# SOCIO-PROFESSIONAL INSERTION OF WOMEN IN BEEF CATTLE IN BRAZIL

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# **ABSTRACT**

The factors involving the management of rural properties go beyond merely productive issues as they involve generational aspects and gender issues. This study aims to analyze the socio-professional insertion of women in management and decision-making in various beef cattle farming plans in Brazil. The research took place in 2020, with 70 women, distributed across seven Brazilian states. Data were obtained through structured questionnaires consisting of open and closed questions, in intentional sampling, with quantitative and qualitative variables sent through a link to an online form via WhatsApp or E-mail, to people related to the researchers, or of the respondents themselves. The results show that 61% of the women in the sample are between 30 and 59 years old, half of them are married and 94% have a higher education degree. In relation to its production units, 84% belong to the family, while 63% are considered large. Regarding direct interference and decision-making power, 52% of cases stated that they always decide alone when it comes to purchasing inputs and animals, 56% in health management and 60% in reproductive management and genetic choice. When analyzing the management of establishments, it is clear that women are the main managers in 33% of cases while the father figure appears in 38% of decisions. Although higher than the national average (18.6%), as shown by data from the last Agricultural Census, the results showed that in this sample universe, women still occupy the supporting role in an eminently male agricultural sector. These results allow to conclude that although there have been significant improvements in more recent periods, women are still in the process of being inserted into culturally masculine activities, such as beef cattle farming, where the main tool for inclusion is educational level.

Key words: decision, academic training, management, livestock, Brazil

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# RESUMEN

Los factores que involucran la gestión de las propiedades rurales van más allá de cuestiones meramente productivas pues involucran aspectos generacionales y cuestiones de género. Este estudio tiene como objetivo analizar la inserción socioprofesional de las mujeres en la gestión y toma de decisiones en diversos planes ganaderos de carne en Brasil. La investigación se realizó en 2020, con 70 mujeres, distribuidas en siete estados brasileños. Los datos se obtuvieron a través de cuestionarios estructurados compuestos por preguntas abiertas y cerradas, en muestreo intencional, con variables cuantitativas y cualitativas, enviadas a través de un enlace a un formulario en línea vía WhatsApp o correo electrónico a personas relacionadas con los investigadores, o de los propios encuestados. Los resultados muestran que el 61% de las mujeres de la muestra tienen entre 30 y 59 años, la mitad de ellas están casadas y el 94% tiene título de educación superior. En relación con sus unidades de producción, el 84% pertenecen a la familia, en tanto que el 63% de ellas se consideran grandes explotaciones. En cuanto a la injerencia directa y el poder de decisión, el 52% de los casos afirmó que siempre deciden solas en la compra de insumos y animales, el 56% en gestión sanitaria y el 60% en gestión reproductiva y elección genética. Al analizar la dirección de los establecimientos se encontró que las mujeres son las principales directivas en un 33% de los casos, mientras que la figura paterna aparece en un 38% de las decisiones. Aunque superior al promedio nacional (18,6%), como lo muestran los datos del último Censo Agropecuario, los resultados evidenciaron que en este universo muestral las mujeres aún ocupan el rol de apoyo en un sector agrícola eminentemente masculino. Estos resultados permiten concluir que si bien ha habido mejoras significativas en periodos más recientes, las mujeres aún se encuentran en proceso de inserción en actividades culturalmente masculinas, como la ganadería de carne, donde la principal herramienta de inclusión es el nivel educativo.

Palabras clave: decisión, formación académica, administración, ganadería, Brasil

# RÉSUMÉ

Les facteurs liés à la gestion des propriétés rurales vont au-delà des simples questions de production car ils impliquent des aspects générationnels et des questions de genre. Cette étude vise à analyser l'insertion socioprofessionnelle des femmes dans la gestion et la prise de décision dans différents plans d'élevage de bovins de boucherie au Brésil. La recherche a eu lieu en 2020, auprès de 70 femmes, réparties dans sept Etats brésiliens. Les données ont été obtenues au moyen de questionnaires structurés composés de questions ouvertes et fermées, par échantillonnage intentionnel, avec des variables quantitatives et qualitatives envoyées via un lien vers un formulaire en ligne via WhatsApp ou email, à des personnes liées aux chercheurs ou aux répondants eux-mêmes. Les résultats montrent que 61% des femmes de l'échantillon ont entre 30 et 59 ans, la moitié d'entre elles sont mariées et 94% ont un diplôme de l'enseignement supérieur. Par rapport à ses unités de production, 84% appartiennent à la famille, en tant que 63% sont considérées comme grandes unités. Concernant l'interférence directe et le pouvoir de décision, 52% des cas déclarent qu'ils décident toujours seuls lorsqu'il s'agit d'acheter des intrants et des animaux, 56% en matière de gestion sanitaire et 60% en matière de gestion reproductive et de choix génétique. Lorsqu'on analyse la gestion des établissements, on constate que les femmes sont les principales dirigeantes dans 33% des cas tandis que la figure paternelle apparaît dans 38% des décisions. Bien que supérieurs à la moyenne nationale (18,6%), comme le montrent les données du dernier Recensement Agricole, les résultats ont montré que dans cet univers-échantillon, les femmes occupent toujours le rôle de soutien dans un secteur agricole éminemment masculin. Ces résultats nous permettent de conclure que, bien qu'il y ait eu des améliorations significatives dans les périodes plus récentes, les femmes sont encore en train de s'insérer dans des activités culturellement masculines, comme l'élevage de bovins de boucherie, où le principal outil d'inclusion est le niveau d'éducation.

Mots-clés: décision, éducation académique, gestion, élevage, Brésil

## RESUMO

Os fatores relacionados à gestão das propriedades rurais ultrapassam questões meramente produtivas, pois envolvem aspectos geracionais e questões de gênero. Este estudo tem como objetivo analisar a inserção socioprofissional de mulheres na gestão e nas tomadas de decisão em diversos planos da pecuária de corte no Brasil. A pesquisa ocorreu no ano de 2020, com 70 mulheres, distribuídas em sete estados brasileiros. Os dados foram obtidos por meio de questionários estruturados constituídos por questões abertas e fechadas, em amostragem intencional, com variáveis quantitativas e qualitativas, cujas respostas foram enviadas por meio de um formulário online via WhatsApp ou E-

mail. Os resultados mostram que 61% das mulheres da amostra têm entre 30 e 59 anos, metade delas é casada e 94% tem curso superior. Em relação às suas unidades de produção, 84% pertencem a família, enquanto 63% são consideradas de grande porte. Sobre a ingerência direta e poder de decisão, 52% dos casos afirmaram que sempre decidem sozinhas quando se tratam da compra de insumos e animais, 56% nos manejos sanitários e 60% no manejo reprodutivo e escolha genética. Quando analisada a gestão dos estabelecimentos evidencia-se que as mulheres são as principais gestoras em 33% dos casos enquanto a figura masculina aparece em 38% das decisões. Embora maior que a média nacional (18,6%), conforme demonstram os dados do último Censo Agropecuário, os resultados mostraram que neste universo amostral as mulheres ainda ocupam o papel de coadjuvante em um setor agropecuário eminentemente masculino. Estes resultados permitem concluir que, embora haja melhorias significativas em períodos mais recentes, as mulheres ainda estão em processo de inserção em atividades culturalmente masculinas, a exemplo da pecuária de corte, e que a principal ferramenta para a inclusão é o nível educacional.

