



Demographic and labor market transformations in rural areas of Chile

Tendencias demográficas y transformadoras del mercado laboral rural agrario en Chile

Carlos Rodríguez Garcés, María Julia Fawaz Yissi and Johana Andrea Muñoz Soto

Centro de Investigación y Desarrollo en Informática Educativa CIDCIE. Universidad del Bío-Bío, Chile. Author for correspondence: carlosro@ubiobio.cl

Rec.: 24.12.2015 Acep.: 26.08.2016

Abstract

Based on the information provided by the Encuesta de Caracterización Socioeconómica Nacional (CASEN) (National Socioeconomic Characterization Survey) of 1990 and 2013, the reconfigurations of the Chilean countryside are analyzed in terms of their demographic trends and labor market restructuring. An ongoing process of depopulation and aging of the rural population is found. Agricultural activities of the rural labor market become less relevant both in terms of jobs and income, showing a strong process of deagrarianisation, salaried workers and feminization of the labor market.

Keywords: deagrarianisation, depopulation, rural space, feminization.

Resumen

Con base a la información proporcionada por la Encuesta de Caracterización Socioeconómica Nacional de los años 1990 y 2013, se analizan las reconfiguraciones del espacio rural chileno, en cuanto a las reestructuraciones del mercado laboral chileno. Se constata un continuo proceso de despoblamiento y envejecimiento de la población rural. Las actividades agropecuarias del mercado laboral rural cobran menor relevancia en términos de empleos e ingresos, observándose un fuerte proceso de desagrarización, asalarización y feminización del mercado del trabajo.

Palabras clave: Desagrarización, despoblamiento, espacio rural, feminización.

Introduction

As society modernizes and globalization process extends and permeates all areas and contexts of social life, rural areas are also showing significant reconfigurations which transforms traditional ways of living in the country. Rural modernization, as an expression of a more widespread access to education, media and consumption flows, coupled with the increased capacity of spatial mobility, the “new” agriculture and new rural / urban linkages, has had particular impacts on the occupational structure, family dynamics and livelihoods of rural people.

Modernization, that has come to transform cultural patterns under an increasingly apparent urban influence.

Rural areas, in fairly homogeneous ate the past considered closely linked to agriculture, forestry activities and container traditional values of society, are diversified. They incorporate new products and work activities, family dynamics, demographic and economic processes, as distinct phenomena and particular of the current rurality.

Despite the presence of the phenomenon of transient, daily and pendular mobility, migration processes of constant population loss do not stop

and have configured a rural town in transition. It is found a negative vegetative growth as a result of the falling birth rate and fertility, coupled with the aging of its population by migration of younger and increased life expectancy (White, 2002). Demographic emptying or rural exodus also motivated by the lack of expectations generated by the countryside, especially for the younger ones, who are attracted by the prevailing life of cities. (Rico, 2003; Camarero, 2008). This situation leads to a reduction in the viability of the territories with an especially agricultural vocation for the loss of endogenous and exogenous demographic resources generated a reduced rate of intergenerational turnover and a higher rate of dependency, despite the increase may have experienced female labor participation.

While agriculture remains the most important economic activity in most rural areas, other activities share and/or increasingly compete for space use. The labor market shows distinct trends in this area, while those living in the countryside not only accept non-agricultural occupational offers, but also open to consider the possibility of urban jobs favored by road improvement and the best conditions of geographical mobility. Larger and diversified employment prospects also impact on women, population segment that shows accelerated incorporation, to rural and urban labor market, whether agricultural and non-agricultural occupations, including *small enterprise* (Fawaz & Rodriguez, 2013). Although the work has lost the centrality it had in the industrial society as basis of social life and the construction of the subject-product of the transformation of the capitalist production mode and the role of the state in developed societies (Castells, 2005) the available evidence in what refers to rural work, sets this as one of the most incident factor in the reconfiguration of the rural world. The land holding as primary and exclusive good, loses force today towards education and work, especially salaried.

To the extent that work becomes relevant, families invest more in education, which they value as a resource that will enable high payoff adequate returns in the future. Moreover, changing consumption patterns pressed into the labor force reserve family, mainly composed of women, for insertion in the labor market, expanding the number of earners in the household. As a result of pluriactivity, diversification and increase in the number of wage earners, household income in terms of regularity, sources and generators are reconfigured.

