



Positive intermediation and digitalization in building territorialized markets for family farming: an analysis of experiences in southern and northeastern Brazil

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Abstract

This work aims to analyze, compare and reflect on the dynamics and challenges faced by digitalization of family farming territorialized markets, drawing on the cases of Trii Ecológico (RS) and Grupo de Consumo do Recôncavo (BA). Grounded on a typology of family farming markets, the interviews conducted reflect the strong social roots of Trii Ecológico, characterized as a typical enterprise of territorial markets. Grupo de Consumo do Recôncavo, on the other hand, is a channel linked to local markets, which involves direct interaction between farmers and consumers and relies on university support for its operation. In both cases, ICT is mostly used as a communication and dissemination tool, due to low educational levels among farming families and limited knowledge in the use of more complex applications. In both cases, women's strong performance stands out, both among farming families and among consumers. In the case of Tri Ecológico they even intermediate transactions. Findings show that, whether due to lack of qualified infrastructure or lack of skills, intermediaries become facilitators of access to ICTs and mediators of the relations

between production and consumption. The intervention of these actors, which are called “positive intermediation”, is what allows the initiatives to persist, expanding the reach of family farming products and facilitating healthy eating for consumers.

Keywords: Markets. Family Farming. Digitalization. Production-consumption relations.

A intermediação positiva e a digitalização na construção de mercados territorializados da agricultura familiar: uma análise de experiências do sul e nordeste do Brasil

Resumo

O objetivo deste trabalho é analisar, comparar e refletir sobre as dinâmicas e desafios enfrentados pela digitalização em mercados territorializados da agricultura familiar, com base nos casos do Trii Ecológico (RS) e o Grupo de Consumo do Recôncavo (BA). Tendo como base referencial a tipologia dos mercados da agricultura familiar, as entrevistas realizadas refletem o forte enraizamento social do Trii Ecológico, caracterizando-se como um empreendimento típico dos mercados territoriais. Já o GCR é um canal vinculado aos mercados de proximidade em que há uma interação direta entre agricultores e consumidores e conta com o apoio da UFRB para seu funcionamento. Em ambos os casos, o uso de TICS se dá majoritariamente como ferramenta de comunicação e divulgação, havendo baixo índice de escolarização entre as famílias agricultoras e limitações de conhecimento no uso de aplicativos mais complexos. Outro elemento de destaque em ambos os casos é um forte protagonismo das mulheres, tanto entre as famílias agricultoras como nas consumidoras, estando inclusive na intermediação no caso do Tri Ecológico. Conclui-se que, seja pela ausência de infraestrutura qualificada, ou falta de habilidades, os intermediadores se tornam facilitadores do acesso a TICS e mediadores das relações entre produção e consumo. A atuação desses atores, que se denomina uma “intermediação positiva”, é o que permite a manutenção das experiências, expandindo o alcance dos produtos da agricultura familiar e facilitando uma alimentação saudável às consumidoras.

Palavras-chave: Mercados. Agricultura Familiar. Digitalização. Relação produção-consumo

Intermediación positiva y la digitalización en mercados territorializados de la agricultura familiar: un análisis de experiencias del sur y nordeste de Brasil

Resumen

El objetivo de este artículo es analizar y reflexionar sobre la digitalización en los mercados territorializados de la agricultura familiar, a partir de los casos de Trii Ecológico (RS) y Grupo de Consumo do Recôncavo (BA). Tomando como referencia teórica la tipología de mercados de agricultura familiar, las entrevistas realizadas reflejan el fuerte arraigo social de Trii Ecológico, caracterizándose como una empresa típica de mercados territoriales. El GCR es un canal vinculado a los mercados de proximidad, en que hay interacción directa entre agricultores y consumidores, además de tener el apoyo de la UFRB para su funcionamiento. En ambos casos, el uso de las TIC se utiliza principalmente como herramienta de comunicación y difusión, existiendo un bajo nivel educativo entre las familias campesinas y limitaciones en el conocimiento a la hora de utilizar aplicaciones más complejas. Otro elemento destacado en ambos casos es un fuerte papel de las mujeres, tanto entre las familias campesinas como consumidoras, incluso como intermediarias en el caso de Tri Ecológico. Se concluye que, ya sea por ausencia de infraestructura calificada, o por falta de habilidades, los intermediarios se convierten en facilitadores del acceso a las TIC y mediadores de las relaciones entre producción y consumo. La acción de estos actores, que llamamos “intermediación positiva”, es la que permite mantener las experiencias,

ampliando el alcance de los productos de la agricultura familiar y facilitando la alimentación saludable a los consumidores.

Palabras clave: Mercados. Agricultura familiar. Digitalización. Relación producción-consumo

1 Introduction

Debate on the construction of healthy and sustainable food systems has been gaining increasing space in academic literature and international discussions. The emergence of climate change, prevalence of food insecurity, increasing health issues related to industrialized diets and socio-environmental unsustainability of the hegemonic model of food production and distribution are some of the central elements that direct the international research agenda to rethink the possible paths towards more beneficial contexts (Monteiro et al., 2019; Ingram and Zurek, 2019; Rockstrom et al., 2020; Artaxo, 2020; Clapp, 2021; Crippa, 2021; FAO, 2024).

On the production side, the relevance of family farmers is undeniable, both for the type of food they produce and for the role they play as managers and guardians of natural resources (HLPE, 2019; Anderson and Rivera-Ferre, 2020; Argumedo et al., 2021). According to the Food and Agriculture Organization of the United Nations (FAO, 2019), family farming encompasses more than 500 million people worldwide involved in agricultural activities. As a social category, family farming is the largest food producer in the world, since it accounts for around 80% of total value of food production. Family farmers have also been considered fundamental actors in leading measures to mitigate climate change effects, in agroecological transition and in reducing poverty and social vulnerability (Fanzo et al., 2018; Tiftonell, 2021; Caron et al., 2020; FAO et al., 2023).

Analyses of the Brazilian context also point to a leading role played by family farming, which accounts for 77% of agricultural establishments (3.9 million establishments) and for 67% of the rural employment (IBGE, 2018). Family farmers are the main producers of many of the foods that comprise Brazilians' meals (vegetables, cassava, fruits, etc.), despite historically receiving limited public investment when compared to Brazilian corporate agriculture. Agricultural public policies in Brazil privilege large-scale agriculture – a paradox that is widely discussed in the literature. Although this context has been reconfigured, with different public policies being addressed to family farmers since the early 2000s, the unequal correlation of forces between corporate and family-based agriculture remains present, making the effects of such policies insufficient, sometimes ambiguous and contradictory (Grisa and Schneider, 2015; Grisa and Porto, 2023). Grisa and Porto (2023) highlight, particularly, how actions focused on promoting healthy and affordable food originated from family farming, linked to agroecology and the valorization of local territories, become fragile and unstable due to the country's constant political and economic changes.

At the other pole of the system lies the general population, mostly urban, living in areas where the dynamics of fast-paced life and lack of conditions to produce their own food prevail. In view of rampant rates of diseases directly linked to diets and a growing process of distrust in the quality of food in the face of the

environmental crisis and new technologies, concern about the origin and impacts of the food that is consumed becomes increasingly common among the population (Whitley, 2019; Preiss and Deponti, 2020; FAO et al., 2023; Louzada et al., 2023). Consumers begin to yearn for healthier foods of known origin.

