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ICTS IN BRAZILIAN FAMILY FARMING: FACING ISOLATION AND DIGITAL EXCLUSION

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ABSTRACT

The article records the evolution of primary data made by the Brazilian Institute of Geography and Statistics (IBGE) with the aim of understanding the progressive digital inclusion in the Brazilian rural world. We revisit in an updated perspective a survey that originates in 2006 and continues until 2022, relating the consumption of ICTs by Brazilian family farming. The importance of mobile phones is highlighted, anticipating the arrival of Smartphones and the Internet in rural areas. The exodus of young people, especially girls, is a reality even in family farming. Masculinization and aging are constant in rural reality, aspects that greatly contribute to the wear and tear of the social fabric. The analysis of the evolution of primary data on the presence of ICTs allows us to understand the characteristics of digital inclusion in the Brazilian rural world. At the end, we present our reflection on the potential of ICTs in the context of gender and generation relations for rural development policies.

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INTRODUCTION

The article records the evolution of primary data collected by the Brazilian Institute of Geography and Statistics (IBGE) with the aim of understanding the progressive digital inclusion in the Brazilian rural world. At the end, we present our reflection on the potential of ICTs in the context of gender and generation relations in the developmental context. We identified characteristics of the social process of transformation of communication in rural areas based on the analysis of some primary data relating to digital inclusion and Internet penetration in Brazilian territory. As demonstrated in previous research (Schwartz, 2012; Silveira, 2019; Silveira, Schwartz, & Souto, 2013; Silveira, & Viero, 2011), women's role in managing gender relations in family farming comprises their action as mediators of affective-productive relationships through the use of Information and Communication Technologies (ICTs, from now on). This provides an understanding that the articulation of gender research with research on the appropriation of ICTs can provide a new perspective on two pressing issues for rural development: a) the digital inclusion of Brazilian rural areas; and b) the rural exodus and family farming. Taking the rural area as a space that comprises a complexity of phenomena linked to the deterritorialization of social life, we have in mind a perspective of pluractivity, which comprises the agro-industrial production of food, inputs and raw materials in general, in addition to the extractivism. Pluractivity also includes activities such as tourism, leisure, sport, seniors, health and others, in which there is a prospect of engaging female work. However, despite the growing sensitivity to gender and generational differences, family farming still suffers from the lack of recognition of female work.

The exodus of young people, especially girls, is a reality even in family farming. Masculinization and aging are constant in rural reality, aspects that greatly contribute to the deterioration of the social fabric (Camarano, Abramovay, 1999). Rural Extension has traditionally dedicated a set of activities related to domestic work to women, despite it being known that women farmers do not ignore practices related to the domestic economy and productive agricultural activity. At the same time, they approach an area in which the true mediators of the family bond are revealed: the use of ICTs. In 2006, telephony was prominent in the use of ICTs in rural areas, especially cell phones, initially used for entertainment. The vehicle, link and cognition aspect of ICTs such as cell phones were and are very important for rural development, even though they are disregarded by public policies generally focused on modernizing aspects. Taking communication as a vehicle requires recognizing the practices that link messages and that allow relationships between subjects. Taking it as a bond involves recognizing the bonding strategies that generate social cohesion. And, finally, taking it from the perspective of cognition requires recognizing the theoretical practices related to the position of observation and systematization of dissemination practices and social bonding strategies (Sodré, 2002). The choice of family farmers is justified by the importance of the activity in Brazil: production through family work, at the beginning of our studies, occupied 74.4% of the total number of people working in agriculture (IBGE, 2006). Women have skills that can be decisive in confronting the redefinition that both productive techniques and new ruralities are requiring from new work relationships and sociability in rural areas. And it is in this way that the use of ICTs sometimes coincides with the traditional framing of women as mediators of productive activities, sometimes strategically placing them at the epicenter of the decision-

