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MULTIACTIVITY FARM WORK IN THE LESS URBANIZED CONTEXTS OF MEXICO: 1993 AND 2003

Documentos de investigación



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INTRODUCTION

One of the aspects always mentioned in studies on the economic dynamics of rural contexts in Mexico is the non-exclusivity of a single economic activity. In some studies, this phenomenon is described from the perspective of land use, and in others from the various labor combinations that can be produced in the domestic unit with the idea of explaining forms 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 levels of discussion on the subject. This article deals with the issue of multiactivity by considering the possible work trajectories a person may have in the six months considered in order to record "farm subjects" in the agricultural module of the National Employment Survey taken during the period from 1998 to 2003.¹

The last decade of the 20th century and the beginning of this century are framed in a context of consolidation of a period that has been described by various authors as "outward growth." On the other hand, we know that since 1991, Mexico has not conducted an agricultural census showing the economic dynamics of this sector.² Consequently, existing information at the national level, based on population censuses, is either limited or specific to income yet restricted as regards questions on employment conditions in the National Survey on Household Income and Expenditure. There are also surveys that have been specially drawn up to determine the dynamics of the sector. However, they are not representative for the country or farm workers as a whole or else refer to a specific size of locality.³

This paper therefore attempts to recover information from a little-explored module of the employment survey, which contains important information on individuals and their work context in the agricultural sector. It also attempts

to describe labor dynamics during the period mentioned above by comparing changes in the forms of insertion into the labor market between 1993 and 2003.

To this end, the article is divided into three sections. The first is designed to explain the various analysis perspectives on multiactivity to obtain a reference framework for contextualizing the line of discussion of the work trajectories of agricultural subjects, an aspect that will be dealt with in the second section. It is worth noting that we defined the various work trajectories farm subjects could have had during the six months prior to the survey as itineraries. In other words, we did not call these "labor routes" trajectories since the three survey questions on people's work status only focus on three moments during the six- month period of study rather than a continuous period. Fourteen possible itineraries are constructed on the basis of these three moments, which involve itineraries of rotation, discontinuity and no change. Lastly, the third section seeks to answer the following question: What factors affect the type of labor trajectory of farm subjects? The article ends with a section of reflections on the information yielded by this means of approaching multiactivity.

AN APPROACH TO "MULTI-ACTIVITY"

As noted in the introduction to this paper, one of the aspects constantly mentioned in studies on rural contexts is multiactivity. In some studies, this phenomenon is framed from the perspective of occupational mobility (Ramírez, 2005), whereas in others, the approach is based on an analysis of land use (Robles and Concheiro, 2004). Still other studies focus on the various labor combinations that may occur in a domestic unit (Guzmán and León, 2005; Garay, 2007) while others frame the discussion from the perspective of the various sources of income produced in rural families (Reardon and Berdegué, 1999; Yúnez and Taylor, undated; Carton de Grammont, 2007; Yúnez and Meléndez-Martínez, 2007).

In particular, Ramírez (2005) analyzes labor mobility in rural zones in Chile, through a longitudinal approach to a sample of households for the period from 1996 to 2000, finding that agricultural rural employment employs the lowest mobility of productive sectors, with 68% of individuals remaining in the same activity between 1996 and 2001. The author notes the low mobility in the sector, combined with the high proportion of agricultural self- employment, accounting for 55% of rural employment. He points out that peasant agriculture apparently experiences the greatest difficulty in expanding its labor sources, but assumes a situation of multiactivity (whereby an individual engages in various activities although his principal occupation is agricultural activity). Lastly, he finds that

workers with very low productivity shift between rural farm work-whether salaried, permanent or temporary- and rural non-farm work that is unproductive or merely serves as a refuge.

Most studies on rural contexts analyze the spheres of the domestic unit to describe the source of family income. Thus, one of the fundamental results is the fact that nowadays, although some of their income comes from the agricultural sector, much of it comes from the non-agricultural sector. Thus, for example, when Reardon, Berdegué and Escobar (undated) study a group of countries, they indicate that multiactivity rates -seen from the perspective of household work arrangements- increase as a country's per capita income decreases, which makes sense to the authors from the perspective of "pressure factors" for the diversification of income. Nevertheless, the authors point out that the multiactivity rate is conditioned by income levels, since it increases when one moves from the poorest income quartile to the richest. This can be explained by the fact that households with better conditions are more able to send members to well-paid, non-agricultural salaried work.⁴

Carton de Grammont (2007) points out that in Mexico, multiactivity is a survival strategy, while the specialization of family incomes is a "better" strategy. In an analysis of rural incomes, he finds that whereas in 1992, the highest proportion of income was associated with peasant households (67%), in 2004, this ratio was inverted, with the highest proportion being found in non-peasant households (73%). In short, various authors observe that activities that at one time were regarded as "complementary" in rural spheres are now no longer so, as aptly noted by Escobal, Agreda and Agüero in their study of Peru.