In this sense, the construction of territorialized food systems through short supply chains, promotion of different certification processes and different expressions of food activism has shown interesting paths to overcome the challenges posed (Rover and Darolt, 2021; Loconto et al., 2018; Souza et al., 2023; Preiss, 2023). However, establishing direct contact between those who produce and those who consume remains a challenge. The increasing and globalized use of information and communication technologies (ICTs) has helped in some processes.

Its effects and potential began to be discussed especially after 2019, when a recommendation from the Global Food Forum was issued and the FAO began developing the International Digital Platform for Food and Agriculture. The following year (2020), with the arrival of the Covid-19 pandemic and the urgent need for social distancing, digitalization expanded significantly, placing the issue at the center of the international agenda. In fact, different studies carried out during the pandemic indicated not only an increase in the use of communication tools, but also an increase in the demand for family farming products sold via digital systems, creating new opportunities, especially in territorial and local markets (Preiss et al., 2022; Tittonell, 2021; Recine et al., 2021). Thus, understanding how ICTs are being appropriated by farmers and to what extent they have contributed to qualifying supply channels and removing barriers between farmers and consumers becomes essential.

This article aims to reflect on digitalization in family farming territorialized markets, by analyzing two case studies: Trii Ecológico (in the state of Rio Grande do Sul) and Grupo de Consumo do Recôncavo (in the state of Bahia). The manuscript is organized into five sections. After this introduction, a section is dedicated to presenting the methodological approaches and theoretical frameworks used. In the following section, the results of the two cases are presented and discussed. Finally, final considerations are presented. Results indicate that the use of ICTs remains limited to communication and dissemination processes. In both cases, a process that we call “positive intermediation” was observed, which allows the initiatives to survive, expanding the reach of family farming products and facilitating healthy eating for consumers.

2 Intermediation and use of ICTs in territorialized food systems

This work draws on the typology of family farming markets proposed by Schneider (2016). For the author, markets are understood as social constructions, that is, they are governed by a set of institutionalized rules and norms that guide the actions of involved subjects, creating different arrangements and dynamics that allow a multiplicity of market types to be characterized (Schneider, 2016). According to the way farmers access the market, to its kind of governance and logistics, there are four types of markets accessed by family farmers, namely: conventional, institutional, territorial and proximity.

Conventional markets are those that present a high degree of vulnerability

and risk for family farmers, as exchanges and products' price definition are mediated by other actors (middlemen, agri-processors, private companies, among other channels) and commercial relations are often guided by contracts that are disadvantageous to producers and oriented towards the global demand for food (Schneider, 2016). Institutional markets are those in which the State acts as the main buyer for providing food for people assisted by public institutions. In this category, the Food Acquisition Program - PAA and the National School Feeding Program - PNAE have been particularly relevant in Brazil (Schneider, 2016; Grisa, 2020).

The other two types of markets, called territorial and proximity (which are the focus of this study) constitute a frequent research topic that discusses short marketing channels and the demand for quality food with a social origin. According to Preiss and Schneider (2020), both have in common a strong process of social rooting in which food's geographic and social origin is relevant to the consumer, who seeks not only to satisfy needs, but also to contribute to broader processes of social development through differentiated foods.

Proximity markets are those in which family farmers engage in direct sales to consumers, allowing personal interaction and ensuring that 100% of the value paid goes to the family farmers. Sales channels range from on-farm sales and local open-air markets to consumer groups, door-to-door delivery and so on. According to Preiss (2023), direct relations between producers and consumers enables a relationship of proximity and care between them, characterized by trust, friendship, recognition and even affection.

In turn, territorial markets are those in which marketing also considers social origin and territorial practices, but these attributes are communicated through different strategies (seals, certificates, collective brands, etc.) without direct contact between producers and consumers. Marsden, Banks and Bristol (2000) call this process 'extended geography' for considering that even without personal interaction between farmers and consumers, foods are differentiated, since they "carry" the social and physical characteristics of the territories in which they are produced.

Both are markets recognized for offering diverse fresh, artisanal, and minimally processed foods, which are aligned with a healthy diet, often linked to agroecological and organic production led by socially relevant actors such as agrarian reform settlers, quilombolas, indigenous people, and women's networks (Preiss and Schneider, 2020). Therefore, they are linked to localized and sustainable food systems that create socially fairer and more equitable dynamics for involved actors through solidarity and support networks in which processes of food activism and citizenship are present (Rover and Darolt, 2021; Souza et al., 2023; Preiss, 2023).

The literature also presents them as marketing spaces strongly aligned with the multidimensional principles of food and nutrition security (FNS) and as important spaces for socialization and integration of rural-urban life dynamics, having positive effects on the dynamization of local economies and regional development (Pozzebon et al., 2018; Preiss and Deponti, 2020).

Considering the high level of poverty and social vulnerability that many family farmers experience, devising processes that facilitate their access to markets and minimize the structural failures and social inequalities experienced becomes

imperative. It is in this context that ICTs and the support of different actors gains fundamental relevance. Different studies have discussed how digitalization has been integrated to family farming markets, ranging from production and management processes to marketing (Conceição and Schneider; 2019; Buainain, Cavalcante and Consoline, 2021;). In this last topic, particularly, although different experiences with family farming food produce marketing through digital technologies were already underway, social distancing and quarantine imposed by the COVID-19 pandemic created a high demand for home delivery products, speeding up processes and mobilizing cooperatives as a way to guarantee distribution (Schneider et al., 2020; Belik, 2020).

Niederle et al. (2021), nevertheless, point out that, although many benefits are alleged – such as improved management and logistical efficiency and increased job and income opportunities –, risks are also observed, considering that the access to technology and development of digitalization may be unequal among farmers, aggravating contexts of marginalization and vulnerability. FAO (2020) even recognizes that the various power dynamics operating in agriculture allow for highly digitalized farms in developed countries to exist simultaneously with smallholder farmers in less developed countries, who remain far from such benefits. In this sense, to what extent is digitalization present in markets where the social origin of farmers has an impact on consumers? Would these markets be a way for farmers to accelerate digitalization of their processes? How does the use of ICTs affect the characteristic relationship between producer and consumer? These are some of the questions that guided the work presented here.

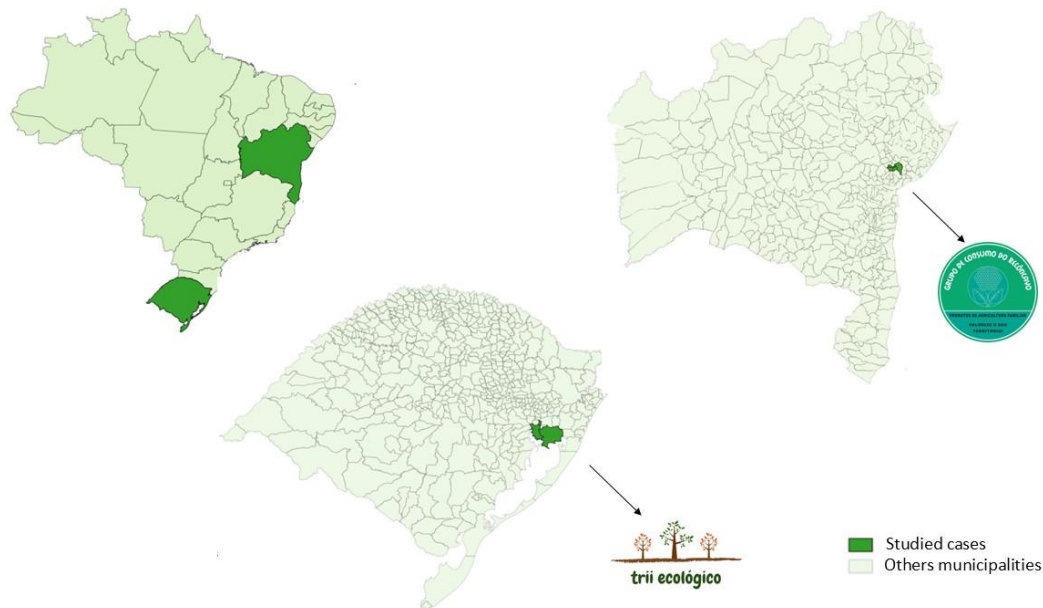
3 Methodological procedures

In methodological terms, this article is part of research findings of the project “Digital food markets in Brazil: dynamics, innovations and challenges of commercialization in family farming” funded by the National Council for Scientific and Technological Development (CNPq), Ministry of Science, Technology and Innovations (MCTI), through Call 40/2022 (Process No. 409231/2022-3).