making process at the level of family farming. Both because they are responsible for maintaining the family bond and because they articulate the social bond that links their family to productive activity, women and ICTs can be identified as responsible for a new moment in gender relations in family farming. The interest in unveiling the transformation of this reality in rural areas in the face of ICTs motivated the aforementioned set of research, making it possible to frame them in a diachronic approach to mediatization research (Hepp, 2014). The media is an agent of transformation as it constitutes differences in the communicative configurations of society. Mediatization research is therefore dedicated to understanding such transformations, incorporating historical aspects and diachronic perspectives. This is the case of the present work, which could count on monitoring the topic throughout the decade. It is considered that ICTs have an important role in the development of rural areas, as they enable residents to have access to information and, in this way, expand their real freedoms, helping to remove deprivations such as the inherent isolation of rural communities (Sen, 2000). A justification for the research comes from Robert White's assessment, based on his extensive experience in communication and development topics in Latin America and Africa. He attributes the lack of rural communications development to a lack of government investment: "There is no general theory proposing a role for rural communications or 'empowerment' in national development. It is no surprise that, in practice, only a few governments are taking it into consideration (White in Moreira, 2001: 2). Digital exclusion worsens when we analyze the size of the rural population. In 2010 in Brazil, 84.4% of the population was in cities and 15.6% in rural areas (IBGE, 2010), but the use of ICTs among farmers aroused little academic or governmental concern. The Ministry of Agrarian Development said that "the search for social inclusion of the poorest Brazilian rural population will be a central element of all actions guided by the National Ater Policy" (Brasil, 2004: 4). However, digital inclusion, which is part of social inclusion, was not among the document's priorities. One example was the *Casa Brasil* project, which was aimed exclusively at areas with high population density.

Another obstacle to digital inclusion in rural areas at the time, which still partially persists, refers to the lack of specific content for these communities (Sorj, 2003). This was largely due to the origin of these contents being from urban, commercial and academic environments. Furthermore, mediatization is a challenge, not only because of the technological nature that is in question, but because there is an effort to redefine the forms of content production so that they are not guided solely by commercial aspects. In this sense, the rural environment can no longer be seen as a distant and backward place by those who live in urban and industrial environments, but rather as an icon of diversity that is in constant development, and is getting closer and closer., from the urban environment. Therefore, it is considered essential that the available information takes local knowledge into account and that farmers are not seen as mere recipients, but also as an active part, essential actors for whose actions the appropriation of ICTs proves to be strategic.

METHODOLOGY

The research exposes the work with official statistical data from Brazil, produced especially by the National Institute of Geography and Statistics (IBGE, 2009, 2013, 2023) aggregated in a historical series and presented in tables and graphs. These are primary data obtained from the National Household Sample Surveys (PNAD) and also from the TIC Households (CETIC), with the aim of understanding the progressive digital inclusion in the Brazilian rural world.

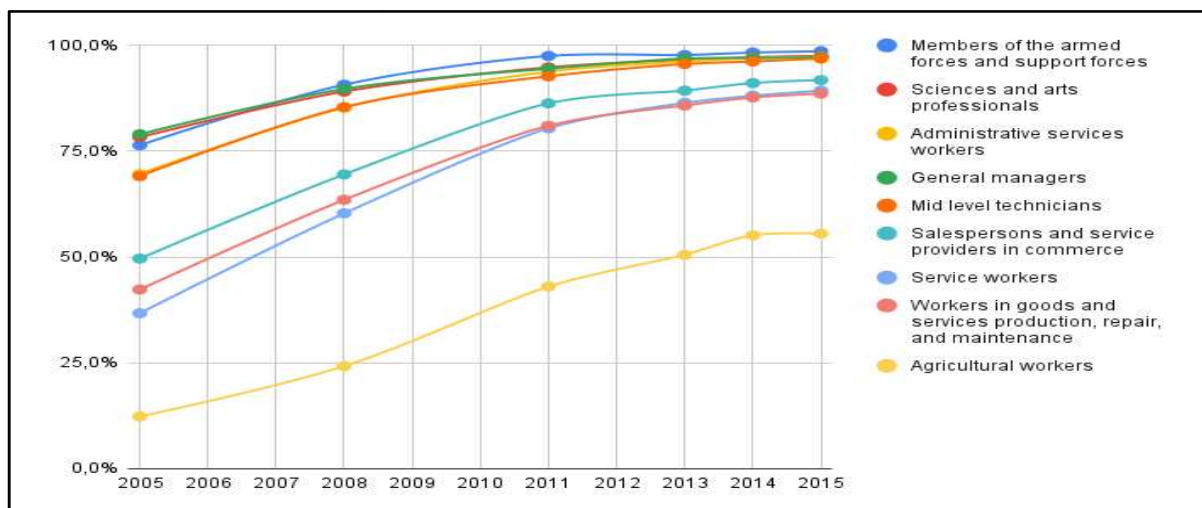
RESULTS AND DISCUSSION

Brazilian agricultural workers historically rank among those who least make use of telephony, despite the presumed advantages that avoiding traveling distances could signify for their economic activity. The exponential growth of Internet access in Brazil has reached rural