This last study finds that over 50% of the net income of Peruvian rural households is obtained from other, off-farm activities. Another significant factor is ownership of assets or access to them, since they powerfully condition income diversification strategies within households. Thus, the rate of engaging in off-farm activities increases considerably for those owning a small amount of land or livestock. Households with better potable water and telephone services tend to increase their off-farm activities, whereas households with sufficient land or cattle do not need to leave their farms to seek complementary incomes.

As for individual variables, one result of this study, in households where the householder is an elderly person or one with lower educational attainment, the likelihood of seeking complementary activities falls. If the householder is a woman, this increases the likelihood that her complementary income will be obtained from off-farm 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 outside the domestic and productive unit. It is worth noting that these findings may not be replicated in other types of studies. For example, in his analysis of occupational mobility in Chile, Ramírez (2005) finds that age has a positive effect on change of employment, whereas sex and education do not significantly explain the change of activity.

As for family organization and differences by sex, there are findings of a different order according to the universe of study. A qualitative study finds that in peasant households, women's mobility is lower, since they tend to be responsible for the domestic aspects of the domestic and productive unit (Guzmán and León, 2005). When the information is examined on a national scale, Garay (2007) shows that in the case of women, off-farm activities are what distinguish them in less urbanized contexts. In this respect, it is not that the results are conflicting but rather that when only the extra-domestic sphere is considered, women declare that they work mainly in the non-agricultural sector. Conversely, studies that analyze the sexual division of labor inside households or domestic and productive units continue to highlight women's role in reproductive dynamics.

We do not wish to end this brief general review without describing a crucial aspect linked to rural contexts, namely migration. Several studies suggest that migration is linked to rural dynamics. Yúñez and Meléndez-Martínez (2007) note that international emigration significantly increases households' total income and the income received through remittances, whereas internal migration does not.

In short, the issue of "multiactivity" can be said to have several facets. Multiactivity may refer to individuals who engage in several occupations. Another approach is multiactivity analyzed from the point of view of the organization of household members (strategies for using family labor). Multiactivity also exists on a territorial scale, when some household members work outside the country or the region, meaning that they will send remittances, whereas other family members remain in the household unit and engage in farm and off-farm activities.



WORK ITINERARIES

Forms of Mobility in Farm Activity

The following question is asked to determine whether a person regards himself as a farm subject in the agricultural module of the employment survey. "Over the past 6 months, have you cultivated land and/or taken part in farm activities, or raised or taken care of animals for their sale and exploitation?" If the answer is "yes" the person is classified according to the typology of agricultural subjects (farmers or workers). Farmers are subsequently asked about their activity over the past three months (farm and off-farm) while workers are asked about whether they have engaged in other off-farm activities during this same period. Lastly, the survey includes information on the week prior to the interview (period of reference).

It is therefore possible to have various itineraries. For example, one can always be an agricultural or livestock farmer or worker over the six months (F/F/farm) (W/W/farm) or combine farm and non-farm activities (for example: W/Woff-farm) which is why this first approach will refer to a person's possible multi-activity during the six-month period. A total of 18 work itineraries were constructed, 11 of which correspond to farmers and 7 to workers (Scheme 1 and Scheme 2).

The information obtained to date shows that the farm subjects recorded in this survey mainly engage in farm work during the period under study, with a small proportion engaging in off-farm activities. It is also important to note that this situation has not changed substantially between 1993 and 2003. Below is a detailed account of the itineraries produced during the two years under study.

In 1993, 10.6 million respondents were defined as farm workers, out of a total of 32.4 million persons of working age. A total of 4.7 million agricultural workers said that they were farmers while 5.7 declared that they were farm subjects (Scheme 1). Among the farmers, 2.4 million can be classified within the itinerary without mobility (in other words, 21.7% of farm subjects were located in the F/F/ farm itinerary whereas in the case of workers, the proportion of non-mobility was 40.5% (in other words, 43 million are located in the W/W/farm itinerary). There is a type of itinerary that includes mobility within the same farm activities but changing the category of farm worker, comprising 1.2 million farmers (11.3% of agricultural subjects located in the itinerary known as F/FandW/farm). The third large group corresponds to movements towards off-farm activities, which account for approximately one million workers (10.4% are located in the following itineraries: F/FandOff-farm/ farm; F/FandOff-farm/Off-farm/Off-farm), whereas in

the case of workers, the proportion is 8.3% (with 830,000 in the following trajectories: W/ WandOff-farm/farm; W/WandOff-farm/no farm). Lastly, there is a group of itineraries which was unemployed during the week of reference (7.7%).

As we mentioned earlier, in the year 2003, no significant changes were observed in the specific importance of each itinerary. Quite simply the number of farm subjects was reduced due to the general trend towards the reduction of the sector. In general terms, 63% made no changes over 6 months while at some time, 19% shifted towards non-farm activities (Scheme 2).

In order to be able to respond to the result related to the non-mobility of farm subjects, we have continued the following options. This group of workers is only identified as a farm subject if it is engaged in farm activities, meaning that in less urbanized contexts, there may be a set of subjects who are not actually defined as farm subjects but may have temporarily engaged in some form of farm work throughout the year. However, it is impossible to record these subjects in this survey and to a certain extent, the group of farm subjects has a degree of selectivity. In order to produce evidence in this respect, we began by trying to find out what proportion of farm subjects were working at the time of the interview, which proved to be a majority (93%), whereas in the case of non-farm subjects, approximately 60% were unemployed.

