

Strategy and action plan for

PROVIDING HEALTHY FOOD CHOICES TO THE CHILDREN USING SCHOOL RESTAURANT CONCEPT

in Setomaa, Rõuge, Smiltene and Tukums municipalities

2024–2028

Interreg



Co-funded by
the European Union

Estonia – Latvia



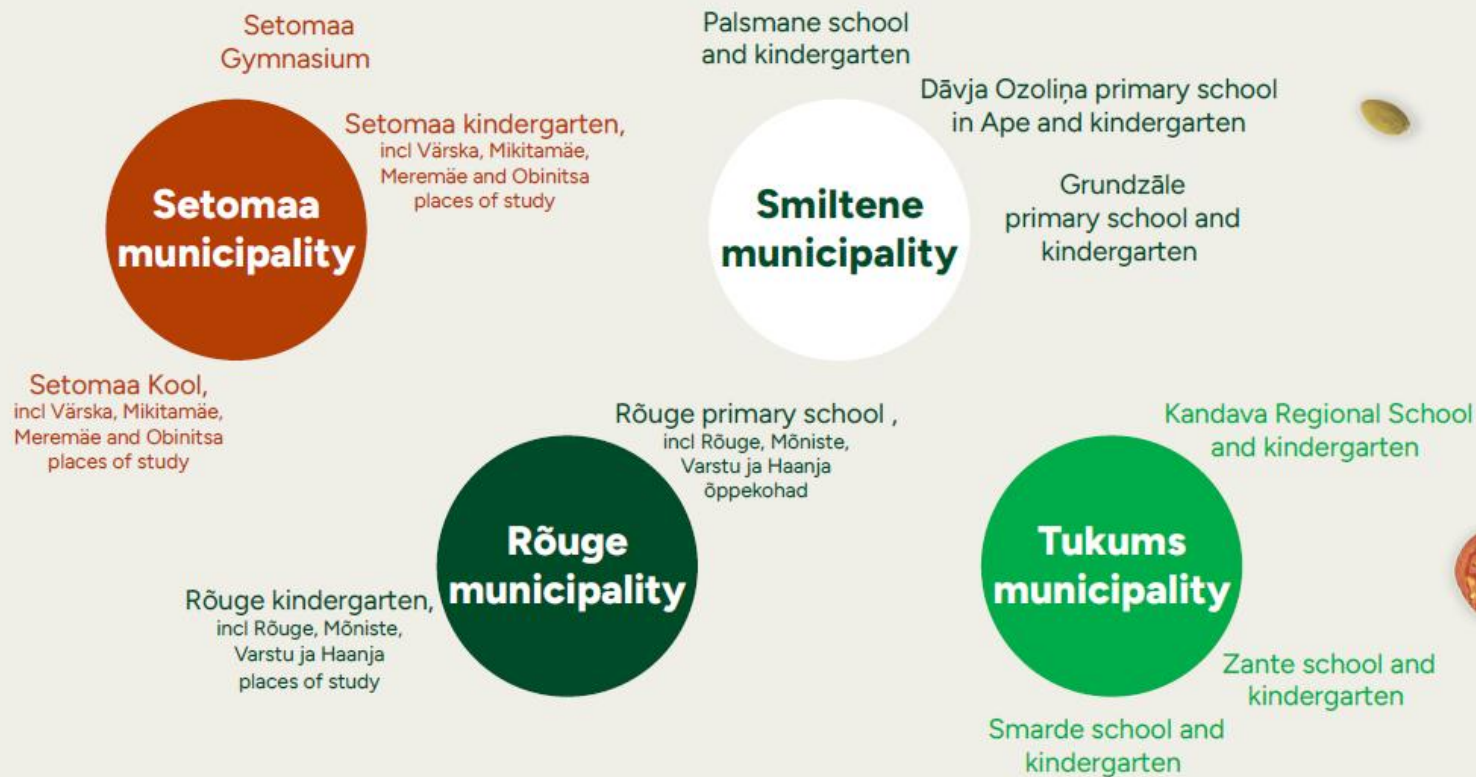
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1. Introduction

Setomaa and **Rõuge** municipalities in Estonia and **Smiltene** and **Tukums** municipalities in Latvia wish to achieve substantial changes in dietary habits of school and kindergarten children and to increase the attractiveness of school dining. For this, it is needed to improve public catering service in schools and kindergartens with specific focus on wider usage of organic products, healthier choices and more active involvement of students.

This strategy is focused on all schools and kindergartens in Setomaa and Rõuge municipality in Estonia and on pilot schools in Smiltene and Tukums municipalities in Latvia. Following pilot schools and kindergartens are participating in the project:



This document will give an overview about

- The relevant development plans
- The current situation in catering in educational institutions in Estonia and Latvia;
- The estimated yearly demand for raw materials in Setomaa, Rõuge, Smiltene and Tukums municipalities;
- The school children's opinion on school meals and the organisation of catering in schools;
- Kindergarten children parents' opinion on kindergarten food and catering organisation in kindergartens;
- The availability of local organic raw materials in Võru County in Estonia and in Smiltene and Tukums regions in Latvia.

