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Labor multi-activity in agricultural production within Mexico's less urbanized contexts: 1993 and 2003

Multiactividad laboral en la producción agrícola en los contextos menos urbanizados de México: 1993 y 2003

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Abstract

An aspect continuously mentioned in research on rural contexts concerns the multi-activity of agricultural workers. Several studies analyze the various work combinations that may occur in a household in order to explain the different social and family reproduction patterns; while others studies approach the debate from the perspective of the different sources of income obtained by rural households. This paper explores the issue of multi-activity by analyzing the work itineraries an individual might undertake during a six-month period, while attempting to answer the question: ¿what factors influence the type of labor trajectory of agricultural workers?

Keywords
Multi-activity
Work itineraries
Rural contexts
Agricultural
Forms of production

Resumen

Uno de los aspectos mencionados continuamente en las investigaciones relacionadas con los contextos rurales se refiere a la multiactividad laboral que experimentan los trabajadores agrícolas. Algunos estudios analizan las diferentes combinaciones del trabajo que pueden ocurrir en un hogar

para explicar las formas de reproducción social y familiar; mientras que otros enmarcan este debate desde la perspectiva de las diversas fuentes de ingresos que obtienen los hogares rurales. Este artículo explora el tema de la multiactividad, describiendo los itinerarios de trabajo a los cuales un individuo puede acceder durante un período de seis meses. Asimismo, se busca responder la siguiente pregunta: ¿Qué factores influyen en el tipo de trayectoria laboral de los trabajadores agrícolas?

Palabras Clave

Multiactividad
Itinerarios laborales
Contextos rurales
Agricultura
Formas de producción

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Introduction

The first two decades of the 21st century in Mexico have been characterized by slow economic growth, with an estimated average annual Gross Domestic Product growth rate of 2.3%, far below that of the last decade of the 20th century, with an average quarterly growth of close to 3.4%. Similarly, the primary sector of the economy has registered an average quarterly growth of nearly 2.0%. In general, the poor evolution of economic activity is likely to have impacted living conditions and possible labor patterns of farmers and agricultural workers.

Nevertheless, despite the drop in agricultural activity over the past decades as a result of urbanization and international migration, the importance of this sector in the country is noteworthy. In 1979, 28.9% of the economically active population (EAP) was employed in the agricultural sector; in 2000, this figure dropped to 18.6% (Florez Vaquiro, 2015; García Guzmán, 2012; Pacheco, 2010); and by 2019, according to data from the Encuesta Nacional de Ocupación y Empleo (National Survey of Occupation and Employment), 12.7% (6.6 million workers) of the EAP employed was in the agricultural sector. It is worth noting that in 2019, one of every two workers in rural areas (comprising less than 2,500 inhabitants) was engaged in agricultural activities. In fact, Bada & Fox (2021) find a stabilization of the agricultural production supply since 2010, largely as an effect of the sector's restructuring, which began in the 90 and early 21st century, linked to the signing of the North American Trade Agreement (NAFTA) and the subsequent economic crises that the country has experienced in recent years.

Several aspects of the process described above have been analyzed by different authors, arguing that in recent decades agricultural production has been characterized by greater heterogeneity and a clear

fragmentation of land; moreover, it has been widely pointed out that labor characteristics in rural contexts have been conditioned by their own demographic dynamics (Carton de Grammont, 2009; Chayanov, 1974; Damian & Pacheco, 2016; Florez Vaquiro, 2005, 2021; Garay Villegas, 2008; Lara Flores, 1998; Pacheco & Florez Vaquiro, 2020b; Sanchez & Pacheco, 2012; Yúnez-Naude & Taylor, 2004).

Three main considerations can be drawn from the above-mentioned studies. The limited growth of the sector, structural poverty, the persistence of self-consumption of traditional crops—corn and beans—and increased wage labor, have led, on one hand, to the diversification of income sources—including non-agricultural activities—and, on the other hand, have stimulated migration as a survival strategy to improve living conditions. Concerning population aspects in rural contexts, higher fertility, and the aging process go hand in hand with family relationships involving the inheritance of land from generation to generation. In addition, these contexts are characterized by low levels of schooling, masculinization of the agricultural labor force, and the feminization of non-agricultural work.

One of the aspects always mentioned in studies regarding the economic dynamics of rural contexts in Mexico is the non-exclusivity of individual economic activities. In certain studies, this phenomenon is described from the perspective of land use, and in others from the various labor combinations within a household unit to explain modalities of social and family reproduction. In still others, this discussion is framed from the point of view of the various sources of income obtained in rural families. In short, there are several perspectives of discussion on the subject. This paper addresses the issue of multi-activity by considering the possible labor trajectories that an individual may undergo over a six months period to be recorded as "agricultural subjects" in the agricultural module of the Encuesta Nacional de Empleo (National Employment Survey or ENE, in its Spanish acronym) undertaken in 1993 and 2003.[1]

The last decade of the 20th century and the beginning of this century were marked by the consolidation of a period that has been described by various authors as "outward growth." However, between 1993 and 2003 Mexico did not conduct an agricultural census showing the economic dynamics of this sector—farming censuses are only available for 1991 and

1 It should be mentioned that after 2003, no statistical information source exists in Mexico that would allow an analysis of changes in work of those who declared having worked in agricultural activities in the six months prior to the survey.

2007. Three farming surveys have subsequently been conducted, however, do not permit the tracking of a person's work trajectory over a six-month period—. Consequently, existing information at the national level, based on population censuses, is limited or specific to income and restricted to questions on employment conditions in the Encuesta Nacional de Ingresos y Gastos de los Hogares (National Survey on Household Income and Expenditure). Several surveys have been specially designed to determine the dynamics of the sector. However, they are neither representative of the country nor of the agricultural workers as a whole, nor do they refer to a specific locality size.[2]

Therefore, this paper attempts to recover information from a relatively unexplored module of the employment survey (agricultural module of ENE) for the years 1993 and 2003, which provides important information on individuals and their labor context in the agricultural sector. It also attempts to describe labor dynamics during the period above mentioned by comparing the changes in patterns of labor market insertion between 1993 and 2003 (for a preliminary version of this paper see Pacheco & Florez Vaquiro, 2020a), a period during which Mexico was consolidating its process of trade liberalization following the execution of NAFTA in 1994. As a result, the initial effects of this agreement on the agricultural sector's labor market and labor dynamics can also be observed indirectly in this study.

For this purpose, the article is divided into six sections. Following the introduction, the second section, An approach to "multi-activity", presents the various analytical perspectives on multi-activity to obtain a frame of reference for the discussion of the labor trajectories of agricultural subjects. The third section, Data and methodology, will refer to the data and methodology applied throughout this paper. The fourth section, Labor itineraries, describes the different itineraries or labor patterns that a farmworker can follow considering six months of observation, with information for two time periods: 1993 and 2003. The fifth section, Factors that influence participation in the non-mobility itinerary, attempts to answer the following question: What factors affect the type of labor trajectory of agricultural subjects in 1993 (see Figure 1) and 2003 (see Figure 2)? Finally, the paper concludes with reflections on the information yielded by this approach to multi-activity.

2 The *Encuesta a hogares de jornaleros migrantes en regiones hortícolas de México: Sinaloa, Sonora, Baja California Sur y Jalisco* (Survey on Migrant Farm Worker Households in Horticultural Regions of Mexico) (Carton de Grammont & Lara Flores, 2004) or the National Survey of Rural Households in Mexico. This last survey was conducted in 80 rural localities in 14 states, after dividing the country into 5 regions and has national coverage in rural populations of 500 to 2,499 inhabitants.