Palavras-chave: decisão, formação acadêmica, gestão, pecuária, Brasil

## 1. INTRODUCTION

Brazilian agribusiness has a fundamental role in the increase and economic development of the country, with expressive effects in the balance of trade and in job generation (Brandão & Conceição, 2019). One of the reasons that help to explain this increase is the rise of productivity, which, partly, can be attributed to rural producers' management style (Cordeiro et al. 2019). However, the factors that involve the management of rural production units exceed factors that are merely productive and accounting, because they are generational aspects (Shahzad, Abubakr & Fischer 2021; Abdala, Binotto & Borges, 2022) and gender issues (Arends-Kuenning, Kamei, Garcias, Romani & Shikida, 2021). By specifically dealing with gender issues—although the administration and the management of units of rural production are, many times, an environment of conflict, these activities also represent a space opportunity for the inclusion of women in the rural environment (Souza & Silva, 2012).

Data that had been gained through the Agribusiness Census in 2017, and through the work by Hora, Nobre & Butto (2021), showed that in a universe of 5.07 million of rural properties in the country, 81.3% (4.11 million) were managed by men, and only 18.7% (946 thousand) were managed by women, which confirms the higher representativeness of men

as managers of the properties. In addition, for the first time of Agribusiness Census in 2017, it was researched the sharing of management of the property by the couple, and it was verified that this co-management happens in 20% of the total number of rural properties (IBGE, 2019). That is, only 817 thousand women share the management with their husbands. For Hora et al. (2021), these numbers are indicators of yet existing inequalities between men and women, which are still prevailing in the Brazilian rural environment.

Nevertheless, on the other hand, it can be affirmed that the roles taken by women in the rural environment, especially in family farming, have been positively diversified (Hora et al., 2021), probably because of the broadness of the range of responsibilities taken by women in rural properties, whose activities encompass not only the plant production, but animal production as well (IBGE, 2019).

Regarding the pioneer studies that depict the issue of women in the Brazilian rural environment, they point out the problematics of women's work, making an association to the lack of social and economic acknowledgment of their activities, being the female position subordinated to the male one in the scope of the rural production (Paulilo, 2004; Brumer, 2004; 2009; Melo & Di Sabbato, 2009), as well as the questions which are related to work social division (Hirata & Kergoat,

2007). Then, there is in Brazil a tradition among done studies and researches that privilege the questions related to the invisibility of the work of women, not only in agriculture environment, but in the rural one as well. Ribeiro & Jesus (2016) when carrying out a historical survey on the insertion and participation of women in the labor market, they already warned that despite women's higher level of education compared to men, they still receive lower salaries and occupy lower positions, showing that this issue is not resolved, because in addition to administrative issues, social and cultural aspects need to evolve, so that genders can, in fact, have the same rights and conditions for promotion in companies.

More recently, other studies include the analysis of women in the rural environment for other contexts, as it is the case of public policies (Spanevello, Matte & Boscardin, 2016; Spanevello, Fagundes, Matte & Boscardin, 2021), of non-agricultural activities (Spanevello, Doege, Drebes & Lago, 2019), of generational succession (Barbosa et al., 2020; Arends-Kuenning et al., 2021), of generational succession in family livestock (Matte, Spanevello, Lago & Andreatta, 2019; Silva & Anjos, 2022) of cooperatives (Zimmermann, Garcias & Basso, 2020; Vedana, Shikida, Garcias & Arends-Kuenning, 2023), of food safety and sovereignty (Boni, 2014) among others. The reflection on the cited studies, are mostly and predominantly associated to women's representativeness itself in the rural environment, and to the way they are included in the management or co-management of farm businesses en's acting in the productive and social scope in academic studies, the incorporation of gender issues in public policies, have gained relevance (Staduto, Alves Nascimento & Souza, 2013). In this sense, Vedana et al. (2023) highlight that the analysis of women's participation, especially in agricultural decisions, aggregate elements for the discussion and elaboration of public policies that are able to break off with the reproduction of the social roles that are attributed to the gender in the rural environment. The justification for this work responds to the context of a world of extraordinary deprivation and oppression (Sen, 2018), which

is even more challenging when it is necessary to promote equality between the sexes and women's autonomy (Tsamaren, 2018). Therefore, for the development process to actually take place, each person's condition as an agent must be taken into account, it is restricted and limited by the social, political and economic opportunities available to them. Thus, development depends on the expansion of freedom, which consists of the elimination of deprivations that limit people's choices and opportunities to thoughtfully exercise their condition as agents (Sen, 2018).

Expanding the issue, and aiming to contribute with the analysis of women in the rural environment, this paper aims to analyze the inclusion of women in the management and decision-making processes, in diverse plans of beef cattle in Brazil. In addition to this introduction, this paper is structured the following way: in section two there is a brief literature review that approaches aspects that are related to women management in the area of beef cattle; the adopted methodological procedures can be seen in section three, followed by the results and discussions that are presented in section four. Finally, there are presented the final considerations, in section 5, also highlighting the limitations in the study.

# 2. ASPECTS WHICH ARE RELATED TO WORK AND MANAGEMENT OF RURAL WOMEN WHO ARE INCLUDED IN THE BEEF CATTLE

The inclusion of women in the labor market, reflects an environment of conflict which is characterized by the search for professional and economic acknowledgment and by gender equity. This behavior is directly related to the logic of work social division, which has as a model of family structure, the male figure as the one who is responsible for the headship of the family, and the female figure, the one in charge for housework (Vedana *et al.* 2023).

These issues are repeated, even more intensely, in the rural environment, including the beef cattle which represents this situation well. Regarding this activity, it was culturally consolidated during long periods, as predominantly having a male character, and as a synonym of big farming lands (Langbecker

& Perleberg, 2014; Lopes & Langbecker, 2018). Also, for Ribeiro (2016) in a study that was held in the state of Rio Grande do Sul, they are few the young family cattlemen, being that when we talk about young women, this number is even more reduced. In this respect, although women have taken part in productive tasks, their acting is usually seen as a «helper» (Staduto *et al.*, 2013).