Table 1. Percentage of cell phone ownership among occupational groups (2005-2015) sorted by the lowest index in 2015

Occupational group	2005	2008	2011	2013	2014	2015
Agricultural workers	12,3	24,2	43,0	50,5	55,1	55,5
Workers in goods and services production, repair, and maintenance	42,3	63,5	81,0	85,8	87,7	88,6
Service workers	36,7	60,3	80,4	86,4	88,1	89,3
Salespersons and service providers in commerce	49,6	69,5	86,3	89,3	91,1	91,8
Mid level technicians	69,1	85,4	92,7	95,6	96,2	96,9
General managers	79,0	89,7	94,5	96,9	97,0	97,2
Administrative services workers	69,6	85,3	93,8	96,2	97,0	97,3
Sciences and arts professionals	78,3	89,1	94,8	96,6	97,2	97,5
Members of the armed forces and support forces	76,4	90,7	97,5	97,7	98,3	98,6

Source: compiled by the authors from data of the Pesquisa Nacional por Amostra de Domicílios by IBGE (2009, p. 84; 2013, p. 40; 2023, table 4874).



Source: compiled from data of the Pesquisa Nacional por Amostra de Domicílios by IBGE (2009, p. 54; 2013, p. 49; 2023, table 4874)

Chart 1. Cell phone ownership among occupational groups (2005-2015)

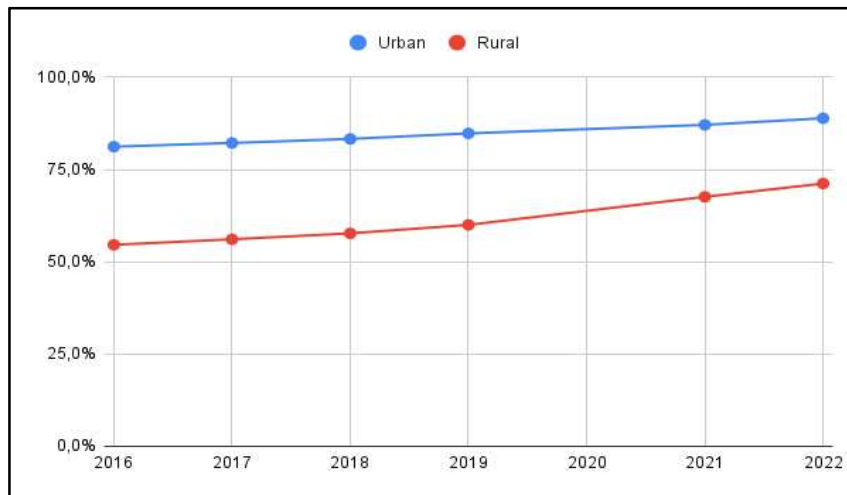
areas, reaching over half of the rural population in 2019: starting from only 4% of households in 2008 and reaching 51% in 2019 (CETIC, 2009; 2020) and 72.7% in 2022 (IBGE, 2023, table 6793). This advancement occurred especially through mobile telephony, a technology that was already present and important in the daily lives of rural areas in the central region of Rio Grande do Sul in 2006, enabling considerations about digitalization in rural areas in recent years (2006-2019).

As of 2016, the Continuous PNAD no longer monitors the numbers by occupational group, however, similar data can be obtained by comparing the household situation, as shown below in Table 2 and Chart 2. It is evident from the historical series that there was a great increase in cell phone ownership among agricultural workers from 2008 onwards, reaching a plateau in 2014 and continuing with stable growth. However, this increase only follows a general trend, that is, inequality remains. After 2015, cell phone ownership in rural

Table 2. Percentage of cell phone ownership by household situation (2016-2022)

Situação do domicílio	2016	2017	2018	2019	2021	2022
Urbana	81,2	82,2	83,3	84,8	87,1	88,9
Rural	54,6	56,1	57,7	60	67,6	71,2

Source: Table n° 7356 from Banco de Tabelas Estatísticas Sidra da Pesquisa Nacional por Amostra de Domicílios (IBGE, 2023).