Another way of exploring non-mobility is by using a question from the questionnaire designed exclusively for farm subjects, which refers to their working condition during a whole year or to the reasons why they had not worked continuously (Table 1). It is striking that the itineraries corresponding to non-mobility show an increase in the section of having worked in the countryside all year. Conversely, itineraries that involve mobility to off-farm work clearly show situations of seasonal work in the countryside during the last year under study.

If one considers the three points in the itineraries, it is easier to see the limits of mobility of this type of workers. Of the thirteen possible itineraries during the last year of the survey -2003- the largest proportion take the following route: farmer (past 6 months)-farmer (past 3 months) and farm worker (past week) or else the worker-worker and farm worker route (Graph 2).

However, the farm-off-farm combination is more common in the case of men who declared themselves to be farm subjects than in the case of women classified as farm subjects (Graph 3). We can therefore infer that these farm subjects have very few options in the market for engaging in more dynamic mobility. In other words, those who might be in a condition to engage in greater mobility are probably no longer recorded by this type of household survey.

Itineraries and forms of production

Nowadays, the study of agriculture uses a combination of different approaches in an attempt to explain its dynamics within the new process of international insertion which began in the 1980s yet when it evaluated one of the main objectives proposed-greater dynamism through productivity and competitiveness- it was unable to achieve this for the whole of the agricultural sector, largely because of the heterogeneity of this sector and the economic policies to support the most fortunate groups in the sector.

In general, the diverse structure of agriculture is characterized by various forms of organizing production and therefore work. A propos of this, it is interesting to take up the proposal of one of the groundbreaking works in Mexico in which Appendini (1983) highlights three main categories (means of production, use of labor force and results of production process) to determine the differences between peasant and capitalist agriculture. She maintained that peasant agriculture was distinguished by the lack of accumulation, family labor and less farm production, focusing on traditional crops, whereas capitalist agriculture was distinguished by the use of modern technology, salaried work, the use of developed techniques and the production of non-traditional crops.

However, the greater heterogeneity of Mexican agriculture observed several decades ago which has been accentuated in recent years is affected by the reforms that have been carried out on the economy, particularly in the sector. One should not forget, however, that these differences are closely linked to the traditional means of exploiting land. In fact, OECD (1997) notes that the structure of agriculture in Mexico has been strongly influenced by the system of land redistribution after the Revolution. The study therefore concludes that the current situation in the sector could be described as an agricultural structure composed of "commercial" exploitation, "traditional" exploitation (poor but with commercial potential) and subsistence exploitation (extremely poor with virtually no commercial potential):

In short, Mexican agriculture is characterized by its multiple forms of heterogeneity, both regional and as regards its productive structure and labor, with marked differences between the individuals linked to it, which makes its study more difficult yet interesting.

Consequently, after reviewing various typologies and considering the various categories proposed by certain authors and analyzing the possibilities of a source of information, this paper takes up a classification made for a previous study by one of the authors of this paper (Florez, 2005). In order to achieve an empirical approach to the way the productive

process is organized, the following three variables are considered: a) size of land, b) type of capitalization and c) form of mechanization. The reason for this selection is related to the fact that a review of the various questions posed in the agricultural model for both farmers and workers showed that there were only three questions common to both types of actors in the agricultural context and it was on the basis of these that the following typology was constructed:

Agricultural subjects linked to subsistence activities: those that meet the following criteria: those linked to small farms -with less than one hectare and up to 20 hectares-: with precarious conditions of capitalization-lacking any kind of installations on their land-: and mechanization -they undertake farm activities with animals and/or manual tools.

Agricultural subjects linked to modern activities: those that meet the following criteria: Those linked to large areas -over 20 hectares-: with good conditions of capitalization - 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.

Agricultural subjects linked to mixed activities: who meet some of the following criteria: 1) linked to small installations –less than 20 hectares- with good conditions of capitalization and mechanization; 2) those linked to small installations –fewer than 20 hectares- with good capitalization conditions and poor mechanization conditions, 4) those linked to large areas of land –over 20 hectares, with poor capitalization conditions and good mechanization conditions; 5) those linked to large expanses of land –over 20 hectares-with good capitalization and poor mechanization conditions and 6) those linked to large expanses of land –over 20 hectares-, with poor capitalization and mechanization conditions.

Given this typology, we were interested in finding out how the various work itineraries performed. To achieve this, we began working with the farmers' itineraries. Before exploring the characteristics of each itinerary, we would like to point out that subsistence farmers account for approximately 65% whereas modern production is virtually non-existent (accounting for a mere 2.5%). In general, this distribution did not change between 1993 and 2003 although it should be pointed out that in 2003, a larger proportion of women farmers engaged in both mixed and modern production (Table 2).