Linked to these factors, Kanokwan (2021) highlights that, traditionally, in beef cattle, men used to be seen as the holders of superior technical knowledge on animal breeding, food practices, treatment and prevention of diseases, while women had more experience with the daily care of small animals. The author also highlights that the knowledge on cattle breeding is passed down from father to son, and not from mother to daughter, and it is considered an inadequate activity for women (Kanokwan, 2021).

However, according to Kanokwan (2021), the most part of the researches that approach the gender issue in the cattle industry, shows that women significantly contribute in the sector, which improves gender equity. Nevertheless, women usually have lower decision-making power in the agricultural activities, generally speaking (Kanokwan, 2021). These conditions represent an unequal power relation between men and women in the families, as well as regarding the control of resources and rights of property (Akter et al., 2017), which, consequently, limits a lot women access to information on market, prices and programs that support livestock (Kanokwan, 2021).

Nonetheless, other studies (Ross, Zereyesus, Shanoyan & Amanor-Boadun (2015); Langbecker, 2016; Cordeiro et al., 2019) show that the acting of women in the management of properties, has gradually increased. According to Langbecker (2016), the researchers have shown that women started to enjoy the rural activity, with their ancestors, father or grandfather, or even from the husband or mate, making it possible for them to take roles and tasks that were related to the management or operationalization of rural activities (Mulugeta & Amsalu, 2014; Langbecker,

2016). So, although women call themselves cattle farmers, and there is the family tradition of livestock as the main activity in their lives, many times they are put in a secondary position in relation to their husbands (Chaves, Magalhães, Benedetti, Blos & Silva, 2010).

About the work done by women in this activity, Langbecker (2017) noticed that a few participants say that their occupation is of a cattle farmer, despite the activities corroborating with the definition of family livestock. According to the author, this issue may be related to the unawareness, itself, of the social category of family livestock, once the view on the activity, in many moments, was associated to the livestock of high economic value (Langbecker, 2017).

In a study held by Litre (2010), which analyzed the participation of women in family livestock in three distinct countries, Brazil, Uruguay and Argentina, there were observed four situations: an activity that had been exclusively administered by women; shared decisions with another person; women as «collaborators» who operationally act in the productive activities, but who do not contribute in the decision-making process; and «observers» who perform activities at home and in the bringing up of children, without participating in the productive decisions.

According to Silva & Schneider (2010), the conditions in which women are «in the command» of the farms, doing management work, predominantly happen when there is the absence of men in the family, in case of fathers' death, divorce or widowhood, which highlights the strength of the patriarchal tradition.

In dairy farming, studies by Menasche & Escher (1996) and Magalhães (2009) show distinct situations, in which the activity tends to be ruled by women. According to Magalhães (2009), the same way women whelp» in crop activities, men help in the milking or cows' feed, this way exercising a secondary role, which reinforces the role of women in the command of dairy activity. However, outside the properties, men are generally responsible for the commercialization of the production and receiving payment (Spanevello et al., 2022).

However, the centeredness of the role of the woman in the dairy activity can be modified because of the standard of modernization and technological innovation, through which the activity pervades (Milani, Boscardin, Spanevello, Christofari & Lago, 2014). According to the authors, among the most «modern» properties, there is more male participation in the management of the activity, demonstrating that as long as milk production becomes a profitable activity, women are not responsible for the activity anymore. That is, although they continue collaborating with their productive force and lose the space of management and control, for men (Milani *et al.*2014).

Another study, which analyzes the inclusion of women in the dairy farming, is the one by Spanevello *et al.* (2021). In this study, the authors, through distinct levels of technification of the activity, highlighted that younger women are ahead of more technified properties, and their tasks are related to milking, selling of the production and technical management. On the other hand, older women are in the less technified areas, and with more need of labor in the milking, cleaning of equipment and animals' feed and, in these cases, they are not responsible by the business management.

These distinctions had already been observed in the early 1980s, by Brumer & Giacobbo (1993). In the study, the authors had already demonstrated the differences among work and management by women, through the size of the property and level of technification. According to the authors, in smaller properties, with little technification and with high dependency on the production of subsistence, women have a prominent position in the work, by organizing the production and the activities. While women that belong to bigger and more technified properties are more prone to act in the management, in the search for technical assistance and holding of banking services. In this regard, Brumer & Giacobbo (1993) get to the conclusion that the educational level and the technical knowledge are determinant so that women assume the condition of managers.

Beyond the conventional production systems, as is the case of organic production and non-agricultural activities, it is possible to observe distinct types of acting of rural women. Regarding the organic production, Karam (2004) highlights that at least half of researched units, women that took the first responsibilities about the conversion of the system of conventional production, to the organic one, look for technical guidance, planting, harvest and commercialization.

Another possibility is the non-agricultural activities, as for example the agro industrialization of the primary production, which has been a growing strategy to improve farms' income conditions, and that allows women's social inclusion. According to Niederle & Wesz Junior (2009) and Martins (2020), in these activities, women have a prominent role, in the productive and labor aspects, as well as in management and decision making.

In general, it is important to highlight that gender issues are dynamic and they get adapted along time, as an answer to the restructuring of the rural economy, as highlighted by Kanokwan (2021). In this sense, women have performed a significant role in the agricultural activities, including beef cattle, not only in the production, but in the commercialization as well. However, they do not have the power to influence the decisions on control of resources, which causes gender inequality, especially for women from the poorest families (Kanokwan, 2021).

#### 3. METHOD

The study was done through an exploratory and descriptive research, through purposive sampling, with quantitative and qualitative variables, by making use of the application of questionnaires which had been sent from March to August, 2020, through a link of an online form via WhatsApp or E-mail.

The contact with women was held through the sampling technique Snowball through the researchers' network sites. The research was sent to women in all Brazil, but there were gotten 70 answers in seven States: Rio Grande do Sul (73%); Santa Catarina (10%); Paraná (6%); Rio de Janeiro (6%); Paraíba (3%); Distrito Federal (1%), and Mato Grosso do Sul (1%).

The inclusion criteria for the research is that women were owners, daughters or wives of properties' owners who had beef cattle as a commercial purpose, independently of the size of the property.

Regarding the instrument for the data collection, it was adopted the model of structured questionnaires, which had open and closed questions, with answers in Likert scales, providing the complementary respondent their answers, if appropriate. The instrument for data collection had questions that included two categories of analysis: a) identification of women's profile and b) women's participation in the activities and in the management and decision-making processes.

The analyzed variables (Table N° 1), in each one of the categories were elected in order to answer the proposed objective, as well as through the considerations of relevant aspects that had already been studied in prior studies.

Regarding the first category of analysis, which is named «identification of the profile», there were considered as variables: age group, educational level, marital status and number of children. For the analysis of age group, it was taken into consideration the Statute of the Youth, Art. 1st [...] «§ 1st. For the purposes of this Law, there are considered young, people aged 15 (fifteen) and 29 (twenty-nine) years old (Brasil, 2013), and from the Statute of the Elderly, intended for regulating the rights

guaranteed to people aged equal to or older than 60 (sixty) years old» (Brasil, 2003).

