



→ As well as his cows and bees, Benedicto Rodríguez, has a vegetable garden in Simijaca, with over 20 species of fruit, vegetables and herbs.





→ Hugo Peña has supported his family through his building work. This photograph was taken when he was working on the restoration of the cemetery in Puente Nacional.

## CHAPTER 9

# CHANGES IN TIME USE IN RURAL HOUSEHOLDS

XIMENA PEÑA  
CAMILA URIBE



→ Teresa Narváez is a leader of coffee growers and farmers in her village in Quindío. Her husband covers the household expenses, but she likes to work.

### → 9.1. INTRODUCTION

The attitudes and activities of the people who make up the communities have permitted their development to the stage we know today. One relevant aspect to understand the contributions of all the members of the communities to society in general and its economic growth is the study of their time use. This not only allows us to understand the aggregate behavior of a society, but also the differences observed between different groups of the population. It also allows us to go beyond the analysis of the household as a unit, helping us to understand what each of the members of the household does as well as the division of household work. At the same time, it is necessary to study the daily routines of the individuals to examine the interactions that determine their quality of life and to focus public policies on the groups that need them most for a more equal society (Ayala, 2003).

Measuring and quantifying time use has gained importance in the economic field as it allows us to understand the contribution of all the members of a growing society more than what is traditionally measured by gross domestic product (GDP). These

indicators also present opportunities to redesign public policies since we can highlight the activities and products, that, when generated inside the household, do not enter into the market and are currently excluded from the traditional measurement of economic activity. The study of time use has become more important in recent decades, with a number of developed countries now having surveys or specific modules that quantify it. This aspect is also becoming increasingly relevant in Latin America.

One of the principal contributions of time use study is measuring the difference between men and women. While men dedicate much of their time to paid work, women principally spend their time on household work that is unpaid and whose significant economic impact and importance to society is not seen. This difference in time use constitutes a new glass ceiling for women in trying to close the existing gaps to achieve equal opportunities. Issues such as access to university education that constituted this glass ceiling a few decades ago have been improving, but new advances have fostered new barriers. These have brought about what we call a second-generation glass ceiling involving, for example, the aforementioned differences in time use. (Peña and Uribe, 2013). In developed countries, the rise of female labor participation has been accompanied by a substantial reduction in female domestic work hours. By contrast, in developing countries, the rise in female labor par-

ticipation has not been accompanied by fewer care work responsibilities. This brings with it a growing asymmetry in the distribution of working and leisure hours between men and women with possible adverse consequences on female labor productivity, women's and children's well-being, and even the accumulation of human capital (Johnson and Lipscomb, 2006; Peña and Uribe, 2013).

The Colombian Longitudinal Survey, or ELCA, by Universidad de los Andes, gathers information on time use for rural households at two points in time. Given the importance of this information, it is possible to study time use for different population groups; for example, men and women, ethnic groups or Familias en Acción beneficiaries. On the other hand, by counting on two waves, the study allows us to compare time use in households between 2010 and 2013. In this chapter, we will explore the time use trends in two-parent families in the rural zone, taking advantage of the panel study and the availability of information in the different modules of the survey. The focus on two-parent households is due to the fact that it is here that the most unequal distributions of labor —paid and unpaid— are observed (Peña and Uribe, 2013). This leaves a sample of 2,778 rural two-parent households that reported information for the two waves. Of these, 26% were in the Coffee Region, 28% in the mid-Atlantic region and the remaining 46% was distributed equally in the Center-East and Cundiboyacá regions. This chapter analyses time use in the four rural

micro-regions by gender differences, differences between regions and education levels, and by the impact of subsidized programs in Colombia on time use behavior. Understanding these dynamics helps us to design pro-development policies, which in turn prevent inequalities and impede the generation of new obstacles.

## 9.2. DESCRIPTION OF TIME USE IN RURAL HOUSEHOLDS

In this article, two principal time use activities are distinguished: paid and unpaid. Paid labor includes: (1) agricultural and livestock and non-agricultural and livestock work on farms, household businesses or companies;<sup>1</sup> (2) agricultural and livestock work on farms, household businesses or companies outside the household;<sup>2</sup> (3) non-agricultural and livestock work on farms, household businesses or companies outside the household.<sup>3</sup> This classification is based on the idea that the rural area has different types of work that imply labor and contributions of a different kind (Ibáñez, Fernández and Peña, 2011). Work inside and outside the household is distinguished in order to better understand the division of labor. Moreover, given the evolution of agricultural and livestock work in Colombia, and given that important differences in diverse characteristics exist, we differentiate work outside the household between agricultural and livestock and

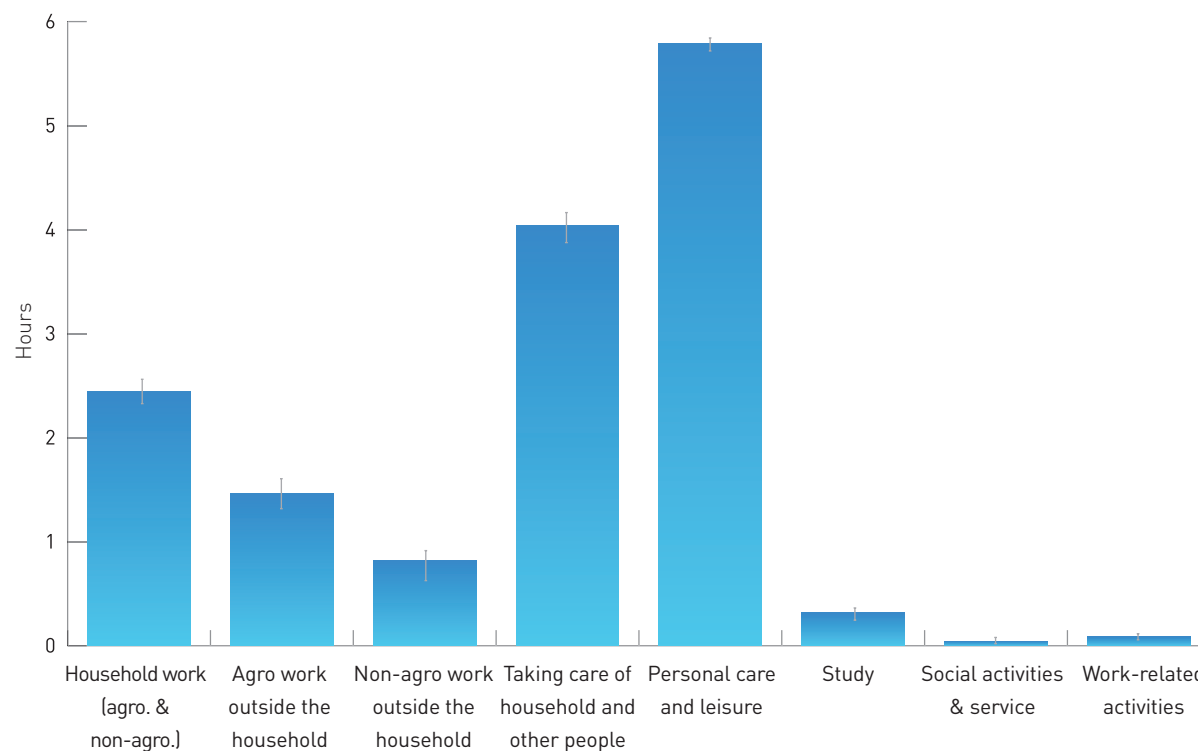
1. Includes paid activities in the household, such as production activities on the household's own farm, making blankets or handicrafts, preparation and sale of food for rural school-children, preparation and sale of other foodstuffs such as *tamales*, *empanadas*, curd cheese and cheese, crops and agricultural products, etc.

2. Agricultural and livestock work outside the household tends to be undertaken on a daily pay basis, where workers pick crops or look after crops and livestock.

non-agricultural and livestock labor. Regarding work inside the household, we do not differentiate between agricultural and livestock and non-agricultural and livestock labor since it was more difficult to do so because of the simultaneous nature of the activities and self-consumption. Insofar as unpaid work, we include (1) looking after the household and other people,<sup>4</sup> (2) leisure time,<sup>5</sup> (3) study,<sup>6</sup> (4) work-related activities such as looking for work, commuting to and from work and the procedures to obtain loans, and (5) social activities such as social service initiatives for the community. Figure 9.1 shows the average number of hours that the household heads and spouses dedicated to work in each of the 2,778 two-parent households.

