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Challenges in Cooperation between Farmers and Educational Institutions in Klaipeda Region: the "Farm-to-school" Model Approach

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Abstract: The article analyzes the challenges of small and medium-sized farms related to the development of the "Farm-to-school" model in the Klaipėda region. The research aimed to reveal the possibilities of involving farmers from the Klaipėda region in cooperation with educational institutions to provide them with farm products/services. During the focused group discussion with representatives of small and medium-sized farms in the Klaipėda region, questions relevant to the study were discussed: Are farmers interested in production and providing services to educational institutions? How do they evaluate the public procurement system? What are the possible cooperation opportunities and obstacles, etc. The results showed that the needs and expectations for cooperation of Klaipeda region farmers, municipal employees, and educational institutions as buyers of services basically coincide. Research participants agreed that food from local growers is good, and they would like children to be fed quality food from local farms in schools. However, the results of the study assumed the insufficient literacy of small and medium-sized farmers to effectively develop cooperation with educational institutions. Therefore, the article aims to raise awareness among representatives of small and medium-sized farms and all interested groups about the "Farm-to-school" model, which could have an impact on better involving farmers and strengthening the connection between local farming communities and educational institutions.

Keywords: "Farm-to-school"; involvement of farmers, challenges in cooperation between farmers and educational institutions

Introduction

The "Farm-to-school" model has sparked numerous initiatives worldwide, aiming to establish connections between schools, local farmers, food producers, and distributors. Their collective goal is to supply school cafeterias with fresh, locally sourced food. These initiatives, commonly referred to as Farm-to-school programs, offer more than just healthier dietary choices for students. They also provide support to local agriculture, foster community strength, and educate students about the origins of their food. At a fundamental level, Farm-to-school programs share overarching objectives that revolve around enhancing childhood nutrition, improving school meal quality, and bolstering local markets (Joshi et al., 2014; Roche et al., 2012). Nevertheless, there is a wide spectrum of program implementations across different countries, each tailored to meet these objectives. Consequently, the "Farm-to-school" model has been defined in various ways within the research and program evaluation literature.

The growing body of literature on Farm-to-school programs around the world generally defines their two primary functions as the procurement and preparation of locally produced foods for school meals and experience-based educational activities that delve into the agricultural, culinary, and nutritional qualities of these foods (Schafft et al., 2010).

The procurement and preparation component serves four distinct purposes, as outlined by researchers (Izumi et al., 2009; Meter, 2011). These objectives include enhancing students' nutritional intake, creating markets for small- and medium-sized farmers within the school's local communities and regions, boosting local economies by allocating a greater portion of school food service budgets to foods produced nearby, and promoting sustainable agricultural practices to benefit the natural environment.

The experiential educational component of most Farm-to-school programs has demonstrated its capacity to heighten students' appreciation for and preferences toward healthful foods produced locally, with an environmentally sustainable approach. This aspect is often considered the overarching goal of Farm-to-school programs. The "Farm-to-school" model is also credited with diminishing the social distance between food production and consumption by facilitating initiatives that deliver food to consumers bearing the farmer's face or story (Barlett, 2009). Furthermore, Farm-to-school programs include cross-

promotion of locally featured school foods in retail outlets, healthcare facilities, and other institutions (Watts et al., 2005).

Proponents of the "Farm-to-school" model firmly believe that the combined application of both these components - local food procurement and experience-based education - plays an instrumental role in encouraging students to consume healthful, locally produced food. Research on school gardens, for instance, reveals that experience-based agricultural education heightens students' willingness to consume fruits and vegetables (Kloppenburg, Hassanein, 2006; Morris et al., 2000).

The multicomponent nature of the Farm-to-school programs leads to a diverse set of objectives, which are adaptable to regional and national contexts but converge around overarching principles outlined by Joshi (2014), Joshi et al. (2014). Generally speaking, these initiatives are designed to holistically enhance the well-being of students and their communities, and their core mission revolves around promoting nutrition and health. This is achieved through ensuring that students have access to fresh, locally sourced, and nutritious foods, with the ultimate goal of instilling healthier eating habits and mitigating diet-related health issues (Jones et al, 2015). Besides this, Farm-to-school initiatives actively support local agricultural sectors by generating consistent demand for locally produced foods. This strategy promotes economic growth and provides essential support to local farmers and food producers within the community (Kirwan, 2004, Lyson, 2004).