With regard to the productive aspects, it was identified the type of tenure and the size of the rural property. For the analysis of the size, it was taken into consideration the classification of the properties through fiscal module. In Brazil, the classification is defined through Law n. 6.746, from December 10, 1979, which takes into consideration the fiscal module, which varies according to each municipality (Brasil, 1979). By observing this provision, it was estimated an average of 37 hectares per module, taking into consideration the regions that raise cattle, in the states that are related to the research. Also, there are considered small properties (family agriculture), the ones that have up to four fiscal modules, middle-sized are the properties with area that is superior to 4 (four) and up to 15 (fifteen) fiscal modules, and big ones are those with an area which is higher to 15 (fifteen) fiscal modules (Brasil, 2006).

The second category included questions related to the participation of women in decision-making processes about beef cattle, under different plans, participation in productive activities which are subdivided into sanitary and reproductive management, feed, participation in commercial activities which are subdivided in purchase of raw materials and commercialization of animals, participation in

Table 1
Categories and analyzed variables

Categories	Variables
Profile	Age Group
	Educational Level
	Marital Status
	Land tenure
	Size of the property
Work and Management	Participation in productive activities
	Participation in commercial activities
	Participation in the management and in the control of the financial flow
	Decision-making processes

the management and in the control of the financial flow.

After the collection, data was tabulated in spreadsheets by using the software Microsoft Office Excel®, for further analysis and presentation of the results through descriptive statistics.

# 4. RESULTS AND DISCUSSION 4.1. THE PROFILE OF THE WOMEN INCLUDED IN THE BEEF CATTLE IN BRAZIL

The analysis of the women's profile allows us to infer 31% of women declared having up to 29 years old, 61% were aged between 30 and 59 years old, and 8% were older than 60 years old. Regarding the age group that was considered young, Langbecker & Perleberg (2014) say that daughters, mostly, studied and returned to the cattle industry, which can help to explain the found figures.

About marital status, 50% of women are married, 10% are divorced, 39% are single and only 1% are widows. It is observed a higher number of married women, and it reflects the social reality and of the activity, as evidenced by Segabinazi (2013). The author affirms that it is a characteristic in Brazil, the presence of the male figure as business generator and pioneer and the inclusion of women through the ways of matrimony, in a country that is predominantly catholic. These aspects are reinforced in a study that had been held in Ecuador, when analyzing the participation of married women in family businesses, when the authors observed that their influence is very little reported by men, who hold the biggest part of managerial activities (Twyman, Useche & Deere, 2015).

Regarding the educational level, 40 women have post-graduate degree, 26 have superior education and 4 of them finished high school. These results dialogue with the findings by Hora et al. (2021), who highlight that currently, at least one part of the female population is already being guided to invest in education and to take new positions and functions in the family production. These findings are also reinforced by Estanislau, Goebel, Staduto & Kreter (2021) when analyzing data from the Agribusiness Census-2017, when they indicate that the variable «educational level» presented positive relationship with the growing of properties that are administered by women.

However, these results differ from the findings by Ross et al. (2015) in which it was observed that women have lower educational levels, which can limit their actions in the activities outside the farm. It also differs from the study done by Maraschin (2019) that showed that most of the women had not finished elementary school. This discrepancy is important data and it can be a reflection of socioeconomic differences of Brazilian rural properties, which are related to the characteristics of the size of the properties, and they will be approached by the end of this section.

In relation to the training area, the number of women who are graduated in areas related to the rural environment, was very representative, being that out of the total number of respondents, 40% have University degrees in Veterinary Medicine, 10% of them in Zootechnics and 7% in Agronomic Engineering. This data corroborates with the research by Langbecker & Perleberg (2014), in which the authors identified that the involvement in the cattle industry would be related to women's academic training.

Regarding the size of the properties, considering the proposed classification (with an average fiscal module of 37 hectares) the properties were divided according to size, namely small (family agriculture) average and big sized (Figure N° 1).

As it can be observed, the most part of analyzed properties is big. Among the interviewees, 10% said to have a property with area up to 148 ha, 27% of 149 up to 555 ha and 63% of them said to have more than 555 ha. This distinction is important, because considering the existing diversity in beef cattle, there is a difference between family livestock and business livestock. In the family livestock, the main characteristic is being smaller, and the producer is usually the one responsible for the daily administration of the production, execution of tasks and strategic decision making, and he may reconcile these activities (Andreatta, 2009; Waquil, Matte, Neske & Borba, 2016).

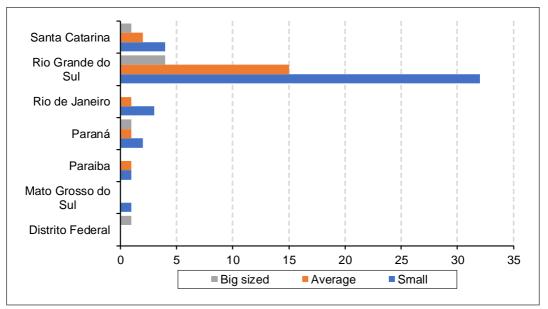


Figure 1. Size of properties according to area

About land tenure, 84% related the tenure with an area originated from the family, 9% said it had not originated from family succession and 7% answered it was a family part, and another part that it was not. It is noticed that the family relationship of production units can facilitate the inclusion of women in livestock activity, because the tenure of the researched properties predominantly happened because of the generational transfer among the families.

Regarding these issues, Kanokwan (2021) highlights that in order to have an egalitarian relationship between men and women, in beef cattle, it is important that the activities of cattle breeding happen in lands that also belong to women. It is a mechanism for women to gain and exercise power to negotiate cattle breeding and commercial activities, as well as access to capital, knowledge and markets (Kanokwan, 2021).

# 4.2. THE PARTICIPATION OF WOMEN IN THE MANAGEMENT OF BEEF CATTLE

The management of the property, for the Agribusiness Census, is associated to the process of decision-making in the direction of the rural property. Regarding the participation in relation to «what to produce», 53% of

women affirmed that had always taken part in these decisions, in person, at the moment of decision-making, while 42% said that sometimes they participate in the decisions (Figure N° 2).

The gained results demonstrate that at least 95% of women are involved in the decisionmaking process in relation to the productive aspects, in person. Besides, 63% always actively participate in the planning of the financial flow from the production unit, 60% decide on the purchase of raw material and animals, and 61% of women affirmed that they had always participated, in person, from commercialization. It is highlighted that the women who answered the survey, also show great participation in the commercial area, which demands knowledge on the markets. The possibility of choosing the appropriate moment for commercialization can represent better remuneration for the product, because in cattle breeding, price variation is constant and relatively cyclic, according to the months of the year (Vaz et al., 2014). Referring to the management of human resources in the properties, including aspects on hiring and firing, in 50% of the cases women are always present in decisions on this issue.