How to launch of the
school restaurant concept

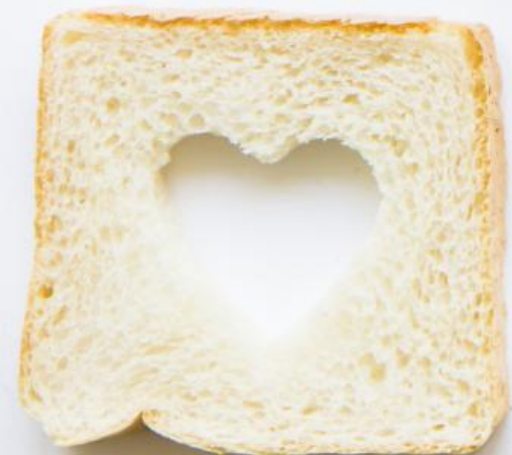
**Action plan for
2024-2028 will
focus on three topics**

How to raise awareness about organic food,
the environmental impact of food
production and healthy diet

How to increase the share of
organic food in catering in
educational institutions

The strategy is designed in the framework of the project **"Green School Dining"**, which is part-financed by the INTERREG Estonia-Latvia Programme 2021-2027. Project partners are NGO Setomaa Union, Rõuge Municipality Government, Smiltene Municipality Government and Tukums Municipality Government.

Strategy was composed in cooperation with the Research Centre of Organic Farming of Estonian University of Life Sciences (RCOF of EULS) and Latvian company SIA OnPlate.



2. Summary of the preparatory phase of the strategy and main outcomes of the studies carried out

2.1 Methodology

The data was collected using different surveys and datasets. Table 1 gives a detailed overview about different actions, target groups and number of respondents.

All surveys for kindergarten and school staff, school children and kindergarten parents included both closed-ended and open-ended questions. The questionnaires were web-based and conducted using Google Forms, except for the kindergarten parents' survey in Setomaa municipality where a paper questionnaire was used. In Latvia, the surveys were conducted online using Google Forms and the results of the questionnaires were received in electronic format from both municipalities. The results were analysed in Excel. In addition to questionnaires, semi-structured group interviews with school children were used in two schools in both Estonian municipalities and three schools in each of the two Latvian municipalities.

In Estonia farms to be included in the more detailed survey were organic potato, vegetable, fruit and berry growers. The list for the survey was made using the national organic farming register and the survey was conducted using structured phone interviews. Information about other groups of producers was available from other datasets. The most detailed survey in Latvia included organic farms producing fruit, vegetables, juices, potatoes, dairy products, eggs, legumes and cereals. The list was compiled using data from the Agricultural Data Centre and primarily selected farms that produced the highest volume of products during the previous year. The survey was carried out using structured telephone interviews.

The quantity of the main food ingredients used in the catering of educational institutions in 2023 was collected in Estonia from the ANC Konsult programme used by schools and kindergartners (except for Mõniste School which uses Excel) and analysed in Excel. The quantities of food groups used in catering in educational institutions in Latvia were obtained by caterers filling the list in an Excel spreadsheet. The collected data was used to estimate consumption for the following years.

In Estonia the data was collected with the help of project partners and analysed by the Research Centre of Organic Farming of EULS (RCOF of EULS). In Latvia, the data was collected and analysed by SIA OnPlate.

Table 1. Surveys conducted in the strategy's preparation.

Action	Target group	Conducted by	Time	Estonia		Latvia	
				Nr of respondents in Rõuge	Nr of respondents in Setomaa	Nr of respondents in Smiltene	Nr of respondents in Tukums
Questionnaire about kindergarten and school catering	Directors and economy managers of schools and kindergartens	RCOF of EULS in Estonia and SIA OnPlate in Latvia	February-April 2024	1 school kitchen, 1 kindergarten kitchen, 3 school/ kindergarten kitchens	1 school kitchen, 1 kindergarten kitchen, 2 school/ kindergarten kitchens	1 school kitchen, 2 schools/ kindergarten kitchens	2 school kitchens, 1 school/ kindergarten kitchens
Questionnaire about school food and catering	School children (all children depending on school grade 1-9 or 1-12)	RCOF of EULS in Estonia and SIA OnPlate in Latvia	February-April 2024	171	125	274	226
Group interviews about school food and catering	School children (depending on school either grade 6-9 or 9-11)	RCOF of EULS in Estonia and SIA OnPlate in Latvia	April-May 2024	19 (10 from Rõuge School, 9 from Varstu School)	17 (9 from Värskä Gymnasium and 8 from Mikitamäe School)	33 (10 from Palsmane School, 16 from Grundzale School, 7 from Davja Ozolina Apes School)	28 (9 from Smarde School, 9 from Zante School, 10 from Kandava Regional School)
Questionnaire about kindergarten food	Parents of kindergarten children	RCOF of EULS, Union of Setomaa, Rõuge municipality in Estonia and SIA OnPlate in Latvia	February-April 2024	34	56	59	41
Phone interviews with organic farmers	Organic farmers in Võru County in Estonia and in a 75 km radius around Tukums and Smiltene in Latvia	Phone interviews: Rõuge municipality and Union of Setomaa; analysis RCOF of EULS in Estonia and and SIA OnPlate in Latvia	April-May 2024	50		22 *	
Use of food in 2023 in schools and kindergartens	Directors and economy managers of schools and kindergartens	RCOF of EULS in Estonia and SIA OnPlate in Latvia	February-April 2024	5	4	3	1

*This figure indicates the number of farms that agreed to complete the questionnaire. Initially, there were around 50 farms in each region, who were contacted

2.2 Links to the relevant development plans related to the public catering and organic farming

ESTONIA

National level:

The Agriculture and Fisheries Strategy 2030 has as one of its objectives the promotion of environmentally friendly practices, including organic production, increasing the exports of organic products and increasing the consumption of organic food. Specific actions include the development and implementation of a pilot programme "Organic Food in Educational Institutions".