Moreover, Farm-to-school initiatives create added value in different social, cultural, ecological, etc. areas. Research emphasizes such benefits as: the promotion of sustainable agricultural practices by prioritizing local and seasonal produce, which in turn not only reduces the environmental impact associated with food transportation but also endorses eco-friendly farming methods (Adams, Adams, 2011); contribution to social cohesion by building strong connections within the community, which actively facilitates interactions between schools, students, parents, farmers, and the broader community, fostering a sense of community pride, engagement, and cooperation (Azuma, Fisher, 2001); promotion of environmental stewardship by enhancing understanding of the environmental implications of food production and consumption, encouraging responsible choices that support ecological health (Krogh, Jolly, 2011); addressing food insecurity by ensuring that all students, regardless of their socioeconomic background, have improved access to fresh and nutritious foods (Bagdonis et al., 2009); and cultural diversity by incorporating diverse foods and culinary traditions from the local community, allowing students to appreciate and learn about different cultures through their meals (Izumi et al., 2015).

However, according to researchers, the pivotal component and the overall aim of the Farm-to-school programs should be education (Prescott et al., 2020). By emphasizing education as the central focus, these programs can empower students with valuable knowledge and skills related to agriculture, nutrition, and sustainability. Education within Farm-to-school programs can take various forms, including farm visits, gardening activities, cooking demonstrations, and classroom lessons on topics such as food production, environmental stewardship, and healthy eating habits. Through these activities, students not only gain a deeper understanding of where their food comes from and how it is produced but also develop important critical thinking skills and a sense of environmental responsibility.

Research highlights the following aims of the educational component: education imparts knowledge to students about the origins of their food, cultivation processes, and the significance of sustainable food systems (Krogh, Jolly, 2011); education empowers students to make informed choices that contribute to a more sustainable and responsible food system (Migliorini et al., 2020); education raises awareness about the sources of food, with a focus on informing students about the importance of local food systems and the broader impacts of their food choices on health, the economy, and the environment (Perroni, 2017); education empowers students with practical skills as they are provided with opportunities to engage in gardening, cooking, and other hands-on activities that enable them to make informed choices about their food (Prescott et al., 2020); education involves parents and families in order to engage them in supporting healthy eating habits at home, reinforcing the lessons learned in school (Izumi et al., 2015).

Furthermore, education in Farm-to-school programs extends beyond the classroom, fostering connections between students, local farmers, and the broader community (Azuma, Fisher, 2001). These interactions provide students with real-world learning experiences and opportunities to explore diverse perspectives on food, agriculture, and cultural traditions. By prioritizing education as the core component of Farm-to-school programs, educators and policymakers can maximize the impact of these initiatives in promoting food literacy, environmental awareness, and community engagement among

students. By equipping the next generation with the knowledge and skills to make informed and sustainable food choices, Farm-to-school programs can contribute to building healthier, more resilient communities for the future.

The aim of this article is to analyze the challenges faced by small and medium-sized farms in the Klaipėda region concerning the implementation of the "Farm-to-school" model. The research seeks to explore opportunities for collaboration between farmers and educational institutions, with a focus on providing farm products and services. The objectives of this study are as follows:

- To explore the perceptions and attitudes of farmers in the Klaipėda region towards engaging
 with educational institutions and supplying farm products and services for "Farm-to-school"
 initiatives.
- To examine existing strategies and initiatives implemented by educational institutions in the Klaipėda region to procure locally produced foods for school meals and integrate agricultural education into the curriculum.
- To assess the potential benefits and impacts of increased collaboration between small and medium-sized farms and educational institutions in the Klaipėda region within the framework of the "Farm-to-school" model.
- To propose recommendations and strategies for overcoming barriers and fostering successful partnerships between farmers and educational institutions in the Klaipėda region to promote the adoption of the "Farm-to-school" model.

Methods used: theoretical analysis of research resources, Focus-group discussion for empiric data collection, the qualitative content analysis method for qualitative research data analysis.