**FIGURE 9.1.**

TIME USE FOR HOUSEHOLD HEADS AND SPOUSES IN THE FOUR RURAL MICRO-REGIONS IN 2013 (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

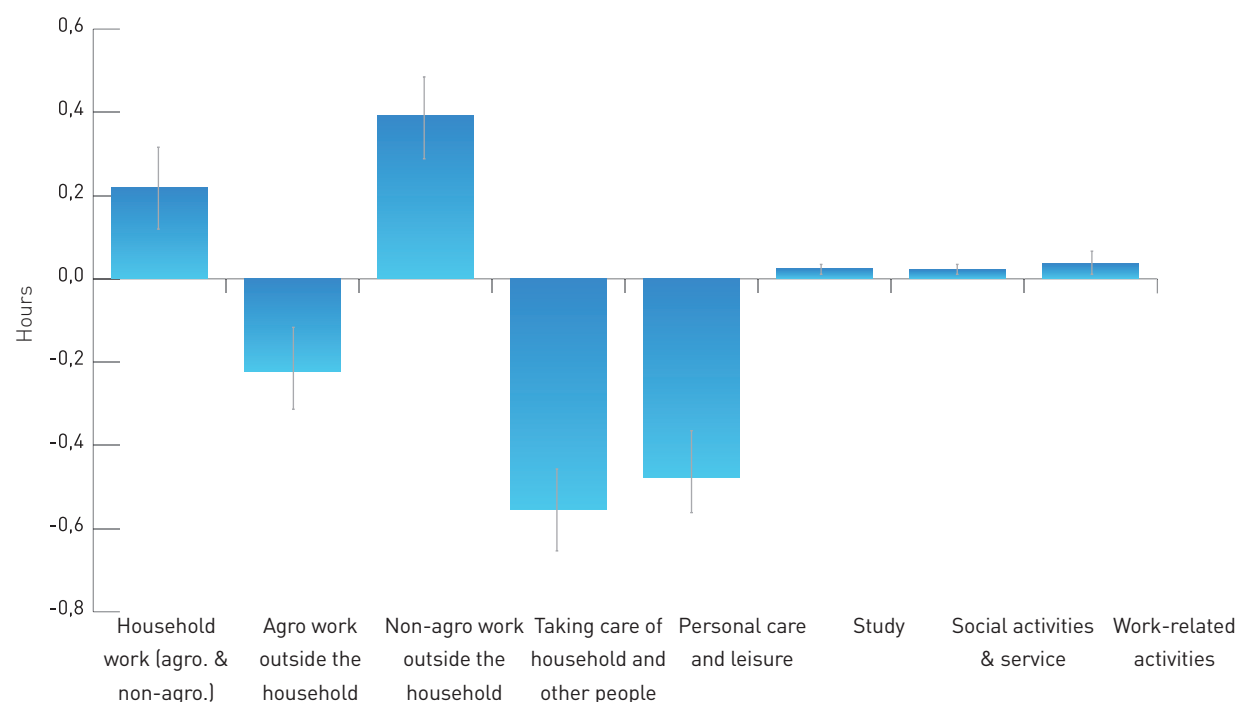
.....→

3. The activities can include transporting passengers on motorbikes, in taxis or vans, hauling, construction work, domestic work in other people's houses, managing shops, receiving a salary for non-agricultural and livestock work, etc.
4. These activities include household work such as washing, ironing, putting clothes and shoes away, cleaning up, cooking, shopping, paying the bills, looking after the garden and animals, collecting water, collecting wood, repairing and maintaining the vehicles, doing the electric repairs, building the house itself, looking after the household's children and the elderly and/or the sick and disabled.
5. These activities include personal care such as eating, sleeping showering, and getting dressed, as well as carrying out health treatments. It also includes leisure activities such as not doing anything, exclusively watching tv or listening to the radio, exercising or doing sports, spending time with family and friends, going to shows, events, cinema, theatre, sports events, praying, meditating, taking part in religious rituals, or any other activity that the individuals enjoy doing.
6. Includes attending educational institutions, commuting to and from the institution and doing homework and other work outside of the educational center.

In total, for paid and unpaid work, people reported an average of fifteen hours a day on an ordinary workday. Figure 9.1 shows that the four rural micro-regions in the survey demonstrate a tendency towards paid work within the household, followed by agricultural and livestock work outside. Paid jobs in the rural micro-regions are different to those in the urban areas, and a concentration of time use in these jobs is presented. Regarding unpaid work, Figure 9.1 shows a marked tendency towards taking care of other people's households (four hours per day), and towards leisure time and personal care (5.8 hours per day). Less time is spent on the other three activities such as study, social and service activities, and work-related activities.<sup>7</sup>

Figure 9.2 shows how time use changed for the eight activities mentioned between 2010 and 2013. While work within the household rose by almost 0.2 hours and work outside the household on non-agricultural and livestock activities rose even more (0.4 hours), agricultural and livestock activities diminished in importance, reducing by 0.2 hours. In terms of unpaid work, we can see that leisure time and taking care of the household was reduced by approximately 0.5 hours, showing that the average net increase in paid work is greater than the average net reduction in unpaid work. This tends towards an increase in work and income, while sacrificing time for leisure and taking care of the household.

**FIGURE 9.2.**  
CHANGE IN TIME USE FOR HOUSEHOLD HEADS AND SPOUSES IN RURAL ZONES BETWEEN 2010 AND 2013 (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

7. As well as presenting a very low hourly dedication, we found no economically significant changes in the analysis of these three categories. We therefore decided not to include them in the rest of the chapter.

### 9.3. DIVISION OF LABOR BY GENDER

Analyzing the time use differences by gender helps us to better understand the dynamics inside rural households. We can observe the traditional gender roles where the work done by women is of a lower profile and is less appreciated despite its economic input. Figures 9.3 and 9.4 show the hourly distribution in 2013 and the changes that have been occurring over time.

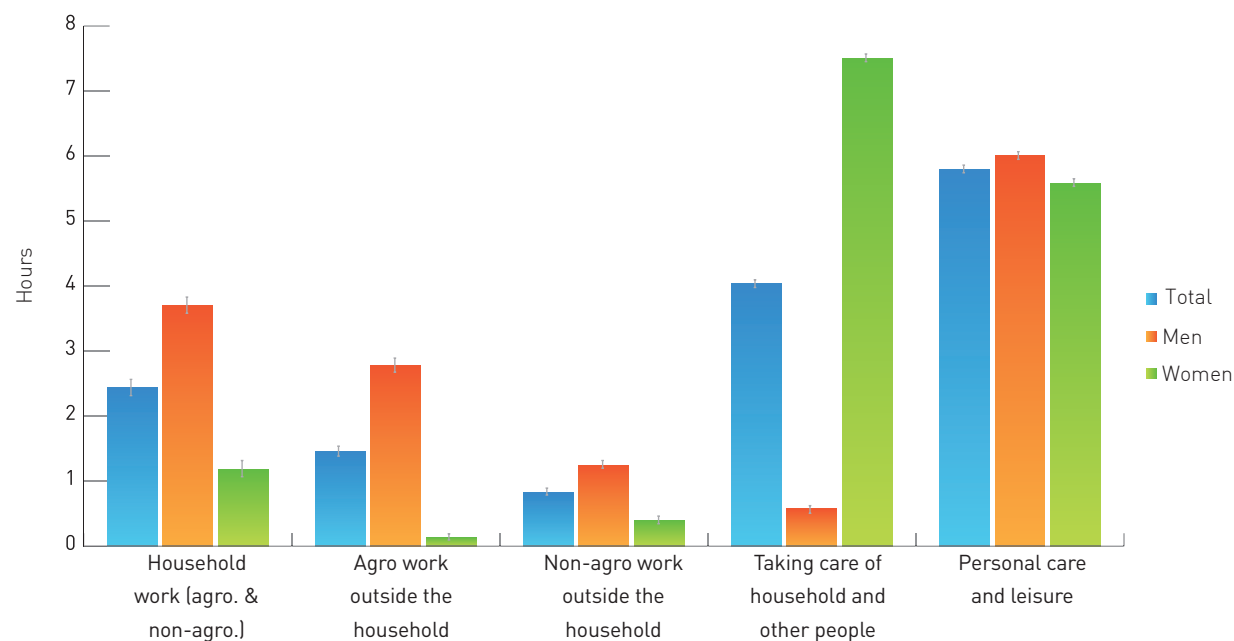
Despite the photo of 2013 showing the traditional gender roles, it seems that the situation did change between 2010 and 2103. Women increased the

amount of time they spend on all paid work, principally those in the household, and non-agricultural and livestock activities outside the household. In contrast, men only significantly increased their participation in activities related to non-agricultural and livestock work outside the household. It seems that in the micro-regions, women are raising their work participation and that they are generating their own incomes, breaking with the first glass-ceiling barrier. Given that their work participation has not been accompanied by a redistribution of household work, this is generating a second-generation glass ceiling for this group: the female double shift. Women are reducing their time dedicated

to household work in the same magnitude as men; however, they are increasing their time dedicated to paid work 100% more than men. While men increased their paid work time by approximately 15 minutes a day, women increased theirs by almost half an hour. Thus, women tend to sacrifice leisure time in order to do what they still have to do in the home, instead of redistributing the time spent taking care of the household more equally in order to compensate for their entry into the labor market. In this way, even though men and women spend more time working, the increase in daily hours worked is greater for women thus generating a double shift for them.