The Action Plan for the Promotion of Organic Agriculture 2023-2030 focuses on increasing the consumption of and demand for organic food. One of the targets is that by 2030, 50% of kindergarten and school children will be served organic food. By March 2024, nearly 25% of children were offered at least 20% organic food.



Regional level:

In 2020, five municipalities of Võru County, the Võrumaa Development Centre and the Setomaa Union signed a goodwill agreement with the aim of using at least 20% organic raw materials in the catering of educational institutions by 2024. To date, 30 kindergartens and schools already use at least 20% organic raw materials.

In the Võru County Development Strategy 2035+ in the line of economic actions, the promotion of sustainable agriculture and organic production is highlighted. In sustainable community action, it is important to preserve clean nature and to support local production of healthy organic food.

In the municipality of Rõuge, the development plan of the municipality of Rõuge and the development plans of the Rõuge School and Mõniste School refer to organic production and the use of organic food. One of the objectives of the Development Plan of Rõuge municipality (2019-2035+) is to provide local and organic food lunches in educational institutions, and the 2024-2027 Action Plan states that the use of organic and local raw materials will be supported and prioritised in institutions managed by the municipality. One of the objectives of the Rõuge School Development Plan (2022-2026) is to ensure that school meals continue to be healthy, varied, locally sourced wherever possible and at least 20% organic. One of the objectives of the Mõniste School Development Plan (2022-2027) is to increase the share of organic food in the menu.

In the municipality of Setomaa, the development plan of Setomaa municipality and the development plans of Värskas Gymnasium, Värskas Kindergarten and Meremäe School refer to the use of organic food. One of the goals of the Setomaa Development Plan (2021-2030) is that 70% of the arable land in the municipality is managed organically and organic food is offered in educational institutions. One of the objectives of the Värskas Gymnasium Development Plan (2019-2026) is that by 2026 the school canteen will use organic and local food at least 70%, while Värskas Kindergarten aims to increase the share of local and organic food to 50% by the end of 2025. One of the objectives of the Meremäe School Development Plan (2020-2024) is that school food is healthy, the share of organic food is increased and children's preferences are taken into account.

LATVIA

National level:

Latvia's Common Agricultural Policy Strategic Plan 2023-2027 aims to promote the development of a sustainable and competitive agricultural sector that can provide farmers with a living wage, healthy and sustainable food for society and vibrant rural regions. The needs addressed by the Strategic Plan also include many different aspects specifically targeting organic farming, e.g. the Food Quality Scheme intervention aims to strengthen the position of the farmer in the food chain - beneficiaries are primary producers, processors who are involved in organic or national food quality schemes as members.

The Action Plan for the Development of Organic Agriculture 2023-2030 is one of the measures to address the challenges of a sustainable food system and to ensure the link between human health, society and nature, as well as to contribute to the implementation of the Green Deal goals in Latvia. The Action Plan includes the implementation of a long-term public education and information campaign. This includes awareness-raising activities for children and young people (in schools, field trips to organic farms, educational cartoons); menus in canteens, including school canteens, highlighting organic products from Latvia and their producers. The Action Plan includes the promotion of the school and university eco-programme through the preparation of methodological material and lesson plans on farming methods, explaining the nature and differences of organic farming, including the visibility of organic products. The action plan includes increasing the share of organic certified products in the School Milk and School Fruit Scheme.

The Ministry of Agriculture has developed key action lines to improve school catering, which need to be implemented to improve the way pupils are fed in educational institutions and to ensure that they receive a more nutritious and healthy diet every day, produced by local farmers and food producers. In October 2023, Latvia joined the School Meals Coalition, a collaboration between all stakeholders (education authorities, municipalities, caterers, farmers' organisations, nutrition experts, dieticians, etc.) to find ways to improve school meals. One of the main objectives is to increase the supply of locally sourced food for school meals, respecting seasonal produce choices and reducing food waste and wastage.

Regional level:

The document of the Sustainable Development Strategy of Smiltene Municipality until 2035 mentions that one of the strongest sectors in Smiltene Municipality in terms of economic specialisation is agricultural production. According to the development strategy, economic activity will be diversified by complementing traditional agricultural sectors with other types of activity, including organic farming.

The Smiltene Municipality Development Programme 2022-2028 Action Plan deliverables include the application of green public procurement criteria in municipal food procurement; support for organic farming. Investment Plan mentions the project "Green School Dining".