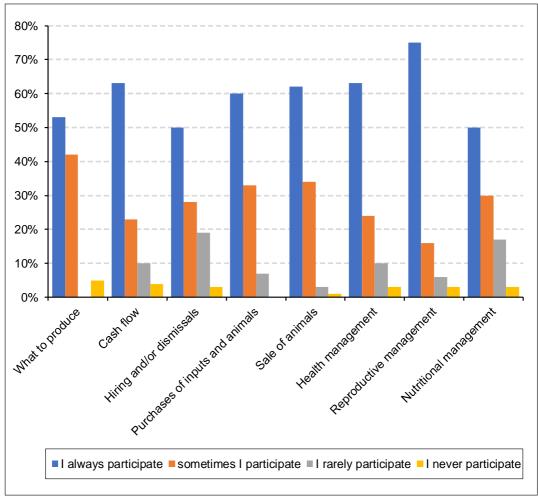


Figure 2. In person participation in the productive and administrative processes

These results show a change in «traditional standards», as highlighted by Kanokwan (2021) when he says that commercialization was exclusively a male task. The referred work, which was done in Thailand, infers that women were considered weak and fragile, and that they were not able to control people and beef cattle, and then knowledge on commerce was exclusively transmitted from father to son.

When they were questioned on their participation in decisions on cattle nutrition, 50% of women said that they always used to participate. In a research done in Ethiopia (Mulugeta & Amsalu, 2014), the researchers showed that women are mainly involved in

animals' feed, by grinding grain and food supply. In general, the data obtained in this study show that in all situations there is, at least, half of the participants of the research, who said to have participated, somehow, in feed management.

Beyond the participation in the properties' productive and administrative activities, this study aimed to understand the decision-making processes related to the women who were included in Brazilian livestock, according to Figure N° 3.

Differently from Figure N° 2, which illustrated the in-person participation of women in the productive factors, Figure N° 3

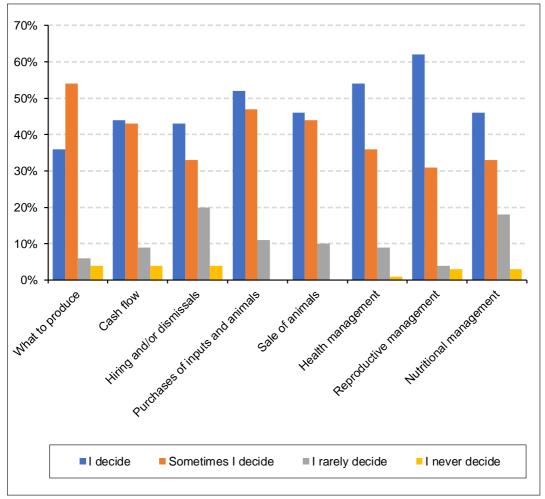


Figure 3. Women's decision-making power

shows women's decision making, calling the attention that the first question is related to «what to produce», being the only one that showed a higher proportion of answers like «I sometimes make decisions» in relation to the choice «I always make decisions». It brings out the possibility of having someone helping them or making decisions in their names, once more showing the prior inference in paternal, matrimonial relations or technical advice. Litre (2010) describes in a study that the leaders of the productive unit, in general, occupy this position because of the male absence, being them single, widow or divorced. Women who share decisions are usually married women or

daughters whose fathers are elderlies, or with some restriction for the work (Litre, 2010).

In the planning of the financial flow, 44% said they always made decisions about the financial area in the business (Figure N° 3). This relative significance of affirmative answers in decisions, corroborates with data that had been previously discussed, in which 63% affirmed they had actively participated in the issue of financial planning.

When it regards the purchase of raw material and animals, it is noticed that 52% said that they always decided. When compared to prior data on the participation in the purchase of raw material and animals (Figure

N° 2), it is interesting to observe that in the time to decide on the purchase of raw material and animals, there are more people who interfere (60%), once the decision-making power belong to women in 52% of the cases (Figure N° 3).

Regarding sanitary management, 56% of them answered that always decided about the directives of the production unit's sanitary management, followed by 36% that sometimes decide, and 10% who almost never or never decide. It is observed that in sanitary management, in most part of the cases, they have the autonomy to make decisions. The only item in which more than 60% of answers was «I decide», is related to the productive management and genetics choice. It reinforces the importance of women in this issue that had been previously discussed.

About cattle nutrition, 46% of them said they decided. Data shows that when the issue is cattle nutrition, which involves the planting of winter and summer pastures, or the purchase of supplements and mineralization, which are raw materials with relatively high cost and that require a bigger planning, they do not only decide and there is Always someone from the Family or a technician helping in this decision.

When the respondents' decision-making process is approached, it is noticed that in most part of the part listed activities, they end up by deciding in group with the family or technicians who work together in the property. However, the activities that they decide with higher representativeness, are the ones related to sanitary management, to reproduction and to genetics choices, probably because a good part of women have university degree in Agricultural Sciences, as already discussed before.

Finally, considering all the involved people with the unit of cattle production, it was aimed to identify the structuring of a decision-making line, in terms of importance. Then, it was argued to whom would be the management, in general, in the property (Figure N° 4).

The «paternal» figure was cited as the most important manager for most of the women that answered the questionnaire (38%),

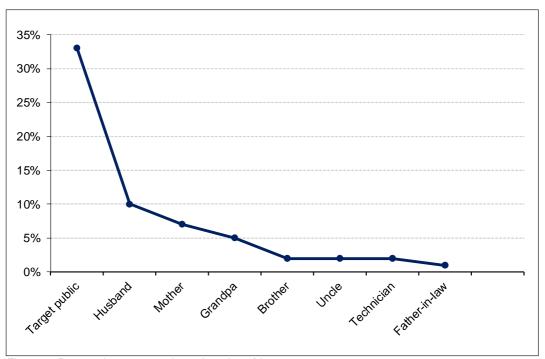


Figure 4. Property's manager through order of importance

followed by 33% who answered that they themselves have been gaining space in the units of livestock production.

In a study done in Thailand, Kanokwan (2021) they found out that wives are now more consulted on their husbands' activities in the market, when negotiating animals. However, only 10% of women that had been observed in the study, could travel to participate in fairs. In general women stay at home doing housework. Then, although there is improvement in the participation of women in decision-making processes, the economic roles are yet restricted by gender norms (Kanokwan, 2021).

In addition to the owners, it was noticed the presence of technicians who had been hired to hold the management task. The companies of livestock consultancy, with professional who are expert in determined areas, including technology information, can, even more, be present in the rural properties, in real time, even not in person, helping the producer in the most assertive decision-making processes for the business. In the last decades, the faster traffic of data and images made the consultancy processes become more interactive and with better quality. In the backwoods of Bahia, Cerqueira & Vieira (2020) say that digital media and the use of social networks are seen as a new type of communication for the rural environment, while the access of this population to Internet also increases.