In view of these transformations occurring in the rural space, this article aims to describe the reconfigurations of Chilean rural labor market in the last quarter century. Specifically, it explores

the dynamics of deagrarianisation, salaried workers and feminization of rural labor market.

Material and methods

This research makes use of the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN) of 1990 and 2013, in which a longitudinal analysis of the rural labor market in Chile is done. Both bases have been weighted by a factor of regional expansion, thus correcting selection bias and allowing the construction of representative indicators of the national rural population as a whole.

CASEN, is designed and implemented biannually by the Ministry of Social Development of the State of Chile, is a multipurpose survey to gather information about national economic reality and evaluate the impact of social policy in the country. The survey provides information with national validity regarding access to education, work, health, housing conditions, income distribution, poverty and indigence, among others. It applies to a representative sample of the population living in private households in both rural and urban. The sampling procedure used to ensure greater representation and reduce selection bias is probabilistic, multistage, stratified, using methodologies and sampling frames provided by the Instituto Nacional de Estadística (INE). Its coverage is national territory includes 15 regions and 324 districts nationwide, excluding only those spaces defined as inaccessible. The optimum sample size is defined based on the poverty rate, noting regional absolute errors of one to four percentage points, a situation that results in an absolute error of 0.69 percentage points nationally (Ministerio de Desarrollo Social, 2013).

For statistical analysis, the bases have been weighted by a factor of regional expansion, correcting selection bias and allowing the construction of representative indicators of the national rural population as a whole.

The analytical approach to the elements that shape current trends was based on the construction of a set of indicators:

- *Rurality index*: Proportion of the population living in concentrated or dispersed areas up to 2000 inhabitants with at least 50% of its economically active population engaged in agricultural or primary activities. It includes people residing in villages, hamlets, farms, plots or indigenous communities.

- *Aging Index*, which expresses the relationship between the population of 65 years and over regarding the population under 20 years (Equation 1).

$$I_e^t = \frac{p_{>64}^t}{p_{<20}^t} \times 100$$

Equation 1

- *Index global dependence*: the proportion of the population in potentially dependent on age, this is under 15 and over 64 years, about the potentially active age population (15-64 years)(Equation 2).

$$I_{dg}^t = \frac{p_{<15}^t + p_{>64}^t}{p_{15-64}^t} \times 100$$

Equation 2

- *Occupancy rate*: The proportion of the population that is actually working on a salaried or self-employed respect of the economically active population in the labor market as employed or unemployed.

- *Feminization Index*: the ratio of women participating in the labor market regarding the total population that integrates the labor market.

- *Tertiary Index*: proportion of the population in areas relating to trade and services to total employed population.

- *Salaried index*: proportion of the population participating in the labor market dependent manner, whether under contract or not, with respect to the total population.

- *Formalization Index*: relation of employed population that has a contract in permanent or indefinite term, signed or to be signed, out of the total employed population dependent.

- *Agricultural occupation index*: proportion of persons employed in the agricultural sector, in relation to the overall working population.

Results and discussion

Among the most significant demographic changes rural areas have experienced in the last quarter century, the continuous process of depopulation and aging highlights (Figure 1), situation which follows global trends and has also been found in other contexts and by other authors (Rico & Gomez, 2009). While in the early 90's and the rural population reaches 17.0%, by 2013 this figure is further reduced and does not exceed 12.7%. On the one hand, there is almost zero vegetative growth as birth rates and fertility that inhibit a generational change, this despite the increased life expectancy. On the other hand, the

aging process is also explained by the continued migration, especially by younger people, being endowed with greater human capital on the occasion of education received; choose to reside permanently in urban areas where greater opportunities for quality employment and satisfaction of expectations are open. Specifically, the aging index has increased by 2.8 times compared to the existing at the beginning of the nineties. In 1990, there were 18.9 adults over 64 years for every 100 young people under 20 years, while by 2013 that figure is positioned at 52.3 seniors per 100 young people. This phenomenon of aging of the rural population directly affects the dependency ratio, that is number of people who are theoretically not in working age, under 15 and over 64 years, compared to those who make up the economically active population, that is population 15 years and over. This situation inhibits the necessary generational change in economic activity, which, coupled with production models based on intensive areas and use of high-cost technologies, make the non-tech segment of small farming unviable, putting into question the very sustainability rural world as we had known.