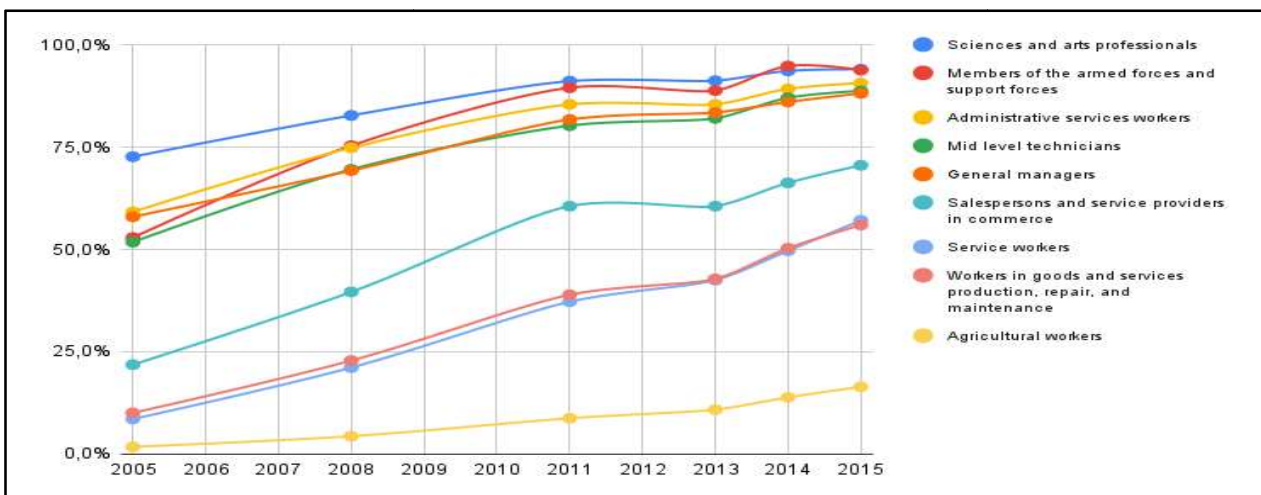
Source: Compiled by the authors from data of table 7356 from the do Banco de Tabelas Estatísticas Sidra of the Pesquisa Nacional por Amostra de Domicílios (IBGE, 2023).

Chart 2. Cell phone ownership by household situation (2016-2022)

Table 3. Percentage of Internet usage in the last three months among occupational groups (2005-2015) sorted by the lowest index in 2015

Occupational group	2005	2008	2011	2013	2014	2015
Agricultural workers	1,7	4,3	8,7	10,8	13,8	16,4
Workers in goods and services production, repair, and maintenance	10,0	22,8	38,9	42,8	50,3	56,0
Service workers	8,5	21,1	37,2	42,5	49,7	57,1
Salespersons and service providers in commerce	21,8	39,6	60,6	60,6	66,3	70,6
General managers	58,0	69,3	81,8	83,5	86,1	88,2
Mid level technicians	51,8	69,6	80,3	82,1	87,1	88,8
Administrative services workers	59,2	74,9	85,5	85,5	89,3	90,7
Members of the armed forces and support forces	52,9	75,4	89,6	88,9	94,9	93,9
Sciences and arts professionals	72,7	82,8	91,2	91,3	93,7	94,1

Source: Pesquisa Nacional por Amostra de Domicílios by IBGE (2009, p. 84; 2013, p. 40; 2023, table 4828)



Source: compiled by the authors from data of the Pesquisa Nacional por Amostra de Domicílios by IBGE (2009, p. 84; 2013, p. 40; 2021, table 4828)