**FIGURE 9.3.**  
TIME USE FOR HOUSEHOLD HEADS  
AND SPOUSES BY GENDER IN 2013  
(HOURS PER DAY).

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

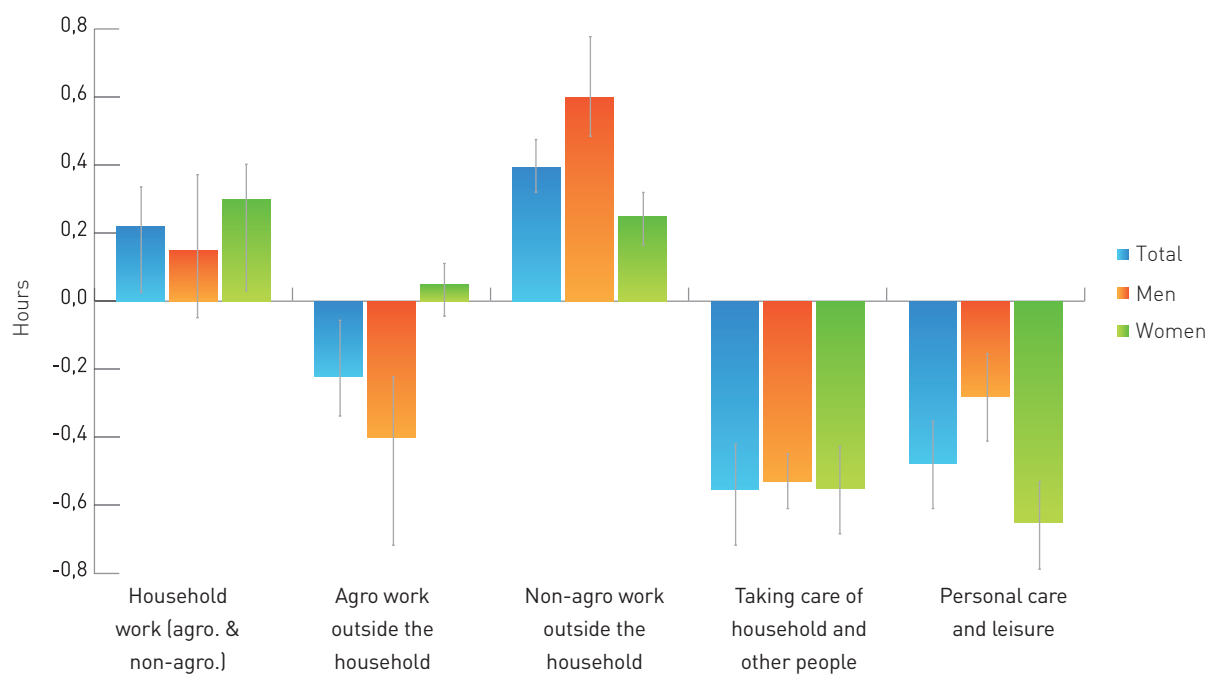


Source: Authors' calculations based on ELCA 2010 and 2013



**FIGURE 9.4.**

CHANGE IN TIME USE BETWEEN 2010 AND 2013 FOR HOUSEHOLD HEADS AND SPOUSES BY GENDER (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

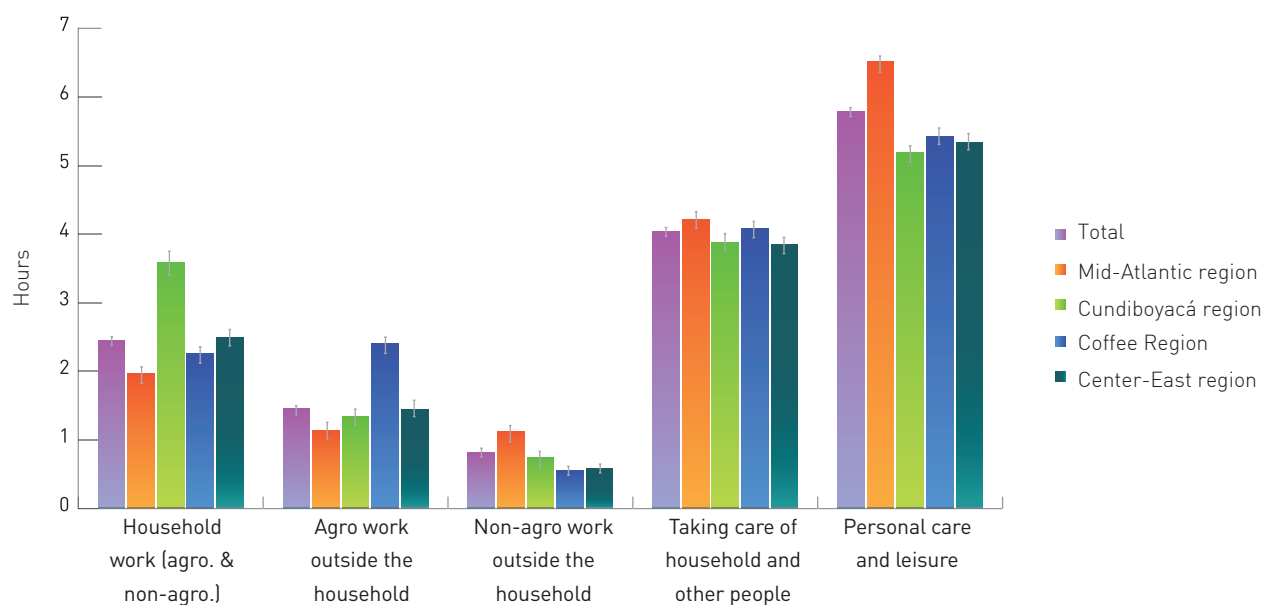
## 9.4. REGIONAL DIFFERENCES

There are interesting differences in time use tendencies in the four rural micro-regions. Figure 9.5 shows that the regions differ in time use according to culture, land and the possibilities available in the area, especially in terms of paid work. The mid-Atlantic region shows a higher proportion of leisure time with respect to the rest of the population. Regarding paid work, the mid-Atlantic region shows a tendency towards paid non-agricultural and livestock work outside the household with respect to the average population, with a difference of 0.4 hours.

In contrast, the Cundiboyacá region dedicates more time to paid household work by an average of 3.6 hours daily. The principal paid activity in the Coffee Region is agricultural and livestock work outside the household; recording an hour more than the average for the population. Lastly, the Center-East region shows a time use similar to the average in all activities. The only activity that does not show substantial differences between the micro-regions is taking care of the household.

**FIGURE 9.5.**

CHANGE IN TIME USE IN 2013 FOR HOUSEHOLD HEADS AND SPOUSES (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

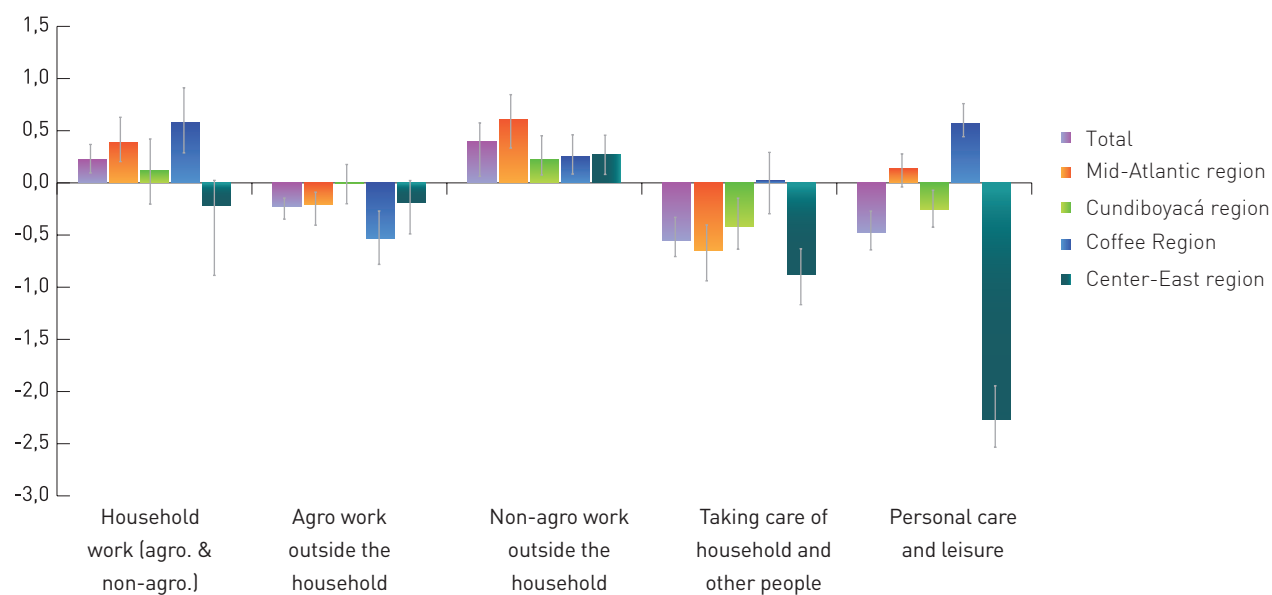


→ Maryvis Palacios Campo serves Sunday lunch for the 50 members of her family during an outing to the Ciénaga de San Silvestre

In terms of change of time use over the three years, there are also significant differences according to region. Agricultural and livestock work outside the household diminished particularly in the Coffee Region, while non-agricultural and livestock paid work outside the households increased for all the regions. The mid-Atlantic was the only region where the increase was more than the national average. Finally, the change in time dedicated to leisure varied the most between regions. While the Coffee Region increased its time dedicated to these activities, in the Cundiboyacá region and the Center-East regions, it decreased.