An approach to "multi-activity"

As noted in the introduction, one of the aspects constantly mentioned in studies on rural contexts is multi-activity. In some studies, this phenomenon is framed from the perspective of occupational mobility (Guzmán Gómez & León López, 2005; Kobrich & Driven, 2007; Ramírez, 2005; Torre, 2016), whereas in others, the approach is based on an analysis of land use (Robles Berlanga & Concheiro Bórquez, 2004; Rodríguez Herrera & Ruiz Rueda, 2018). Further studies focus on the various labor combinations that may occur in a domestic unit (Carmagnani, 2008; Chulim Uluac, 2019; Díaz-Núñez et al., 2019; Garay Villegas, 2008; Guzmán Gómez & León López, 2005; Segrelles Serrano, 2007) while others frame the discussion from the perspective of the various sources of income produced in rural families (Alvarado Méndez et al. 2011; Carton de Grammont, 2009; Quiroz Ramirez, 2017; Reardon, Berdegué & Escobar, 2004; Taylor & Yúnez Naude, n.d.; Yúnez Naude & Meléndez-Martínez, 2007).

Recently, Florez Vaquiro & Luna Contreras (2018) identified the great heterogeneity of types and sources of income of rural households. A decrease in households with income from businesses related to farming activities was observed, from 41.7% in 2002 to 32.8% in 2014. It is evident that the combination of activities can be approached from different viewpoints and units of analysis, and thus the concepts of pluriactivity and multi-activity are often not synonymous, as can be seen in the review of this section.

In particular, Ramírez (2005) analyzes labor mobility in rural areas in Chile, using a longitudinal approach based on a sample of households for the period 1996 to 2000, finding that rural agricultural employment has the lowest mobility of productive sectors, with 68% of individuals remaining in the same activity between 1996 and 2001. The author explains the low mobility in the sector to be a result of the high proportion of agricultural self-employment, accounting for 55% of rural employment. The author points out that peasant agriculture experiences great difficulty in expanding its labor sources, and at the same time, implies a situation of multi-activity—whereby individuals engage in various activities, although their principal occupation is agricultural activity. Lastly, he finds that workers with exceptionally low productivity shift between rural agricultural work—whether salaried, permanent, or temporary—and rural non-farm work that is unproductive or merely serves as a refuge.

Recent studies on mobility have focused on two main issues: the effect of education, and geographic mobility on occupational mobility. After conducting an ethnographic study in the state of Jalisco, Mexico, Torre (2016) questions: which strategies have been implemented in practice, for young people to undertake their work trajectory in the rural environment, within a context of increased activities in secondary and tertiary sectors? In this regard, he identifies extended and interrupted itineraries through which personal projects are adjusted between education, work, and starting a family. Thus, underemployment, together with multiple activities and remittances, are now the central means of subsistence for the rural population.

Most studies on rural contexts analyze the spheres of the household unit in order to understand the source of household income. One of the key findings has been that nowadays, although a percentage of this income comes from the agricultural sector, a significant part of it comes from the non-agricultural sector. Thus, for example, when Reardon et al. (2004) studied a group of countries, they found that multi-activity rates—seen from the perspective of household work arrangements—increase as the country's per capita income decreases, which the authors understand from the perspective of "pressure factors" for the diversification of income. Nevertheless, they point out that the multi-activity rate is conditioned by household income levels, increasing when moving from the poorest income quartile to the richest. This may be explained by the fact that households with better conditions are more able to send members to well-paid, non-agricultural salaried jobs. The authors note the differences that may occur according to the criterion used for multi-activity. A "wide criterion" considers households that earn any kind of income from non-agricultural activities. There is also a stricter criterion whereby a household is regarded as engaging in multi-activity when less than 20% of its income is obtained from the non-agricultural sector.

Carton de Grammont (2009) observes that in Mexico, multi-activity is a survival strategy, while specialization of household income is a "better" strategy. In an analysis of rural incomes, he found that while in 1992, the highest proportion of income was associated with farm households (67%), this ratio was reversed in 2004, with the highest income proportion being found in non-farm households (73%). In short, several authors have noted that activities that were previously considered as "complementary" in rural areas are now no longer so, as noted by Escobal, Agreda & Agüero (1998) in their research of Peru.

This study reveals that over 50% of the net income of Peruvian rural households is obtained from other non-agricultural activities. Ownership of

or access to assets plays a significant role in this regard, as it powerfully conditions households' income diversification strategies. Thus, the rate of engaging in non-farm activities increases considerably for those owning only a small amount of land or livestock, while households with sufficient land or cattle do not need to abandon their farms to seek complementary income.

Regarding individual variables, one of the results from this study shows that in households where the householder is either an elderly person or has low educational attainment, the likelihood of seeking complementary activities decreases (Escobal et al., 1998). If the householder is a woman, this increases the likelihood that her complementary income will be obtained from non-agricultural activities within the household unit. At the same time, the higher the level of educational attainment, the more likely it is for householders to complement their income with activities beyond the domestic and productive unit. It is worth noting that these findings were not replicated in other studies. For example, in his analysis of occupational mobility in Chile, Ramírez (2005) finds that while age has a positive effect on change of employment, gender and education do not significantly explain a change of activity.

Findings differ for family organization and differences by gender, depending on the study population. Qualitative studies find that in peasant households, women's mobility is lower, since they tend to be responsible for the domestic aspects of the household and productive unit (Guzmán Gómez & León López, 2005; Quiroz Ramirez, 2017). A further qualitative study shows that in indigenous communities, agriculture is reported as providing greater income and occupying more time. This is explained by the role played by community life in such contexts (Chulim Uluac, 2019). When the information is examined at a national level, Garay Villegas (2008) has demonstrated that women in less urbanized contexts are characterized by non-agricultural activities. In this respect, it is not that the results are contradictory but rather that when considering only the extra-domestic sphere, women report working mainly in the non-agricultural sector. Conversely, studies that analyze the gender division of labor within households or domestic and productive units, continue to emphasize women's role in reproductive dynamics.

Before concluding this brief review, it is worth mentioning a crucial aspect linked to rural contexts, namely migration. Several studies suggest that migration is linked to rural dynamics. Yúñez & Meléndez-Martínez (2007) note that international migration significantly increases both total

household income and income obtained from remittances, whereas internal migration certainly does not. Alternatively, as mentioned above, migration constitutes part of labor trajectories in rural contexts, considering the occupational mobility approach (Torre, 2016).