The priorities of the Vidzeme Planning Region Development Programme 2022-2027 include access to quality locally produced food for consumers through the development of local food chains, increasing the share of locally produced food in public procurement; promotion of local production, including local products, development of short food chains. The Sustainable Development Strategy 2022-2042 of Tukums Municipality identifies priority development areas, which include agriculture, including the development of organic farming.

The deliverables of the Action and Investment Plan of the Tukums Municipality Development Programme 2022-2028 include the implementation of awareness raising activities in educational institutions, including kindergartens, on sport and health issues, thus promoting public health. One of the objectives is to develop the small and local enterprise sector and to promote economic diversification. The planned measures include providing support for the production of locally sourced products, ensuring regular communication with entrepreneurs and cooperation with business organisations.



3. Catering in educational institutions

3.1. Current situation in catering in educational institutions in Estonia

In Estonia, catering in educational institutions is regulated by Regulation No 8 of the Ministry of Social Affairs of 2008 "Health Requirements for Catering in Pre-School Childcare Institutions and Schools", which is currently being updated and a new act will probably come into force in 2025. Estonia's national school meal support is €1 per child per day from 2018, plus support from local municipality, which is voluntary.

In the spring of 2024 under the auspices of the Ministry of Social Affairs a roadmap for school food was prepared, which includes offering of organic food in schools and kindergartens and its support as one of the actions.

Nationally, the reference of using organic food in catering is regulated by the Regulation of the Minister of Rural Affairs No 19 "Specific requirements for the preparation of organic food and food containing organic ingredients in catering institutions and specific requirements for the provision of information and record-keeping on organic ingredients". Caterers who use organic food must be notified to the Food and Agriculture Board and follow the organic rules. The organic catering eco-label can be used by all catering institutions where organic products account for more than 20% of the total raw materials purchased each month. The percentage of organic raw material can be shown in three levels: 20-50%; 50-80%; 80-100%. The use of organic catering eco-label is free of charge. All catering institutions referring to organic food are inspected by the Food and Agriculture Board.

All kindergartens and schools that use more than 20% of organic raw materials in a month are eligible for national support from 2022. The local municipality or other kindergarten or school owner (in the case of private institutions) will receive a support of €4.90 per kindergarten child and €2.20 per school child in a month. In 2023, the total amount of the support paid was €1.32 million, of which Võru County received €123 thousand, in the first quarter of the year for 19 educational institutions and in the fourth quarter already for 25 institutions. Out of this amount Setomaa municipality received more than 12 000 and Rõuge municipality more than 8000 euros.

The procurement of both the raw materials and the catering services is organised on the basis of the Public Procurement Act. EU legislation allows the contracting authority to give preference to organic food if it so wishes. EU legislation does not allow preference to be given to local food.

Table 2. Organisation of catering in Rõuge and Setomaa municipality

	Rõuge municipality	Setomaa municipality
Number of schools / number of students	4 schools / 346 children	3 schools / 226 children
Number of kindergartens / number of children	1 kindergarten + kindergartens related to 3 schools / 157 children	1 kindergarten + kindergartens related to 2 schools / 116 children
Organisation of catering	Own kitchen, no procurement From September 2024 one foodstuff procurement in the municipality	Own kitchen, no procurement
Cost of raw materials per day	In school: 1-1.50 € In kindergarten: 2-3 €	In school: 0.97-1.20 € In kindergarten: 1.85-1.90 €
Who pays: in school; in kindergarten	School lunch is paid by: state 1 € + municipality (incl. organic food support) School afternoon meal: parents Kindergarten cost is paid by: parent + municipality (only organic food support)	School lunch is paid by: state 1 € + municipality (incl. organic food support) School afternoon meal: parents Kindergarten cost is paid by: parent + municipality (only organic food support)
Menu period	2 weeks in Rõuge School and kindergarten and Varstu School, 1 week in Haanja School and 4 weeks in Mõniste School	Mostly 2 weeks, 1 week in Meremäe School
Use of organic food	All but one institution use more than 20% of organic ingredients. Main ingredients used as organic: potato, beetroot, milk, eggs, juices, pasta, cereals, beef meat, carrot	All institutions use more than 20% of organic ingredients. Main ingredients used as organic: flour, milk, potato, eggs, juices, berries, pasta, cereals, milk products, beef meat
Main suppliers	Wholesaler, directly from producer	Wholesaler, directly from producer
Serving of food	In school: the main course is served on the table in bowls, the dessert is portioned on the table. In Rõuge School, the salad components are on a separate table and children can usually prepare the salad themselves. In kindergarten: food is taken to the kindergarten groups, where the younger ones are served by a teacher, and from the age of 5 the children can serve themselves.	In Värskas and Mikitamäe School: children take food from the self-service lunch table, only some desserts are portioned. In Meremäe School (including kindergarten): the main course is served on the table in bowls, the dessert is served in portions on the table. In kindergarten in Mikitamäe: in the canteen the chef puts a portion of the main meal on each child's plate, the dessert is served as a portion, and children are taking their own drink, bread and salad. In Värskas Kindergarten: the food is taken to the kindergarten groups, from where the teacher's assistants distribute the food to the children or the children take the food themselves.