Methodology

A focus group discussion with farmers and related social partners was held in November 2022 at Klaipeda university. The purpose of the discussion was to find out what challenges local farmers and related representatives of schools have in order to effectively involve farmers in the "Farm-toschool" model.

The questions of the focus group discussion were structured in order to discuss several relevant situations: whether farmers are interested in production, provision of services to educational institutions, how they evaluate the public procurement system, whether they cooperate with educational institutions in order to develop a culture of healthy nutrition, etc. The questionnaire was developed by the project researchers on the basis of the theoretical analysis.

The focus group discussion comprised ten participants representing small and medium-sized businesses in the Klaipeda region particularly those involved in agriculture and food production, including land and food farms. The agriculture and food sector encompasses a broad range of economic activities that involve the cultivation, harvesting, and processing of food resources, as well as various related endeavors such as animal husbandry, forestry, fish farming, and plant breeding. In essence, a farm consists of three main groups of branches: agriculture, industry, and services (https://osp.stat.gov.lt/zemes-ukis1).

Table 1 **Presentation of focus group discussion participants**

Expert code	Sector of agriculture	Short presentation
Ū1	Poultry	Kretinga district poultry (turkey) farm. The production is provided to preschool education institutions.
Ū2	Beef cattle	Klaipėda district beef cattle (beef) farm. There are no contracts with educational institutions.
Ū3	Poultry	Farm poultry (chicken) of Skuodas district. Has contracts with educational institutions.

Expert code	Sector of agriculture	Short presentation
Ū4	Poultry	Skuodas district poultry (chicken) farm. Has contracts with educational institutions.
Ū5	Beef cattle	Klaipėda district beef cattle (beef) farm. There are no contracts with educational institutions.
Ū6	Beef cattle	Klaipėda district beef cattle (beef) farm. There are no contracts with educational institutions.
Ū7	Grains, flour, oils	Klaipėda district grain farm. Another field of activity is the production of oils. There are no contracts with educational institutions.
Ū8	Vegetable cultivation	Klaipėda district vegetable and horticulture farm. Teaching of educational programs in progress. Project activity - it is planned to establish a day care center for children with autism syndrome
Ū9, Ū10	Vegetable cultivation	Klaipėda district vegetable and horticulture farm. Project activities.
Ž11	Klaipėda District Municipal Administration Department of Agriculture	Representative
Ž12	Klaipėda District Municipal Administration Department of Agriculture	Representative
Š13	Education and Sports Department of Klaipėda District Municipality Administration	Representative
M14	Mosėdis children's nursery- kindergarten	Representative
M15	Mosėdis children's nursery- kindergarten	Representative

The qualitative content analysis method was used to analyze the qualitative research data. This choice of research data analysis method was determined by the research topic and problem. The purpose of qualitative content analysis is to describe the studied phenomenon by systematizing and summarizing the research material, to reveal the meanings people give to these phenomena (Žydžiūnaitė, 2007). Before starting the analysis of the research data, the detail of the data analysis was determined. When analyzing the research data, the available texts were read several times in order to deepen as much as possible, to understand what meanings the informants give to the phenomenon under consideration, how they see its context. Themes and subthemes are formulated with the help of excerpts from the examined texts. Qualitative content analysis was carried out in several stages: open coding, data grouping, categorization and abstraction. The extracted meaningful units in the research data matrix were grouped according to content, themes are started to be created, they are grouped, connected according to meaning in order to reduce the volume of data and present the research results to the reader more simply. While coding the research data and distinguishing the themes, the distinguished themes were constantly compared with each other, because it was believed that such a comparative analysis can provide original insights, highlight the essential differences between the themes and avoid superficiality. Although qualitative content analysis was used to analyze the data, it is based on the assumption that the peculiarity of working with data in qualitative research is characterized by the fact that there is no single analytical approach or model of analytical work. Even with common strategies and guidelines, each researcher develops a fundamentally unique data analysis model (Žydžiūnaitė, 2007).