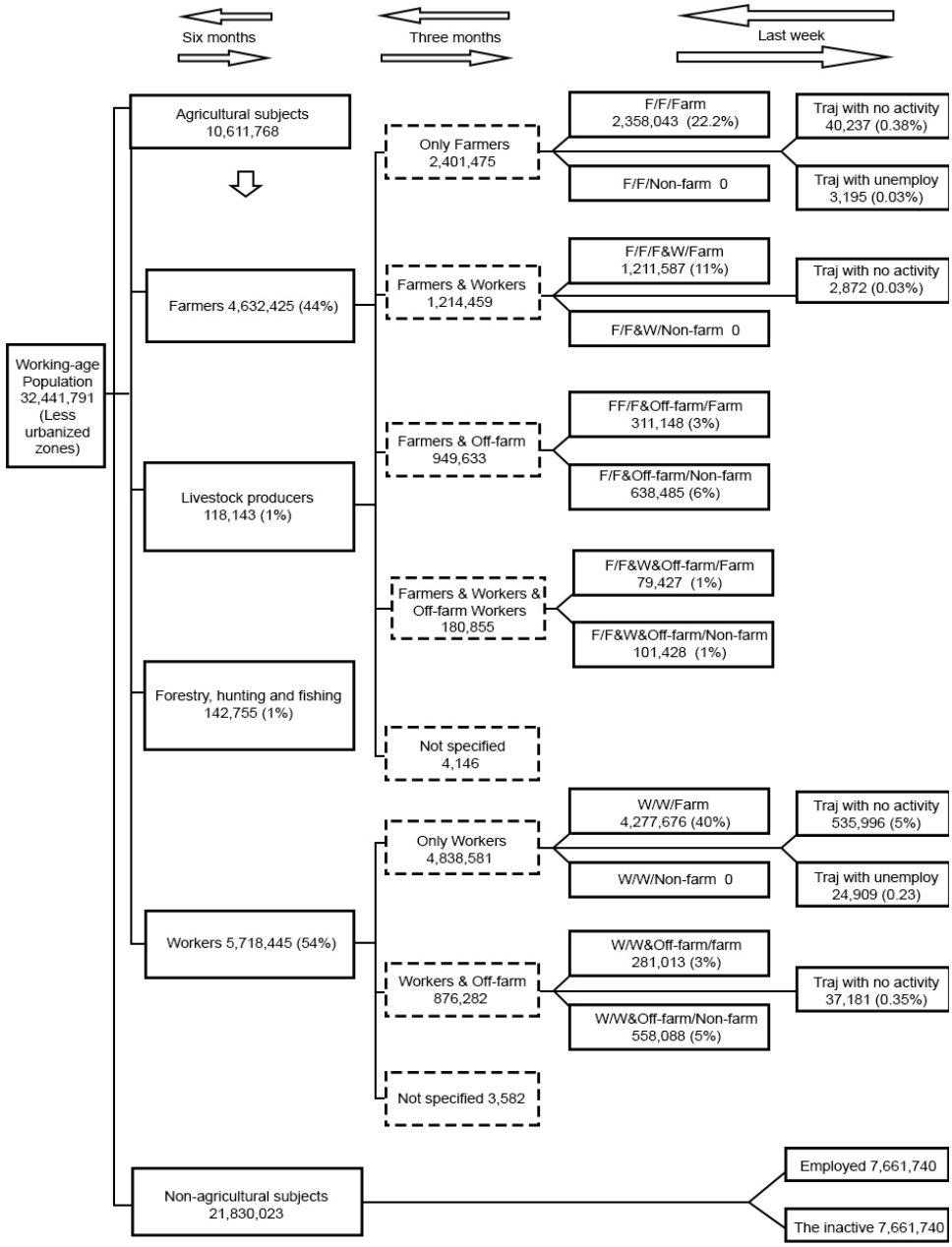
In short, the issue of "multi-activity" can be said to have several facets. Multi-activity may refer to individuals who engage in several occupations, or it can be analyzed from the point of view of the organization of household members (family labor use strategies). Multi-activity also exists on a territorial scale, with some household members working outside the country or the region, meaning that they will send remittances, while other family members remain within the household unit and engage in farm and non-agricultural activities.

Data and methodology

In the agricultural module of ENE, the term "agricultural subjects" is used to describe "any individual who at any time over a six-month period, ending in the week in which the survey was conducted, participated in obtaining products from the land or from livestock production, either directly as a worker or as an organizer or supervisor of the production process as a whole" (Instituto Nacional de Estadística y Geografía [INEGI], 2002, p. 182). In order to determine whether the people interviewed meet this definition, the survey included a series of questions that allowed us to construct the individuals under study in this paper.

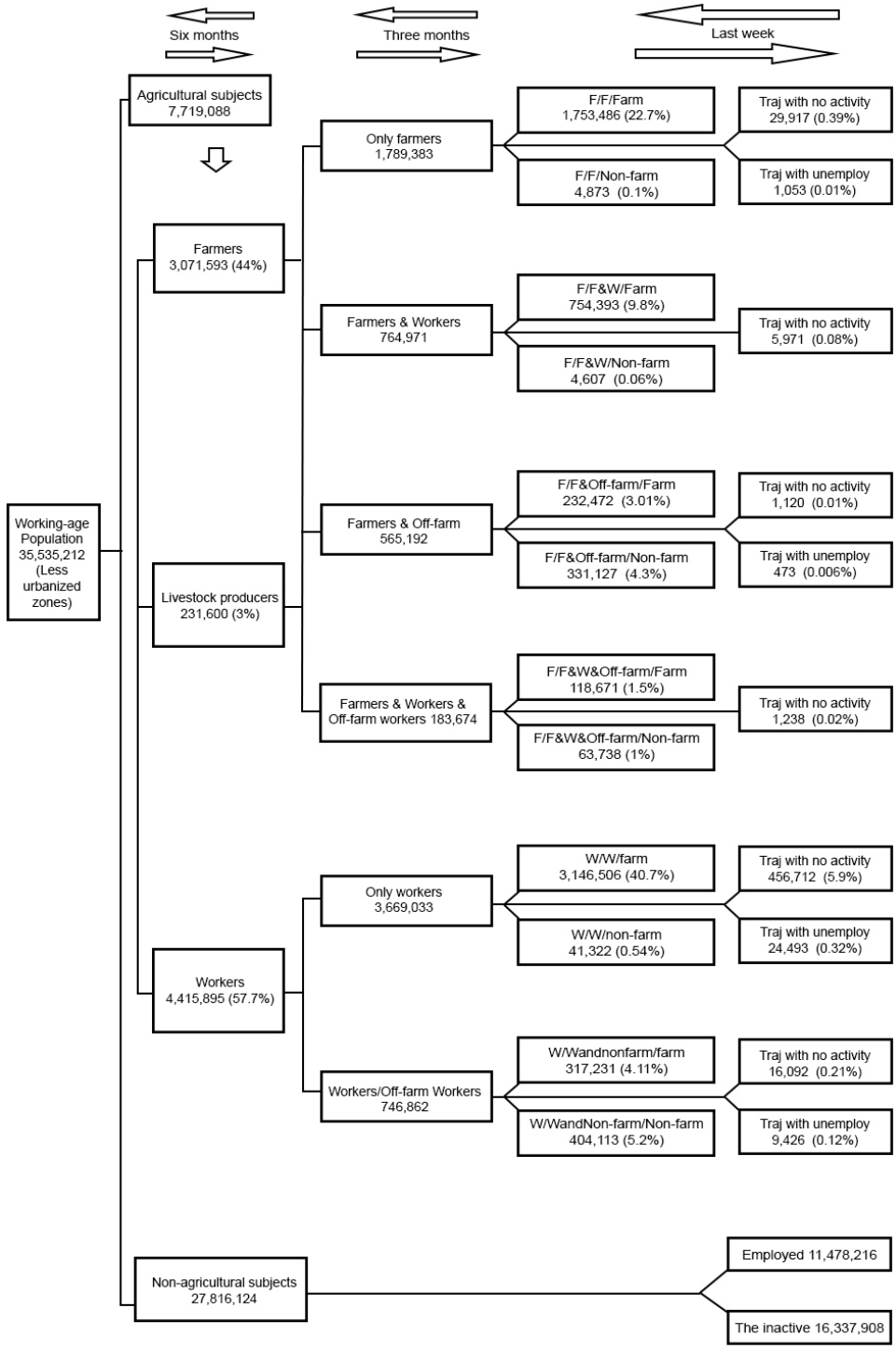
However, the construction of the itineraries analyzed in this article was possible due to the fact that this agricultural module contains the following question to determine whether people regard themselves as agricultural subjects: "Over the past 6 months, have you cultivated land and/or taken part in agricultural activities, or have you raised or taken care of animals for sale and exploitation?" If the answer is "yes" the individual is classified according to the typology of "agricultural subjects" (farmers or workers). Farmers are subsequently asked about their activity during the previous three months (on-farm and off-farm) while workers are asked whether they have engaged in other off-farm activities during this same period. Lastly, the survey includes information based on the week prior to the interview (reference period) (agricultural and non-agricultural).

