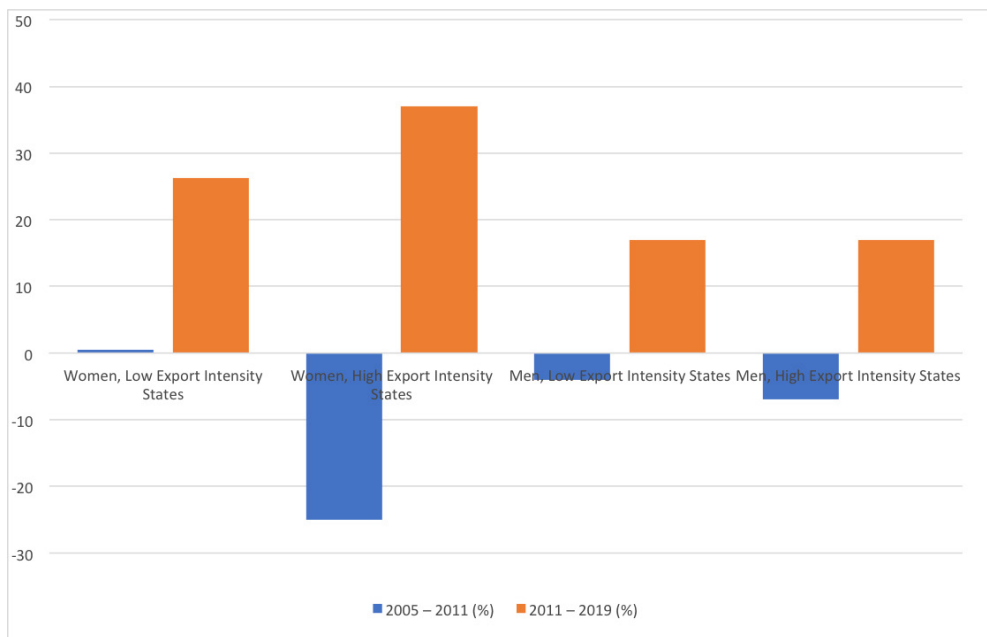
Source: Own elaboration from ENOE

Table 5. Monthly Real Farmworkers Wage 2005-2019, Men.

	2005 Q4	2011 Q4	2019 Q4
	Monthly Real Wage	Monthly Real Wage	Monthly Real Wage
Low Export Intensity States			
Mean	3,024	2,909	3,404
High Export Intensity States			
Mean	4,373	4,066	4,748

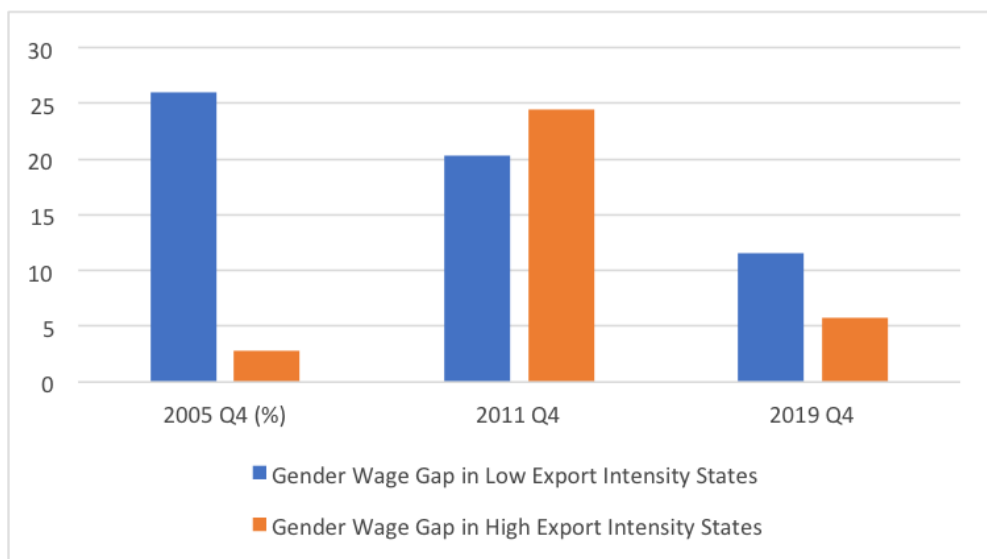
Source: Own elaboration from ENOE

Figure 3. Real Wage Trends, 2005 - 2019.



Source: Own elaboration from ENOE.

Figure 4. Gender Wage Gap, 2005-2019 (% Men Earn Above Women).



Source: Own elaboration from ENOE.

export intensity areas from 2005 to 2011 and falling in export areas. After 2011, women's wages rise in both areas, but they rise faster in high-export intensity areas, where the labor market is tighter. Men's real wages fell in both areas during the first period and then rose by the same proportion in both. The dynamics of women's wages is much more significant.

The total number of persons employed in Mexican agriculture is falling, but the fraction of that workforce that works for a wage is increasing. Women have become a more significant part of the working force on farms and, although they still earn less than men, the trend is towards better wages and a smaller gender wage gap.

Our own survey (ENJOREX or MEXAWS) finds higher wages and better conditions among women and men in export agriculture.⁸ Kindly refer to CIESAS Bulletin N. 3.

⁸ "Women and Men in Mexico's Export Farms in 2019 - 2020".