3.2. Current situation in catering in educational institutions in Latvia

In Latvia, catering in educational institutions is regulated by Cabinet of Ministers Regulation No 172 "Regulations on dietary norms for children of educational institutions, clients of social care and social rehabilitation institutions and patients of medical institutions" and Cabinet of Ministers Regulation No 610 "Hygiene requirements for educational institutions implementing general basic education, general secondary education, vocational basic education, vocational education or vocational secondary education programmes".

Both Smiltene and Tukums municipalities carry out procurement based on the guidelines from the Cabinet of Ministers Regulation No 353 "Requirements for Green Public Procurement and the Procedure for their Application". The Regulations stipulate that when purchasing processed cereal products, at least 20% of the total weight must be produced according to organic farming methods while for milk and kefir, at least 50 %. For other foodstuffs, the municipalities shall determine the proportion of organic products. For organic, national food quality scheme or integrated farming, the offer must include information on products that comply with Cabinet of Ministers Regulation No 461 "Requirements for food quality schemes, procedure for their implementation, operation, supervision and control", Cabinet of Ministers Regulation No 485 "Procedure for Monitoring and Control of Organic Farming" and Cabinet of Ministers Regulation No 1056 "Requirements and Control Procedure for Integrated Production, Storage and Labelling of Agricultural Products".

Table 3. Organisation of catering in Smiltene and Tukums municipality

	Smiltene municipality	Tukums municipality
<i>Number of pilot schools / number of students</i>	3 schools / 366 children	3 schools / 521 children
<i>Number of kindergartens / number of children</i>	2 kindergartens / 127 children	1 kindergarten / 100 children
<i>Organisation of catering</i>	Common procurement of raw materials	Common procurement of catering services or procurement of raw materials
<i>Cost of food (including catering service) per day</i>	In schools: 2.23-3.09 € In kindergartens: 4.51-4.95 €	In schools: 1.80-2.63 € In kindergartens: 4.45 €
<i>Who pays: in school; in kindergarten</i>	In school grades 1-4 lunch is paid by the state 1.545 € + municipality In school grades 5-12 lunch is paid by parents 1.50 € + municipality In kindergartens cost is paid by parents + municipality	In school grades 1-4 lunch is paid by the state 1.545 € + municipality In school grades 5-12 lunch is paid by municipality + parents (split the costs equally) In kindergartens cost is paid by municipality 1.17 € + parents
<i>Menu period</i>	1 week in Dāvja Ozoliņa Apes Primary School and Grundzāles Primary School, 2 weeks in Palsmane Primary School	1 week in Kandavas Regional Primary School and Zantes Primary School, 2 weeks in Smārde Primary School
<i>Use of organic food</i>	All schools use organic milk and kefir (at least 50%) and cereal-based products (at least 20 %) Some schools use organic apples and juice	All schools use organic milk and kefir (at least 50%) and cereal-based products (at least 20 %) One school uses organic apples and juice
<i>Main suppliers</i>	Wholesalers	Wholesalers
<i>Serving of food</i>	The main courses are not portioned, desserts and soups portioned	Main courses and soups are not portioned, and desserts portioned



3.3. The yearly demand for raw materials in Estonia and Latvia

In Estonia, based on the use in 2023, the annual use of food ingredients in kindergartens and schools in the municipalities of Rõuge and Setomaa was calculated (Annex 1, Table 4). These figures are estimates, as a change in menus or a change in cooks will also slightly change the figures.

The most commonly used dry food products are pasta, rice, wheat flour, different flakes, buckwheat, and groats. The use of potatoes is high, and the most commonly used vegetables are cabbage, carrots, beetroot and onions, but also tomatoes and cucumbers. There is a high annual use for milk, and among other dairy products, the most used are kefir, sour cream, cream (35%), and curd creams. From local fruits and berries that grow in Estonia, the most commonly used fruit was apple and the most commonly used berry was strawberry. Of the meat and meat products, pork and chicken are mostly used, along with large amounts of processed meat products and minced meat. Very little beef is used.

Of the local organic produce, organic potatoes and milk are the most widely used. Local organic flakes, flours, eggs, beetroot, carrots, juices and some berries are also used. Some institutions also use Estonian organic beef.

There is potential to increase the use of organic products in several food categories. Using more local organic milk and dairy products is a good option, as there is an organic dairy in Rõuge municipality. Increasing the use of local organic cereal products also has the potential, as there is a mill in Võru County. Increasing the use of Estonian organic beef (including minced meat) by replacing some pork/chicken is also an option to increase the use of organic products, as half of the institutions did not use it at all. It is possible to increase the use of local organic vegetables, but this depends on the producers' willingness to increase their production areas and the variety of products grown. The same applies to fruit and berries and processed products made from them.

In Latvia, based on the use of raw materials in pilot schools and kindergartens in 2023, the estimated demand for these materials was calculated, assuming a similar number of children (Annex 1, Table 5). In both municipalities, the trend in raw material demand is mostly similar.

According to the data, the most commonly used grains and grain products, excluding bread, are wheat flour, pasta, rice, and buckwheat. As specified by Green Public Procurement, at least 20% of cereal products must already be produced using organic farming methods, and there is potential to increase this proportion. Additionally, there is a high demand for potatoes, which can also be grown using organic methods.