Figure 1. Mobility itineraries of agricultural subjects, 1993



Source: Encuesta Nacional de Empleo 1993, Módulo agropecuario, INEGI.

Figure 2. Mobility itineraries of farm subjects, 2003



Source: Encuesta Nacional de Empleo 2003, Módulo agropecuario, INEGI.

Based on the answers provided to the three questions listed above, several itineraries are therefore possible. For example, respondents could identify as an agricultural or livestock farmer or worker in the six month period (F/F/Farm) (W/W/Non-farm) or combine agricultural and non-agricultural activities (for example: W/W&off-farm/Farm). Thus, this approach refers to a person's possible multi-activity during the six-month period. A total of 22 work itineraries were constructed, 14 of which correspond to farmers and 8 to workers (Figure 1 and Figure 2).

We hereby define "itineraries" as the various possible work trajectories of agricultural subjects during the six months prior to the survey. In other words, we do not refer to "labor routes" as "trajectories" since the three survey questions on the employment status of individuals only focus on three points in time during the six-month period under study rather than on a continuous period. Out of the 22 possible itineraries that can be taken into account considering the three aforementioned periods, we pay special attention to 14 itineraries (which reveal itineraries of rotation, discontinuity, and "no change), since those that contemplate workers who responded in the week prior to the interview indicating that they were out of the labor market or were looking for a job, have a very low importance in the two years of the study: in the case of farmers, this type of itinerary represented less than 1% and in the case of workers, less than 6%.

It is worth highlighting that the first part of the study is descriptive (see Labor itineraries section of this paper), and uses statistical indicators, percentages and means. Hypothesis tests for comparison of means for independent samples were performed for both years under analysis. Initially, for the two periods in question (1993 and 2003), we describe the importance of each one of the possible itineraries that a given worker could have followed at three points in time, followed by a consideration regarding the importance of these itineraries in terms of the type of activity carried out: subsistence, modern or mixed. It is worth mentioning that it will be in Itineraries and forms of production section of this document, where the characteristics that comprise each of these three types of activity are described in detail.

Finally, given that the itineraries with the highest importance are those that reflect permanence, in order to identify associated factors, which influence the most stable mobility itinerary, logistic regression models were conducted, comparing the two points in time of interest (1993 and 2003) (see Factors that influence participation in the non-mobility itinerary section in this paper). To this end, three dimensions of interest were used as a starting

point, and the effect and changes in these dimensions were observed when incorporating a new dimension. These were classified as: sociodemographic variables (gender and schooling level), labor variables (working condition), and structural variables (type of crop and productive structure).

Labor itineraries

Forms of mobility in agricultural activity

The information obtained shows that the agricultural subjects recorded in this survey mainly engaged in agricultural work during the period under study, with a small proportion engaging in non-agricultural activities. It should also be noted that this situation did not change substantially between 1993 and 2003. The itineraries identified in the two years under study are detailed below.

In 1993, 10.6 million respondents were defined as agricultural subjects, out of a total of 32.4 million working-age individuals. A total of 4.7 million agricultural subjects reported they were farmers while 5.7 declared that they were farm workers (Figure 1). Among farmers, 2.4 million were classified within the non-mobility itinerary (i.e. 22% of agricultural subjects were located in the F/F/Farm itinerary) whereas, in the case of workers, the proportion of non-mobility was 40% (i.e. 4.3 million were placed in the W/W/Farm itinerary). One itinerary includes mobility within the same agricultural activities but with a change of agricultural worker category, comprising 1.2 million farmers (11% of agricultural subjects located in the itinerary known as F/F&W/Farm). The third large group corresponds to movements towards non-agricultural activities, which account for approximately one million workers (11% of agricultural subjects are located in the following itineraries: F/F&Off-farm/Farm; F/F&Off-farm/Non-farm; F/F&W&Off-farm/Farm; F/F&W&Off-farm/Non-farm), whereas in the case of workers, the proportion is 8% (with 876,282 in the following trajectories: W/W&Off-farm/Farm; W/W&Off-farm/Non-farm). Lastly, there is a small group in which respondents were unemployed during the week of reference.

As mentioned above, in 2003, no significant changes were observed in the specific importance of each itinerary, although the number of agricultural subjects decreased due to a generalized contraction of the sector. Overall, 63.4% made no changes over the six-month period while at a certain point in time (F/F/Farm and W/W/Farm), 11.2% shifted towards non-agricultural activities (Figure 2).

To address the result related to the non-mobility of agricultural subjects, we propose that, as this group of workers were only identified as agricultural subjects if they were engaged in agricultural activities at the time of the study (six months), it is possible that in less urbanized contexts, there may be a set of subjects who are not actually defined as agricultural subjects as such, but who may have temporarily engaged in some form of agricultural work during the year. However, the survey has no capacity for recording these subjects and thus the group of agricultural subjects has a certain degree of selectivity. In order to provide evidence of this, we explored the proportion of agricultural subjects who were working at the time of the interview. This proved to be the majority (93%), whereas, in the case of non-agricultural subjects, approximately 60% were not in the labor force.

A further approach to explore non-mobility is through the questionnaire designed exclusively for agricultural subjects, in which specific reference is made to their work status over the course of a year, and to the reasons why they had not worked continuously (Table 1). It is noteworthy that the itineraries corresponding to non-mobility show an increase in the section referring to work in the field throughout the year. Conversely, itineraries that involve mobility towards off-agricultural work clearly reveal seasonal work in the fields during the year under study.

Taking into account the three points of the itineraries, the limits in mobility of this workers' category become clear. Among the possible itineraries during the last year of the survey, 2003, the largest proportion engage in the following routes: farmer-farmer (past 6 and 3 months respectively) and farm-worker (past week) or worker-worker and farm-worker.

The farm-off-farm combination is more frequent in the case of men who declared themselves to be agricultural subjects, compared to women classified as agricultural subjects. Therefore, we can infer that these agricultural subjects have very few options in the labor market to undertake a more dynamic mobility. In other words, those individuals who might be in a position to undertake greater mobility are probably no longer recorded by this household survey.