**FIGURE 9.6.**

CHANGE IN TIME USE BETWEEN 2010 AND 2013 FOR HOUSEHOLD HEADS AND SPOUSES FOR EACH REGION (HOURS PER DAY).



## 9.5. AGE GROUPS

Household heads and spouses are classified in two age groups: youths between 14 and 34 years and adults of 35 years or more. This classification helps to determine the generational differences in terms of time use. The panel shows the changes that took place over the three-year period; thus, analyzing the “photo” for each of these two groups, allows us to observe whether there were any substantial changes during the three-year period.

Figure 9.7 shows that there are no differences in time use between youths and adults outside the household. However, adults dedicated more time to paid work in the household, while youths dedicated more time to taking care of other people’s households. This is probably because their children are still young and so household responsibilities fall on the parents, especially the mother. To support this idea, we can see that adults dedicate more time to leisure and to personal care. These results are consistent with the findings of Peña and Uribe (2013): women and youths between 26 and 35 years dedicate more time to unpaid work.

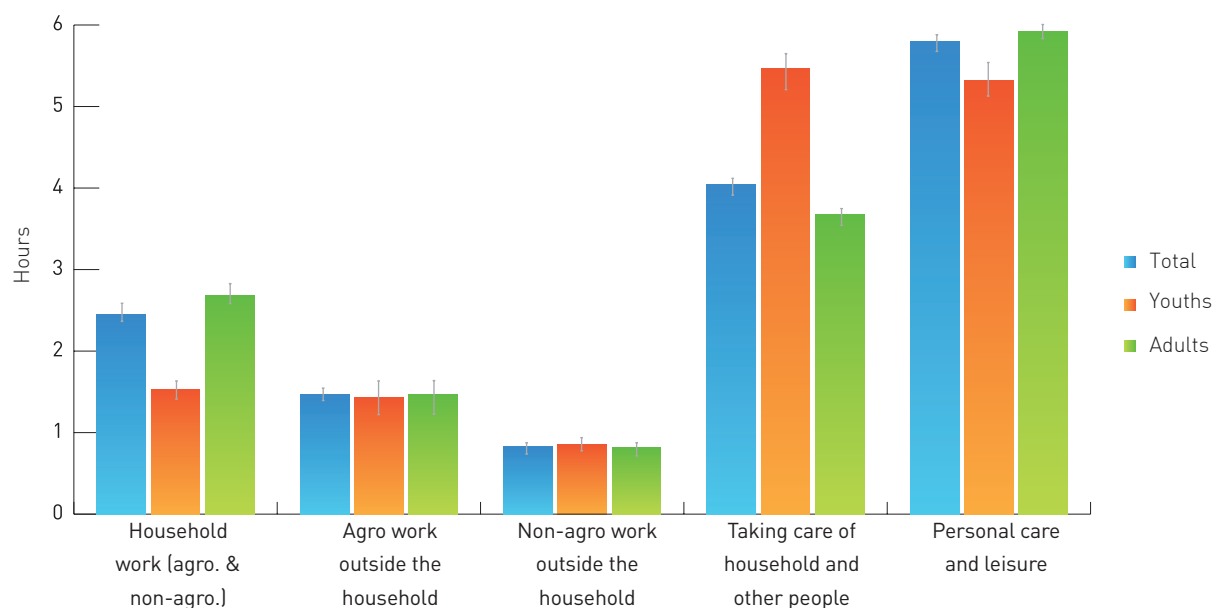
There are no significant differences in terms of the change in time use between 2010 and 2013 according to age group.

Source: Authors’ calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

**FIGURE 9.7.**

CHANGE IN TIME USE IN 2013 FOR HOUSEHOLD HEADS AND SPOUSES BY AGE GROUP (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

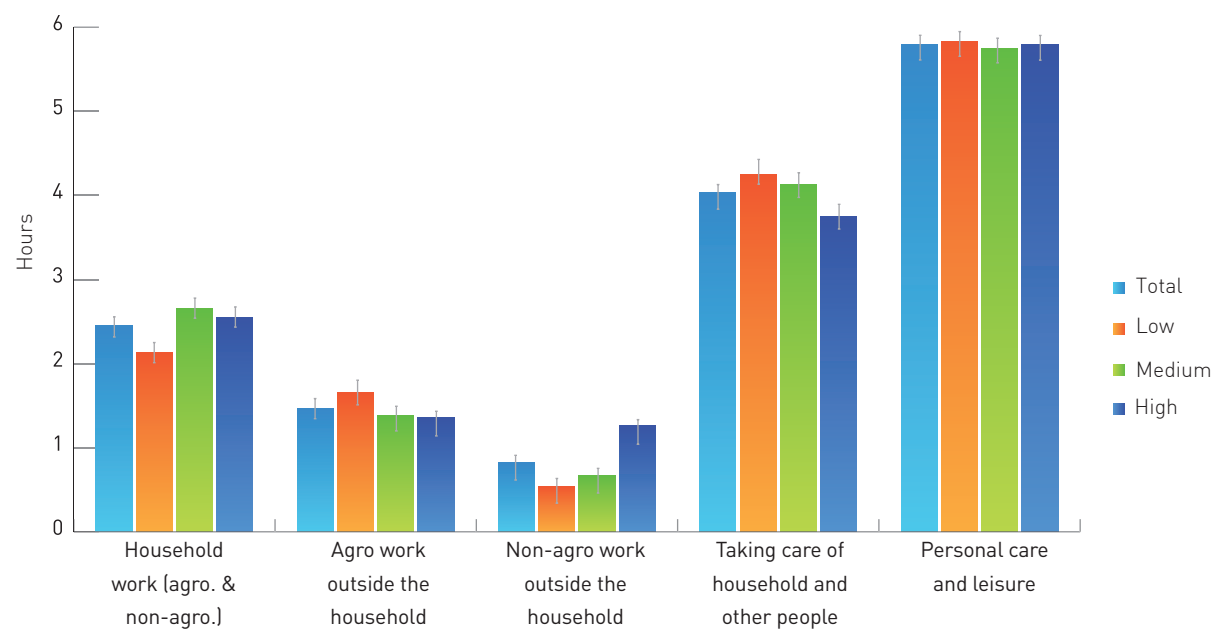
This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. Youths are those people aged between 14 and 34 years and adults, those who are 35 or over. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

## 9.6. TIME USE AND WEALTH

International studies show that the level of wealth is one of the factors that most determines time use (Ayala, 2003). This is because a greater income increases the capacity to pay private household services. Taking a wealth index that includes access to goods and services, Figure 9.8 shows that wealthier households dedicated more hours to unpaid agricultural and livestock activities outside the household and less time to caring for the household and for other people. Analyzing this change in time use for the three-year period, significant differences can be observed according to the level of wealth in three aspects (Figure 9.9). First, households with a high wealth index are the only ones that did not decrease time dedicated to agricultural and livestock work outside the household, compared to households with a medium or low wealth index. Second, the former increased the time dedicated to non-agricultural and livestock work outside the household by a greater proportion. Third, individuals from low-wealth level households reduced the time they dedicated to leisure activities less than households with high and medium-high levels of wealth.

**FIGURE 9.8.**

CHANGE IN TIME USE IN 2013 FOR HOUSEHOLD HEADS AND SPOUSES BY WEALTH LEVELS (HOURS PER DAY).



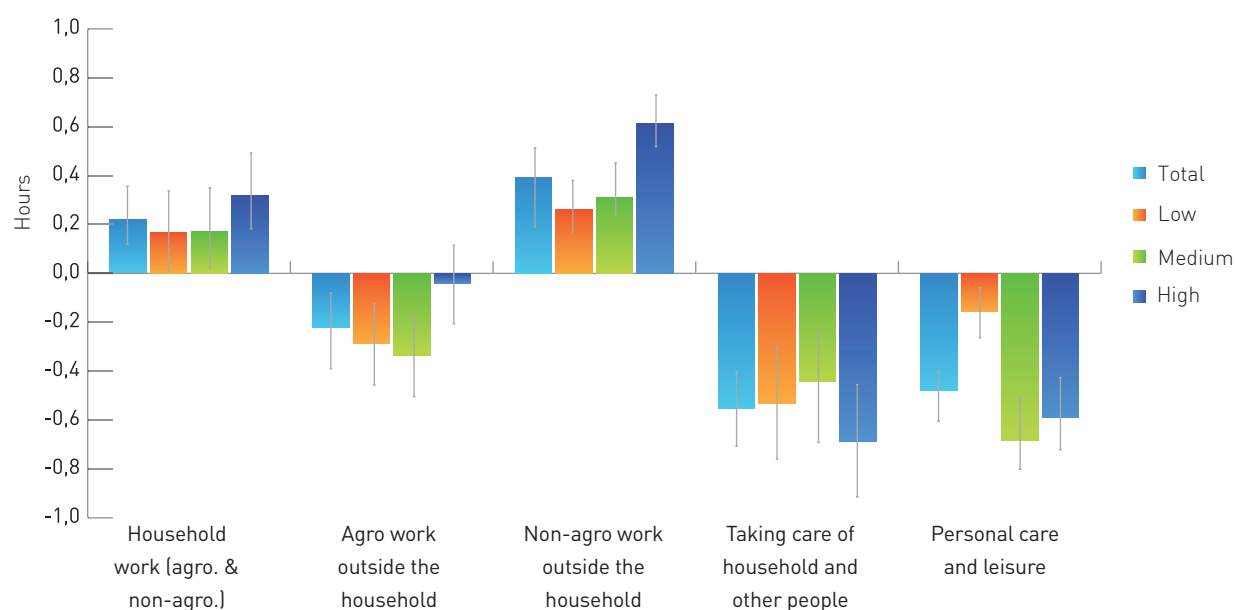
→ Donny Juan Pablo Lozano in Gramalote

Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The level of wealth corresponds to tertiles in a continuous wealth index, based on durable goods and households' access to services. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