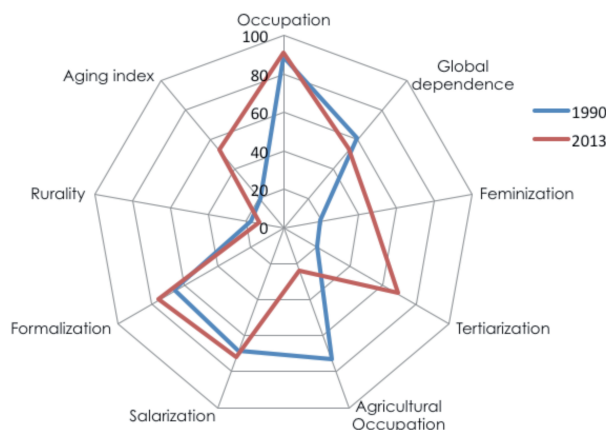


Figure 1. Labour Market Trends, 1990 and 2013 (Indices)

Pluriactivity is the complementarity of agricultural income with other sources, and the incorporation of other family members, including women, as income earners; appear as strategies that offer the possibility of economic sustainability of rural families, mitigating the process of permanent migration.

Indeed, economic productive diversification, the growing importance in family income from nonagricultural work, which they are conducted mainly in urban areas, and the improvement of transport and communications, make possible the existence of a pendular mobility or commuting, i.e. the movement for short periods of time

(daily or weekly) of the rural population on the occasion to access to health services, education and consumption, and the labor market, events that give rise to a growing live trend in the field; Phenomenon that tends to contain and/or slow down the process of emptying the countryside, assuming it from multifunctionality. (OECD, 2006; Rico & Gomez, 2009).

The agricultural sector has an intrinsic inability to absorb rural labor supply, especially the most qualified produced by the education system. Also, it is limited in providing better quality jobs and remuneration to labor of low qualification. The economic activities most technologically advanced in the agricultural sector are not labor intensive and, moreover, they demand more jobs and those are characterized by poor timing and incomes. This situation makes barely competitive against the urban labor market, especially when it is facing a contingent ever better qualified in what level of education is concerned. Consequently, the level of education and the particularities of the rural labor market constitute push factors, and explain why the young people, especially the most prepared, are the first to migrate. To this is added the traditional factors of attraction of cities with the promise of a better quality of life that is associated with urban lifestyle. This depopulation of rural areas generates, according to Mojarro & Benitez (2010), an imbalance in the rural areas, increasing impoverishment and social vulnerability by way of loss of human capital, abandonment of productive activities, waste of installed social infrastructure, among others. Mass and selective exodus also alter the demographic and household composition, increasing the presence of children and elderly at home, as well as the feminization of their structure.

The labor market shows, on a global level, ability to absorb increased labor available, which transits in accordance with the proliferation of temporary employment in rural areas and greater access to work in urban areas. The demand for labor is mobilized based on the labor needs of economic-productive activity, in both rural and urban, but this creation of new jobs, with rising supply, also puts pressure on wages and working conditions (Rodríguez & Muñoz, 2015). Consequently, the particularities of the rural labor market are more determined by the type of employment, working conditions and income levels, and not just by the mere presence or absence of jobs.

The data show a strong deagrarianisation process. Agricultural activities increasingly become less important in terms of jobs and income, which favors the position of services in areas such as tourism, transport and trade. Trends have

been noted in other contexts Haggblade, Hazell & Reardon (2002), and Dirven & Köbrich (2007). While in the 90's 73.8% of the employed labor force was employed in agriculture, in 2013 this has been reduced to less than a quarter (24.6%), This implies a decrease of 67% from the level of employability in the agricultural sector in early 90's .While the process of deagrarianisation has not involved the disappearance of agricultural activities as a source of family income, if a progressive loss of hegemony is found as a source of income generation and employment (Escalante, Catalan, Galindo & Reyes, 2007). Consistent with the above, the rural labor market terciariza where the presence of industrial activities related to services increased by 239% and position it as the main source of income and employment generating to rural families.