Data collection was conducted through Alimento application, consisting of three questionnaires. The first one was aimed at the Platforms and contained 27 questions, addressing aspects related to the profile of the social organizations responsible for the platform, its digital infrastructure, and the physical and digital markets. The second questionnaire was addressed to farmers, having 49 questions covering aspects related to the profile of the farm and the family, the digital infrastructure of the farming unit and farmers, and the physical and digital markets and marketing channels they accessed. And the third questionnaire was addressed to consumers, having 42 questions covering the respondents’ profile, their relationship, consumption habits and satisfaction regarding the marketed food, their socioeconomic profile and use of internet. This study focused on information relating to farmers and consumers.

Two cases are analyzed, the first being categorized as a territorial market and the second as a proximity market (Table 1). The first case is Trii Ecológico,¹ a home delivery system for organic food produced by family farmers in the metropolitan region of Porto Alegre, state of Rio Grande do Sul. The second is the consumer group Grupo de Consumo do Recôncavo (GCR),² a direct supply arrangement between farmers and consumers, located in the Recôncavo Baiano region, state of Bahia (Figure 1).

Figure 1 - Geographical context of the studied cases



Source: Prepared by the authors (2024).

Table 1– Compared characteristics of the studied cases

	Trii Ecológico	GCR
Year of foundation	2019	2015
Number of families involved	21	7
Number of farming families interviewed	10	3
Municipalities of operation	Viamão-RS, Porto Alegre-RS and Cachoeirinha-RS	Cruz das Almas-BA, Muritiba-BA, São Félix-BA and Cachoeira-BA
Kind of food marketed	Vegetables, legumes, fruits, cereals, baked goods, spices, teas, jams and appetizers, Kombuchas, frozen foods and herbal	Green vegetables, vegetables, fruits, tubers, spices, teas, baked goods, jams, sweets and pesto sauces

¹ See:

https://www.instagram.com/trii_ecologico?utm_source=ig_web_button_share_sheet&igsh=ZDNIZDcoMzIxNw==

² See:

https://www.instagram.com/gcreconcavo?utm_source=ig_web_button_share_sheet&igsh=ZDNIZDcoMzIxNw==

	medicines	
Regularity of deliveries	Weekly	Biweekly

Source: Prepared by the authors (2024)

Data were collected between October 2023 and March 2024. Fieldwork regarding Trii Ecológico involved interviews with members – ten farming families, two family farming cooperatives, and twelve consumer families. Although they also have products from a non-family organic production enterprise, the respective data will not be presented here as they are outside the scope of this study. Three farming families and eleven consumers associated with Recôncavo Consumer Group were interviewed. The other seven suppliers of this collective are characterized as small artisanal producers and do not qualify as target audience of the research project. The selection of cases from existing experiences was fundamentally based on representativeness of family farming in the territories, the length of time the initiatives have existed, as well as the difficulties and challenges faced by family farmers for marketing their produce. By putting the two experiences in dialogue, it is possible to analyze to what extent their different contexts led each case to develop specific solutions for the flow of family farming products and consumers' food supply. Despite distinct contexts in extreme regions of the country, the experiences share many elements, especially regarding digitalization and the social roots of involved actors, thus becoming interesting references for good practices in the construction of food systems.

4 Digitalization in family farming territorial and proximity markets: a case analysis

In this section, the studied cases will be presented, outlining the historical formation of these experiences and presenting the identified profiles of farmer families and consumers involved.

4.1 Trii Ecológico

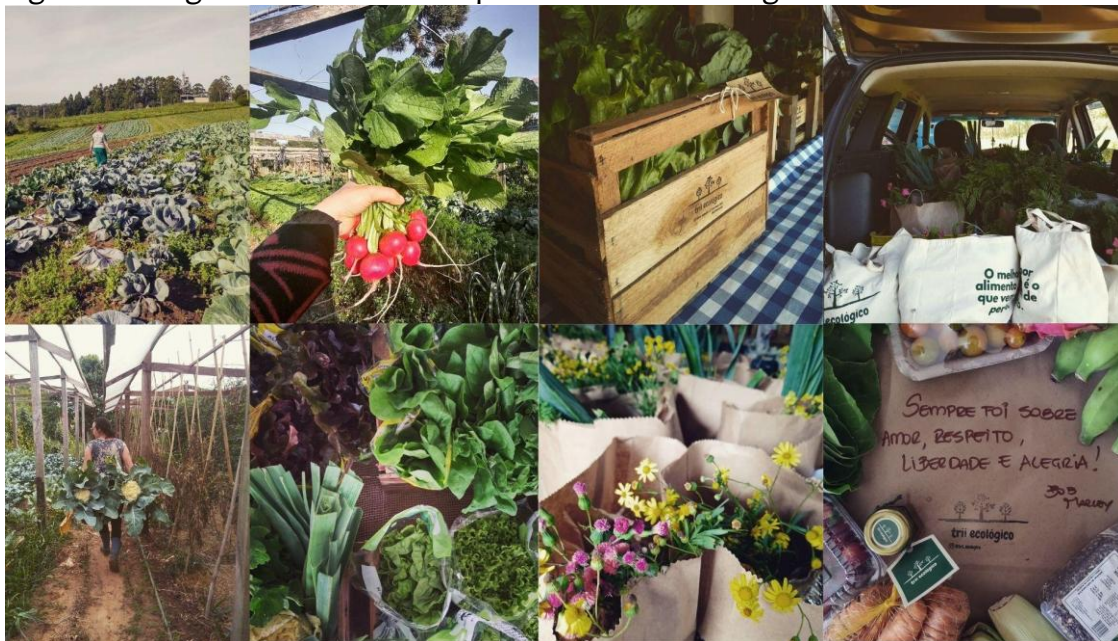
Trii Ecológico is a system for home delivery of organic food from regional family farming, operating in the metropolitan region of the capital of Rio Grande do Sul, with administrative center in Viamão. It began its activities in 2019, and is led by two women, both with experience in food production through their own businesses. Based on their desire to promote health through food, they decided to join forces to create a delivery system for products from local agroecological family farming (Figure 2). Both are young mothers who balance work with family responsibilities. The name "Trii" is a reference to a local expression "tri", meaning something very good.

The company operates with home deliveries in three cities: Viamão, Porto Alegre and Cachoeirinha. Orders are placed online, with products listed in an Excel spreadsheet updated weekly (Fridays) and sent to consumers on Sundays in PDF format via a WhatsApp contact list. Consumers send their order lists by 2 pm on Monday. Orders are systematized and forwarded to farmers. After the last orders are collected in the morning, the food is separated and delivered on Wednesday afternoon. The company receives an average of 15 to 20 orders per week, paid via

Pix upon delivery.