Table 1. Permanent work and reasons for temporary work in a year by itineraries, Mexico (percentages)

Itineraries	Works all year in the countryside		Does not work in the countryside all year									
			Works in the country side at some time during the year		Only works in the country side when called or when his services are required		Engages in other occupations or periodically emigrates to urban centers		Engages in domestic activities		Others	
	1993	2003	1993	2003	1993	2003	1993	2003	1993	2003	1993	2003
Men												
Farmers												
F/F/farm	78.4	89.4	19.5	9.4	0.1	0.0	0.6	0.6	0.2	0.0	1.2	0.6
F/F/non-farm	-	89.3	-	10.7	-	0.0	-	0.0	-	0.0	-	0.0
F/F&W/farm	83.4	92.9	13.9	4.6	0.1	0.0	1.5	1.2	0.1	0.0	1.1	1.3
F/F&W/non-farm	-	38.9	-	61.1	-	0.0	-	0.0	-	0.0	-	0.0
F/F&non-farm/farm	66.2	72.2	28.8	20.5	0.0	0.0	4.5	7.2	0.0	0.0	0.5	0.2
F/F&non-farm/non-farm	39.2	55.2	48.4	29.7	0.3	0.0	9.2	13.7	0.2	0.0	2.7	1.4
F/F&W&non-farm/farm	79.7	75.0	5.8	11.9	0.0	0.0	11.0	12.6	0.0	0.0	3.4	0.5
F/F&W&non-farm/non-farm	47.0	63.5	34.5	22.9	0.0	0.0	18.5	13.3	0.0	0.0	0.0	0.3
Workers												
W/W/farm	75.3	84.4	17.3	10.8	2.0	1.7	1.1	1.4	0.0	0.0	4.3	1.7
W/W/non-farm	-	61.1	-	24.7	-	4.6	-	7.3	-	0.3	-	2.0
W/W&non-farm/farm	63.9	54.6	19.3	23.8	4.6	5.3	11.2	15.5	0.0	0.0	1.0	0.9
W/W&non-farm/non-farm	42.4	29.8	32.9	30.8	3.2	11.9	16.3	25.5	0.5	0.0	4.6	2.0
Traj. that ends in non-activity	17.1	13.0	37.3	48.9	11.0	8.4	2.1	3.4	0.0	0.0	32.5	26.3
Traj. that ends in unemployment	21.9	15.0	65.9	52.5	1.9	18.8	0.0	11.0	0.0	0.0	10.3	2.7
Total (%)	70.4	78.3	21.3	13.9	1.5	1.8	3.1	4.1	0.1	0.0	3.7	1.9

(continues)

Table 1 (continuation)

Itineraries	Works all year in the countryside		Does not work in the countryside all year									
			Works in the country side at some time during the year		Only works in the country side when called or when his services are required		Engages in other occupations or periodically emigrates to urban centers		Engages in domestic activities		Others	
	1993	2003	1993	2003	1993	2003	1993	2003	1993	2003	1993	2003
Women												
Farmers												
F/F/farm	62.5	82.6	32.7	13.1	0.0	0.4	3.8	0.0	1.0	2.2	0.0	1.7
F/F/non-farm	-	100.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
F/F&W/farm	58.1	82.4	29.9	17.6	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
F/F&W/non-farm	-	100.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
F/F&non-farm/farm	21.6	72.6	66.8	23.8	0.0	0.0	0.0	0.0	11.5	2.8	0.0	0.8
F/F&non-farm/non-farm	57.5	56.9	42.5	24.1	0.0	0.0	0.0	11.7	0.0	1.5	0.0	5.8
F/F&W&non-farm/farm	0.0	53.2	100.0	0.0	0.0	0.0	0.0	46.8	0.0	0.0	0.0	0.0
F/F&W&non-farm/non-farm	-	80.2	-	0.0	-	0.0	-	0.0	-	0.0	-	19.8
Workers												
W/W/farm	55.4	57.4	26.2	28.4	5.6	3.0	0.0	0.5	11.1	9.0	1.8	1.7
W/W/non-farm	-	45.5	-	25.8	-	0.0	-	1.7	-	15.5	-	11.6
W/W&non-farm/farm	21.1	40.4	65.3	37.7	0.0	4.8	0.0	13.0	13.6	3.7	0.0	0.3
W/W&non-farm/non-farm	27.9	21.0	43.3	43.2	2.8	9.5	14.2	19.8	11.7	3.7	0.0	2.8
Traj. that ends in non-activity	4.2	4.5	71.8	73.0	1.9	4.7	0.0	1.2	8.9	13.1	13.2	3.5
Traj. that ends in unemployment	0.0	6.3	34.2	75.2	0.0	2.9	65.8	7.4	0.0	1.9	0.0	6.3
Total (%)	43.1	42.6	39.2	40.1	3.5	3.5	1.4	3.0	9.1	8.3	3.6	2.5

Source: Encuesta Nacional de Empleo, 1993 and 2003, Módulo agropecuario, INEGI.

Itineraries and forms of production

Currently, agricultural studies employ a combination of approaches to explain dynamics within the new process of international insertion, which began in the 80. It argues that one of the main objectives of this insertion—greater dynamism through productivity and competitiveness—was not possible for the whole agricultural sector, largely due to the heterogeneity of this sector and the economic policies that supported the most privileged groups within such sector.

In general, the diverse agricultural structure is characterized by various forms of organizing production and, therefore, labor. In this regard, it is worth mentioning Appendini's groundbreaking work in Mexico (1983), in which she highlights three main categories (means of production, use of labor force and results of the production process) that differentiate peasant agriculture from capitalist agriculture. She argues that peasant agriculture was characterized by lack of accumulation, family labor and less agricultural production, with a focus on traditional crops, whereas capitalist agriculture was distinguished by the use of modern technology, salaried labor, the use of developed techniques, and the production of non-traditional crops.

However, the great heterogeneity of Mexican agriculture, evident for several decades and accentuated in recent years, has been affected by economic reforms in the sector. This heterogeneity is closely linked to traditional means of land exploitation. In fact, the Organización para la Cooperación y el Desarrollo Económicos (1997) points out that the structure of agriculture in Mexico has been strongly influenced by the land redistribution system implemented after the Revolution—land redistribution began in 1912, reached its peak between 1920 and 1934, and came to an end with the Constitutional Reform of 1992 (Warman, 2003). The study concludes that the current agricultural structure is composed of commercial exploitation, traditional exploitation (impoverished but with commercial potential) and subsistence exploitation (extremely impoverished with virtually no commercial potential).

In short, Mexican agriculture is characterized by its multiple layers of heterogeneity, in terms of both regionality and productive structure and labor, with significant disparities between the individuals engaged in it. This makes its study challenging, yet of great interest.

After reviewing different typologies, considering several proposed categories, and analyzing possible sources of information, this paper adopts the classification developed in a previous study by one of the authors of

this paper (Florez Vaquiro, 2005, 2015). To achieve an empirical approximation of how the production process is organized, the following three variables are considered: a) land size, b) type of capitalization, and c) form of mechanization. These variables were selected as they were the only three questions in the agricultural module that were common to both farmers and workers in the ENE undertaken in 1993 and 2003. The following typology was constructed from these variables:

1. *Agricultural subjects linked to subsistence activities:* individuals linked to small farms—with less than one hectare and up to 20 hectares—; with precarious conditions of capitalization—lacking any kind of facilities on their land—; and mechanization—they undertake farm activities with animals and/or manual tools.
2. *Agricultural subjects linked to modern activities:* individuals linked to large areas—over 20 hectares—; with good capitalization conditions—irrigation infrastructure, facilities for the exploitation and care of livestock and processing and manufacturing facilities—; and good conditions of mechanization—agricultural activities are carried out mechanically and/or mechanically and with animals.
3. *Agricultural subjects linked to mixed activities:* 1) individuals linked to small facilities—less than 20 hectares—with good conditions of capitalization and mechanization; 2) individuals linked to small facilities—less than 20 hectares—with poor capitalization conditions and good mechanization conditions; 3) individuals linked to small facilities—less than 20 hectares—with good capitalization conditions and poor mechanization conditions; 4) individuals linked to large areas of land—over 20 hectares—with poor capitalization conditions and good mechanization conditions; 5) individuals linked to large extensions of land—over 20 hectares—with good capitalization and poor mechanization conditions; and 6) individuals linked to large extensions of land—over 20 hectares—with poor capitalization and mechanization conditions.