The first thing that strikes one about the farmers' itineraries according to the forms of organizing production is the fact that the itinerary without mobility (F/F/farm) increases during the shift from subsistence organization (approximately 50%) to modern organization (approximately 70%). This result shows that being in a modern organization makes a household less likely to require a mobility strategy to obtain income. In other

words, it is an itinerary with the possibility of job and economic permanence. However, it is worth noting that men linked to modern production showed a decrease in the itinerary without mobility of nearly 10 percentage points between 1993 and 2003. This raises the question of whether in recent years, the possibility of income obtained from this type of activity is insufficient and therefore requires a mobility strategy to obtain a higher income, especially because the itinerary that showed an increase is linked to the fact that three months before the interview, the farmer was engaged as a farm worker.

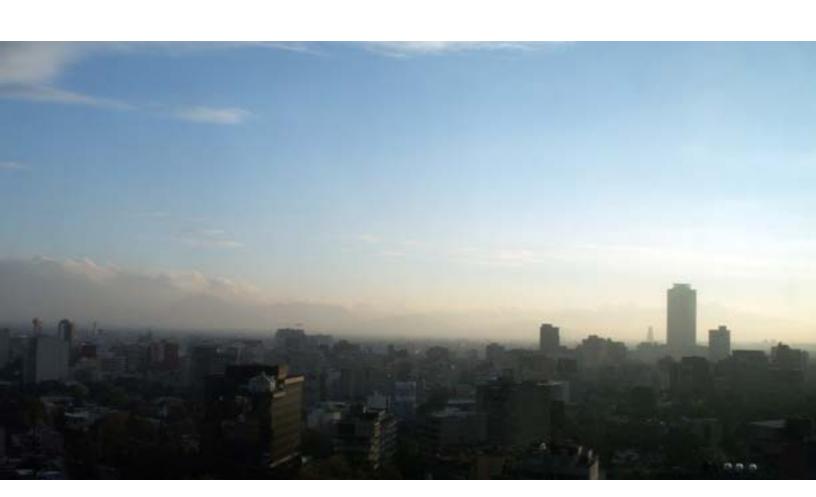
As for the differences between male and female farmers, women account for a significant share of the itineraries that involve leaving the agricultural sector. For example, in the case of mixed production, 11.3% of male farmers are located within the itinerary category that involves moving to the non-agricultural sector (F/Fandoff-farm/off-farm) whereas in the case of women, the percentage is 22.6% and although the difference is not as high in subsistence production, there is also a sex gap (8% of men as opposed to 14% of women). Another aspect worth noting is the fact that at the beginning of the period of study, there were no women engaged in modern production and yet by the end of the period, women were already participating, and rarely shifted to the non-agricultural sector.

As for workers, a high proportion work in subsistence production (44% in 2003) (Table 3). However, the proportion was higher at the beginning of the period under study (56.4% in 1993) which raises the question of what forms of organization they shifted to. In principle, one would tend to think that modern production would have absorbed this type of workers but in fact mixed insertion experienced a significant increase (from 21.8% to 40.8) meaning that it is the only economic sphere in which there was an absolute increase in the number of workers in the general context of a decline in the number of farm workers. In short, there has been a significant transformation which, on the one hand, indirectly describes farm workers' shift towards off-farm 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 salaries by moving from subsistence insertions to mixed insertions.

A second analysis of the itineraries showed that itineraries without mobility are those that have a larger proportion of workers (73.9% for subsistence, 68.1% for mixed insertion and 70.1% for modern) although a downward trend is observed in this proportion in mixed and modern insertions. Fifteen to 20% of workers shifted to off-farm activities whereas in the insertions into subsistence and modern insertions, it was the shift to off-farm activities three months earlier that increased over this period. However, during the week of reference, workers were engaged in farm activities once more whereas mixed insertion experienced a significant increase in long-term mobility towards off-farm activities (4.9% to 11.4%). This result leads us to reflect on the role played by mixed production in the sense that although it absorbed a larger number of workers, they did not remain

exclusively in the sector. Instead, this economic sphere could imply a bridge towards offfarm activities perhaps as a result of the seasonal nature of farm work although it might also be reflecting indices of labor instability.

Unlike the farmers, among the group of workers, there is a trajectory that involves not being active at the time of the interview, which accounted for 10% of the workers (Table 3). This trajectory showed a clear difference between men and women. In 2003, a third of the female population that described themselves as being farm subjects was not engaged in any activity at the time of the interview, a trend that increased over time. This result suggests that women that continue to work on farms experience a traditional model of family organization, which means that domestic responsibilities are an integral part of their lives. On the other hand, in these contexts, the division between domestic and extradomestic work is extremely blurred, hence the difficulty of acknowledging participation in extra-domestic work (in other words, there is a sharp degree of underestimation).



FACTORS THAT INFLUENCE PARTICIPATION IN THE ITINERARY OF NON-MOBILITY

Since the most significant itineraries are those linked to forms of permanence in agricultural activities during the three moments that occur over six months, we decided to explore the possible factors that might be influencing this situation. We constructed three types of variables: individual variables (sex and educational attainment), work variables (condition at work) and structural variables (type of crop and productive structure). Our hypothesis is linked to the fact that being in a traditional productive structure, having a low educational attainment and living in precarious working conditions increases the likelihood of remaining in the sector. In other words, a perception of the agricultural sector as precarious is implicitly assumed.