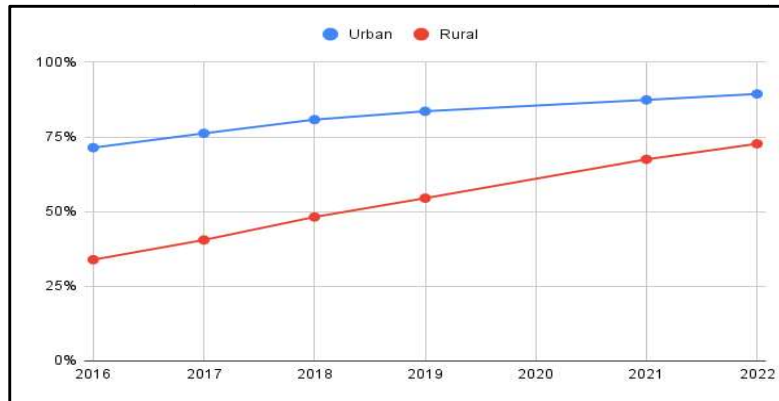
Chart 3. Internet usage in the last three months among occupational groups (2005-2015)

The PNAD 2008 (IBGE, 2009) also revealed that ownership of equipment was related to people's level of education and salaries. Differences are also noticed in relation to the level of study: those who have a high level of education have more cell phones than people with little education. As for occupation, in 2005 agricultural workers had almost 6 times fewer cell phones than members of the armed forces and professionals in the sciences and arts, a difference that diminished throughout the decade, but remains the same. After 2015, there was no growth in occupations or household situations with lower levels of cell phone ownership, which suggests that inequalities have not been overcome. The general growth seen between 2005 and 2015 can be attributed to the drop in the price of devices at the time, the increase in purchasing power and the increase in the possibility of prepaid cell phone plans, all factors that contributed to the increase in accessibility to ICTs. Regarding Internet use, similar data is displayed.

A relevant section of the data shown in Graph 4 is the use of ICTs by gender in rural areas. The data show a slightly greater adherence by women to both cell phones and the Internet. Tables 5 and 6 and graphs 5 and 6 present such data. Among the millions of digitally excluded people, the situation is worse in rural areas: in 2005, only 1.8 percent of agricultural workers were Internet users, in contrast to 20.9% of the Brazilian population (IBGE, 2009). When analyzing data from the 2000 Brazilian Census, Parry Scott (2010) pointed to interesting particularities about rural areas: the rural population is younger than the urban population; the largest transfer of the rural to urban population occurs in the age group between 20 and 39 years old; From the age of 20 onwards, the number of women decreases faster in the countryside and the feminization of cities and the masculinization of the countryside takes place. Such data raises many questions at the time of research.

Table 4. Percentage of Internet usage in the last three months by household situation (2016-2022)

Household area	2016	2017	2018	2019	2021	2022
Urban	71,4	76,2	80,8	83,6	87,4	89,4
Rural	33,9	40,5	48,2	54,5	67,5	72,7



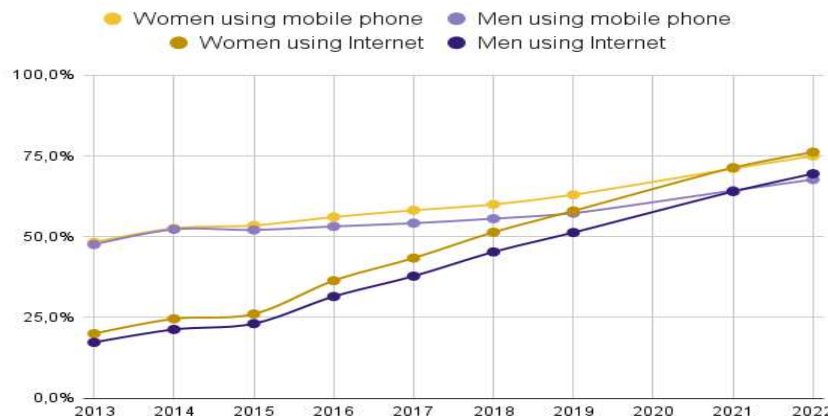
Source: compiled by the authors from data of table 6793 from Banco de Tabelas Estatísticas Sidra of the Pesquisa Nacional por Amostra de Domicílios (IBGE, 2023).