The management of the enterprise is largely shared, with both companies handling contact with consumers, sharing the listing, transmission and collection of orders, in addition to collaborating in the collection and delivery of products. Over the years of operation, the suppliers have changed and expanded. They currently work with 21 suppliers from four cities: Viamão, Eldorado do Sul, Antônio Prado and Maquiné. The products supply changes according to production and harvests, but each week they have around 125 different products available, including vegetables, fruits, cereals, baked goods, seasonings, teas, minimally processed foods such as jams and appetizers, Kombuchas, frozen foods and herbal remedies.

Figure 2 - Images of the actors and products of Trii Ecológico



Source: Trii Ecológico Photographic Collection (2024).

Trii Ecológico has an active presence on social media, regularly sharing information about seasonal products, farmers' activities, the company's routine, recipes and cooking tips, as well as nutritional advice and environmental, social and political content. It has a strong position, defending values such as healthy eating, sustainable production, agrarian reform and social justice. Trii Ecológico stands out as an initiative based on proximity to farmers and suppliers. The partners are committed to offering a special service to consumers, including a motivational phrase in the delivery packages every week and frequently offering free gifts. In addition to the value of the purchased products, a fee of R\$16.00 is charged for the service provided from the selection of the products to delivery.

4.1.1 Farming families involved

Among the ten farming families involved, the majority (seven) belong to the Filhos de Sepé Settlement located in Viamão, an agrarian reform settlement linked to the Landless Workers' Movement (MST). Two family farming cooperatives are also connected to this settlement. There is also one family from the municipality of

Antônio Prado, one from Maquiné and another in the rural area of Viamão. In all cases, the production is agroecological and has organic certification.

As regards the number of people in the family units, it totals 35 people, 28 out of which are adults and six are children up to 12 years old. Considering the family group of interviewees, 57% are women and 43% are men, females also being majority in the children's age group. Among the families, 80% have an annual gross income ranging from R\$20,000 to R\$360,000. One of the families has an annual income of less than R\$20,000 and another an income of more than R\$360,00. Regarding families' educational level, incomplete elementary education is predominant. Among the youngest members of family units, some had access to higher education.

Table 2 details the markets accessed by farming families, showing that the territorial market is the most significant (38%), and that home delivery systems (in this case, Trii Ecológico), family farming cooperatives and regional farmers markets are the most used channels. Local markets come in second (32%), with on-farm sales and local farmers' markets as the main channels. Conventional markets are accessed only by fruit and mushroom growers. The institutional market is the least significant in the sample, being accessed through two channels: the National School Feeding Program (PNAE) and the Viamão Food Program - PAV, a municipal public policy of Viamão. It is also worth mentioning that Trii Ecológico is not the main channel in terms of income for any of the families, but it plays an important role in promoting and expanding the market, taking products to consumers that otherwise would not be directly reached by the farming families.

Table 2 - Markets and marketing channels accessed by farmers linked to Trii Ecológico

Market representativeness in the sample	Marketing channels	Number of farming families accessing the channel
Proximity Market (33%)	On-farm	8
	Door to door	1
	Local farmers' markets	6
	Consumer groups	5
Territorial Markets (38%)	Regional farmers markets	5
	Specialty stores	3
	Websites	1
	Events	1
	Home Delivery System	8
	Family farming cooperatives	5

Conventional Markets (17%)	Agribusiness	1
	Supermarkets	3
	Local retail	3
	Associations	2
	Companies	1
Institutional markets (12%)	PNAE	5
	PAV	2

Source: Prepared by the authors (2024).

Most families saw significant growth in the marketing of their products during the pandemic. The increase in demand was also observed at Trii Ecológico, which had an average of 40 weekly orders in 2020. In both cases, with the end of the pandemic there was a reduction to a more stable demand that continues to this day. Regarding digitalization, only one of the farming families has a website and sells its products through this tool. Among the other farmers, eight use Instagram and WhatsApp to promote their products and communicate with consumers, but commercial exchange involves face-to-face interaction taking place on-farm or through door-to-door delivery.

Thus, the use of WhatsApp is predominant, with all interviewees using this tool for communication. As regards the main difficulties for participating in digital markets, interviewees mention the lack of knowledge to operate the tools and the overload of tasks to carry out. Generally, all farmers interviewed are somehow connected to technology. All ten interviewed farming households have radios, smart TVs, smartphones and notebooks. Despite having a quality internet signal on their properties, interviewees mentioned difficulties in using ICTs. Most said they know how to navigate and use communication and social media applications, but they find it difficult to access other applications.

Regarding the interviewed cooperatives, both the Cooperative of Organic Producers of Agrarian Reform of Viamão (COPERAV) and the Cooperative of Settled Workers of the Porto Alegre Region (COTAP) have agroecological rice as their main product, although they also offer other foods. Coperav began supplying products to Trii Ecológico in 2019 and contributes thirteen varieties of agroecological rice, rice flour, soybeans and four types of beans. Coperav's most significant sales are aimed at the institutional market, specifically PNAE, in which a large part of the rice is sent to the state of São Paulo and a considerable amount to RS. There is also a percentage of sales directed to the Alimenta Viamão program, a municipal public policy created in recent years. The territorial market is present through sales to specialized stores and to Trii Ecológico. Local open-air markets are the main channel in the local market.

COTAP became a supplier in 2021, producing products such as: rice crackers, tomato paste, rye flour, different varieties of beans and juices. The main market accessed is also the institutional one, with sales to PNAE in RS, the PAA and also a percentage to the PAV. They are also present at ecological farmers' markets,

characterized as a proximity market. When asked about the use of technology, in both cases, managers of the cooperatives recognize the importance of digital marketing channels and the need for online sales. However, due to shortage of both human and financial resources, marketing through these channels is still limited. They claim to use websites to promote the products and the institution, but do not make sales through these means due to the lack of knowledge and personnel available for this task.

4.1.2 Trii Ecológico's consumers

Considering that current average demand for Trii Ecológico's products is 12 to 18 weekly orders, 12 consumer families were interviewed. The group of surveyed consumers was composed exclusively of working women, who are also responsible for purchasing food for their families. Regarding their ethnicity or race, most were self-identified as white women (9 interviewees), two as black women and one woman identifies herself as yellow. The group's educational level is high, with the majority having completed postgraduate studies and working in various professional fields. Among them, only one is retired and two are civil servants. Regarding income, the majority (7 families) declare an average salary between two to four minimum wages (R\$2,641.01 to R\$5,280.00). Three of them have a family income of more than R\$10,000.00, and only one family has a low income of up to 2 minimum wages.

Overall, this group of families is mainly composed of adults (80%), teenagers comprising 4% and children 5%. Trii Ecológico entered the lives of these consumers mainly through recommendations from acquaintances and personal networks, revealing that there is an effective dynamic of proximity and strong social ties. Most interviewees (67%) were reached through these recommendations, while the others discovered the service through social networks, reflecting the effectiveness of the services and general appreciation on the part of consumers.

Regarding the frequency of orders, 67% are weekly, 25% biweekly and only 8% sporadically. For most families, purchases made at Trii Ecológico represent approximately 50% of their food consumption. For two, Trii Ecológico accounts for more than 51% of their food purchases. Families also buy their food in other places, with conventional market channels being the most frequent, as detailed in Table 3. However, there are also purchases in specialized stores, ecological farmers' markets and directly on farms. Therefore, it is appropriate to state that Trii makes it easier for local products from family farming to reach these consumer families in a practical and constant way, which perhaps would not be feasible through other channels. When asked about the reasons for not buying more from Trii Ecológico, most attributed it to their busy routine and the difficulty in organizing the family to send orders. Some also mentioned the low number of meals at home.