Results and Discussion

When examining the transcribed statements from the focus group participants, several key themes have emerged, shedding light on the intricate dynamics between local farms and educational institutions involved in farm-to-school programs. These overarching themes encompass:

- Quality of production/services provided by farms: This theme delves into the perceptions and
 experiences related to the quality of produce and services offered by local farms. It encompasses
 discussions on factors such as the freshness of the produce, reliability of farm services, and the
 overall satisfaction of schools and students.
- Cooperation with educational institutions: current situation, expectations and challenges: This
 theme examines the existing state of collaboration between local farms and educational
 institutions. It encompasses discussions on the current state of cooperation, expectations from
 both sides, and challenges faced in establishing and maintaining these partnerships. Sub-themes
 might include the clarity of roles and responsibilities, communication effectiveness, and mutual
 goals.
- Issues of public procurement organization and execution: In this theme, the focus group participants discuss the intricacies of public procurement processes as they pertain to farm-to-school programs. Sub-topics include the efficiency of procurement procedures, the involvement of multiple stakeholders, regulatory challenges, and areas requiring improvement in the procurement system.
- Farm education: Participants delve into the role of farm education within the program. This includes discussions on the extent to which students are educated about the origins and cultivation of their food, the methods used to deliver this education, and its overall impact on student awareness and engagement.
- The role of the municipality: This theme explores the role played by local municipalities in facilitating farm-to-school programs. It encompasses discussions on how municipalities support these initiatives, allocate resources, and collaborate with farms and educational institutions to ensure the success of such programs.
- Good examples of cooperation between farmers and educational institutions: This theme highlights successful instances of collaboration between local farmers and educational institutions. These examples serve as practical illustrations of how farm-to-school programs can be effectively implemented, thus providing valuable insights and inspiration for future endeavors.

Below is a presentation of the results of the research conducted, emphasizing the main themes and subthemes that emerged.

• Quality of production/services provided by farms

When talking about the products they grow/the services they provide, the farmers who participated in the discussion emphasized that the quality of the products/services is the most important factor for their success as an economic sector (representatives of small and medium businesses). "Farmers are always "responsible" for their production and strive to ensure its quality in every possible way, as this is one of the most important factors for farmers in order to survive in the market" ($\bar{U}2$). By providing low-quality products/services, "the farmer will do himself and his children a "disservice" and will simply not enter the market anymore" ($\bar{U}1$). Participants from the farm sector also emphasized that "we, farmers, know that we provide quality products and we are interested in our products reaching children" ($\bar{U}2$). In addition, the informants added that "a small farm is quality, an industrial farm is quantity. If the kindergarten wants quality food, it should be taken from farms" ($\bar{U}3$). According to the informants, "educational institutions must realize that they are buying quality" ($\bar{U}8$). Summarizing the statements of the informants, it can be concluded that farmers seek to ensure the quality of their production and services, and also, in their opinion, they could contribute to improving the quality of food for children in educational institutions.

• Cooperation with educational institutions: current situation, expectations and challenges

Farmers participating in the discussion emphasized that currently the cooperation of educational institutions with local farms in the Klaipeda region is not very developed. Some farms in the Klaipeda region provide their production to educational institutions, but only to pre-school education institutions,

and only in cases where the institutions themselves carry out purchases (Such purchases of pre-school education institutions were encouraged by the State program)

Several of the farmers who participated in the discussion have had or currently have contracts with educational institutions (preschools) and provide them with their produce. "We participate actively, we have 25 contracts, we are one of the largest providers of services to kindergartens, but we are the only ones here, others do not actively participate" (Ū1). Most often, such examples of cooperation occur when farmers provide one specific type of produce (such as turkey in this case). Other participants said that when cooperating with pre-school education institutions, they are "oriented to people, to specific needs, since we don't have a lot of production, but we have a huge variety, so we already have target customers, whom we simply call and provide as much as we can" (Ū8). This way of providing products/services to educational institutions is more acceptable for farmers with various fields of activity (e.g. farmer-growers, farmer-producers).

Other participants in the discussion, farmers, said that they would be interested in the possibility of "getting into" educational institutions. "We have been talking about it for two years now, but it seems that the road is difficult" (\bar{U} 7). The participants of the discussion would like more support in this process from the local municipality. The informants suggested several possible ways of support: "a responsible person in the municipality could be appointed to advise and provide assistance to farmers who want to participate in public procurement" (\bar{U} 7). "There could also be such a model that the municipality collects information about purchases and shares it with interested farmers" (\bar{U} 7).