Chart 4. Internet usage in the last three months by household situation (2016-2022)

Table 5. Percentage of Internet usage in the last three months and ownership of personal mobile phone of the total rural population by gender (2013-2022)

Gender	2013	2014	2015	2016	2017	2018	2019	2021	2022
Women using mobile phone	48,3%	52,6%	53,5%	56,1%	58,2%	60,0%	63,0%	71,1%	75,0%
Men using mobile phone	47,6%	52,3%	52,1%	53,2%	54,2%	55,6%	57,3%	64,3%	67,7%
Women using Internet	20,0%	24,6%	26,1%	36,4%	43,4%	51,4%	58,0%	71,4%	76,2%
Men using Internet	17,3%	21,3%	23,1%	31,5%	37,8%	45,3%	51,3%	64,0%	69,5%

Source: compiled by the authors from data of tables 4847, 4822, 6793, and 7356 from the Banco de Tabelas Estatísticas Sidra of the Pesquisa Nacional por Amostra de Domicílios (IBGE, 2023).



Source: compiled by the authors from data of tables 4847, 4822, 6793, and 7356 from the Banco de Tabelas Estatísticas Sidra of the Pesquisa Nacional por Amostra de Domicílios (IBGE, 2023).

Chart 5. Internet usage in the last three months and ownership of personal mobile phone of the total rural population by gender (2016-2022)

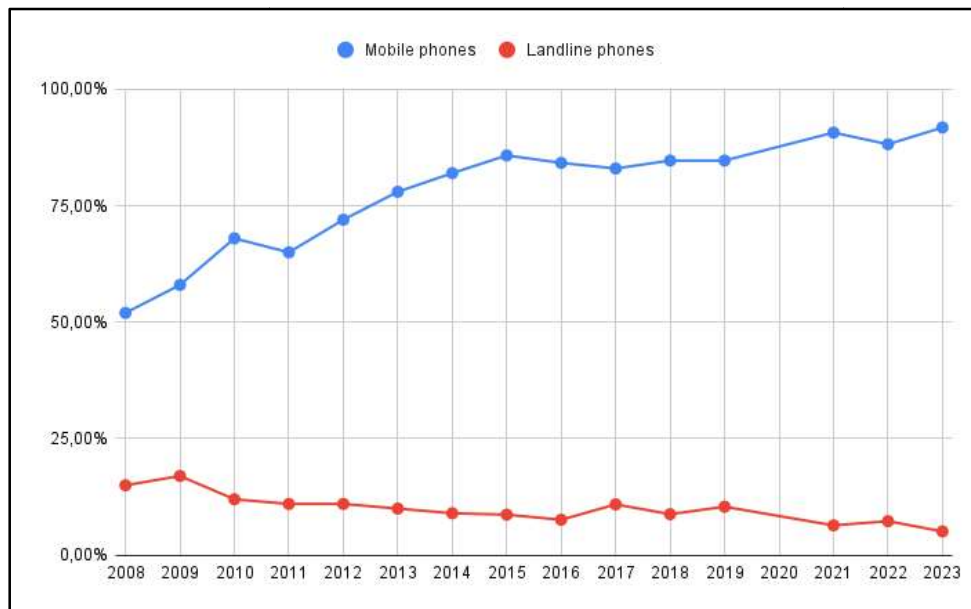
What were the expectations of the rural population in relation to their comfort and well-being made possible by their economic activity and how did ICTs contribute to this? This question permeates the analyses we developed. According to the Pesquisa Nacional por Amostra de Domicílios by IBGE (2013, p. 45), the population of the Brazilian state of Rio Grande do Sul was the second highest in terms of the percentage of the population owning a personal cell phone in 2011, at 54.7%, behind only the Federal District, with 66.3%. In 2022, according to IBGE (2023, table 7373), the population of Rio Grande do Sul ranked fifth, with 90.4% of the population owning a mobile phone, behind Mato Grosso do Sul (90.6%), São Paulo (90.8%), Goiás (91.2%), and the Federal District (94.3%).

quickly take the lead in exploring the activity (Karam, 2004). Currently, women's participation is confined to the property and even participation in meetings is reduced. Educational, training and informational activities still suffer from a restricted view of female potential. The use of communication technologies in rural areas, with the ease of acquisition and adoption generated mainly by their popularization and low cost, has awakened young men and women to technologies that mediate instrumental and entertainment aspects. Reflecting on gender relations and female performance in family farming and possible situations of professional depreciation, defining strategies for absorbing female labor through the use of ICTs with a view to increasing public policies is essential for the debate current,