The salary, like education, inputs and start-up capital that helps to reach a good level of income, constitute patrimonial goods of prime importance. Meanwhile what once defined the rural agricultural labor and land ownership, today these attributes give ground to the sale of the labor force and the increasing importance of educational investment. Function of agricultural production in the rural family persists, but today it depends on a much larger amount of salary of its members, many of them outside the strictly productive activity. Strategies to overcome welfare and consumption are defined by the conditions of the labor market and are less sensitive to the vagaries of the agricultural productive market. This loss of centrality of the agricultural sector is also explained by the permanent comparative economic decline in productive activity that has diminished revenues and subtracted viability to family livelihoods of small producers. Situation that threatens the diversification of livelihoods through paid work, an event that is even in the explanatory basis of historical migration processes from the countryside to the city, and that, currently, undermine the foundations of sustainability, becoming a denial of rural development (Lastarria, 2008; Kay, 2009).

Other more optimistic positions argue that this same exponential growth of nonfarm rural employment, is not only an efficient solution to problems such as poverty, but also transform the agricultural sector and modernize rural areas (Blanco & Bardomás, 2015). This would not result in a simple process of transition to wage-earning family group, but rather a diversification and stabilization of the sources of jobs and income that will make them less vulnerable to the home, enable its sustainability and, concomitantly, provide greater support to rural areas.

The low profitability makes rural inhabitants choose to leave their home, engaging in non-

agricultural activities and seeking employees, including precarious jobs in the urban space and services, resulting in processes of flexibility and feminization of the labor market. The combination of income sources becomes a hallmark of rural families, where pluriactivity, before understood as a supplement, is now incorporated as the main attribute, transforming the classic vision of rural (Arias, 2009). The production-consumption relationship that once worked in hegemony; today is gradually replaced by a model income-consumption, where agricultural production constitutes a possibility, among others, to identify resources for family subsistence. Rural families can no longer do without the income provided by wage labor, and even less the one generated by women (Rodríguez & Muñoz, 2015). The changing patterns of consumption, an overview of restrictive income by low wages, requires the inclusion of more household members in the labor market, so it makes the families get access to the reserve, generally consists of women in order to increase the number of income earners.

Pluriactivity in rural space, it is strongly influenced by the increasing flexibility of agricultural productive activity, which has mainly affected women, creating new job opportunities also in rural areas. Particularly relevant in this context is the increase in fruit and vegetable exports, where women are employed more easily, mainly in the form of temporary work. Gender preference in the labor market, due to the greater skill in tasks that require patience and care, in addition to considering them less confrontational and more flexible in working conditions than their peers men (Barrientos, Dolan & Tallontire, 2003). It is estimated that much of the non-traditional agricultural employment generated is occupied by women, especially in what agroindustrial processing facilities refers (Edelman, 2008), making it possible to note that this area is primarily responsible for the feminization of the workforce used in the field. This while recognizing the importance and visibility acquired women in smallholder agriculture, whether as principal farmers or unpaid family (Deere, 2006).

The feminization of the labor market constitutes one of the most important events of the productive-economic transformations that are in the field. In 1990, for every five men inhabitants of rural areas that made up the labor market, there was only one woman; while in 2013, this ratio is one woman for every two men. Women are increasingly restricted and limited to certain activities, unlike what happened in the past. Event which operates in conjunction with an interest in raising living conditions and access to goods and services. A contingent now being increasingly prepared to compete in the labor market and a more

favorable predisposition to work. The decrease of the inactive female population in all its segments allows the conclusion that older and poorly educated women are also incorporated into paid work, either through micro-enterprises or as heads of exploitation. In particular agricultural activity strongly feminized in this quarter century in the country. While in 1990 only 7.5% of those involved in the agricultural industry were women, today that figure is positioned at 21.6%. The female presence in this sector has nearly tripled as a result of the substitution effect by male migration, as well as the generation of new jobs less limited to the prerogatives of gender conditioning of the past.