**FIGURE 9.9.**

CHANGE IN TIME USE BETWEEN 2010 AND 2013 FOR HOUSEHOLD HEADS AND SPOUSES ACCORDING TO WEALTH LEVELS (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The level of wealth corresponds to tertiles in a continuous wealth index, based on durable goods and households' access to services. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

## 9.7. FAMILIAS EN ACCIÓN BENEFICIARIES

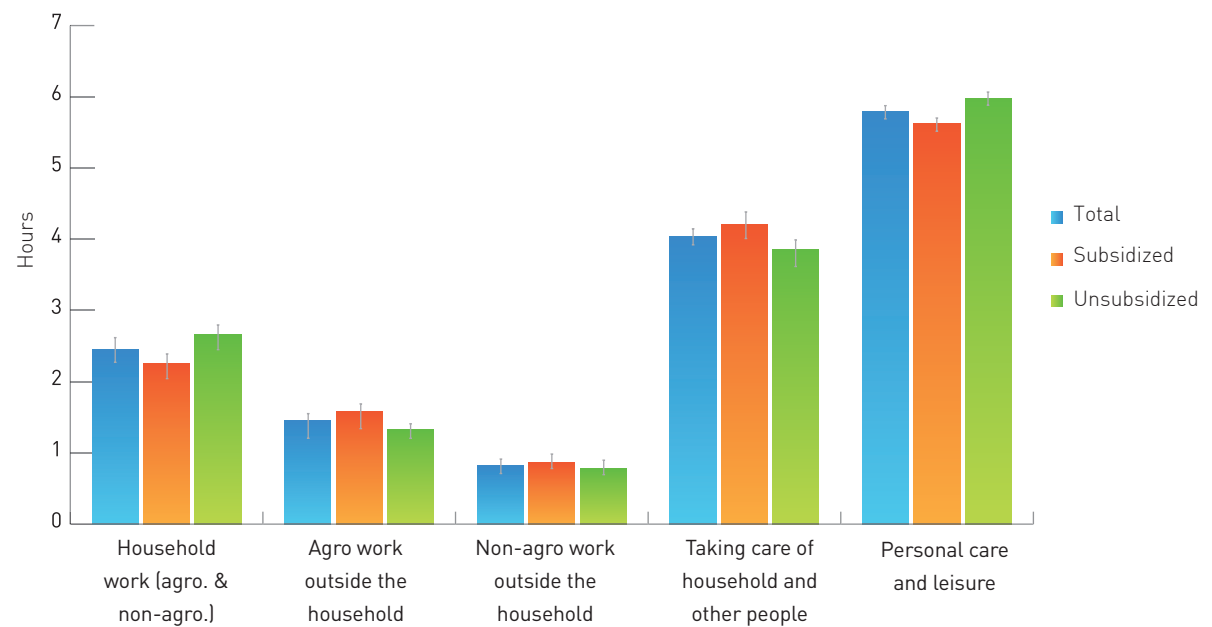
One of the problems of the conditional cash transfer programs is that they can deepen traditional gender roles. This is because the fulfillment of program requirements takes time and it is usually the mothers who are responsible for these tasks. However, it is worth asking whether the fulfillment of the requirements fosters substantial differences in time use. Is there a difference between caring for the household and caring for other members of the family in households with subsidies and those without? Households that benefit from Familias en Acción are probably very distinct from those that do not receive subsidies in different dimensions beyond simply not receiving the transfers and fulfilling the requirements. For this reason, the following analysis does not aim to establish a causal relationship between being a beneficiary of the program and the differences in time use; it only presents a correlation analysis.

Figure 9.10 suggests that having access to Familias en Acción is related to more time spent taking care of the household. The difference is almost 0.4 hours daily; that is to say, a little more than two hours per week. Additionally, the tendency for paid work is more concentrated on activities within the household for people without access to subsidies, while people who receive subsidies tend to belong to the labor market outside the household. These results are interesting and it would be worth exploring them further. Lastly, throughout time, the only changes observed are those related to leisure since the households with subsidies decreased their leisure time much more than the rest of the households (see Figure 9.11)



→ Visiting bathing areas like La Represa in the Ciénega de San Silvestre, close to Barrancabermeja, is a weekend leisure option.

**FIGURE 9.10.**  
TIME USE FOR HOUSEHOLD HEADS AND SPOUSES ACCORDING TO WHETHER THEY ARE BENEFICIARIES OF FAMILIAS EN ACCIÓN.

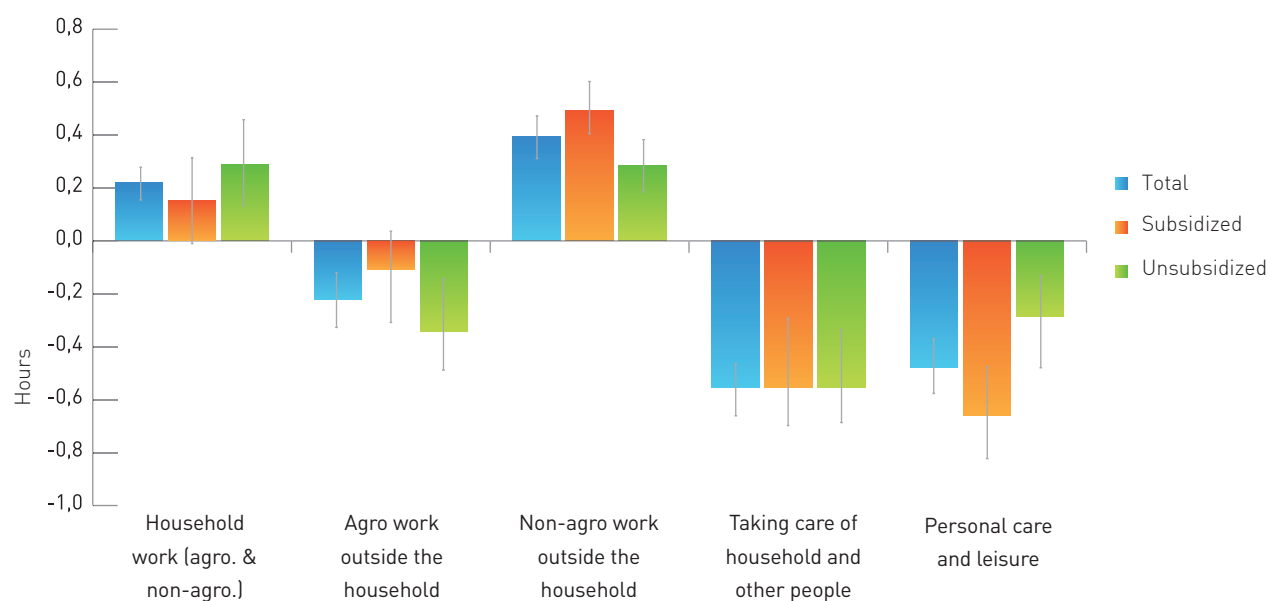


Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

**FIGURE 9.11.**

CHANGE IN TIME USE BETWEEN 2010 AND 2013 FOR HOUSEHOLD HEADS AND SPOUSES ACCORDING TO WHETHER THEY ARE BENEFICIARIES OF FAMILIAS EN ACCIÓN (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