Based on this typology, we sought to discover how the various labor itineraries performed, and thus focused on farmers' itineraries. It should be noted that subsistence farmers account for approximately 65% of all farmers, whereas modern production is practically non-existent (accounting for barely 2.5%). In general, this distribution did not change between 1993 and 2003, although in 2003, a higher proportion of women farmers engaged in both mixed and modern production (Table 2).

Table 2. Farmers' itineraries by forms of production, Mexico (percentages)

Farmers	Total		Men		Women	
	1993	2003	1993	2003	1993	2003
Subsistence Farmers						
F/F/farm	47.0	49.9	46.3	49.6	60.2	55.0
F/F&W/farm	28.0	28.0	29.2	28.6	6.6	12.6
F/F&W/off-farm	-	0.1	-	0.1	-	-
F/F&Off-farm/farm	6.2	6.6	6.3	6.6	4.6	5.8
F/F&Off-farm/non-farm	14.0	8.5	13.7	8.2	19.6	14.0
F/F&W and Off-farm/farm	1.5	4.1	1.6	4.2	-	0.7
F/F&Off-farm/non-farm	2.2	1.9	2.3	2.0	-	-
Itinerary with no activity	1.0	1.0	0.5	0.5	8.9	11.9
Itinerary with unemployment	0.1	-	0.1	-	-	-
N	2,987,382	1,971,902	2,829,999	1,889,336	157,383	82,566
% of subsistence production	65.6	64.2	65.2	64.3	73.0	62.7
Mixed production						
F/F/farm	51.8	55.6	51.5	55.7	57.6	54.1
F/F/off-farm	-	0.3	-	0.3	-	-
F/F&W/farm	22.8	17.0	23.6	17.4	2.1	10.3
F/F&W/off-farm	-	0.2	-	0.2	-	-
F/F&Off-farm/farm	7.7	8.3	6.9	8.4	27.7	7.1
F/F&Off-farm/off-farm	12.2	11.8	12.3	11.3	11.1	22.6
F/F&WandOff-farm/farm	2.2	2.8	2.2	2.9	1.5	0.6
F/F&Off-farm/off-farm	2.3	2.3	2.4	2.4	-	-
Itinerary with no activity	0.9	1.5	1.0	1.3	-	5.2
Itinerary with unemployment	-	0.1	-	0.1	-	-
N	1,468,068	1,012,423	1,409,998	965,593	58,070	46,830
% of mixed production	32.2	33.0	32.5	32.8	27.0	35.6
Modern Production						
F/F/farm	78.5	68.4	78.5	68.7	-	57.5
F/F/off-farm	-	-	-	-	-	-
F/F&W/farm	4.8	11.1	4.8	11.4	-	-
F/F&W/off-farm	-	-	-	-	-	-
F/F&Off-farm/farm	10.0	9.7	10.0	8.7	-	42.5
F/F&Off-farm/non-farm	6.7	6.5	6.7	6.7	-	-
F/F&WandOff-farm/farm	-	3.7	-	3.8	-	-
F/F&Off-farm/off-farm	-	-	-	-	-	-
Itinerary with no activity	-	0.6	-	0.7	-	-
Itinerary with unemployment	-	-	-	-	-	-
N	101,245	81,760	101,245	79,509	-	2,251
% of modern production	2.2	2.7	2.3	2.7	-	1.7
Not specified	-	0.2	-	0.2	-	-
F/F/farm	-	40.0	-	40.0	-	-
F/F&W/farm	-	53.8	-	53.8	-	-
F/F&Off-farm/off-farm	-	6.2	-	6.2	-	-
N	-	5508	-	5508	-	-
Total	4,556,695	3,071,593	4,341,242	2,939,946	215,453	131,647
(%)	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Empleo, 1993 and 2003, Módulo agropecuario, INEGI.

The first major observation shows that the non-mobility itinerary (F/F/Farm) increases during the shift from subsistence organization (approximately 50%) to a modern organization (approximately 70%). This result shows that modern organization reduces the likelihood that a household will require a labor mobility strategy in order to obtain income. In other words, it is an itinerary that offers labor and economic stability. However, it is worth noting that there was a decrease in the non-mobility itinerary for men linked to modern production of nearly 10 percentage points between 1993 and 2003. This suggests that, in recent years, income obtained from this type of activity is insufficient, and therefore a mobility strategy is needed to obtain a higher income, especially since there was an increase in the itinerary showing that three months prior to the interview, the farmer had been engaged as an agricultural worker.

As for differences between male and female farmers, women account for a significant share of the itineraries that involve leaving the agricultural sector. For example, in the case of mixed production, 11.3% of male farmers fall into the itinerary category involving the non-agricultural sector (F/F&Off-farm/Non-farm) whereas this applies to 22.6% of women. Similarly, a gender gap is also observed in subsistence production, although not as pronounced, (8% of men as opposed to 14% of women). Another aspect worth highlighting is that, at the beginning of the study period, women were not engaged in modern production, but had begun to participate by the end of the period, and had rarely shifted into the non-agricultural sector.

Regarding workers, a high proportion was engaged in subsistence production (44% in 2003) (Table 3), however, this was higher at the beginning of the period under study (56.4% in 1993). This raises the question of the forms of organization to which they shifted. In principle, it could be assumed that modern production would have absorbed this type of workers; however, a significant increase (from 21.8% to 40.8%) was seen for mixed insertion, the only economic sphere with an absolute increase in the number of workers within the general context of a decrease in the number of agricultural workers. In short, a significant transformation has occurred, which indirectly involves a shift among farm workers to off-agricultural activities, migratory processes and possibly labor-saving processes in the agricultural sector. It also directly reflects the need to work in an economic space in which there may be a possibility of higher income by moving from subsistence insertions to mixed insertions.

The second major finding shows that non-mobility itineraries have a larger proportion of workers (73.9% for subsistence, 68.1% for mixed insertion, and 70.1% for modern insertion) although a downward trend in this proportion

is observed among mixed and modern insertions. Between 15 and 20% of workers shifted to non-agricultural activities, whereas in subsistence and modern insertions, the shift to non-agricultural activities three months earlier increased during this period. However, during the week of reference, workers reverted to agricultural activities, while mixed insertion experienced a significant increase in long-term mobility towards non-agricultural activities (4.9% to 11.4%). This result suggests that, although mixed production absorbed a greater number of workers, they did not remain exclusively in the sector. Instead, this economic sphere could thus be a bridge towards non-agricultural activities, possibly resulting from the seasonal nature of farm work, although it might also reflect indices of labor instability.