The participants of the discussion also reasoned about the motivation to participate in purchases organized by educational institutions. The discussants also saw the economic motive "of course it's money, so the farmer, thinking about such an opportunity, evaluates himself in terms of his capacity, but on the other hand, also checks" $(\bar{U}8)$ ". Other participants of the discussion saw the social motives: "On the other hand, it is an opportunity to contribute to more noble goals - a culture of healthy eating, etc. formation" $(\bar{U}2)$. However, the participants of the discussion agreed that cooperation with educational institutions "should be a win-win strategy for farmers" $(\bar{U}8)$, as it would meet both economic and social needs. "Every entrepreneur is calculating. However, if the provided product or service would help solve other problems and also contribute to the development of healthy eating skills, it would be a great result" $(\bar{U}10)$.

Regarding the cooperation between farmers and educational institutions, the informants saw an important question - who becomes the initiator of such cooperation - "do farmers find a kindergarten, or does the kindergarten itself look for and approach the farmers?" ($\bar{U}7$). According to the farmers, they are partly held back by not knowing how to act, "we minimally applied to kindergartens, because through the prism of fears about those public procurements, we know that we won't be able to do much" ($\bar{U}7$). Participants in the discussion, representatives of the educational institution, emphasized that the development of cooperation between the educational institution and farmers is "a matter of attitude, whether to put in the effort - to go look for the farmer, talk with him, on the other hand, the purchases for the educational institution increase, because you buy potatoes from one, poultry from another and you can buy everything immediately from the wholesale provider" (M15). Meanwhile, farmer informants said that educational institutions could show more initiative to cooperate with farmers ($\bar{U}5$, $\bar{U}6$). The participants of the discussion came to the opinion that both sides lack information and communication.

During the discussion, the issue of special requirements (e.g. hygiene, quality, logistics, etc.) for farmers' products/services, taking into account the specifics of educational institutions, was also discussed. In response, the informants emphasized that "yes, of course there are such requirements and the production is checked by the Veterinary Service, etc., but it is very easy to make an agreement with the farmers, you just tell them how much you need and on what day and they bring you fresh produce" (M13). An important aspect is logistical issues. Educational institutions do not have storage facilities, so "they can buy only a small amount of produce, so it is also additional work for the person in charge - to calculate how much is needed and what is needed, and also how long it will be used" (M15).

Issues of organization and execution of public procurement

In the currently existing practice of public procurement, managers of educational institutions organize small purchases (up to EUR 15,000), according to farmers, this is a good practice, because managers know what products their institutions need. According to the informants, "if the farmer buys low-quality

produce, the cooks will put it on the table and say 'eat it yourself'" $(\bar{U}1)$. The informants emphasized that "the managers of the educational institutions are really able to buy a quality product, but if the municipalities buy it, there will be no reason to complain, you will have to eat, because the arguments will be that we bought it according to the current laws, we bought it cheaply" $(\bar{U}2)$. However, in such a case, according to the participants of the discussion, there is a high probability that the children will receive lower quality food, which the children will simply not want to eat, and then many will say "that the children are spoiled, their eating habits have not been formed" $(\bar{U}2)$.

Farmer participants in the discussion emphasized that short chains (i.e. there can be no more than one intermediary between the consumer and the grower) are very effective "after all, buying local food supports the country's economy and fosters community spirit" ($\bar{U}10$). The participants in the discussion emphasized such short chains as well. advantages such as: "kindergartens will definitely receive fresh, high-quality food, not a rotten product" ($\bar{U}8$), "children have different needs, they sometimes care about the color of tomatoes, so it is very important to know those needs" ($\bar{U}9$). According to the informants, there should be direct communication between the nursery school and the farmer.