There is high yearly demand for milk, due to the rules of Cabinet of Ministers No. 172, which regulate the minimum amount of dairy products included in school lunch menus. There is potential to increase the proportion of organic milk in school meals.

In the fruits and berries category, the demand for apples is the highest, making it one of the possible food categories for increased organic production. Similarly, there is high demand for locally grown vegetables such as cabbage, carrots, beetroot, cucumber, tomato, and onion, which could also be produced using organic farming methods



3.4. School children's opinion on school meals and organisation of catering in Setomaa and Rõuge pilot schools

The analysis of students' opinions is based on web-based questionnaires that were conducted in all schools in both municipalities, with a total of 296 respondents. In addition, semi-structured group interviews were conducted in Rõuge, Varstu and Mikitamäe schools and Värskas Gymnasium, which provided more detailed information on students' wishes and expectations.

Children's satisfaction with the food and the organisation of catering in the Rõuge and Setomaa municipality schools was rather good. On a scale of 1 to 5, the average satisfaction with the food was 3.6 in Rõuge municipality schools and 3.7 in Setomaa municipality schools. Satisfaction with the organisation of the catering was on average 3.9 and 3.8 respectively. Children in grade 3 and above were asked to rate different aspects of food and canteen separately. These included the taste, smell and healthiness of the food, the appearance of the food and the appropriateness of the meal time. In relation to the canteen, the following aspects were rated: general satisfaction with the canteen, comfort of chairs and tables, cleanliness of the dining room and dishes, smell of the dining room and how inviting the dining room is to eat in.

In terms of food, the highest average rating in both municipalities was given to the healthiness of the food and the lowest to the appearance of the food. Most of the students thought that the meal time was appropriate.

Regarding the canteen, the cleanliness of the canteen and the dishes were rated the highest in both municipalities. The lowest average rating was slightly different, in Rõuge municipality the lowest average rating was clearly given to the comfort of chairs and tables, in Setomaa municipality this aspect was rated slightly higher than in

Rõuge municipality, and two other aspects were rated similarly: how inviting the dining room is to eat in and the smell of the room. In both municipalities, children in almost all schools would like to have more comfortable, softer chairs and more space in the dining room. There was quite a lot of variation in opinions of the children between the schools and in order to make changes it is important to look at individual school data rather than averages.

Students were also asked which dishes they like the best and which dishes they don't like. The dishes that the students liked were quite different in the different schools and probably partly depend on the skills of the cooks to make certain dishes very tasty. The dishes that students didn't like were quite similar in all schools. Everywhere, fish soup was the most disliked dish, and in some schools more than half of the children mentioned it as the dish they didn't like at all or wouldn't eat. In some schools, most of the other soups were also disliked. Instead of fish soup, the children prefer other fish dishes (e.g. fried fish) and it is rather questionable whether fish soup should be offered at all.

The average results for all seven schools, based on the most frequently mentioned dishes in each school, are shown in a word cloud.

Children like



Children don't like



3.4. School children's opinion on school meals and organisation of catering in Setomaa and Rõuge pilot schools

When asked which types of food could be offered more, the answers were partly similar between the schools, but there were also clear differences. All schools (except Meremäe School) asked for more pasta dishes, while children in five schools specifically mentioned lasagne among the pasta dishes. There was not such a clear overlap between the schools in the requests for other foods and in some cases the children's wishes differed, e.g. Rõuge School children asked for less potatoes, Haanja School children for more potatoes in different forms and Varstu School, Värskas Gymnasium and Mikitamäe School children for French fries. In several schools children asked for more main courses (especially fried dishes), different side dishes (including a choice between two side dishes). Children from Rõuge School would like to have more desserts, e.g. yoghurt, fruit, also pureed soups, and would be willing to eat vegetarian meals from time to time, but expect more interesting recipes. Children at Varstu School and Värskas Gymnasium expect juice to be served with their meals.

The most important aspects of food for the children are taste, appearance (visual attractiveness), and smell. Children also expect food to be varied and with high nutritional value. There were some differences in answers between the schools.

In all schools where group interviews were conducted, the children were interested in the possibility of giving feedback, e.g. at Mikitamäe School it was thought that this could be done every month as a simple online survey: favourite food and least favourite food of the month, at Rõuge School it was thought that it would be sufficient to have a discussion about food once a year, which should then be taken into account in the following school year. Children are also interested in offering their favourite foods on the school menu, e.g. each class could have the opportunity to offer three dishes at the beginning of the school year. Several schools mentioned that there should be more cooking in home economics classes, and Rõuge School lacks a proper home economics classroom with a modern kitchen area where cooking classes could be held.

The canteens are expected to be colourful, cheerful, with pictures, and some students would like to see plants/flowers. Students from several schools would like to have a say in the design of the canteen. It is considered very important that chairs and tables are

comfortable and there is enough space in the dining room. The need for not broken and clean crockery was also mentioned a lot, as well as the cleanliness of the room. Good daylight in the room was also mentioned. In those schools where self-service is available, there is satisfaction with it and a desire to continue with it. Music during meals is not recommended.