In general, although the research had been done only with women who directly work with livestock, and 84% of them had answered that the land plots belongs to the family, it is highlighted that in only 33% of the cases they are the main managers. This fact highlights that it is due to them the role of coadjuvant in a universe that is said to belong mainly to men. Besides, by analyzing the data, it is inferred that the managers who are women, usually, do not make decisions alone, in, at least, half of the analyzed variables.

### 5. FINAL CONSIDERATIONS

This study aimed to analyze the socioprofessional insertion of women in management and decision-making in various beef cattle farming plans in Brazil. In general, the results show that women are especially involved in the purchase of raw materials and animals, in health management, reproductive management and genetic choice. Such findings are associated with the academic training of the interviewees.

When analyzing property management, it is highlighted that the father figure still appears in the majority of cases for women. Thus, although it is higher than the national average (18.6%), the results show that—even in this small sample universe, exclusively made up of women, they play a supporting role in an eminently male universe. In summary, women are still in the process of gaining space, whose main tool for inclusion is a high educational level and technical training in the area of Agricultural Sciences.

As limits of this study, the lack of representation of the other states of the federation (except Rio Grande do Sul) and the fact that it is possible that data on women's participation and management in livestock farming are overestimated, since the research was aimed exclusively at women.

### REFERENCES

Abdala, R. G., Binotto, E., & Borges, J. A. R. (2022). Sucessão familiar rural: evidências da capacidade absortiva, capital social e aspectos socioeconômicos. *Revista de Economia e Sociologia Rural*, 60(4), 1-19. https://doi.org/10.1590/1806-9479.2021.235777

Akter, S., Rutsaert, P., Luis, J., Htwe, N. M., San, S. S., Raharjo, B., & Pustika, A. (2017). Women's Empowerment and Gender Equity in Agriculture: A different Perspective from Southeast Asia. *Food Policy*, 69, 270-279. https://doi.org/10.1016/j.foodpol.2017.05.003

- Andreatta, T. (2009). Bovinocultura de corte no Rio Grande do Sul: um estudo a partir do perfil dos pecuaristas e organização dos estabelecimentos agrícolas. (Unpublished Doctorate Thesis). Programa de Pós Graduação em Desenvolvimento Rural - Universidade Federal do Rio Grande do Sul/UFRGS. Retrieved from https://lume.ufrgs.br/handle/10183/ 16416
- Arends-Kuenning, M., Kamei, A., Garcias, M., Romani, G. E., & Shikida, P. F. A. (2021). Gender, education, and farm succession in Western Paraná State, Brazil. Land Use Policy, 107, 105453. 10.1016/j.landusepol.2021.105453
- Barbosa, R. A., de Faria Domingues, C. H., da Silva, M. C., Foguesatto, C. R., de Aragão Pereira, M., Gimenes, R. M. T., & Borges, J. A. R. (2020). Using Q-methodology to identify rural women's viewpoint on succession of family farms. Land Use Policy, 92, 104489. https://doi.org/10.1016/j.landusepol. 2020.104489
- Boni, V. (2014). Movimento de mulheres camponesas, campesinato e soberania alimentar. Agroalimentaria, 20(38), 71-86. Retrieved from http://erevistas.saber.ula.ve/ index.php/agroalimentaria/article/view/5287
- Brandão, J. B., & Conceição, J. C. P. R. (2019). Desafios da inserção competitiva internacional. In J. E. R. Vieira Filho (Org.), Diagnóstico e Desafios da Agricultura Brasileira (pp. 115-136). Rio de Janeiro, Brasil: IPEA. Retrieved from https://www.ipea.gov.br/portal/images/ stories/PDFs/livros/livros/ 191126\_diagnostico\_e\_desafios\_da\_ agricultura\_brasileira.pdf
- Brasil. (1979). Lei Nº 6.746, De 10 de Dezembro de 1979. Altera o disposto nos arts. 49 e 50 da Lei nº 4.504, de 30 de novembro de 1964 (Estatuto da Terra), e dá outras providências. Retrieved from http://www.planalto.gov.br/ccivil\_03/leis/ 1970-1979/l6746.htm
- Brasil. (2003). Lei N° 10.741, De 1° de Outubro de 2003. Dispõe sobre o Estatuto do Idoso e dá outras providências. Retrieved from https:// www.planalto.gov.br/ccivil\_03/leis/2003/ 110.741.htm

- Brasil. (2006). Lei Nº 11.326, de 24 de julho de 2006. Estabelece as diretrizes para a formulação da Política Nacional da Agricultura Familiar e Empreendimentos Familiares Rurais. Retrieved from http://www.planalto.gov.br/ccivil\_03/ \_ato2004-2006/2006/lei/l11326.htm
- Brasil. (2013). Lei N° 12.852, de 05 de Agosto de 2013. Institui o Estatuto da Juventude e dispõe sobre os direitos dos jovens, os princípios e diretrizes das políticas públicas de juventude e o Sistema Nacional de Juventude - SINAJUVE. Retrieved from http:// www.planalto.gov.br/ccivil\_03/\_ato2011-2014/2013/lei/l12852.htm
- Brumer, A. (2004). Gênero e agricultura: a situação da mulher na agricultura do Rio Grande do Sul. Estudos Feministas, 12(1), 205-227. https:// doi.org/10.1590/S0104-026X2004000100011
- Brumer, A., & Giacobbo, E. O. (1993). O trabalho da mulher na pequena produção agrícola. Revista do Instituto de Filosofia e Ciências Humanas, XI(XI), 305-322.
- Cerqueira, J. M. M. L., & Vieira, D. D. (2020). Dialogando com e sobre o rural através das novas mídias: estratégias e desafios de comunicação. Políticas Culturais em Revista, 13(1), 67-88. https://doi.org/10.9771/ pcr.v13i1.35281
- Cordeiro, A., Paffaro, R., Figueirêdo, T., Biff, M., Tejon, J. L., & Cornacchioni, L. (2019). Mulheres do Agro: inspirações para vencer desafios dentro e fora da porteira. Belo Horizonte, Brazil: Letramento.
- Chaves, R. de Q., Magalhães, A. M., Benedetti, O. I. S., Blos, A. L. F., & Silva, T. N. da. (2010). Tomada de decisão e empreendedorismo rural: um caso da exploração comercial de ovinos de leite. Revista Brasileira de Gestão e Desenvolvimento Regional, 6(3). https://doi.org/10.54399/ rbgdr.v6i3.291
- Estanislau, P., Goebel, M. A., Staduto, J. A. R., & Kreter, A. C. (2021). Distribuição espacial das mulheres na direção dos estabelecimentos agropecuários no Brasil. Revista de Economia e Sociologia Rural, 59(3), e222800. https:// doi.org/10.1590/1806-9479.2021.222800
- Hirata, H., & Kergoat, D. (2007). Novas configurações da divisão sexual do trabalho. Cadernos de pesquisa, 37(132), 595-609. Retrieved from https://www.scielo.br/j/cp/a/ cCztcWVvvtWGDvFqRmdsBWQ/ ?format=pdf&lang=pt