However, in Lithuania, there is currently a tendency to increase public procurement, i.e. to centralize them (we want to put purchases in the hands of municipalities). Farmers expressed their fear that this would pose a great threat to food quality - they would buy from large suppliers who have the ability to offer lower prices but are not responsible for quality. The most important criterion for such centralized purchases is price, while quality criteria are rarely strictly defined in technical specifications. According to the informants, "industrial farm and wholesale trade is about quantity, according to informants, small farms are about quality" (Ū3). According to the informants, it is very important to maintain short chains: "It is necessary to maintain short chains, not to get involved in mass purchases, because the humanfarmer is responsible for quality" ($\overline{U}2$). "How will the purchases be scaled up, what product will the children get?" High-quality or simply cheaper?" (Ł9). However, the participants of the discussion also emphasized the fact that by abandoning the short chains, the additional administrative burden increases and "the short chain is put under pressure, we put it on the neck of the farmer, one thing - the requirements are getting stricter, another thing - "paperwork", new forms of reports are appearing" (Ū2). In the opinion of the informants, "perhaps the process of centralizing public procurement would help the educational institutions themselves (because they would take over that function), but there would no longer be a short circuit" (Ū4).

According to farmers, decentralized public procurement would give freedom to farmers and help them get fresh produce directly from the farm.

• Education carried out by farms

The participants of the discussion emphasized that children should be taught from an early age "children must also know where milk comes from and where potatoes grow" (Ū2), because in this way we will contribute to the formation of their healthy eating skills.

Participants in the discussion organic farms conduct educational programs about what is ecology and healthier food. But "currently, these educational programs are more attractive to adult communities that are concerned with healthy eating issues" (\bar{U} 7), according to the participants of the discussion, it would be important to promote this type of education in educational institutions as well. According to the informants, educational programs about organic food from the mouths of farmers would be significant for both children and parents, so that with their help, healthy eating skills could be formed more effectively. Other participants in the discussion emphasized that they have been conducting educational activities on their farms for some time and invite educational institutions to actively participate in their programs. "We want to form a person's deep attitude towards what is important through real examples, because when people come to the farm, they see with their own eyes how everything grows" (\bar{U} 8).

The participants of the discussion said that they would be interested in allocating part of their land to educational institutions, so that the students themselves could grow produce when they arrived. In addition, the farmers participating in the discussion supported the initiative for educational institutions to go to their farms for educational purposes, to contribute by organizing educational sessions.

• The role of the municipality

Speaking about the role of the local municipality in promoting the involvement of farmers, the participants of the discussion noted that it would be very important to ensure proper information and communication. The farmers who took part in the discussion emphasized that "some kind of page should appear, where all farmers would gather what they grow, so that anyone, a school, a kindergarten, could find information" ($\bar{U}8$). The informants said that there are such initiatives (interactive maps, etc.), but "it would be relevant for every district to have such a map" ($\bar{U}8$). It would also be important to publish educational activities carried out by farmers. However, the informants emphasized that economic and other factors would be important. considerations "a farmer must have a walkie-talkie (mark on the map or advertise his products, services) for whom I am doing this, why it is economically beneficial for me" ($\bar{U}9$). Other participants noted that there are project activities that have led to the creation of such initiatives (e.g. the AgroBazaar project), but these initiatives are not publicly known.

On the other hand, the informants emphasized the role of the Municipal Agriculture Department. "We have an intermediary institution, the Department of Agriculture, which has all that information" ($\bar{U}1$), "could be an effective mediator between farmers and educational institutions." However, such possibilities are somewhat limited by the existing data protection legal acts. Informants agreed that municipalities could create an open platform where farmers themselves could identify themselves on the map.

The farmers participating in the discussion emphasized that "the most important thing is to publicize information about organic farmers, that we have such farmers and that they can provide healthier food for children" (Ū7). "There are farms willing to invite students to educational programs." The representatives of the municipality agreed that it would be very important to organize joint events for target groups, "we have farm data tables that we constantly fill in, we personally contact when needed, but this is not effective communication, it is necessary for both parties to learn the advantages of cooperation" (Ž11). The informants suggested organizing a "conference for educational institutions to bring both parties together to realize mutual benefits" (M15).

Another important observation of the informants is that municipalities could declare the priority of healthy meals in their strategic documents. Farmers' involvement could then be promoted through various formal means.