However, in order to explore the way in which each type of variable affects permanence in the sector, three models were explored for each year. The first includes individual variables, the second is constructed on the basis of individual and work variables while the third incorporates variables we have called structural.

An analysis of individual variables shows that sex is the most important variable in the tendency to remain in the agricultural sector (being male as opposed to being female may increase the likelihood of this by a factor of 14) which reflects the masculinization of the farming sector in Mexico (Column 1 of Table 4). When the variables linked to working conditions are incorporated, sex continues to be important in the explanation although it is also important to note that in 1993, being a farmer reduced this likelihood, as did higher educational attainment (Column 2 of Table 4). It is worth noting that in 2003, there was a change in agrarian dynamics, because if the farm subject is a farmer with a low income, this increases his likelihood of remaining in the sector by 10% (Column 5 of Table 4) which might be indicating processes that constitute exit barriers for precarious individuals.

For the last model in 1993, working conditions are more important 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 being male increases this likelihood 2.6 times (Column 2 of Table 4). On the other hand, the results of this model modify our hypothesis, showing that certain non-precarious conditions in the sector reflect possibilities of permanence, as in the case of participation in the vegetable, pulse, fruit and flower production, since working with this type of crops increases the likelihood of remaining by nearly 40%. The same is true of working in a modern production structure, which could be explained by greater job stability since this type of production does not depend on seasonality.

By the year 2003, working conditions were no longer more important than being male, but in addition, being a low wage-earner reduced the likelihood by more than half (Column 6 of Table 4). Unlike what happened in 1993, this model reflects the fact that certain non- precarious conditions reduce the possibility of remaining in the sector, since being a day worker with a higher income reduces the likelihood by 40% and being a farmer with a higher income reduces the likelihood by 70%, which could be explained by the fact that these groups may have assets that will enable them to leave the sector more easily. Lastly, one aspect that does not change over time is the effect of being involved in the production of non-traditional crops, However, ten years later, engaging in activities in modern productive contexts reduces the likelihood of remaining in the sector by 15%. This may be reflecting labor saving processes and therefore limits on the creation of modern work spaces in the agricultural sector.

FINAL REFLECTIONS

At the beginning of this paper, we explained that the concept of "multiactivity" is polysemic. It can be approached from various levels of reality. In our case, we approached this discussion from the perspective of the changes displayed by farm subjects at three points in time (considering a period of six months). We therefore constructed 18 work itineraries, 11 of which corresponded to farmers and 7 to farm workers. We also described these itineraries.

Since remaining in agricultural activities was our first result, the question was how to explain the situation. The first answer had to do with the degree of selectivity that may occur in a survey such as the one we used. Some inhabitants of the less urbanized contexts may not have been engaged in farm activities over the past six months and therefore been excluded from the universe of study. But the explanation found by earlier research for the low mobility in the rural sector is undoubtedly worth considering. In other words, a high proportion of self- employment may be a contributing factor to non-mobility (see Ramírez, 2005).

However, in trying to explain what factors influence permanence in itineraries of non-mobility, we proposed hypotheses for the most disadvantageous situations that would explain the greater permanence (in keeping with previous research results). However, the model reveals nuances we believe could be interesting in understanding agricultural dynamics.

In the section on "itineraries and forms of production," we found an increase in itineraries without mobility in the shift from subsistence to modern organization. We therefore explained this situation in terms of the fact that modern contexts offered conditions that permitted greater stability. However, when we came to the section on the search for factors explaining the lack of mobility, we found that although in 1993, participation in modern processes increased the propensity to remain within the itinerary of non-mobility, by 2003 this was no longer the case. It turned out that participation in modern structures actually reduced the likelihood of remaining in agricultural activities. This made us reflect on the limits of modern production as regards job creation.

Lastly, our hypothesis that the most disadvantageous conditions would explain permanence in itineraries of non-mobility was modified on the basis of the results obtained in the models. By 2003, certain less disadvantageous conditions reduced the likelihood of remaining in these itineraries. This is true of farm workers and farmers with higher incomes, which is why we think that these groups may have certain assets that will enable them to exit the sector more easily. In short, it is impossible to speak of a single direction regarding the factors that explain non-mobility, but rather of two poles in which certain disadvantages keep the population in the sector while certain advantages may also explain why they remain there.

Notes

¹The survey uses the term "farm subjects" to describe "any individual who at any time during a period of six months, ending in the week the survey was taken, participated in obtaining products from the earth or livestock production, either directly as a worker or as an organizer or supervisor of the production process as a whole" (INEGI, 2002: 182).

² It was not until 2007 that a new farming census was made, although results are not yet available.