Opinions on whether students could help in the canteen were mixed. Some would be interested, others not. Some would not want food prepared by other students, citing concerns about food hygiene. Overall, it could be tried in some schools, but it should not be made compulsory for students.

During the group interviews, children were also asked to suggest ways in which they would be interested in learning more about organic farming. Students from all schools are interested in visiting organic farms, with one school mentioning that there could be opportunities for hands-on activities rather than just looking at the farm, and that there should be animals on the farms visited. Watching videos about organic farming, e.g. as part of a biology lesson, was also mentioned. There is a lack of interest in reading written material.

The children's knowledge of the fact that they are offered organic food varies greatly between the schools. According to the questionnaires, at Mõniste School all children and at Mikitamäe School 90% knew that they were offered organic food, while at Meremäe School only 44% of the children knew this. In Värskas Gymnasium and Rõuge and Varstu schools, about 70% of the children knew that organic food was offered.





Serving of smoothies and healthy snacks.



Display of the vegetables used in the school meal that day in the school canteen.

3.5. School children's opinion on school meals and organisation of catering in Smiltene and Tukums pilot schools

In total, 500 school children filled out the web-based questionnaire in Tukums and Smiltene municipalities with similar representation. In addition, semi-structured focus group interviews were conducted in all project schools with 7-16 children from 7th to 9th grade.

The level of children's satisfaction with catering in both Tukums and Smiltene municipal educational institutions is generally good. On a scale of 1 to 5, the average satisfaction with the food was 3.9 in Tukums municipality schools and 4.0 in Smiltene municipality schools. Satisfaction with the organisation of the catering was on average 3.7 and 3.9 respectively. Children mostly answered all questions related to catering by selecting answer options from 3 to 5. However, a large number of children in both the questionnaires and focus group interviews mentioned several important aspects that they would like to improve.

Regarding canteens, in both municipalities, cleanliness was the most appreciated, but in most schools, childrens added that canteens could be more ventilated. The lowest rating was given to the comfort of the tables and chairs - children would appreciate it if the chairs were more comfortable and softer. Children also mentioned that they would like more space in the dining area. In almost all schools, children said that lunch breaks could be a little longer, as they are often eaten in a hurry. In both municipalities, children said that it was too loud in the dining hall.

Students in Smiltene said they would like sharper knives and possibly new utensils, as some of the current utensils have cracked edges, while students in Tukums said that the utensils often smell bad.

Children were asked to rate different statements about food in schools. The highest rating was given to the healthiness of the food, followed by the fact that lunch is served at a convenient time. However, the lowest-rated statement was that the food served is appetising.

In both municipalities, children like the fact that they can determine their own portion size, as meals are not portioned. All stressed that they would like this to stay the same. On the variation of dishes, children mentioned the lack of variety in recipes. They would appreciate it if there were several options to choose from for lunch, including a variety of salads. Children feel that it would be valuable if there were sauces and condiments to choose from. Concerning drinks, it was stressed that it would be good to have a drink with lunch every day.

Children were also asked which dishes they liked best and least. Overall, children like school lunches, which is very pleasing. Children' opinions differed slightly on their favourite dishes, as schools have different cooks and each has their own subjective opinion on what is tasty and what is not so tasty. The dishes that students did not like were quite similar in all schools. Fish dishes were the most disliked food everywhere and soups were also not particularly liked by the children. In some schools, children also mentioned that they were often served food for lunch that they did not eat at home, so they did not eat it at school. It was also noted that sometimes unusual food combinations are served at lunch which do not encourage appetite, especially the appearance of the food.

The average results for all schools, based on the most frequently mentioned dishes in each school, are shown in a word cloud.

There are several schools where few school staff and teachers eat lunch. However, teachers and school staff are the ones who should set an example to children that school meals should be eaten and that they are healthy and tasty. In some schools, children's opinions are listened to regarding what tastes good and what does not taste good, but in general children would like to have their opinions listened more.

Children like



Children don't like



In cooperation with students and parents the walls of the school canteen are designed in a fun way.



3.6. Kindergarten children parents' opinion on kindergartens food and catering organisation in Setomaa and Rõuge municipalities

A total number of 90 parents of kindergarten children answered the questionnaire. Parents of kindergarten children are mostly satisfied with the food offered and the organisation of catering in kindergartens. In both municipalities and for both aspects, the average rating of the municipal kindergartens' food and catering organisation was higher than 4 (on a scale of 1-5). In Rõuge municipality kindergartens, satisfaction with the food was 4.1 and satisfaction with the catering organisation was 4.3. In Setomaa kindergartens, the average rating of the food was 4.4 and the satisfaction with the organisation of the catering was as high as 4.8.

In some kindergartens, parents gave almost no comments on the question "What changes would you like to see in kindergarten catering?" or wrote that they are satisfied with the food offered and no changes are needed. This was the case in Varstu, Mõniste and Haanja school kindergartens in Rõuge municipality and in Värskä and Mikitamäe school kindergartens in Setomaa. The parents of Meremäe school kindergarten and Rõuge kindergarten had more recommendations and wishes. Parents' comments included: more varied food (including texture, colour, no repetition of the same main ingredient on the following days, fewer days with porridge for breakfast); more local and organic food; more fruit and vegetables; use of more interesting recipes; serving food components separately; cooperation with parents in setting the menu.