Good practice examples

The representatives of the educational institution that participated in the discussion shared their examples of good practice. "We buy, we buy a lot, we compared the prices, it's really not much different compared to wholesale suppliers" (M13). The informants emphasized that they search for and choose farmers themselves. "It's convenient for schools to order a week's worth of food, because they don't have the conditions to store it; freshness, variety, and seasonality of food are important" (Ū8). The informants gave examples of the participation of educational institutions (preschool education institutions) in the state program, and also emphasized the need for children's ecological education (Š12).

Meanwhile, the farmers participating in the discussion emphasized that they are developing the idea of cooperation with educational institutions and would like closer cooperation with educational institutions, but they do not know how to achieve it, therefore, in their opinion, there should be a mutual initiative.

The participants of the discussion expressed the need to "educate the farmers themselves - that today's understanding of cooperation combines management, which gives food growers the opportunity to provide a more varied choice and fulfill the catering wishes of public institutions (according to seasonality, according to the variety of products, to insure against extreme natural conditions or relevant conditions that limit obligations to provide food, etc.)" (L9). The expressed need is that not only food growers, but also food producers (producers) should come together.

In order for the cooperation of farmers and educational institutions to be smooth, it is necessary to carry out needs studies. "Both educational institutions and farmers themselves should clearly express their needs for cooperation" $(\bar{U}4)$, this would facilitate the involvement of farmers.

Discussion

Research supports the notion that quality is a critical factor in the success of agricultural businesses, particularly in the context of Farm-to-school programs. Studies have shown that consumers, including educational institutions, place a high value on the quality of locally sourced food, emphasizing freshness, nutritional content, and taste (Ditlevsen et al., 2020). The discussion on the quality of production and services provided by Klaipeda region farmers revealed a unanimous emphasis on quality as the cornerstone of success for farmers. Participants underscored that ensuring high-quality products and services is not just a business strategy but a responsibility towards consumers and future generations. It was noted that small farms prioritize quality over quantity, positioning themselves as providers of premium produce. Farmers expressed their commitment to maintaining quality standards and contributing to improving the quality of food for children in educational institutions.

The Farm-to-school program has emerged as a promising initiative to bridge the gap between schools and local farms, offering numerous benefits such as the supply of local products to school canteens (Botkins, Roe, 2018), hosting community events on farms (Selmer et al., 2014), and establishing regular markets for local producers (Allen, Guthman, 2006). However, in the case of the Klaipeda region, effective collaboration between schools and farms is still an ambition rather than a reality, as evidenced by the findings of the focus group discussion. While some farms supply produce to preschool education institutions, these partnerships are limited, often relying on specific contracts or one-off arrangements. Farmers expressed interest in expanding cooperation but cited challenges such as lack of support from local municipalities and unclear initiation processes. They suggested initiatives like appointing a dedicated liaison in municipalities to facilitate farmer-school partnerships and sharing procurement information with interested farmers.

Research supports the notion that decentralized procurement and short supply chains contribute to the provision of fresh, high-quality food for educational institutions. Studies have shown that shorter supply chains are associated with numerous benefits, including improved product quality, enhanced traceability, and greater economic resilience for local farmers and communities (Berti, Mulligan, 2016). The discussion also delved into issues surrounding public procurement organization and execution. Participants favored decentralized procurement, emphasizing the effectiveness of short supply chains in ensuring fresh, high-quality produce for educational institutions. However, they expressed concerns about the trend towards centralized procurement, fearing a compromise in food quality due to a focus on cost rather than quality. Maintaining short supply chains was seen as essential for upholding quality standards, although participants acknowledged the administrative burdens associated with such arrangements.

Jolly et al. (2010) outlined fundamental principles guiding the collaboration between farms and educational institutions, emphasizing the importance of collaborative training for teachers and farmers, co-designing educational programs, fostering a shared vision, and mediating between the needs of farmers and teachers. Despite these principles, the Klaipeda region faces challenges in actualizing these collaborations. Education carried out by farms was identified as a crucial aspect of promoting healthy eating habits among children. Participants stressed the importance of early education on food origins and healthy eating, advocating for farm-based educational programs. While organic farms have been active in offering educational initiatives, there was a call for broader integration of such programs into educational institutions to reach a wider audience. Farmers expressed readiness to allocate land for educational activities and invited schools to participate in farm-based learning experiences.