³ The Survey on Migrant Farm Worker Households in Horticultural Regions of Mexico (Carton de Grammont y Lara, 2005) or the National Survey of Rural Households in Mexico (ENHRUM) (http://precesam.colmex.mx), ENHRUM has national coverage in rural populations of 500 to 2499 inhabitants. This last Survey was taken in 80 rural localities in 14 states, after dividing the country into 5 regions.

⁴ The authors note the differences that may occur according to the criterion used for multiactivity. A "wide criterion" considers households that earn any kind of income from off-farm activities. There is also a stricter criterion whereby a household is regarded as engaging in multiactivity when less than 20% of its income is obtained from the non-agricultural sector.

⁵We 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.

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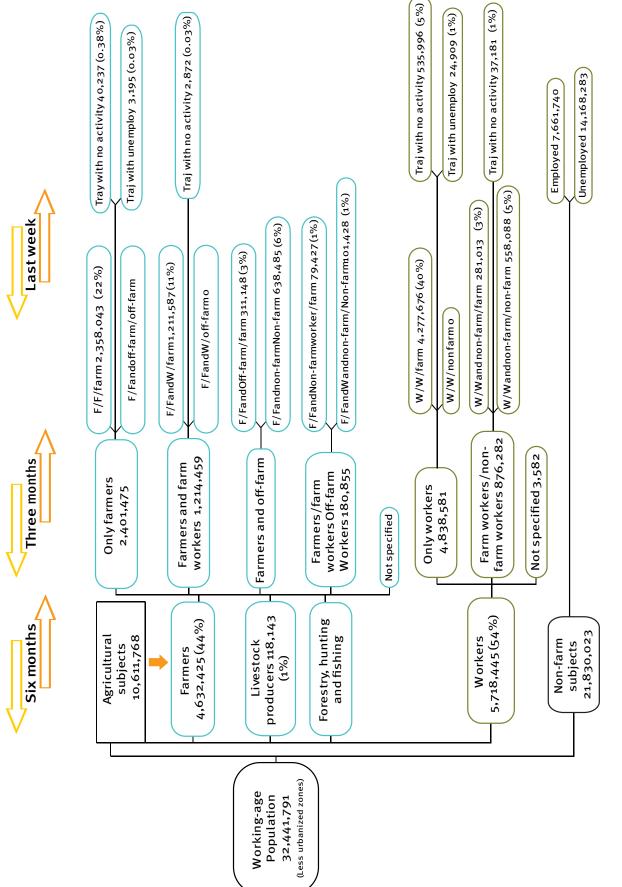
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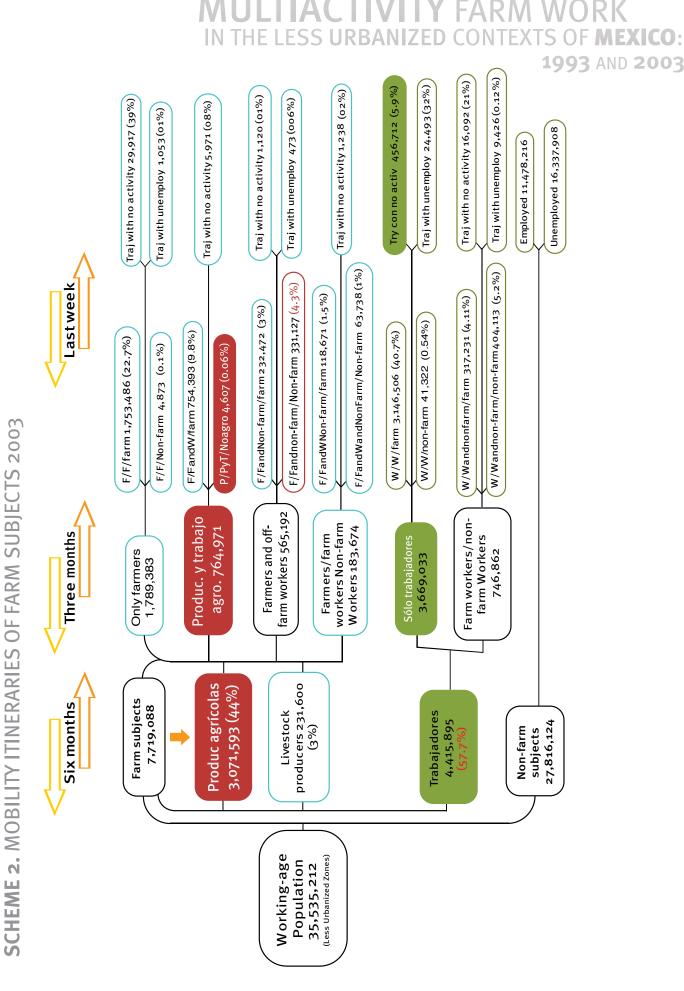
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MULTIACTIVITY FARM WORK IN THE LESS URBANIZED CONTEXTS OF MEXICO: 1993 AND 2003 (%5) 966'58 (%1) 606'4 (%1) 606'4