Table 3. Farmers' itineraries by forms of production, Mexico (percentages)

Workers	Total		Men		Women	
	1993	2003	1993	2003	1993	2003
Subsistence insertion						
W/W/farm	72.5	73.9	75.2	81.6	63.1	47.0
W/W/off-farm	-	0.4	-	0.4	-	0.8
W/W&Off-farm/farm	3.2	6.3	3.7	6.6	1.7	5.1
W/W&Off-farm/off-farm	13.7	8.4	14.7	7.9	10.8	10.2
Itinerary with no activity	10.5	10.7	6.4	3.2	24.4	36.7
Itinerary with unemployment	-	0.3	0.0	0.3	0.0	0.2
Not employed	0.1	-	0.1	-	0.0	-
N	3,122,220	1,900,766	2,417,825	1,474,310	707,988	426,456
% of subsistence insertion	56.4	44.9	56.1	44.5	57.9	46.2
Mixed insertion						
W/W/farm	82.7	68.1	84.3	72.5	77.1	52.2
W/W/off-farm	-	0.7	-	0.5	-	1.5
W/W&Off-farm/farm	6.1	7.9	5.6	9.4	7.8	2.7
W/W&Off-farm/off-farm	4.9	11.4	6.2	11.5	0.9	10.9
Itinerary with no activity	6.3	10.8	4.0	4.7	14.2	32.4
Itinerary with unemployment	-	1.1	0.0	1.4	0.0	0.3
N	1,208,096	1,726,300	932,181	1,347,474	276,411	378,826
% of mixed insertion	21.8	40.8	21.6	40.7	22.6	41.1
Modern insertion						
W/W/farm	82.3	70.1	86.3	74.5	67.2	55.3
W/W/off-farm	-	2.1	-	2.2	-	1.7
W/W&Off-farm/farm	3.9	7.7	3.7	8.7	5.1	4.3
W/W&Off-farm/off-farm	5.9	5.0	6.5	5.0	2.1	5.0
Itinerary with no activity	7.9	13.9	3.5	8.5	25.5	32.3
Itinerary with unemployment	-	1.2	0.0	1.2	0.0	1.4
N	1,145,103	454,345	914,194	351,324	227,219	103,021
% of modern insertion	20.7	10.7	21.2	10.6	18.6	11.2

(continues)

Table 3 (continuation)

Workers	Total		Men		Women	
	1993	2003	1993	2003	1993	2003
Not specified	1.0	3.6	1.0	4.2	0.9	1.6
W/W/farm	83.3	75.5	11.9	76.6	0.0	64.9
W/W/off-farm	-	3.7	-	4.1	-	-
W/W&Off-farm/farm	1.9	8.2	0.0	8.0	0.0	10.1
W/WandOff-farm/off-farm	-	5.7	5.0	5.9	3.3	3.9
Itinerary with no activity	14.0	5.9	77.3	4.4	96.7	21.0
Itinerary with unemployment	0.7	0.9	5.8	1.0	0.0	-
N	55,762	152,220	44,746	137,949	10,615	14,341
Total	5,531,181	4,233,631	4,308,947	3,311,057	1,222,233	922,644
(%)	100.0	100.0	100.0	100.0	100.0	100.0

Source: Encuesta Nacional de Empleo, 1993 and 2003, Módulo agropecuario, INEGI.

Unlike the farmers, 10% of the workers had a trajectory that involved not being active at the time of the interview (Table 3). This trajectory showed clear differences between men and women. In 2003, one-third of the female population who described themselves as agricultural subjects were not engaged in any activity at the time of the interview, a trend that increased over time. This suggests that women who continue to work on farms experience a traditional model of family organization, meaning that domestic responsibilities are an integral part of their lives. However, in these contexts, the distinction between domestic and extra-domestic work is extremely blurred, and hence the difficulty in recognizing participation in extra-domestic work (in other words, there is a sharp degree of underestimation).

Factors that influence participation in the non-mobility itinerary

The most significant itineraries are those linked to forms of permanence in agricultural activity, identified in all three periods over the six-month period. To explore the possible factors that might influence this, we constructed three types of variables: individual variables (gender and educational attainment), labor variables (working conditions), and structural variables (type of crop and productive structure).[3] Our hypothesis states that involvement in a traditional productive structure, low educational level and living in precarious working conditions increase the likelihood of remaining in the sector. In other words, a perception of the agricultural sector as precarious is implicitly assumed.

3 We wish to point out that although we used several variables related to working conditions, a combination of position at work and range of income fitted the model best and did not cause problems of correlation between the explanatory variables.

Furthermore, in order to explore how each type of variable affects permanence in the sector, three models were explored for each year. The first included individual variables, the second was constructed from the individual and labor variables, while the third incorporates the structural variables.

The analysis of individual variables shows that gender is the most significant variable affecting the tendency to remain in the agricultural sector (men are 14 times more likely to remain than women), reflecting the masculinization of the agricultural sector in Mexico (Table 4, Column 1). Gender continues to be a significant factor to consider even when variables linked to working conditions are incorporated. Nevertheless, in 1993, being a farmer also reduced this likelihood, along with a higher educational level (Table 4, Column 2). In 2003, there was a notable change in agricultural dynamics. Agricultural subjects who were low-income farmers were 10% more likely to remain in the sector (Table 4, Column 5), which might indicate processes underlying exit barriers for individuals in precarious situations.

Table 4. Factors that influence permanence in the agricultural sector (logistic regression models)

Explanatory Variables	1993			2003		
	Model I	Model II	Model III	Model I	Model II	Model III
	Odd Ratios					
Individual Variables						
Sex						
Woman	1.000	1.000	1.000	1.000	1.000	1.000
Man	14.408*	1.762*	2.565*	13.031*	3.324*	3.571*
Education						
No instruction	1.000	1.000	1.000	1.000	1.000	1.000
Elementary	0.568*	0.595*	0.555*	0.608*	0.714*	0.699*
Secondary	0.201*	0.433*	0.459*	0.282*	0.578*	0.558*
High school and over	0.777*	0.274*	0.315*	0.111*	0.399*	0.390*
Work Variables						
Condition at Work						
Unpaid Worker		1.000	1.000		1.000	1.000
Day worker with low income		1.164	1.465**		0.962	0.881**
Day worker with higher income		0.896	0.306		0.644*	0.587*
Farmers with low income		0.759*	0.348*		1.103**	1.062
Farmer with higher income		0.280*	0.123*		0.313	0.293*
Employees with low income		1.403	3.238**		0.631**	0.474*
Farmers with higher income		1.156	0.000		1.036	1.138

(continues)

Table 4 (continuation)

Explanatory Variables	1993			2003		
	Model I	Model II	Model III	Model I	Model II	Model III
	Odd Ratios					
Structural variables						
Crop						
Maize-Beans-Wheat and Rice			1.000			1.000
Vegetables-Pulses-Fruit and Flowers			1.388**			1.420*
Other Crops			1.268**			1.866*
Productive Structure						
Traditional			1.000			1.000
Modern			1.474*			0.857*
Constant	0.115*	3.947*	5.058*	0.069*	1.611*	1.450*

** Significant to 0.001 and ** significant to 0.05*
Source: Encuesta Nacional de Empleo, 1993 and 2003, Módulo agropecuario, INEGI.

For the last model, in 1993, working conditions are more relevant than individual characteristics. Thus, being employed in a low-income job increases the likelihood of remaining in the agricultural sector by a factor of 3.2, while men are 2.6 times more likely to remain in the sector (Table 4, Column 2). On the other hand, the results of this model modify our hypothesis. Indeed, these results show that certain non-precarious conditions in the sector offer possibilities of permanence, as in the case of participation in vegetable, legumes, fruit, and flower production. Working with these crops increases the likelihood of remaining by nearly 40%. The same occurs with workers on a modern production structure, which could be explained by greater job stability as this type of production does not depend on seasonality.