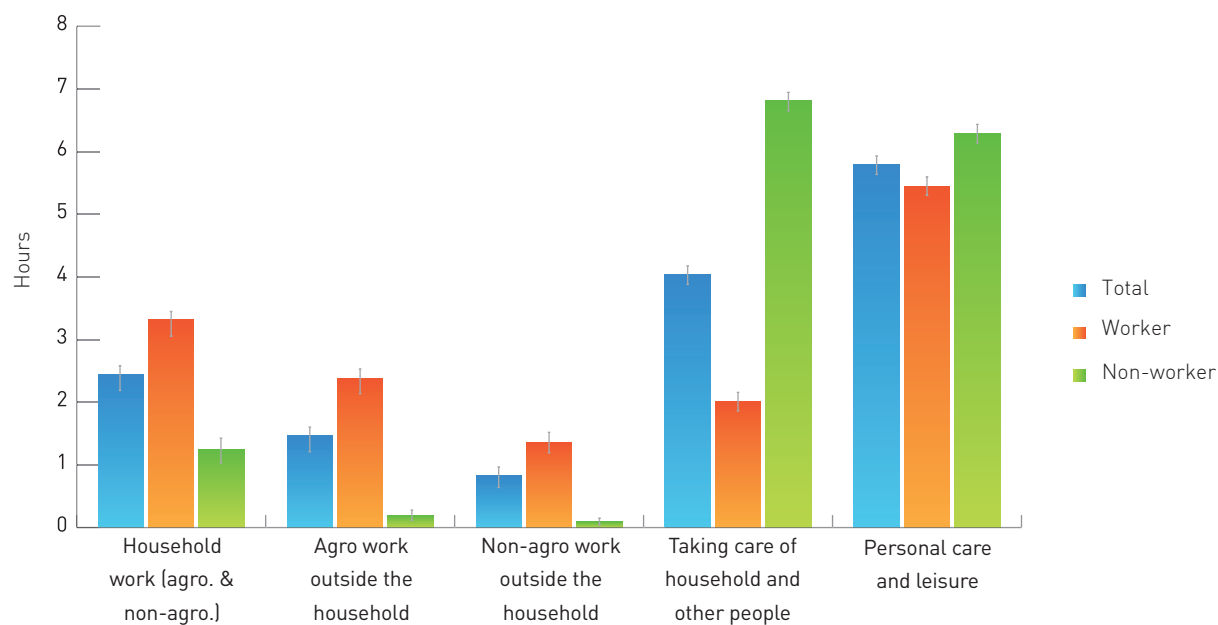
## 9.8. ACCESS TO PAID WORK

A comparative study was carried out among the people who affirmed they were working based on a standard labor market question. The people who were working are characterized as those who, in the 2013 survey, answered that they worked at least one paid hour per day in the week prior to the survey. Those who said they did not carry out paid work during this lapse of time were considered people who did not work. Time use has two distributions that are presented according to the type of work carried out by that person. Figure 9.12 shows that, as expected, people who worked in the paid market dedicated most of their time to paid work, while people who worked in the unpaid market undertook activities to economically support society, but which were not paid nor visible in their environment.



**FIGURE 9.12.**

TIME USE FOR HOUSEHOLD HEADS AND SPOUSES IN 2013  
ACCORDING TO WHETHER THEY WORKED OR NOT (HOURS PER DAY).



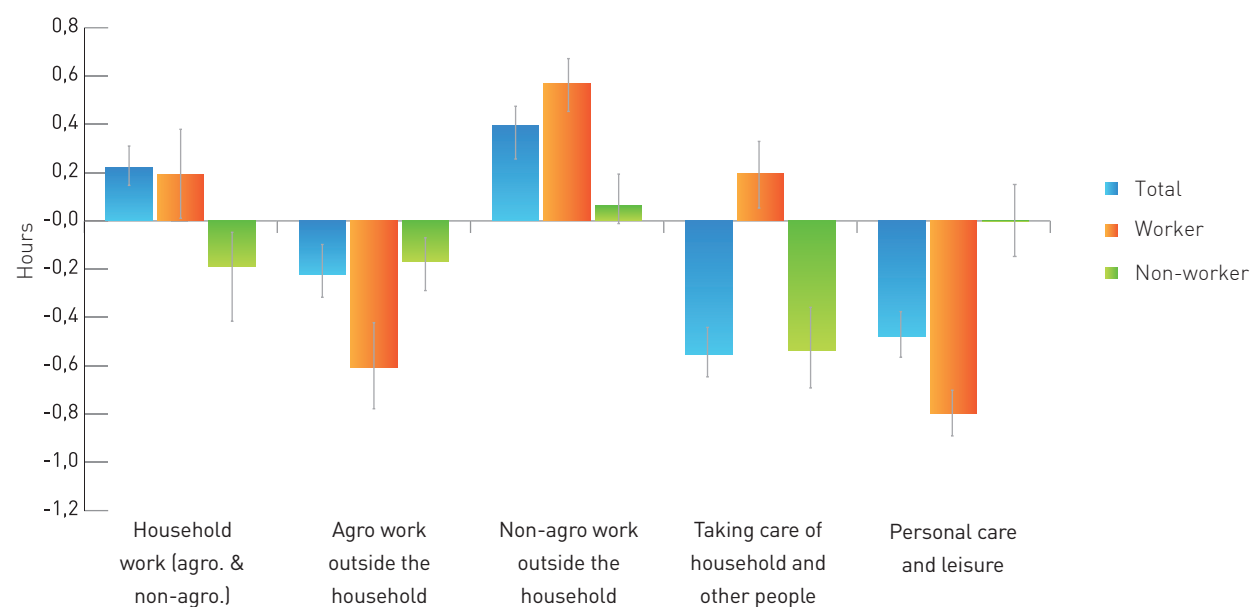
Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

Figure 9.13 shows the change in time use for the year 2013 for people who worked and people who did not work. People who worked increased the time dedicated to non-agricultural and livestock work outside the household as well as the time in which they took care of their household. This appears to be positive for the sharing of tasks among people who work and those who do not. Finally, the same people reduced their leisure time and their personal-care time, while those who did not work decreased the time they worked in the household, the time they spent on agricultural and livestock work outside the household, and on care work.

**FIGURE 9.13.**

CHANGE IN TIME USE FOR HOUSEHOLD HEADS AND SPOUSES BETWEEN 2010 AND 2013 ACCORDING TO WORK (HOURS PER DAY).



Source: Authors' calculations based on ELCA 2010 and 2013

This information is based on the data reported by the followed household head and spouse that were surveyed in both waves of ELCA. The rural sample is only representative of the mid-Atlantic, Cundiboyacá, Coffee Region and Center-East micro-regions. A 95% confidence interval is reported.

## 9.9. MORE SIMILAR THAN DIFFERENT

Time use differences were also analyzed taking into account other variables such as educational level, skin color or type of household (single-parent or two-parent). In these variables, we expected to find substantial differences in household behavior. However, in analyzing the data, no significant differences were found between these groups which is why they were not described in the previous sections. A similar situation presents itself in households that received negative shocks and those that did not. In spite of having been affected by negative shocks such as the death of household members or a natural disaster, no changes in the households' time use were found. This could be due to two principal factors: On the one hand, time use on a 'normal' day for the previous week was considered, and so the shock would have had to have been very harsh in order to permanently affect time use. On the other hand, the shocks could have happened at any point over the three-year period, making it difficult to find effects on time use in the previous week.

## 9.10. CONCLUSIONS

The time use analysis in the four rural micro-regions is an alternative way of studying rural labor markets and understanding the tendencies of paid and unpaid work. This chapter exposes the most important changes in time use over the three-year period identified in the ELCA.

In the dynamics shown, the rise in paid work in the household can be noticed in three main subgroups. The first is the Coffee Region, which shows a higher than average increase of more than half an hour in this kind of work between 2010 and 2013. The second is a rise in the time spent on these kinds of activities by women, presenting a significant rise of a quarter of an hour compared with men. The last and final is a rise of twenty minutes, which is shown in the subgroup whose socioeconomic index is high. Work within the household is being strengthened to produce more and generate economic growth with its own assets.

Three groups influence the reduction of almost a quarter of an hour in paid agricultural and livestock work outside the household between 2010 and 2013 for the objective sample. The first includes men who reduced their time spent on these activities by almost half an hour, demonstrating a lower tendency of tie use in the agricultural and livestock sector given that it is they who mainly work on these tasks.

The second is the Coffee Region, which during the three years, reduced its agricultural and livestock work outside the household by a little over half an hour. The last subgroup that showed a strong fall is the group of youths. Its reduction of almost twenty minutes daily shows that the new generations are reducing their time spent on agricultural and livestock activities in order to spend it on other forms of production, especially when they are working people.

The rise in paid non-agricultural and livestock work outside the household, equal to almost an additional half an hour of work, is influenced by four principal subgroups. Men, in first instance, are those who most increased their time spent on this kind of work by more than half an hour. Additionally, the mid-Atlantic region is one of the regions that showed an increase of approximately 35 minutes in this kind of work. In relation to the socioeconomic index, those that showed the biggest increase in the time spent on non-agricultural and livestock work, outside the household, are from the higher wealth levels. With this in mind, it can be observed that men continue to leave their households for the labor market, but they are inclined to prefer non-agricultural and livestock work, especially when they belong to high socioeconomic levels and they want to increase their social status as well as their incomes.

To conclude, we can see that there is a general tendency for paid work to distance itself from agricultural and livestock work unless this is done for personal production in the household. This shows a rising interest in earning a higher income and economic growth because, on the one hand, household work represents the production of capital and, on the other hand, non-agricultural and livestock work outside the household represents initiatives to enter the better-paid sectors. It is principally men who tend to look for income outside the household in other sectors of the economy, while women lead the initiative to increase work inside the household in order to generate more income. This continues to be an impediment in terms of the distribution of unpaid work since women continue to stay at home; however, it is an advance in terms of income generation. Equally, it is the higher socioeconomic levels that, in general, lead these two increases. This shows more motivation and the search for better incomes. We can also observe differentiated tendencies among the regions, perhaps due to cultural factors or the predominant industries in these regions.