SCHEME 1. MOBILITY ITINERARIES OF AGRICULTURAL SUBJECTS 1993



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						מטס	200			y a a		
	Works all the coun	lyearin ntryside	W orks in th countryside some time du the year	W orks in the countryside at ome time during the year	Only works countrysid called or his servic	works in the tryside when led or when services are required	Engages in othooccupations o periodically emigrates to urban centers	ngages in other occupations or periodically emigrates to urban centers	Engages i dom estic activities	es in sstic ities	Others	Θrs
	1993	2003	1993	2003	1993	2003	1993	2003	1993	2003	1993	2003
MEN												
F/F/farm	78.4	89.4	19.5	9.4	0.1	0.0	9.0	9.0	0.2	0.0	1.2	9.0
F/F/non-farm		89.3		10.7		0.0		0.0		0.0		0.0
F/F and W /farm	83.4		13.9	4.6	0.1	0.0	1.5	1.2	0.1	0.0	- -	1.3
F/F and W /non-farm		ω.		61.1		0.0		0.0		0.0		0.0
F/F and non-farm/non-farm	66.2	72.2	28.8	20.5	0.0	0.0	4.5	7.2	0.0	0.0		0.2
F/F and W and non-farm/farm	39.2		48.4	တ	0.3		9.2	13.7	0.2	0.0	2.7	1.4
F/F and W and non-farm/non-farm	7.67	75.0	5.8	11.9	0.0	0.0	11.0	12.6	0.0	0.0	3.4	0.5
W/W/farm	47.0	63.5	34.5	22.9	0.0		18.5	13.3	0.0	0.0	0.0	0.3
W/W/non-farm	75.3	84.4	17.3	10.8	2.0	1.7		4.1	0.0	0.0	4.3	1.7
W/W and non-farm/farm		61.1		24.7		4.6		7.3		0.3		2.0
W/W and non-farm/non-farm	63.9	54.6	19.3	23.8		5.3	11.2	15.5	0.0	0.0	1.0	6.0
Traj. that ends in non-activity	42.4	29.8	N	30.8	3.2	11.9	16.3	25.5	0.5	0.0	4.6	2.0
Traj.that ends in unemployment	17.1	13.0	37.3	48.9	11.0	8.4	2.1	3.4	0.0	0.0	32.5	26.3
Total	21.9	15.0	6.59	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
WOMEN												
F/F/farm	62.5	82.6	32.7	13.1	0.0	4.0	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 and 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 and W /non-farm		100.0		0.0		0.0		0.0		0.0		0.0
F/F and non-farm/farm	21.6	72.6	8.99	23.8	0.0	0.0	0.0	0.0	11.5	2.8	0.0	0.8
F/F and non-farm/non-farm	57.5		42.5	24.1	0.0	0.0	0.0	11.7	0.0	1.5	0.0	5.8
F/F, W and 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 and non-farm/non-farm		80.2		0.0		0.0		0.0				19.8
W/W/farm	55.4		26.2	28.4	5.6	3.0	0.0	0.5	11.1		1 8.	1.7
W/W/non-farm		45.5		25.8		0.0		1.7				11.6
W/W and non-farm/farm	21.1	40.4	65.3	37.7	0.0			13.0	13.6	3.7	0.0	0.3
W/W and non-farm/no farm	27.9	21.0	43.3	43.2	2.8	9.2	14.2	19.8	11.7	3.7	0.0	2.8
Traj. ending in non-activity	4.2			73.0	1.9	4.7	0.0	1.2	8.9	13.1	13.2	3.5
Traj. ending in unemployment	0.0	6.3	34.2	75.2	0.0		65.8	7.4	0.0	1.9	0.0	6.3
Total	43.1	42.6	39.5	40.1	3.5	3.5	1.4	3.0	9.1	8.3	3.6	2.5

Table 1. Permanent Work and Reasons for Temporary Work in a Year by Itineraries, Mexico