Table 3 - Markets and sales channels accessed by Trii Ecológico's consumers

Market representativeness in the sample	Marketing channels	Number of consumers accessing
Proximity Market (13%)	On farm	1

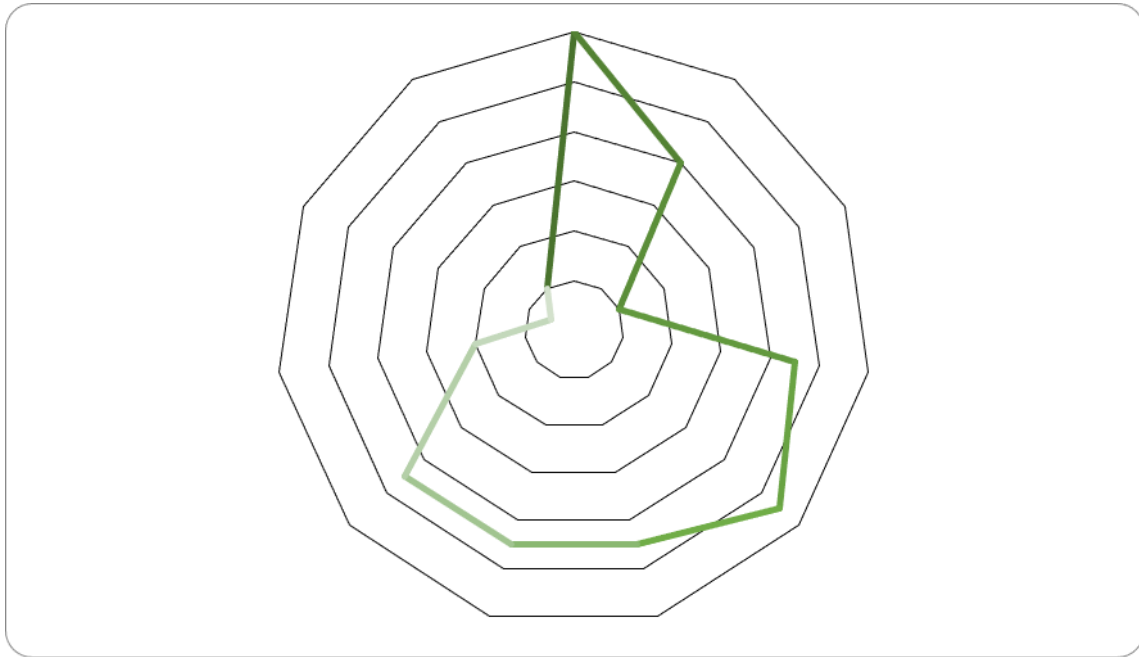
	Local agroecological farmers' markets	5
Territorial Market (34%)	Home delivery system	12
	Specialty stores	3
Conventional Markets (53%)	Supermarkets	11
	Neighborhood grocery stores	7
	Restaurants	1
	Food delivery	1
	Conventional open-air markets	4

Source: Prepared by the authors (2024).

Regarding satisfaction with the service at its different stages (from ordering to delivery) and the quality of offered products, responses were largely positive, highlighting the efficiency and high quality of Trii Ecológico. All interviewees expressed complete satisfaction with the ordering system and the way products are delivered to their homes. The system for selecting products in the format of a pdf spreadsheet was considered adequate by 92% of the interviewees. The same level of satisfaction was observed as to products packaging. Only one person reported difficulty in selecting products and another mentioned the desire for more biodegradable packaging.

As to prices, consumers unanimously said them to be affordable. For 83%, the prices are fair due to the quality and characteristics of the food, while 9% indicate that the prices are equivalent to those practiced in the organic market. Only one family states that price has an impact on their purchases and therefore chooses to buy only the most affordable products. Regarding the motivations for making purchases at Trii Ecológico, in addition to health concerns, support for family farming, contribution to local production, concern for the environment and search for strengthening cooperatives are the issues highlighted, as illustrated in Figure 3.

Figure 3: What encourages consumers to buy at Trii Ecológico local



Source: Prepared by the authors (2024).

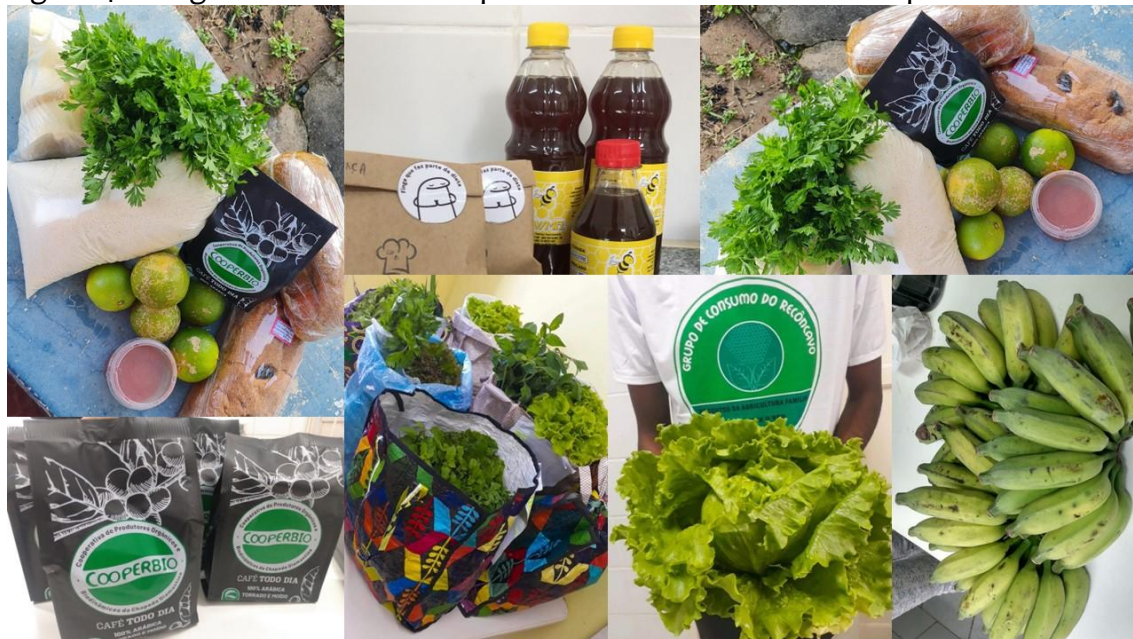
When evaluating social networks, most interviewees who follow social networks (63%) say to be very satisfied, actively following posts and interacting frequently. Regarding farmers, most interviewees (50%) are satisfied with just buying products. For the others, 25% would like more information on social networks about the farmers and another 25% indicate that they would like to have joint activities to get to know them in person.

4.2 Recôncavo Consumer Group

Grupo de Consumo do Recôncavo - GCR is an extension project of the Federal University of Recôncavo da Bahia (UFRB) created in 2015 and aimed at establishing a differentiated marketing channel for family farming, fostering more sustainable production and valuing local products. It is established in the municipality of Cruz das Almas in Bahia, where the Center for Agricultural, Environmental and Biological Sciences (CCAAB) of UFRB is located, serving consumers in this municipality and in Muritiba, São Félix and Cachoeira, located within a range of thirty kilometers.