We can see that the Center-East region, high socioeconomic levels, people who do not work, and people who work in private companies earning a salary are in the lead when it comes to taking care of the household and looking after other people. A

number of conclusions can be drawn from this. On the one hand, the changes observed in the analyzed micro-regions are more highly differentiated insofar as paid work than unpaid. Seemingly, the latter were less dynamic in terms of changes in time use over the three years. We also conclude that the higher the socioeconomic level, the less time is dedicated to household work, possibly due to the two following facts: 1) an increase in women's paid work, and 2) the possibility to hire people to do such work. Unfortunately, in terms of equality in time use distribution, we can see that both women and men reduce their dedication to such activities by the same rate. Given the above, we can see that the increase in women's paid work is not being compensated by a redistribution of work, but rather, redistribution in terms of their own time or by access to other ways of contracting out this type of work. Finally, those who most reduce the time they spend on such tasks are those who are about to be gainfully employed (to work outside the home in non-agricultural and livestock work), who tend to be mainly men. This is even more worrying for women in terms of the unequal distribution of household work as there is no evidence of a reduction of their double shift in the four rural micro-regions, but rather, the opposite is true.

Finally, the almost half-hour reduction of time spent on leisure activities is presented in various subgroups. The first is the subgroup of women, showing more proof that there isn't a trend towards an equal division of labor but rather a trend towards an increase in the double shift and the second generation glass ceiling in terms of gender equality. The Center-East region, again, leads this reduction. It would be interesting to analyze what is happening in the region and the reasons behind such drastic changes in the dedication of time to unpaid labor, which, in terms of leisure, falls by two hours and fifteen minutes. Those who most reduce their time dedication to such activities are youths and those from high and medium socioeconomic levels. This adds to the theory that these individuals are more motivated by the idea of dedicating their time to generating income. It is also interesting to note that Familias en Acción beneficiaries reduced their leisure time, despite being a low socioeconomic level group. Given that the purpose of this subsidy is to improve the lives of the poorest sector of children, this may be a positive effect as it means that parents are tending towards avoiding leisure time, despite the fact that the opposite trend is true for the low-income population.

To sum up, we wish to point out the need to tackle this topic by implementing public policy in order to mitigate the second generation glass ceiling effect and reverse traditional gender roles in the four ELCA micro-regions. It is possible to create policies to narrow this gap and instead promote growth and income generation, taking advantage of the general trend of the households to propel their own development. One way to approach the problem is to analyze different regions in order to understand their policies and cultural beliefs and, in turn, the relationship between such factors and the communities' distribution of time use. We also propose a policy to encourage low-income households to think about other ways in which they could generate income. We could think about policies whereby women generate additional income in these households, creating programs that drive entrepreneurship among these women in order to allow them to change the traditional notions of gender roles. Finally, we propose that in-depth studies be carried out to research crossovers between these variables, given that we believe that the effect may be even greater when the women are from low-income households.

## REFERENCES

Ayala, M. J. (2003). "Un acercamiento a las encuestas sobre uso del tiempo con enfoque de género". Santiago de Chile: Unidad Mujer y Desarrollo, cepal-onu.

Ibáñez, A. M., Fernández, M., and Peña, X. (2011). "Adjusting the labor Supply to Mitigate Violent Shocks". Evidence from Rural Colombia. Documento CEDE-ELCA, 39.

Johnson, J., and Lipscomb, J. (2006). "Long working hours, occupational health and the changing nature of work organization". *American Journal of Industrial Medicine* (49), Issue 11, pp 921-929.

Peña, X. and Uribe, C. (2013). "Economía del cuidado: Valoración y visibilización del trabajo no remunerado". Documento CEDE, 27.

## LIST OF TABLES

### CHAPTER 1

COLOMBIAN LONGITUDINAL SURVEY (ELCA) BY UNIVERSIDAD DE LOS ANDES, 2010-2013

XIMENA CADENA

Table 1.1	Household survey coverage by area.	19
Table 1.2	Coverage of surveyed people in studied households by sample areas.	21

### CHAPTER 2

THE DYNAMICS OF COLOMBIAN HOUSEHOLDS

CARMEN ELISA FLÓREZ  
NÉSTOR EDUARDO MUÑOZ

Table 2.1	Household characteristics by year and area.	32
Table 2.2	Changes in the typology of the surveyed households by year and area.	33
Table 2.3	Changes in the heads of surveyed households by year and area.	33
Table 2.4	Demographic characteristics of households in 2010, according to the dynamic between 2010 and 2013, by area.	38
Table 2.5	Demographic characteristics of the households that remained identical between 2010 and 2013, by region and area.	40
Table 2.6	Changes in the typology of recomposed or divided households between 2010 and 2013.	41
Table 2.7	Changes regarding the heads of households that recomposed or divided between 2010 and 2013, by area.	42
Table 2.8	Households that experienced shocks between 2010 and 2013, according to the household demographic, by type of event, and area.	43
Table 2.9	Migratory conditions of the original households, according to the demographic dynamic between 2010 and 2013, by area.	46
Table 2.10	Households that experienced shock between 2010 and 2013, according to their migratory condition, by type of event, and area.	47

### CHAPTER 3

VULNERABILITY TO SHOCKS AND RESPONSE MECHANISMS

XIMENA CADENA  
CLAUDIA QUINTERO

Table 3.1	Households that benefitted from natural disaster aid programs.	61
Appendix 1	Shocks.	72
	Responses to shocks.	73

#### **CHAPTER 4**

COLOMBIAN HOUSEHOLDS' POVERTY CONDITIONS AND ACCESS TO SOCIAL PROGRAMS

ADRIANA CAMACHO  
ROMÁN D. ZÁRATE

Table 4.1	Average per capita expenses in the urban area.	79
Table 4.2	Average per capita expenses in the rural micro-regions.	79
Table 4.3	Wealth levels transition matrix by area.	83
Table 4.4	Property and use of durable assets.	84
Table 4.5	Poverty characteristics and dynamics in the urban area.	89
Table 4.6	Characteristics and dynamics of poverty in the rural micro-regions.	90

#### **CHAPTER 5**

CHILDREN AND YOUTH IN COLOMBIA: THEIR EVOLUTION THROUGH THE 2010-2013 PERIOD

CATHERINE RODRÍGUEZ ORGALES

Table 5.1	Characteristics of the panel of children and youths ten years and older in 2013.	101
Table 5.2	Educational variables of the panel of children and youths by region.	108
Table 5.3	Participation in household work and the labor force of the panel of children and youths by gender and wealth level.	111

#### **CHAPTER 6**

COLOMBIAN POLITICS IN THE LIGHT OF ELCA: BETWEEN DISINTEREST AND CLIENTELISM

LEOPOLDO FERGUSSON  
JUAN FELIPE RIAÑO

Table 6.1	Determinants of vote selling.	143
-----------	-------------------------------	-----

## **CHAPTER 7**

PARTICIPATION AND AID IN COLOMBIA: SOCIAL ORGANIZATIONS AND PROSOCIAL BEHAVIOR  
THROUGH THE LENS OF ELCA

JUAN CAMILO CÁRDENAS  
PAULA JULIANA SARMIENTO

Table 7.1	Correlations between associativity and the network of trust among neighbors against opinions regarding the welfare state and redistribution, solidarity and reciprocity.	169
-----------	--	-----

## **CHAPTER 8**

WHAT HAPPENED IN THE RURAL AREAS BETWEEN 2010 AND 2013: CONTRIBUTION TO LAND ACCESS,  
NEGATIVE SHOCKS AND STATE PROGRAMS GEARED TOWARDS THE WELL-BEING OF RURAL HOUSEHOLDSS

ANA MARÍA IBÁÑEZ  
LAURA MONTENEGRO

Table 8.1	Total aggregate consumption.	182
Table 8.2	Size of the plots of land by household.	184
Table 8.3	Changes in the tenure of plots of land between 2010 and 2013.	185
Table 8.4	Changes in the tenure of plots of land between 2010 and 2013.	186
Table 8.5	Type of land tenure.	188
Table 8.6	Access to State programs.	190
Table 8.7	Rural households, which experienced shocks over the three-year period.	191



## LIST OF FIGURES

### CHAPTER 1

COLOMBIAN LONGITUDINAL SURVEY (ELCA) BY UNIVERSIDAD DE LOS ANDES, 2010-2013

XIMENA CADENA

- Figure 1.1 Geographic distribution of the municipalities surveyed through ELCA. 18

### CHAPTER 2

THE DYNAMICS OF COLOMBIAN HOUSEHOLDS

CARMEN ELISA FLÓREZ  
NÉSTOR EDUARDO MUÑOZ

- Figure 2.1 Household typology by kinship and household head. 30
- Figure 2.1.1 Permanence, recomposition, and division of households between 2010 and 2013, by area. 35
- Figure 2.2 Distribution of surveyed households in 2013 according to permanence, recomposition, and division between 2010 and 2013, by area and region in 2010. 36
- Figure 2.3 Distribution of surveyed households in 2013 according to permanence, recomposition, and division between 2010 and 2013, by area and level of wealth in 2010. 37
- Figure 2.4 Nuclear households in 2010, according to household dynamics between 2010 and 2013, by area. 39
- Figure 2.5 Nuclear households, which remained identical between 2010 and 2013, by region and area. 41
- Figure 2.6 Migration patterns of the original households by area between 2010 and 2013. 44