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

Table 2. Farmers' Itineraries by Forms of Production, Mexico

TOTA	AL		Me	en	Wor	men
1993	2003		1993	2003	1993	2003
1						
47.0	49.9		46.3	49.6	60.2	55.0
28.0	28.0		29.2	28.6	6.6	12.6
† †	0.1			0.1		
6.2	6.6		6.3	6.6	4.6	5.8
14.0	8.5		13.7	8.2	19.6	14.0
1.5	4.1		1.6	4.2		0.7
2.2	1.9		2.3	2.0		
1.0	1.0		0.5	0.5	8.9	11.9
0.1			0.1			
2,987,382	1,971,902		2,829,999	1,889,336	157,383	82,566
65.6	64.2		65.2	64.3	73.0	62.7
03.0	04.2		03.2	04.0	73.0	02.7
+ +						
51.8	55.6	+	51.5	55.7	57.6	54.1
31.0		+	51.0		57.0	54.1
22.8		+	23.6		21	10.3
22.0			25.0		2.1	10.5
7.7			6.0		27.7	7.1
						22.6
						0.6
					1.5	0.0
						5.2
0.9			1.0			5.2
1 469 069			1 400 000		59.070	46 920
						46,830 35.6
32.2	33.0		32.3	34.0	27.0	33.0
1						
79.5	69.4		70 5	607		57.5
/6.5	00.4		/6.5	08./		57.5
4.0	11.1		4.0	11.4		
4.8	11.1		4.0	11.4		
10.0	0.7		10.0	0.7		42.5
						42.5
6.7			0./			
1	3./			3.8		
+ +	0.6			0.7		
1	0.0			0.7		
101 245	01 770	\perp	101 245	70 500		2.251
		\perp				2,251
			2.3	2.7	-	1.7
2.2	2.1	-+	ĺ			
2.2		#		0.2		
2.2	0.2			0.2		
2.2	0.2 40.0			40.0		
2.2	0.2 40.0 53.8			40.0 53.8		
2.2	0.2 40.0 53.8 6.2			40.0 53.8 6.2		
-	0.2 40.0 53.8		-	40.0 53.8	-	-
- 4,556,695	0.2 40.0 53.8 6.2		- 4,341,242	40.0 53.8 6.2	- 215,453	- 131,647
	1993 47.0 28.0 6.2 14.0 1.5 2.2 1.0 0.1 2,987,382 65.6 51.8 22.8 7.7 12.2 2.2 2.3 0.9 1,468,068 32.2 78.5 4.8 10.0 6.7	47.0 49.9 28.0 28.0 0.1 6.2 6.6 14.0 8.5 1.5 4.1 2.2 1.9 1.0 1.0 0.1 2.987,382 1,971,902 65.6 64.2 51.8 55.6 0.3 22.8 17.0 0.2 7.7 8.3 12.2 11.8 2.2 2.8 2.3 2.3 0.9 1.5 0.1 1,468,068 1,012,423 32.2 33.0 78.5 68.4 4.8 11.1 10.0 9.7 6.7 6.5 3.7	1993 2003 47.0 49.9 28.0 28.0 0.1 6.2 6.6 14.0 8.5 1.5 4.1 2.2 1.9 1.0 1.0 1.0 1.0 2.987,382 1,971,902 65.6 64.2 151.8 55.6 64.2 17.7 8.3 12.2 11.8 2.2 2.8 2.3 2.3 2.	1993 2003 1993 47.0 49.9 46.3 28.0 28.0 29.2 0.1 6.2 6.6 6.3 14.0 8.5 13.7 1.5 4.1 1.6 2.2 1.9 2.3 1.0 1.0 0.5 0.1 0.1 0.1 2,987,382 1,971,902 2,829,999 65.6 64.2 65.2 51.8 55.6 51.5 0.3 22.8 17.0 23.6 0.2 7.7 8.3 6.9 12.2 11.8 12.3 2.2 2.3 2.3 2.4 2.2 2.3 2.3 2.3 2.4 0.9 1.5 1.0 1.0 1.468,068 1,012,423 1,409,998 32.2 33.0 32.5 78.5 68.4 78.5 4.8 11.1 4.8 10.0 9.7 10.0 6.7 6.5 6.7	1993 2003 1993 2003 47.0 49.9 46.3 49.6 28.0 28.0 29.2 28.6 0.1 0.1 0.1 6.2 6.6 6.3 6.6 14.0 8.5 13.7 8.2 1.5 4.1 1.6 4.2 2.2 1.9 2.3 2.0 1.0 1.0 0.5 0.5 0.1 0.1 0.1 0.1 2.987,382 1,971,902 2,829,999 1,889,336 65.6 64.2 65.2 64.3 51.8 55.6 51.5 55.7 0.3 0.3 0.3 22.8 17.0 23.6 17.4 0.2 0.2 0.2 7.7 8.3 6.9 8.4 12.2 11.8 12.3 11.3 2.2 2.8 2.2 2.9 2.3 2.3 2.4 2.4	1993 2003 1993 2003 1993 1993

Table 3. Farmers' Itineraries by Forms of Production, Mexico

	TOT	AL	Me	n	Wome	en
WORKERS	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/WandOff-farm/farm	3.2	6.3	3.7	6.6	1.7	5.1
W/WandOff-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
	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/WandOff-farm/farm	6.1	7.9	5.6	9.4	7.8	2.7
W/WandOff-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
	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/WandOff-farm/farm	3.9	7.7	3.7	8.7	5.1	4.3
W/WandOff-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
	20.7	10.7	21.2	10.6	18.6	11.2
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/WandOff-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, Modulo agropecuario, INEGI.

Table 4. Factors that Influence Permanence in the Agricultural Sector

		1993			2003	
Explanatory Variables	Model I	Model II	Model III	Model I	Model II	Model III
Individual Variables						
Sex Woman						
Man	*14.408	*1.762	*2.565	*13.031	*3.324	*3.571
wan	14.408	1.702	2.505	13.031	3.324	3.571
Education						
No instruction						
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						
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
Structural variables						
Crop						
Maize-Beans-Wheat and Rice						
Vegetables-Pulses-Fruit and						
Flowers			**1.388			*1.420
Other Crops			**1.268			*1.866
Productive Structure						
Traditional						
Modern			*1.474			*0.857
Constant	*0.115	*3.947	*5.058	*0.069	*1.611	*1.450
* significant to .001 and ** significant	cant to .05					