Table 6. Percentage of rural households by type of telephony (2015-2023)

	2008	2009	2010	2011	2012	2013	2014	2015
Mobile phones	52,0%	58,0%	68,0%	65,0%	72,0%	78,0%	82,0%	85,8%
Landline phones	15,0%	17,0%	12,0%	11,0%	11,0%	10,0%	9,0%	8,7%
	2016	2017	2018	2019	2021	2022	2023	
Mobile phones	84,2%	83,0%	84,7%	84,7%	90,7%	88,2%	91,8%	
Landline phones	7,6%	10,9%	8,8%	10,4%	6,4%	7,3%	5,1%	

Source: compiled by the authors from data from the CETIC Data Portal (2023b) and the indicators panel of the TIC Domicílios survey (2023a).



Source: compiled by the authors from data from the CETIC Data Portal (2023b) and the indicators panel of the TIC Household Surveys (2023a).

Chart 6. Percentage of rural households by type of telephony (2008-2014)

In the years that comprise the present analysis, focusing on the temporal thickness of the phenomenon, at least partially and with regard to the use of cell phones and digital social media networks, the situation has changed. The appropriation of cell phones for information and socialization has become common even in rural areas, even pending better infrastructure, and mainly by youth, as some cases reveal (Silva, Lopes, 2021; Santana, Santos, 2014) but not limited to it, forming what can be thought of as a rural culture hybridized with new ICTs (Fraga; Fiúza, 2019).

CONCLUSIONS

The issues listed in the text generate a redefinition of the sexual division in the production process and, consequently, in gender relations. Role conflicts, hierarchies, domination and subordination go beyond the intra-family scope in family farming, with a broad impact on the retention of female labor in the countryside. In general, the literature records that women continue to be excluded from recognition in productive activities and in training to adopt new technologies in agriculture. In traditional families, the role of women has been representative, and they have initiatives and intervene in marketing in a way that often changes the productive panorama of the property. But when the initiative begins to bear economic fruit, men

both in the field of rural extension and in social communication, as the two areas allow relating information and communication technologies (especially as a link), for a participatory, citizen and democratic bias, with relationships built collectively. The infrastructure aspect is historically one of the biggest obstacles to universal Internet access, as it is still a problem in small towns and rural areas, and broadband is still only accessible in urban centers. Even though adoption rates for ICTs such as mobile phones and the Internet have increased in recent years, many infrastructural differences related to the situation of households remain, that is, the appropriation of ICTs for development in rural areas remains behind its potential.

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REFERENCES

Brasil. Ministério do Desenvolvimento Agrário. 2004. *Política Nacional de Assistência Técnica e Extensão Rural*. Brasília: Ministério do Desenvolvimento Agrário, 2004. Available in:

- https://www.ipea.gov.br/participacao/images/pdfs/conferencias/2_CNDRSS/2cndrss%20politica_nacional.pdf.
- Camarano, A.; Abramovay, R. 1999. *Êxodo rural, envelhecimento e masculinização no Brasil: panorama dos últimos cinquenta anos*. Rio de Janeiro: IPEA.
- CETIC. 2009. *TIC Domicílios 2008*. São Paulo: Comitê Gestor da Internet no Brasil. Available in: <https://cetic.br/pt/tics/domicilios/2008/domicilios/>.
- CETIC. 2020. *TIC Domicílios 2019*. São Paulo: Comitê Gestor da Internet no Brasil. Available in: <https://cetic.br/pt/tics/domicilios/2019/domicilios/>.
- CETIC.BR. 2023a. Painel de indicadores das pesquisas TIC Domicílios. São Paulo: CETIC. Available in: <https://cetic.br/pt/pesquisa/domicilios/indicadores/>.
- CETIC.BR. 2023b. Portal de Dados CETIC. São Paulo: CETIC. Available in: <https://data.cetic.br/>
- Fraga, K. L.; Fiúza, A. L. C. 2019. Ruralidade e midiaticização: as transformações culturais das sociedades rurais pelas práticas comunicacionais contemporâneas. *Revista Brasileira de Gestão e Desenvolvimento Regional*, 15(4). Available in: <https://rbgdr.net/revista/index.php/rbgdr/article/view/4855>.
- HEPP, A. 2014. As configurações comunicativas de mundos midiaticizados: pesquisa da midiaticização na era da “mediação de tudo”. *Matrizes*, 8(1). <https://doi.org/10.11606/issn.1982-8160.v8i1p45-64>
- IBGE. 2006. *Censo Agropecuário 2006*. Rio de Janeiro: IBGE. Available in: <https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=750>
- IBGE. 2009. *Pesquisa nacional por amostra de domicílio 2008: acesso à internet e posse de telefone móvel celular para uso pessoal*. Rio de Janeiro: IBGE. Available in: <https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?id=280801&view=detalhes>
- IBGE. 2013. *Pesquisa nacional por amostra de domicílios 2011: acesso à internet e posse de telefone móvel celular para uso pessoal*. Rio de Janeiro: IBGE. Available in: <https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=263999>
- IBGE. 2021. *Pesquisa nacional por amostra de domicílios contínua*. In: IBGE. Sistema IBGE de Recuperação Automática. Rio de Janeiro: IBGE. Online. Available in: <https://sidra.ibge.gov.br/>
- Karam, K. 2004. A mulher na agricultura orgânica e em novas ruralidades, *Estudos Feministas*, Florianópolis, 12(1): 360.
- Moreira, S. 2001. Ética e comunicação para o desenvolvimento. Entrevista com Robert White. *RBCC*, 24(2): 123-133. Available in: <http://portcom.intercom.org.br/revistas/index.php/revistaintercom/article/view/466>.
- Santana, E. C.; & Santos, M. S. T. 2014. Juventude, tecnologias da comunicação e desenvolvimento local em contextos rurais. *Revista Contexto & Educação*, 29 (92): 109-131. Available in: <https://revistas.unijui.edu.br/index.php/contextoeducacao/article/view/1844>.
- Schwartz, C. 2012. *Relações de gênero e apropriação de tecnologias de informação e comunicação na agricultura familiar de Santa Maria - RS*. 2012. Ph. D. Thesis in Rural Extension, Federal University of Santa Maria, Brazil. Available in: <https://repositorio.ufsm.br/handle/1/3806>.
- Scott, P. 2010. Gênero e geração em contextos rurais: algumas considerações. In: Scott, P; Cordeiro, R; Menezes, M. (Irgs.). *Gênero e geração em contextos rurais*. Ilha de Santa Catarina: Mulheres.
- Sen, A. 2000. *Desenvolvimento como liberdade*. São Paulo: Companhia das Letras.
- Silva, J. F.; Lopes, I. S. 2021. Juventude rural, consumo e apropriação do telefone celular. *Educação, Cultura e Comunicação*, 12(23). Available in: <http://publicacoes.unifatea.edu.br/index.php/ECCOM/article/view/1310>.
- Silveira, A. C. M. 2019. TICs e relações afetivo-produtivas na agricultura familiar. *Revista Eletrônica Competências Digitais para Agricultura Familiar*, 5(1): 20-29. Available in: <https://owl.tupa.unesp.br/recodaf/index.php/recodaf/article/view/96>.
- Silveira, A. C. M.; Schwartz, C.; Souto, C. B. 2013. Gênero e TICs: expondo a intimidade das relações de poder na agricultura familiar. *Revista Latino-Americana de Geografia e Gênero*, 4(1): 22-35. Available in: <https://revistas.uepg.br/index.php/rflagg/article/view/3371>.
- Silveira, A. C. M.; Viero, V. C. 2011. Apropriação de Tecnologias de Informação e Comunicação no Meio Rural Brasileiro. *Cadernos de Ciência & Tecnologia*, 28(1): 257-277. Available in: <http://dx.doi.org/10.35977/0104-1096.cct2011.v28.12042>
- Sodré, M. 2002. *Antropológica do espelho: uma teoria da comunicação linear e em rede*. Petrópolis: Vozes.
- Sorj, B. 2003. *Brasil@povo.com – a luta contra a desigualdade na Sociedade da Informação*. Rio de Janeiro: Jorge Zahar; Brasília: Unesco.