Despite this strong feminization, agricultural activity is not the most distinctive feature of the labor market participation of rural women. Despite this strong feminization, agricultural activity is not the most distinctive feature of the labor market participation of rural women. The women are also sensitive to the "urban call", making the agricultural industry lost relevance as a source of income and employment also in this segment. In 1990 one third (33.6%) of employed rural women did in the agricultural branch, in 2013 this figure only reached 21.6%, detriment is explained by the strong position of women in the service sectors. Salaried work of nonagricultural nature is relevant in women as this is where the largest number of offers of employment, more stability and where women can have access to get pay at least comparable to the one obtained by men, especially considering that is a contingent increasingly prepared that seeks a return on investment in education. According to Berdegúe, Reardon & Escobar (2000), in rural jobs, whether as agricultural self-employment, agricultural wage, men get, in most cases, salaries much higher than that of women.

As a corollary of the process of deagrarianisation or loss of hegemony of the agricultural industry in generating income and employment sources, a strong movement of labor into the area of services is found. We are witnessing a growing process of outsourcing the rural sector, once defined by the predominance of primary and agricultural activities. In 1990, in Chile only one in five (22.3%) men and women are occupied in rural activities associated with the services sector an overwhelmingly growing proportion, by the year 2013 reached 68.1%, which means that currently about seven out of ten employed are working in the services sector. Activity, which by its nature, is preferably performed in urban areas, because the economic sector associated services such as trade, in the rural sector dwindles and becomes less profitable for the same demographic migration process, as well as the better transport

and communication networks that facilitate and reduce time commuting to supply urban markets.

Finally, the employee or dependent work operates increasingly linked to a formal relationship established between employee and employer by an employment contract. Explained by the economic development achieved, increased wage labor and social protection policy, there is an increase in the rate of formalization of labor activity. Although the rise of this index is less obvious than that observed in the other indicators, the fact is that in the rural sector, during 1990 66% of the population that participated in the formal market with contract and/or social benefits thickens to 75.5% in 2013. Increasing labor protection in rural areas does not necessarily imply ignoring the existence of an informal economy, but simply say that the informal and socially unprotected employment has a countercyclical behavior, since it constitutes a strategy for family subsistence and refuge from the deteriorating economic situation and wage employment as a whole. However auspiciousness of the figures presented in social protection schemes with strong bias in wage labor, such as Chile, labor formalization provides coverage in labor and health eventualities, transient or permanent form only in this segment of population. Independent rural workers, for example, do not have the same protection, situation involving an inclusion bias that marginalizes them and their families on a set of benefits and social benefits.

In consequence, it is possible to sustain the factors that manage the social and economic life of rural families is strongly shaped by the salaried urban labor, outsourced, formalized and feminized.

Conclusion

Rural areas in Chile have shown reconfigurations that have transformed the traditional ways of living in the country: in population, rural areas are faced with a process of depopulation and aging; and what to rural labor market is concerned, this is presented as a deagrarianisation and outsourcing; diversifying and feminizing sources of income, intensifying processes of salaried workers.

By 2013 a scant 13% is rural population and represents a reduction of about one quarter of the existing early nineties. Meanwhile, the rate of aging of the rural population has increased by 2.8 times in the same period; there is presently an older adult for every 2 young people. Aging is explained by the continued migration, especially by younger that have a higher educational level who are attracted to urban areas because of the

greatest opportunities for employment and access to services.

In the current rural labor market trends, agricultural activities come less relevant in terms of jobs and income. A strong process of deagrarianisation is observed, a situation that favors the positioning of the area of services, such as tourism, transport and trade. The rural labor market is outsourced making work activities linked to services increase by 239%, disputing hegemony to farming as their main source of income and generating employment for rural families.

The feminization of the labor market is one of the events that are especially important in productive economic transformations in recent times in the Chilean rural sector. In 1990, for every five men inhabitants of rural areas that made up the labor market there was only one woman, while in 2013 this ratio is one woman for every two men.