One crucial aspect highlighted by research is the collaborative design of educational activities by farmers and teachers. This approach relies on a shared acknowledgment of skills and knowledge, fostering close contact between farmers and teachers to seamlessly integrate farm activities into the regular curriculum (Jolly et al., 2004). However, the pedagogical role of farmers and their interaction with children's and teachers' often stereotypical perceptions of farm life pose challenges to this co-design process. Good practice examples shared by educational institutions demonstrated successful collaborations with farmers, highlighting the feasibility and benefits of sourcing fresh, seasonal produce locally. However, there was a consensus among participants on the need for mutual initiative and clearer communication channels to enhance farmer-school partnerships. Education and needs assessments were deemed

essential for streamlining cooperation between farmers and educational institutions, ensuring that collaborations are mutually beneficial and contribute to the well-being of children and communities.

Research discloses the role of municipalities as key stakeholders capable of fostering an enabling environment for such partnerships through policy development, resource allocation, and coordination efforts (Xing et al., 2018). The role of the municipality was highlighted during the Focus group discussion as pivotal in fostering farmer-school collaborations. Participants suggested initiatives like creating online platforms to connect farmers with educational institutions and organizing joint events to promote mutual understanding and cooperation. Municipalities were urged to prioritize healthy meals in their strategic documents and facilitate communication between farmers and schools to realize mutual benefits.

In conclusion, while the Farm-to-school program offers significant potential for collaboration between schools and farms, the Klaipeda region faces challenges in implementing effective partnerships. Overcoming these challenges requires concerted efforts to provide collaborative training, co-design educational activities, and foster meaningful interactions between farmers and teachers. By addressing these issues, the Farm-to-school program in the Klaipeda region can realize its full potential in promoting agricultural education and fostering community connections.

Conclusions

The research findings reveal several critical themes and sub-themes that are instrumental in understanding the dynamics between farmers and educational institutions, particularly in the Klaipeda region. These insights offer valuable perspectives on quality of production/services, cooperation with educational institutions, public procurement organization, farm-based education, the role of the municipality, and good practice examples.

Farmers recognize that product/service quality is paramount for their success. Ensuring high-quality products is a top priority for farmers, as they understand that quality is essential for survival in the market. The community perceives smaller farms as synonymous with quality, emphasizing that educational institutions should prioritize quality when sourcing food. Current cooperation between local farms and educational institutions in the Klaipeda region is limited, with only pre-school education institutions engaging in such partnerships when they handle their own procurement. While some farmers have contracts with these institutions, broader cooperation is hampered by challenges, including limited information sharing, need for support from local municipalities, and questions about who should initiate cooperation.

Farmers express economic and social motives for engaging with educational institutions, emphasizing the importance of a win-win strategy. Farmers support short chains for the procurement of fresh and high-quality produce, believing that direct communication between farmers and educational institutions is crucial. However, the trend toward centralizing public procurement poses a potential threat to food quality, as price-driven criteria overshadow quality standards. The administrative burden also increases with longer procurement chains. Encouraging children to understand where their food comes from and promoting healthy eating skills is essential. Farmers emphasize the value of educational programs about ecology and healthier food, indicating that such programs could benefit both children and parents.

Farmers are willing to allocate land for educational institutions to grow their produce and suggest the possibility of institutions visiting farms for educational purposes. Effective communication, information dissemination, and coordination between farmers and educational institutions are vital, with participants suggesting the need for an interactive platform that lists farmers and their produce. The Municipal Agriculture Department could serve as a mediator between farmers and educational institutions, fostering collaboration and providing essential information.

Educational institutions and farmers shared instances of successful cooperation, highlighting the importance of seeking out farmers and embracing a short-chain approach for procuring fresh, seasonal, and varied food. The participants expressed the need for mutual initiative and the importance of promoting a culture of cooperation among farmers and food producers.

Overall, the research underscores the potential for enhanced collaboration between local farms and educational institutions, focusing on quality, sustainability, and healthier food choices for children. It

emphasizes the significance of information sharing, effective communication, and the support of local municipalities in nurturing these partnerships.

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