With support from the Institutional Program for University Extension Grants (PIBEX), the project sought initially to mobilize a group of farmers from a *quilombola* community in the municipality of Muritiba. But since 2017, the group took a new format, integrating other farmers interested in selling directly and collectively their products. It currently gathers three smallholder farmer families and seven artisanal producer families, who produce minimally processed foods such as baked goods, sweets, pestos, among others (Figure 4). The basic inputs for these products are, in many cases, the products sold by farming families also linked to the GCR. The organization of collective sales allows for dispensing with sales intermediaries, allowing farmers to earn 100% of the value paid, thus helping to strengthen these families and encouraging local and responsible consumption in the Recôncavo Baiano territory.

Figure 4 - Images of the actors and products of the Consumer Group.



Source: Consumer Group Photographic Collection (2024).

Deliveries are made every two weeks, on Wednesdays, by the producers themselves. The products available for sale, as well as the price, are indicated by the producers to the project team, which updates the list on the Kyte app, used to place orders. After updating the product list, the announcement is made on Instagram and WhatsApp. Once the orders are placed, the list of ordered products is systematized and forwarded to producers, who deliver them to the Center for Family Farming and Agroecology - NAF. There, the orders are organized by the project team and farmers. Consumers can choose to pick up the products at the location, free of charge, or have them delivered to their home, for a fee of R\$7.00 for the municipality of Cruz das Almas and R\$12.00 for the municipalities of Muritiba, São Félix and Cachoeira. The delivery fee covers the fuel costs used in the logistics of transporting the products.

Payment is mainly made via Pix, however, the group also works with Mercado Pago links and accepts cards, options that have not been widely used. For farmers who sell more than R\$80.00 in an order, the group suggests a 7% contribution to the cash register, which is not mandatory. The amount is used for delivery fees and the purchase of utensils such as alcohol, eco-bags, banners, among others. Organizing orders, operating the Kyte app, and assisting in the management and transfer of payments, activities carried out by the university's team are essential for the supply dynamics to effectively function. It is this action by UFRB, through an extension project, that allows products commercialization and income generation for these local producers, who are mostly women, with small production areas and difficulties in entering the markets.

4.2.1 GCR farming families

Two women and one man, aged between 52 and 57, were interviewed. Two of them are mainly dedicated to farming, having areas of one and 0.5 hectare, both are classified as category B of family farmers. The third farmer holds an area of less than 0.5 ha and provides outsourced services, representing a case of multi-activity in family farming, characterized by both agricultural and non-agricultural activities and income generated from the two sources (Schneider, 2003). One of the farmers lives in the municipality of São Félix, BA, 12 kilometers from the town, while the other two are from the municipality of Cruz das Almas, BA, living at distance of about three kilometers from the town.

Regarding production aspects, the products sold include green vegetables, spices, fruits, roots, tubers and artisanal products; coriander is the product that generates the highest earnings for two of the farmers, and cassava for the third one. Although the production system is free of pesticides, the farmers do not have yet organic or agroecological certification. Sales are mainly made through local market channels (Table 4), which are the most representative in the sample (58.8%), such as the GCR, the local farmers' market (Feira da Agricultura Familiar e Economia Solidária da UFRB), on-farm sales and home delivery, mediated by social networks and messaging apps. In second place, there are territorial markets (17.6%) reached by the interviewed families through regional farmers markets. Finally, with the same representation (11.8%), there are conventional markets, through access to supermarkets and restaurants, and institutional markets, through sales to PNAE and the UFRB refectory.

Table 4 - Markets and marketing channels accessed by farmers linked to the GCR

Market representativeness in the sample	Marketing channels	No. of Farmers accessing
Proximity Market (58.8%)	On-farm	3
	Door to door	1
	Local farmers' market	3
	Consumer groups	3
Territorial Markets (17.6%)	Regional farmers' markets	3
Conventional Markets (11.8%)	Supermarkets	1
	Restaurants	1
Institutional markets (11.8%)	PNAE	1
	University	1

Source: Prepared by the authors (2024).

Regarding farmers' and their farms' digital infrastructure, it is worth noting that despite having access to the internet, the quality of this access is low in the three properties. All three families have a radio, smart TV, and smartphone. Only

one of them has a laptop and access to email and social networks, such as Instagram and Facebook. In this case, the farmer lives with her daughter, who helps her to advertise the products and organize orders, via WhatsApp group and social networks. This reflects the level of knowledge and skills of the interviewees regarding digitalization. In the latter case, the farmer claims to have knowledge of navigation and use of ICTs, though saying to be to perform some processes, being assisted by her daughter, then. WhatsApp is an application that is common to all of them.

This context reflects farmers' use of ICTs in marketing their products. In the case that the daughter helps with using ICTs, most of the production (70%) is advertised through social networks or WhatsApp, followed by home delivery. In the other two cases, the use of ICTs for marketing is even less significant, corresponding to 20% and 30% of the farmers' production. Regarding these interviewees, one mentions having no knowledge about navigation, the internet or the use of ICTs, and the other says to know only how to browse on the internet. None of the cases uses applications for development of technological resources to support farming processes or for access to public policies.

Given the low use of ICTs by farming families, they were unable to assess the potential difficulties they would face in digital markets. It is worth noting that most of the digital part of the work at GCR is carried out by UFRB's extension team, via the Kyte Platform. Another aspect worth highlighting is the stability of demand for products during and after the pandemic, which guaranteed farming families' income. Such stability was achieved through the efforts of the Recôncavo Consumer Group, which already existed before this pandemic period.

Regarding the main advantages of marketing via GCR, they mention access to new consumers, as well as loyalty and appreciation. For one of the farmers interviewed there is also the advantage of safer payment, sales are larger and follow a practical and flexible dynamic, in addition to providing a guaranteed income. For another interviewee, access to new knowledge, technical assistance and building of friendships stand out. All of them believe that digital technologies are crucial for marketing and the future of the farm. They also emphasize the importance of the intermediation carried out by the university in coordinating the CGR and in holding courses and workshops.

4.2.2 Profile of consumer families

Eleven consumers were interviewed, most of whom were women (ten). White people predominated (six), with five black and mixed-race individuals. They had a high level of education, all of whom had completed college, and six respondents had either complete or incomplete postgraduate studies. Regarding occupations, seven consumers were civil servants at UFRB. Another aspect worth noting is that only one student is a consumer, that is, even though the group works from within the university, there is a low level of young people's participation in this sales channel, which can possibly be explained by income issues. As for income, it can be considered that for most consumers it is relatively high, since three families have a monthly income of over 12 minimum wages and three receive between 8 and 12 minimum wages.

As to participation in social movements, only three consumers declared to be active in movements, namely in the Movimento Negro Unificado (unified black movement), a women’s collective and the feminist movement. Therefore, even though being people that purchases products from a specific food marketing channel that prioritizes local production and healthy eating, none of them is linked to food movements or to activism such as veganism or agroecology. Even so, five consumers said that they reduced their meat consumption, and two identified themselves as flexitarians. One consumer declared herself to be vegan and one consumer follows a restricted diet (gluten-free, lactose-free and low in sugar).

The frequency of purchases in the Recôncavo Consumer Group is biweekly for the majority (nine families), one family does monthly purchases and another buys sporadically. These results indicate the loyalty of most consumer families in relation to this group, since orders and deliveries in the Recôncavo Consumer Group are made every fifteen days. Due to this characteristic, the percentage of food purchased in the GCR compared to other channels becomes somewhat low. For most families (seven) it is below 25%, being supplemented by other marketing channels, with supermarkets linked to conventional markets being the most frequent (Table 5). However, there is also consumption in channels of local and territorial markets.