Acknowledgments

To Fondo Nacional de Desarrollo Científico y Tecnológico (Fondecyt), project number 1140579 and the research center CIDCIE for the contribution with this research awarded to “Socio-spatial, structural and symbolic reconfigurations of the population, lifestyles, work and family in the context of the new rural / urban relations. Perspectives and contributions from the Bio-Bío region”.

References

- Arias, P. (2009). La pluriactividad rural al debate. En H. Carton, & L. Martínez, *La pluriactividad en el campo latinoamericano* (pp. 171-205). Quito, Ecuador: FLACSO.
- Barrientos, S., Dolan, C., & Tallontire, A. (2003). A gendered value chain approach to codes of conduct in African horticulture. *World Dev*, 31 (9), 1511-1526. [http://dx.doi.org/10.1016/S0305-750X\(03\)00110-4](http://dx.doi.org/10.1016/S0305-750X(03)00110-4)
- Berdegú, J., Reardon, T., & Escobar, G. (2000). Empleo e ingresos rurales no agrícolas en América Latina y el Caribe. *Desarrollo del Empleo Rural No Agrícola*, p.28.
- Blanco, A. (2002). Castilla y León. *Envejecimiento y mundo rural*. Madrid, España: Fundación Encuentro.
- Blanco, M., & Bardomás, S. (2015). Agrario y no agrario: ingresos de hogares rurales argentinos. *Revista Mexicana de Sociología*, 77 (1), 87-116.
- Camarero, L. (2008). Invisibles y móviles: trayectorias de ocupación de las mujeres rurales en España. *Revista de Estudios sobre Despoblación y Desarrollo Rural* (7), 10-33.
- Castells, M. (2005). *La era de la información: economía, sociedad y cultura*. Madrid: Alianza. p134.
- Deere, C. (2006). ¿La feminización de la agricultura? *Asalariadas, campesinas y reestructuración*

- económica en la América Latina rural. *Alasru*, 4, 77-136.
- Dirven, M., & Köbrich, C. (2007). Características del empleo rural no agrícola en América Latina con énfasis en los servicios. Santiago: Cepal.
- Edelman, M. (2008). Transnational organizing in agrarian Central America: Histories, challenges, prospects. *J Agrarian Change*, 8 (2-3), 229-257. <http://dx.doi.org/10.1111/j.1471-0366.2008.00169.x>
- Escalante, R., Catalán, H., Galindo, L., & Reyes, O. (2007). Desagrarización en México: tendencias actuales y retos hacia el futuro. *Cuadernos de Desarrollo Rural*, 4 (59), 87-116.
- Fawaz, J., & Rodríguez, C. (2013). Mujeres rurales y trabajo en Chile central. Actitudes, factores y significaciones. *Cuadernos de Desarrollo Rural*, X (72), 47-68.
- Haggblade, S., Hazell, P., & Reardon, T. (2002). Strategies for stimulating poverty-alleviating growth in the rural nonfarm economy in developing countries. Washington: The World Bank.
- Kay, C. (2009). Estudios rurales en América Latina en el periodo de globalización neoliberal: ¿una nueva ruralidad? *RMS*, 71 (4), 607-645.
- Lastarria, S. (2008). Feminización de la agricultura en América Latina y África: Tendencias y fuerzas impulsoras. *RIMISP* (11), 26.
- Mojarro, O., & Benítez, G. (2010). El despoblamiento de los municipios rurales de México, 2000-2005. México: CONAPO, Situación Demográfica de México.
- OECD. (2006). The new rural paradigm: Policies and Governance. Organisation for Economic Co-operation and Development.
- Rico, M. (2003). La mujer dentro del proceso migratorio y de envejecimiento en el medio rural de Castilla y León. Valladolid: Área de Acción Social y Participación Ciudadana.
- Rico, M., & Gómez, J. (2009). La contribución económica de la mujer al desarrollo del medio rural de Castilla y León. Un análisis aplicado al turismo rural. *Anales de Estudios Económicos y Empresariales*, XIX, 257-296.
- Rodríguez, C., & Muñoz, J. (2015). Participación laboral de las mujeres rurales chilenas: tendencias, perfiles y factores predictores. *Cuadernos de Desarrollo Rural*, 12 (75), 22.