- Hora, K., Nobre, M., & Butto, A. (May, 2021). As mulheres no censo agropecuário 2017. São Paulo, Brasil: Associação Brasileira de Reforma Agrária (ABRA)-Friedrich Ebert Stiftung. Retrieved from https://www.embrapa.br/documents/1355154/69822227/HORA%2C+NOBRE+E+BUTTO+CENSO+2017.pdf/f391dda1-c8f8-6e51-117f-f221042e5a0e
- IBGE (Instituto Brasileiro de Geografia e Estatística). (2019). Censo Agropecuário 2017. Rio de Janeiro, Brasil: IBGE. Retrieved from https:/ /censoagro2017.ibge.gov.br/
- Karam, K. F. (2004). A mulher na agricultura orgânica e em novas ruralidades. *Revista Estudos Feministas*, 12, 303-320. Retrieved from https://www.scielo.br/j/ref/a/TtGn767X6Cky3NJqBgxThbT/?lang=pt&format=pdf
- Kanokwan, M. (2021). Gender dynamics and the complexities of cattle ownership in North-Eastern Thailand. *Asia-Pacific Social Science Review*, 21(3), 260-274. Retrieved from https://www.dlsu.edu.ph/wp-content/uploads/pdf/research/journals/apssr/2021-September-vol21-3/1-Prelim.pdf
- Langbecker, T. B., & Perleberg, C. S. (2014). A contribuição da mulher pecuarista como potencial ator na preservação da atividade de corte no município de Dom Pedrito-RS. REDD–Revista Espaço de Diálogo e Desconexão, 8(1), e2. https://doi.org/10.32760/1984-1736/REDD/2014.v8i2.6962
- Langbecker, T. B. (2016). Trabalho e género:mulheres na atividade pecuária familiar no município de Encruzilhada do Sul/RS. (Unpublished Master Degree Dissertation). Mestrado em Desenvolvimento Rural, Universidade Federal do Rio Grande do Sul, Porto Alegre. Retrieved from https://lume.ufrgs.br/handle/10183/147431
- Langbecker, T. B. (2017). Gênero e o trabalho na pecuária familiar: uma leitura a partir da divisão sexual do trabalho. *Alamedas*, 5(2), 128-144. Retrieved from https://e-revista.unioeste.br/index.php/alamedas/article/view/18132/12400
- Litre, G. (2010). Os gaúchos e a globalização:

  Vulnerabilidade e adaptação da pecuária familiar no
  Pampa do Uruguai, Argentina e Brasil. (Unpublished
  Doctorate Thesis). Centro de Desenvolvimento
  Sustentável, Universidade de Brasilia IHEAL/
  CREDAL, Paris III, Sorbonne-Nouvelle.
  Retrieved from http://www.realp.unb.br/jspui/
  handle/10482/7999

- Lopes, J. M. L., & Langbecker, T. B. (2018).
  Inclusão produtiva, pecuária familiar e situação das mulheres rurais do Programa Brasil Sem Miséria em um município do RScontexto de uma realidade pouco conhecida. REDES: Revista do Desenvolvimento Regional, 23 (1), 31-52. Retrieved from https://dialnet.unirioja.es/descarga/articulo/6354647.pdf
- Magalhães, R. S. (2009). A «masculinização» da produção de leite. Revista de Economia, Administração e Sociologia Rural, 47(1), 275-299. https://doi.org/10.1590/S0102-30982013000200007
- Maraschin, M. S. (2019). Perfil sociodemográfico e econômico de mulheres trabalhadoras rurais. *Nursing*, 22(251), 2848-2853. https://doi.org/10.36489/nursing.2019v22i251p2848-2853
- Martins, S. P. (2020). Estratégias de reprodução socioeconômica familiar: um estudo nos assentamentos rurais de Palmeira das Missões (RS). (Unpublished Master Degree Dissertation). Mestrado em Agronegócios, Universidade Federal de Santa Maria, Brasil. Retrieved from https://repositorio.ufsm.br/handle/1/22138
- Matte, A., Spanevello, R. M., Lago, A., & Andreatta, T. (2019). Agricultura e pecuária familiar: (Des) continuidade na reprodução social e na gestão dos negócios. Revista Brasileira de Gestão e Desenvolvimento Regional, 15(1), 19-33. https://doi.org/10.54399/rbgdr.v15i1.4317
- Melo, H. P., & Di Sabbato, A. (2009). Gênero e trabalho rural 1993/2006. In A. Butto (Org.), Estatísticas rurais e a economia feminista: um olhar sobre o trabalho das mulheres (pp. 31-120). Brasília, Brasil: MDA. Retrieved from https://repositorio.iica.int/bitstream/handle/11324/19444/CDBR17069076 p.pdf? sequence=1
- Menasche, R., & Escher, M. S. (1996). Género e agricultura familiar: cotidiano de vida e trabalho na produção de leite. (Relatório de pesquisa). Curitiba, Brasil: DESER/CEMTR. Retrieved from https://guaiaca.ufpel.edu.br/bitstream/handle/prefix/6364/Genero\_e\_agricultura\_familiar.pdf?sequence= 1&isAllowed=y

- Milani, R., Boscardin, M., Spanevello, R. M., Christofari, L. F., & Lago, A. (2014).