Table 5 - Markets and sales channels accessed by consumers

Market representativeness in the sample	Marketing channels	No. of Consumers
Proximity markets (26%)	Agroecological farmers’ markets	5
	Local family farming markets	5
	Direct purchase from rural producers	1
Territorial markets (14%)	Family farming home delivery systems	1
	Health food stores	5
Conventional markets (60%)	Neighborhood markets	5
	Stores that offer ready-made food	5
	Delivery systems	3
	Discount markets or grocery stores	2
	Supermarkets	11

Source: Prepared by the authors (2024).

All consumers mention environmental concerns, family farming strengthening and contributing to the local economy as factors that encourage

them to consume products from the Recôncavo Consumer Group (Figure 5). The elements that appear in smaller proportions are price and seasonality.

Figure 5: What encourages consumers to buy from GCR



Source: Prepared by the authors (2024).

Regarding interaction with farmers, most said they were interested in interacting more, with five saying they would like to visit farms and participate in rural tourism activities. Two said they were open to personal interaction and two others would appreciate having information about farmers in the media (website and social networks). Only two consumers said they were satisfied with just purchasing the products. These findings allow us to infer that consumers prefer to experience personal experiences and be the protagonists of social interactions, and that physical presence remains relevant.

5 Putting cases into dialogue

This section proposes a reflection on the results presented, placing the two cases in dialogue discussing them in light of the literature. Trii Ecológico offers a large and diverse catalog of quality products, predominantly from agroecological and regional family farming, showing strong social roots and establishing significant connections with both farmers and consumers. It is, thus, a typical enterprise of territorial markets. When analyzing the other markets accessed by the farming families that supply Trii Ecológico, a predominance of local markets is observed, with large part of sales being done on-farm, a channel that is quite comfortable for farmers and generally the option of small-scale producers who have limited logistics infrastructure. In this case, by guaranteeing weekly orders and taking responsibility for the collection and distribution of products, Trii Ecológico acts as an intermediary

for the expansion of products commercialization, maintaining the social and territorial identity of these actors through dissemination strategies.

The Recôncavo Consumer Group (GCR), in turn, is a channel linked to local markets in which there is direct interaction between farmers and consumers. Here, family farmers that supply the group also sell their produce mostly through other local channels, as on-farm sales and home delivery, indicating characteristics similar to Trii Ecológico's farming families. According to data from the 2017 Agricultural Census, in Bahia's Recôncavo territory, 60.5% of rural establishments have an area of up to two hectares, 80.8% are family farms, and 91.3% are classified in category B of Pronaf³ (IBGE, 2019). In this context, the marketing of surplus produce through short circuits, such as the GCR, represents an important opportunity to earn a fair price for their products, generate income and boost local economy.

In both cases, ICTs are mainly used as a communication and dissemination tool, especially through WhatsApp and Instagram applications, due to low educational levels among farming families and scarce knowledge of more complex applications. Although GCR processes orders through the Kyte Platform, the management of this application involves a third actor, UFRB's extension team, which mediates communication between farmers and consumers.

Therefore, regarding the central question of the article, on the role of digitalization in family farming markets, we realize that it is present but limited to communication and dissemination processes. Among all farming families interviewed in both cases (including cooperatives), only one linked to Trii Ecológico said to make sales through a website, being a producer of natural cosmetics. Thus, although international agencies and authors argue about the potential of digitalization for agriculture, these benefits do not seem to have reached these cases yet. Different elements seem to contribute to this context.

First, digitalization depends on infrastructure including equipment and good signal availability for internet access, a context that is still distant for most family farmers, according to a recent article by Gazolla and Rufino de Aquino (2024) that assesses the digitalization reality in Brazilian rural establishments. According to the authors, there is a "serious digital debt" in the country that needs to be remedied, since more than 70% of rural properties have low-quality mobile connections. The situation is even more precarious in the Brazilian northeast, where the GCR is located, which is in line with the results presented here. Gazolla and Rufino de Aquino (2024) find a more qualified context in the south of Brazil, which also corroborates the data reported here, since the farming families of the Trii Ecológico indicate, in most cases, good internet access conditions.

However, in both cases, ICT usage skills are limited to social networks and communication applications. Other applications are not used or are operated only by the younger generations of families. This reality is similar to that reported in previous studies on the subject, carried out by Niederle and colleagues (2021), who argue that it is not just a matter of access and notice the need to develop farmers' skills to master available tools. The low educational level of the interviewed families certainly contributes to this difficulty, which is unfortunately also a common

³Group B of the National Program for Strengthening Family Farming - Pronaf: family farmers and rural producers who have obtained a gross family income of up to R\$23 thousand, in 12 months of production.

element for Brazilian family farming as whole. Data from IBGE (2019) indicate that most Brazilian farmers (43%) only attained up to elementary school, while 15% have never attended school and 21% are unable to read or write. In this sense, we dare to say that perhaps the highest priority regarding family farming digitalization should be to remedy this reality, using distance learning processes to qualify education rates.

In both cases, families have radios, smart TVs, and cell phones, perhaps indicating what Felippi (2019; 2020) discusses in her studies on the use of ICTs in rural areas as a process of social relations expansion mediated by digital technologies for processes of culture, leisure, and access to information media – a research agenda that has drawn attention in the field of regional development. For the author, the phenomenon originated from democratization of access to technology and has helped to create a new dynamic of cultural and communicational expression in society, breaking with archaic notions that associate rural areas with backwardness and conservatism. In other words, the digital popularization of the globalized world also affects rural populations, even though the quality of infrastructure is not universal and homogenized. Even so, through social networks and digital media, family farmers are raised to a contemporary dynamic of ritualization and virtual mobility that makes ICTs enter their daily lives as leisure and socialization practices.

Furthermore, we must also consider that truly digital marketing, without interaction between producers and consumers, with commercial transactions taking place via websites and platforms, also requires certain infrastructure and logistic conditions from farmers – at the very least, they need to ensure ways to transport their products. Thus, besides developing skills, resources are needed to invest in qualifying transport equipment and vehicles. This brings us to another relevant point in both cases, which is the role of intermediaries.

Discussions about markets generally tend to deem intermediaries negatively – they are typically perceived as actors whose practices are abusive, who generally exploit farmers. In popular language they even carry a series of pejorative nicknames: profiteer, cheater, etc. International studies related to sales in supermarkets indicate that while food products final prices to consumers have increased by 11.5%, values paid to farmers have been reduced by up to 26% for the same items (Oxfam, 2018). Research carried out by Matioli and Peres (2020) in large supermarket chains in Brazil reaffirms this data, demonstrating that supermarkets unfairly and coercively appropriate suppliers, having practices unfavorable to family farmers (Oxfam, 2018). Considering that the food distribution chain in Brazil has been highly concentrated, with 92.9% of food retail dominated by supermarkets, an increasingly restrictive and coercive context is created for both farmers and consumers (Belik, 2020). Thus, although this reality exists as a common practice in conventional markets, the intermediation that we find in the cases reported here has distinct characteristics.