By 2003, working conditions were no longer more important than the fact of being male, and in addition, being a low wage-earner reduced the likelihood by more than half (Table 4, Column 6). In contrast to results in 1993, this model shows that certain non-precarious conditions reduce the possibility of staying in the sector, with higher income day workers and higher income farmers being 40% and 70%, respectively, less likely to stay. This could be explained by the fact that these groups may have assets that enable them to leave the sector with greater ease. Lastly, one aspect that does not change over time is the effect of participation in the production of non-traditional crops. In contrast, by 2003, participation in modern productive contexts reduces the likelihood of remaining in the sector by 15%. This may reflect labor saving processes that limit the creation of modern workspaces within the agricultural sector.

Final considerations

According to the 2020 Census (INEGI, 2020), 21.4% (27 million inhabitants) of the Mexican population lived in areas with less than 2,500 inhabitants, that is, more than one in five inhabitants in the country still live in rural areas. This highlights the importance of identifying the population, as well as the economic, social, and labor dynamics of less rural and agricultural contexts. It is thus worth emphasizing the recent decline in poverty levels in rural contexts, as food poverty decreased from 34% in 1992 to 29.2% in 2010, while similarly, the percentage of the population in poverty decreased from 62.5% in 2008 to 55.3% in 2018, an average annual decrease of 0.72 percentage points. However, the decrease in poverty levels has not translated into better living conditions, nor a reduction in inequalities. On the contrary, the income and working conditions of rural and agricultural workers have become more precarious, and contributed to the need for diversification of income sources and recourse to strategies such as multi-activity.

Longitudinal analyses are particularly valuable to observe changes in multi-activity over short periods of time in the agricultural sector, since, due to its mostly informal nature and its dependence on crop production cycles (months), it demands labor during the planting and harvesting periods. Thus, the recognition of labor itineraries of agricultural producers and workers (in three points in time over a six-month period) is valuable in order to identify the productive and reproductive arrangements of households and, in particular, to understand family and individual income and living strategies, which perhaps impact the labor itineraries of agricultural workers.

As explained in the introduction of this paper, the concept of multi-activity is polysemic, and can be considered from several points of view. We approached this discussion from the perspective of changes displayed by agricultural subjects at three points in time (over a six-month period). We constructed 22 work itineraries, 14 of which corresponded to farmers and 8 to agricultural workers. These itineraries were also described herein.

Our first result referred to subjects remaining in agricultural activities. We argue that this was related to the degree of selectivity that may occur in a survey such as the one used. It is possible that some inhabitants of less urbanized contexts may not have been engaged in farm activities during the six months prior to the survey and, therefore, were excluded from the scope of study. However, it is undoubtedly also worth considering the explanation

offered by previous research on low mobility in the rural sector, which argues that a high proportion of self-employment may be a contributing factor to non-mobility (see Ramírez, 2005).

An additional explanation is that the low mobility is due to the fact that the survey is focused on investigating the itineraries of agricultural individuals at only three specific moments during a semester, therefore, it is not possible to identify all the rotations that may arise during such period, underestimating possible greater mobility of the labor supply in the sector. There is even the possibility that an individual may declare agricultural activity as his or her main occupation despite having performed secondary, non-agricultural activities; or, on the contrary, that he or she may perform some work in the fields on a temporary basis throughout the year without being recorded in the survey.

On the other hand, regarding permanence in agricultural activities, our literature review shows that qualitative studies have found that labor mobility among women is lower in peasant households, probably due to their responsibilities in domestic work, non-remunerated care work and within the indigenous context, while at a national level, there is greater participation of women in non-agricultural activities (Pacheco, 2010). Given our results, we argue that a short-term longitudinal approach reveals the different sides of labor mobility and illustrates processes that would not be discernable with cross-sectional sources of information.

In the section on Itineraries and forms of production, we have identified an increase in itineraries without mobility in the transition from subsistence to modern organization. We argue that modern contexts offer conditions that allow greater stability. In the section that sought to explain non-mobility, we found that in 1993, participation in modern processes increased the propensity to remain within the itinerary of non-mobility. However, this changed in 2003, when participation in modern structures actually reduced the likelihood of remaining in agricultural activities. This forced us to reflect on the limits of modern production in terms of job creation.

Lastly, in attempting to explain the factors that influence permanence in non-mobility itineraries, we proposed hypotheses for the most disadvantageous situations that would explain greater permanence (in line with the results of previous research). The model reveals nuances we believe may be interesting for understanding agricultural dynamics.

Our hypothesis that the most disadvantageous conditions would explain permanence in non-mobility itineraries was modified based on the results

obtained in the models. By 2003, certain less disadvantageous conditions reduced the likelihood of remaining in these itineraries. This occurs for both agricultural workers and higher-income farmers and suggests that these groups may have certain assets that enable them to exit the sector more easily. In short, it is impossible to speak of a single factor that explains non-mobility. Rather, we must consider two, in which certain disadvantages keep the population within the sector and, at the same time, certain advantages may account for their permanence.

As a conclusion, two demographic aspects present in this study should be mentioned. The first concerns the evolution of the volume of workers in agricultural activities, and the second refers to the labor differences between men and women in rural contexts.

In terms of volume, the comparative analysis of the agricultural module of the 1993 and 2003 ENE revealed a sharp decrease in the labor supply of agricultural workers in the country's less urbanized contexts. In 1993, one out of every three individuals in the EAP was involved in agricultural activities, while in 2003 the ratio was already one out of every five; thus, in a short period of 10 years, the agricultural sector underwent a strong process of de-peasantization. Such a change can be explained as an effect of the structural trend of the modernization and urbanization process, but also the low growth of agricultural activity, the low prices of goods and salaries and the lack of opportunities contributed to the fact that the sector was no longer attractive for farming and agriculture, displacing the labor force towards other sectors of economic activity that were less precarious. In addition to this set of explanatory factors, we cannot forget that NAFTA was signed and implemented during the period analyzed; although the purpose of this research is not to study its effects on the labor market in the primary sector of the economy, we cannot ignore or fail to notice its possible implications and argue that the period of study under consideration in this paper provides an interesting snapshot of the changes that took place immediately after the NAFTA was executed.

Lastly, in terms of gender disparities, we are convinced that the lower mobility of men may be due to their greater insertion in traditional seasonal and self-consumption crops, in addition to being older and with lower levels of schooling; aspects that possibly impede a greater transition to non-agricultural activities in search of a better income. While women, although they have low participation in the agricultural labor supply, are the ones with the greatest mobility, with marked differences according to

structural variables. Women linked to modern insertion and agro-export crops—vegetables, fruits, and flowers—showed less mobility, most likely related to the greater job stability and better income offered by these crops and types of production. On the other hand, women involved in subsistence and mixed production showed greater mobility between agricultural and non-agricultural activities. In addition, we must warn that women producers and workers present greater itineraries of unemployment and inactivity throughout the year; with the characteristic that they are the ones who carry out the greatest burden of domestic activity combining it with agricultural work; a fact that invites us to expand our research considering the relationships between paid work and unpaid work in the social organization in rural contexts (Pacheco & Florez Vaquiro, 2014; Florez Vaquiro & Pacheco, 2017).

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