  Participação das mulheres no trabalho e na gestão da atividade leiteira, uma análise no noroeste gaúcho. [Annals of the] 52° Congresso da Sociedade Brasileira de Economia, Administração e Sociologia Rural. Goiânia, Brasil: SOBER. Retrieved from https://guaiaca.ufpel.edu.br/bitstream/handle/prefix/6364/Genero\_e\_agricultura\_familiar.pdf?sequence=1&isAllowed=y
- Mulugeta, M., & Amsalu, T. (2014). Women's role and their decision making in livestock and household management. *Journal of Agricultural Extension and Rural Development*, 6(11), 347-353. Retrieved from https://academicjournals.org/article/article1413988579\_Mulugeta%20and%20Amsalu.pdf
- Niederle, P. A., & Junior, V. J. W. (2009). A agroindústria familiar na região Missões: construção de autonomia e diversificação dos meios de vida. *Redes*, 14(3), 75-102. DOI: 10.17058/redes.v14i3.566. Retrieved from https://www.redalyc.org/articulo.oa?id= 552056848004
- Paulilo, M. I. (2004). Trabalho familiar: uma categoria esquecida de análise. *Estudos Feministas*, 12(1), 229-252. https://doi.org/10.1590/S0104-026X2004000100012
- Ribeiro, C. R. (2016). O modo de vida dos pecuaristas familiares do pampa brasileiro. In P. D. Waquil, A. Matte, M. Z. Neske & M. F. S. Borba (Eds.), *Pecuária familiar no Rio Grande do Sul: história, diversidade social e dinâmicas de desenvolvimento* (pp. 87-107). Porto Alegre, Brasil: Editora UFRGS. Retrieved from https://www.ufrgs.br/pgdr/wp-content/uploads/2021/12/2016-Livro-Pecuaria-Familiar-no-Rio-Grande-do-Sul-COMPLETO.pdf
- Ribeiro, R. M., & Jesus, R. S. (2016). A inserção da mulher no mercado de trabalho no Brasil. Revista de Ciências Humanas, 16(1), 42-56. Retrieved form https://periodicos.ufv.br/ RCH/article/view/1366
- Ross, K. L., Zereyesus, Y., Shanoyan, A., & Amanor-Boadu, V. (2015). The health effects of women empowerment: recent evidence from Northern Ghana. *International Food and Agribusiness Management Review*, 18(1030-2016-83056), 127-143. Retrieved from https://ifama.org/resources/Documents/v18i1/Ross-Zereyesus-Shanoyan-Boadu.pdf

- Segabinazi, G. G. T. (2013). A inserção da mulher no agronegócio. (Unpublished MBA Dissertation). MBA Agribusiness Specialization Course, Recanto Maestro, RS, Brazil. Retrieved from http://repositorio.faculdadeam.edu.br/xmlui/ handle/123456789/408
- Sen, A. (2018). Desenvolvimento como liberdade. São Paulo, Brasil: Editora Companhia das Letras.
- Shahzad, M. A., Abubakr, S., & Fischer, C. (2021). Factors Affecting Farm Succession and Occupational Choices of Nominated Farm Successors in Gilgit-Baltistan, Pakistan. *Agriculture*, 11(12), 1203; https://doi.org/10.3390/agriculture11121203
- Silva, C. B. de C., & Schneider, S. (2010). Gênero, trabalho rural e pluriatividade. Gênero e geração em contextos rurais (pp. 183-208). Florianópolis, Brasil: Ed. Mulheres.
- Silva, M. N. da, & Anjos, F. S. dos (2022). A sucessão geracional na pecuária familiar do extremo sul do Brasil. Revista de Economia e Sociologia Rural, 61, 1-20. https://doi.org/ 10.1590/1806-9479.2021.253400
- Souza, R. E. M. de, & Silva, M. das G. S. N. (2012). Mulher: A quebra do paradigma da função reprodutiva. Revista Geografares, (10), 203-224. Retrieved from http:// www.periodicos.ufes.br/geografares/article/ download/1694/1707
- Spanevello, R. M., Boscardin, M., Christofari, L. F., Lago, A., Andreatta, T., & Botene, T. S. (2022). O trabalho feminino no espaço rural. Revista Estudo & Debate, 29(1), 61-79. http:// dx.doi.org/10.22410/issn.1983-036X.v29i1a2022.2921
- Spanevello, R. M., Doege, A. M. N., Drebes, L. M., & Lago, A. (2019). Mulheres rurais e atividades não agrícolas no âmbito da agricultura familiar. Desenvolvimento em Questão, 17(48), 250-265. https://doi.org/10.21527/2237-6453.2019.48.250-265
- Spanevello, R. M., Fagundes, C. C., Matte, A., & Boscardin, M. (2021). Contribuições do acesso ao crédito rural: uma análise entre mulheres no norte do Rio Grande do Sul. Revista Grifos, 30(51), 212-235. http://dx.doi.org/10.22295/grifos.v30i51.5418

- Spanevello, R. M., Matte, A., & Boscardin, M. (2016). Crédito rural na perspectiva das mulheres trabalhadoras rurais da agricultura familiar: uma análise do Programa Nacional de Fortalecimento da Agricultura Familiar (PRONAF). *Polis. Revista Latinoamericana*, (44), 11963. https://journals.openedition.org/polis/11963
- Staduto, J. A., Alves Nascimento, C., & De Souza, M. (2013). Ocupações e renda das mulheres e homens no rural do estado do Paraná, Brasil: uma perspectiva de gênero. *Cuadernos de Desarrollo Rural*, 10(72), 91-115. https://doi.org/10.11144/Javeriana.cdr10-72.ordm
- Tsamaren, L. M. S. (2018). A pobreza e o desenvolvimento humano no Estado peruano do Amazonas à luz do conceito de capacidade de Amartya Sen, 2000 a 2015. (Unpublished Master Degree Dissertation). Programa de Pós-Graduação em Desenvolvimento Regional da Amazônia, Universidade Federal de Roraima, Brasil. Retrieved form http://repositorio.ufrr.br:8080/jspui/handle/prefix/625
- Twyman, J., Useche, P., & Deere, C. D. (2015). Gendered perceptions of land ownership and agricultural decision-making in Ecuador: who are the farm managers? *Land Economics*, *91*(3), 479-500. Retrieved from https://www.jstor.org/stable/24773479
- Vaz, F. N., Pascoal, L. L., Pacheco, P. P., Vaz, R. Z., Vargas, F. V., Soccal, D. C., &Maysonnave, G. S. (2014). Fatness beef cattle purchase transaction study in a abattoir firm in the Rio Grande Do Sul State. American International Journal of Contemporary Research, 4(9), 165-171. Retrieved from https://wp.ufpel.edu.br/gecapec/files/ 2014/09/Fatness-Beef-Cattle-Purchase-Transactions-Study-in-a-Abattoir-Firm-in-the-Rio.pdf
- Vedana, R., Shikida, P. F. A., Garcias, M. D. O., & Arends-Kuenning, M. P. (2022).
  Empoderamento feminino na agricultura: um estudo na Lar Cooperativa Agroindustrial (Paraná). Revista de Economia e Sociologia Rural, 61(2), 1-22. http://dx.doi.org/10.1590/1806-9479.2021.237944
- Waquil, P. D., Matte, A., Neske, M. Z., & Borba, M. F. S. (2016). Pecuária familiar no Rio Grande do Sul: história, diversidade social e dinâmicas de desenvolvimento. Rio Grande do Sul, Brazil: Editorial de la UFRGS. Retrieved from https://lume.ufrgs.br/handle/10183/232502

Zimmermann, S., Garcias, M., & Basso, D. (2020). Participación y empoderamiento de las mujeres en las cooperativas: un estudio sobre la participación de mujeres en cooperativas de la agricultura familiar en Brasil. *Desenvolvimento em Debate*, 8(1), 145-161. Retrieved from https://revistas.ufrj.br/index.php/dd/article/view/37491