At Trii Ecológico, the initiative itself, through its partners, acts as an intermediary for the entire commercial process, from the offer of available products, collection, organization of orders, communication with consumers and home delivery. The existence of this intermediary is an important characteristic of territorial markets, according to Schneider (2016). However, it is worth noting that,

in the case of Trii Ecológico, the existence of this intermediation is known to both farmers and consumers, revealing a process of transparent intermediation. And, unlike some similar initiatives that inflate the prices of final products to derive their income from these transfers, Trii Ecológico charges a service fee, making the intermediation work performed explicit and showing a fair dynamic of values regarding both ends of the chain. Here, two points are worth noting. First, when asked about the main difficulties in participating in digital market, families interviewed claimed lack of knowledge to operate digital tools and accumulation of tasks that they need to reconcile with production on the farm and commercial processes. This leads to the second point, one of the farming families from the agrarian reform settlement had a group of clients to whom they regularly delivered their products in a door-to-door dynamic. Even so, they opted to become a supplier to Trii Ecológico and to pass on their clientele, so that they could focus their work on farming.

In the case of the GCR, the intermediation is carried out by the UFRB extension team and involves product survey, operationalization of the Kyte Platform, dissemination, organization and delivery of orders, and facilitation of communication between suppliers. This process can also be characterized as a type of intermediation that becomes essential for sales to occur and is common in consumer groups in Brazil, as reported in the literature. For example, in the case of Responsible Consumers' Cells active in Florianópolis and metropolitan region, the Laboratory for Family Farming Marketing (LACAF) at UFSC assists in the logistics and communication processes, as well as in the creation of distribution centers, as discussed by Souza et al. (2023) and Rover and Daroldt (2021). According to Preiss and Marques (2015), UNESP, UFSCar, UFRGS, PUC-Rio, and UFFS are also universities with a history of involvement with responsible consumption groups. In addition to universities, NGOs, social movements, community associations and religious institutions were also identified in the literature as important supporters of consumer groups (Preiss, 2023).

Therefore, whether due to the lack of qualified infrastructure, lack of ICT management skills, or even overload of work, intermediaries become indispensable for maintaining these experiences. Loconto et al. (2018) raised this discussion in their studies on short supply chains in different countries, arguing that intermediaries have an important role to play in the development of localized food systems. In Brazil, this discussion seems to be somewhat incipient, perhaps due to the historical negative connotation due to abusive and exploitative practices by intermediaries in conventional markets, as mentioned above. Nevertheless, as indicated by the data reported here, intermediation can play a fruitful and beneficial role in the consolidation of territorialized markets, as it acts facilitating produce flow. After all, through them, broader networks are created, allowing agroecological and family farming products to reach greater distances and consumers that otherwise would hardly access these products.

Another interesting element that appears in both cases is a strong female protagonism, both among farming families and among consumers, including, in the case of Trii Ecológico, as an intermediary. This result is highly positive considering that the role of women is often undervalued, whether in food production or in management and care tasks for family members. In this regard, studies such as

those by Brumer (2004) and Langbecker (2017) demonstrate that, traditionally, rural women's work is marked by the division between agricultural and domestic work, with a tendency to devalue female work in “traditional” agricultural activities. Thus, the inclusion of women in non-agricultural activities, for example, has proven to be an alternative economic source, contributing to autonomy (Spanevello et al., 2019). Other studies, such as those by Niederle and Wesz Junior (2009) and by Martins (2020), point out that the agri-processing of primary production has also been a growing strategy to improve income conditions and enable the social inclusion of women in family farming. In these activities, women farmers play a prominent role, as the strategy of adding value to food generally arises from the transformation of activities previously carried out by them in the family kitchen (Guivant, 2003). The important role of women as consumers of food supply channels and also as activists in favor of healthier and more sustainable food is also recognized in the literature, being discussed by Stolle and Micheletti (2003) as an inverted gender difference, and problematized and supported by other authors (Sachs and Patel- Campillo, 2014; Gago, 2020; Teixeira and Motta, 2022).

Despite all the difficulties experienced during the COVID-19 pandemic, it does not appear to have had a negative impact on cases. Both Trii Ecológico and its farmers report having seen an increase in demand during the pandemic. For GCR, sales remained stable during and after the pandemic, which can be explained by the fact that the group already existed before this period. The results are similar to other studies carried out with family farmers and localized food systems, which indicate both a generalized increase in demand for healthy products with a recognized social origin and high resilience on the part of farmers (Tittonell et al., 2021; Preiss et al., 2022).

Consumer families are characterized by high income, high educational attainment, and strong concerns about the social origin of products. In both cases, they are motivated to consume from these supply initiatives out of concern for their health, the environment and the need to strengthen family farmers and local economies. These concerns indicate consumers with heightened awareness regarding the origin of food, common characteristics already reported in the literature on territorial and proximity markets (Rover and Darolt, 2021; Souza et al. 2023; Navarro, Ganzo and Preiss, 2023).

The observed high income corroborates studies that point to the consumption of healthier foods as a reality for a specific segment of society (Lang, 2020; Organig, 2023). The study also pointed to consumers who have adopted alternative consumption styles, such as flexitarianism, also referred to as “flexible vegetarianism”, referring to a dietary model characterized by a substantial reduction in meat consumption. Its concerns include aspects related to personal health, the environment and animal welfare (Teixeira et al., 2024; Boscardin et al., 2023).

Considering that the cases analyzed here are part of debates in sociology of food promoted since the early 2000s involving the ‘quality turn’ and food relocalization, we believe that they have the same potential for contributing to regional development as identified for other related experiences, as discussed by Preiss and Deponti (2020). By rethinking and reconstructing the flow of food in different territories and regions, the values of actors, cultures, and local knowledge

are promoted, connecting agroecological family farmers and consumers through collaborative processes that foster the local economy, sustainable development practices, and food sovereignty.

6 Final remarks

With the aim of analyzing and reflecting on digitalization in territorialized markets of family farming, this work addressed the cases of Trii Ecológico (RS) and Grupo de Consumo do Recôncavo (BA). The two experiences, despite being small and occurring in different regions in Brazil, dialogue through their characteristics, operationalization, as well as contributions to the formation of territorialized and sustainable food systems, since production, marketing and consumption practices besides satisfying income and food needs, also contribute to the construction of new social realities.

Without intending to extrapolate or generalize the findings, the reported experiences are examples of good local marketing practices, through a process of positive mediation that shows female protagonism in both production and consumption. The two cases offer practicality and convenience by providing healthy, sustainable and socially relevant food. Although having a small clientele, the loyalty and strong adherence of consumer families is notable. These are consumers who are aware of the origin of their food, and have concerns related to health, the environment, strengthening family farming and the local economy.

With a female representation, the farmers of Trii Ecológico and GCR sell their produce through local and regional markets, through channels such as on-farm sales, and agroecological and conventional farmers' markets. With low educational attainments, fragile infrastructure and difficulty in operating ICTs, they find in the intermediation process a fair and supportive way to sell their produce. Thus, unlike the role played by intermediaries who engage in abusive practices when marketing family farming products, in the cases studied, intermediation is interpreted as positive, as it allows local marketing, expands the reach of these families' products and facilitates healthy eating for consumers.

Regarding digitalization of territorialized family farming markets, it was possible to observe that it is limited to the promotion of products and communication with consumers. Its potential can be explored, as long as issues such as equipment infrastructure and access to quality internet are addressed, in addition to initiatives for training and qualification of family farmers whose educational attainment is low, entailing difficulties in operationalizing ICTs. In this context, the role of the State in setting up public policies aimed at providing the basic elements for digitalization of family farming markets stands out.

Finally, it is worth noting that this research demonstrates the importance of mapping initiatives that promote the formation of territorialized food systems, aiming to broaden the debate about the role of actors in marketing intermediation. In the context of these experiences, the need for in-depth studies related to gender issues and the protagonism of new generations, as well as cooperatives and associations, stands out.

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