### CHAPTER 3

VULNERABILITY TO SHOCKS AND RESPONSE MECHANISMS

XIMENA CADENA  
CLAUDIA QUINTERO

- Figure 3.1 Households that experienced shocks over the three years and economic impact by region. 55
- Figure 3.2 Households which experienced shocks over the three years and economic impact by level of wealth and gender of the household head. 56
- Figure 3.3 Households which experienced shocks over the three years and economic impact by type of event. 57

Figure 3.4	Urban households that experienced shocks over the three years by type of event, region and gender of household head.	58
Figure 3.5	Rural households that experienced shocks over the three years by type of event, region and gender of household head.	59
Figure 3.6	Vulnerability to shocks with medium to high economic impact over time and by area.	62
Figure 3.7	Probability of experiencing shocks with medium to high economic impact in accordance with previous characteristics in the urban area.	64
Figure 3.8	Household responses to dealing with shocks by area.	66
Figure 3.9	Households' responses by type of event and area.	67
Figure 3.10	The effects of shocks on changes in household income and expenses per person in the urban area.	69
Figure 3.11	The effects of shocks on changes in individual expenses, characteristics and responses in the urban area.	69

#### CHAPTER 4

##### COLOMBIAN HOUSEHOLDS' POVERTY CONDITIONS AND ACCESS TO SOCIAL PROGRAMS

ADRIANA CAMACHO  
ROMÁN D. ZÁRATE.

Figure 4.1	Households in monetary and multi-dimensional poverty by area and region.	80
Figure 4.2	Wealth index distribution by area and year.	82
Figure 4.3	Distribution of Sisbén scores by area and year.	82
Figure 4.4	Familias en Acción beneficiaries by area, region, and year.	85
Figure 4.5	SENA beneficiaries by area, region, and year.	86
Figure 4.6	ICBF beneficiaries by area, region, and year.	87
Figure 4.7	Red Unidos beneficiaries by area, region, and year.	88
Figure 4.8	Perception of social programs in 2013 by area.	89
Figure 4.9	Participation in social programs by poverty dynamics for the urban area.	91
Figure 4.10	Participation in social programs by poverty dynamics for the rural micro-regions.	91
Figure 4.11	Participation in SENA by poverty dynamics by area.	91
Figure 4.12	Education level of household head by poverty dynamics.	92
Figure 4.13	Households that experienced some kind of health shock by poverty dynamics.	92

## CHAPTER 5

CHILDREN AND YOUTH IN COLOMBIA: THEIR EVOLUTION THROUGH THE 2010-2013 PERIOD

CATHERINE RODRIGUEZ ORGALES

Figure 5.1	School attendance of the panel of children and youths by area.	102
Figure 5.2	Educational lag of the panel of children and youths by area.	103
Figure 5.3	Attendance and educational lag of the panel of urban children and youths by cohort and year.	104
Figure 5.4	Attendance and educational lag of the panel of rural micro-region children and youths by cohort and year.	104
Figure 5.5	Educational lag of the panel of children and youths by gender, year and area.	105
Figure 5.6	Educational lag of the panel of children and youths by wealth level, year and area.	105
Figure 5.7	Educational lag of the panel of children and youths by PPVT score, year and area.	106
Figure 5.8	Participation in household work of the panel of children and youths by year and area.	109
Figure 5.9	Participation in the labor force of the panel of children and youths by year and area.	110
Figure 5.10	Participation in household work and in the labor force by household shocks.	112
Figure 5.11	Youths that reported having a peer belonging to a gang in 2013 by gender and wealth level.	114
Figure 5.12	Expected ages for educational achievements reported by youths in 2013 by 2010 PPVT results and area.	115

## CHAPTER 6

COLOMBIAN POLITICS IN THE LIGHT OF ELCA: BETWEEN DISINTEREST AND CLIENTELISM

LEOPOLDO FERGUSSON  
JUAN FELIPE RIAÑO

Figure 6.1	Participation in the local elections of 2011 and self-reported voting frequency by area and gender.	123
Figure 6.2	Do you remember the name of your Mayor? The cases of Bogotá and Medellín.	124
Figure 6.3	People who have tried to convince others to vote for a certain candidate by area and gender.	125

Figure 6.4	Participants that remember having voted in the local elections of 2011 by area and gender.	126
Figure 6.5	Loyal voting patterns and identifying with a political party by area and gender.	127
Figure 6.6	Ideological identification reported by area and gender.	128
Figure 6.7	The offer curve for vote buying by gender and area.	131
Figure 6.8	The vote offer curve by wealth and area.	133
Figure 6.9	The vote offer curve in accordance with shocks by area.	134
Figure 6.10	The vote offer curve in accordance with the perception of vote confidentiality by area.	135
Figure 6.11	The vote offer curve in accordance with the level of negative and positive reciprocity by area.	137
Figure 6.12	The vote offer curve in accordance with the access to governmental programs by area.	139
Figure 6.13	The vote offer curve by age and by area.	140
Figure 6.14	The vote offer curve by level of education and by area.	141

## CHAPTER 7

PARTICIPATION AND AID IN COLOMBIA: SOCIAL ORGANIZATIONS AND PROSOCIAL BEHAVIOR THROUGH THE LENS OF ELCA

JUAN CAMILO CÁRDENAS  
PAULA JULIANA SARMIENTO

Figure 7.1	Households' participation in social organizations by area.	152
Figure 7.2	Dynamic of household participation in social organizations by area.	154
Figure 7.3	Households' leadership in social organizations by area.	156
Figure 7.4	Households that dedicate time to prosocial activities: social and community service or costless help to households in the rural area.	157
Figure 7.5	Households that dedicate time to prosocial activities in the rural area by region.	158
Figure 7.6	Dynamic of households that dedicate time to prosocial activities: social and community service or costless help to households in the rural area.	159
Figure 7.7	Participation in organizations and reciprocity by area.	160
Figure 7.8	Network of trust between neighbors: Loans for medical emergencies, by area.	161
Figure 7.9	Trust networks between neighbors: Communication in case of emergency by area.	162

Figure 7.10	How much do the inhabitants of your community help each other? Community survey by area.	163
Figure 7.11	How do neighbors mainly resolve non-criminal conflicts? Community surveys by area.	164
Figure 7.12	Households which dedicate time to social or community service in the rural area according to their participation in social organizations.	165
Figure 7.13	People who agreed with: "The Government must implement strong policies to reduce the inequalities between the rich and the poor", by area.	166
Figure 7.14	People who agree with: "The Government is the main entity responsible for overseeing people's welfare", by area.	167
Figure 7.15	People who agree with the statement: "Each individual is responsible for his/her own well-being", by area.	168
Figure 7.16	Panel of the dynamic of households entering into and leaving State programs differentiated by participation in social organizations.	170

## CHAPTER 8

WHAT HAPPENED IN THE RURAL AREAS BETWEEN 2010 AND 2013: CONTRIBUTION TO LAND ACCESS,  
NEGATIVE SHOCKS AND STATE PROGRAMS GEARED TOWARDS THE WELL-BEING OF RURAL HOUSEHOLDS

ANA MARÍA IBÁÑEZ  
LAURA MONTENEGRO

Figure 8.1	Participation of self-consumption and transfers in household consumption by year and region.	181
Figure 8.2	Land use distribution by year and region.	183
Figure 8.3	Destination of resources obtained from the sale of land between 2010 and 2013.	186
Figure 8.4	Investment in households by type of land tenure.	189
Figure 8.5	Determining factors in the change in consumption in households between 2010 and 2013.	193

## CHAPTER 9

### CHANGES IN TIME USE IN RURAL HOUSEHOLDS

XIMENA PEÑA  
CAMILA URIBE

Figure 9.1	Time use for household heads and spouses in the four rural micro-regions in 2013.	201
Figure 9.2	Change in time use for household heads and spouses in rural zones between 2010 and 2013.	202
Figure 9.3	Time use for household heads and spouses by gender in 2013.	203
Figure 9.4	Change in time use between 2010 and 2013 for household heads and spouses by gender.	204
Figure 9.5	Change in time use in 2013 for household heads and spouses.	205
Figure 9.6	Change in time use between 2010 and 2013 for household heads and spouses for each region.	206
Figure 9.7	Change in time use in 2013 for household heads and spouses by age group.	207
Figure 9.8.	Change in time use in 2013 for household heads and spouses by wealth levels.	208
Figure 9.9	Change in time use between 2010 and 2013 for household heads and spouses according to wealth levels.	209
Figure 9.10	Time use for household heads and spouses according to whether they are beneficiaries of Familias en Acción.	210
Figure 9.11	Change in time use between 2010 and 2013 for household heads and spouses according to whether they are beneficiaries of Familias en Acción.	211
Figure 9.12	Time use for household heads and spouses in 2013 according to whether they worked or not.	212
Figure 9.13	Change in time use for household heads and spouses between 2010 and 2013 according to work.	213