3.7. Kindergarten children parents' opinion on kindergartens food and catering organisation in Smiltene and Tukums municipalities

A total number of 100 parents of kindergarten children filled the questionnaire. They are mostly satisfied with their children's meals - In Tukums municipality, on average, food satisfaction was 3.9 and satisfaction with the catering organisation was 4.3. In Smiltene municipality, the average satisfaction with food was 4.0 and with catering 4.4. Many parents also mentioned important aspects they would like to see improved.

Parents of kindergarten children in Tukums municipality emphasise that it is necessary to increase the amount of vegetables, fruit and berries, respecting seasonality, offering these products to children, giving them the opportunity to choose them themselves, but serving them every day. Parents also point out that fruit and vegetables should be served cut up, with each vegetable served separately and not mixed together or with sauces. In addition, several parents of learners point out that children should be offered less white bread, as well as a variety of sweets and sweetened drinks. Some parents stressed that they would like to see a more nutritious lunch served to their children. Some parents expressed the wish to always receive the menu on time.

Parents of kindergarten children in Smiltene municipality say that it would be good to increase the amount of fruit, vegetables and berries, to offer them more often, respecting variety and seasonality, and to choose and support more local products. Another group of parents believes that the content of lunches should be improved, as they are not satisfied with uniform products, products that do not provide adequate satiety and variety. Some parents recommended that the "opt-in/opt-out system" should be examined and improved. Parents would like to address the municipality and ask for more municipal support in terms of funding for the meals. Parents asked for a monitoring system to keep track of what children eat and what they do not eat. Parents would like a drink to be offered at every meal.



3.8. Availability of local organic raw materials

Organic farming in Võru County developed quite rapidly until 2019, after which the area remained more or less the same over the three years, and in 2023 there was a slight decrease in both the area and the number of organic farms. In 2023, there were 20 843 ha of organic land and 250 farmers. With these figures, Võru County has one of the largest numbers of organic farms among Estonian counties and ranks fourth among counties in terms of area. The municipalities of Rõuge and Setomaa had 80 and 45 organic farms respectively. In addition to organic farmers there are 21 organic food processors in Võru County.

The availability of local (Võru County) organic food depends on the category of food. In some categories (e.g. bread, meat, oil) there is no local offer, in some there is a supply of certain products (e.g. milk and kefir in dairy products), in some there is a seasonal supply (e.g. vegetables, potatoes, berries), in some there is limited amount available (e.g. eggs, fruits) and in some there is a year-round supply (e.g. cereal products, some juices, honey).

Several organic farms and processors in the region already sell organic products to educational institutions, including at least one cereal processor (wide range of flours, flakes, semolina, groats), one milk processor (mainly milk and kefir), one egg producer, some juice and jam producers, 12 growers of potatoes/horticultural products. There is also one regional wholesaler who has organic certification and is selling to educational institutions.

50 interviews were conducted with organic potato and horticultural producers during the survey, four of them were producing only for their own consumption with no intention of increasing production. This target group was selected for the interviews because of the high interest of kindergartens/schools to buy these product groups as local and organic. Five of the organic producers interviewed said that educational institutions were already their main market channel. Out of 46 respondents, 40 said they were potentially interested (answers yes/maybe) in selling their products to kindergartens/schools. Half of them are interested in using a local wholesaler as an intermediary to sell to kindergartens and schools, and almost half are also interested in selling to Latvia if the price and other conditions are acceptable. Many farms interested in selling their products to educational institutions stressed the need to know in advance (winter, early spring) the desired products and quantities required in order to plan production. Berry and fruit growers would have an interest in knowing even earlier, in order to decide on possible increases in area. Producers would like to receive the information not only on the quantities of produce, but also on possible prices, so that they can consider whether it is financially viable to grow for educational institutions. During the interviews producers were also asked about their plans for the future and the

result is rather positive: 2 potato, 3 vegetable, 5 fruit and 9 berry producers plan to increase their production areas and only a few plan to reduce the areas or stop farming altogether. Some growers plan to increase the variety of crops grown.

At least two-thirds of the farms selling potatoes/horticultural products indicated that the following problems hamper their farming activities: lack of marketing opportunities, lack of labour, low investment capacity, lack of storage facilities. More than half also mentioned lack of appropriate technical equipment, low profitability and insufficient agricultural land. More than half of the producers indicated that better marketing opportunities for organic products, more support for organic farming and possibilities for investment support would be motivating factors for increasing the area and production volume.

Producers were also asked about their storage conditions and these vary widely - there are storage facilities in good condition, storage facilities in need of renovation, other companies storage facilities used, and some producers have no storage facilities at all. A number of producers mentioned that, although storage facilities are available for current volumes, they will be limited as volumes increase. Half of the producers want/prefer to sell their production immediately after harvest, for many this is the only option due to storage conditions. Some producers only have storage facilities for a certain type of production, other types of production have to be sold immediately.

As there is a plan to establish a South-Estonian horticultural products processing centre, the interviewed farmers were asked about their interest in using the facilities of this centre. More than half (53%) of the growers were interested in selling their produce for processing at this facility and several were interested in using the processing services. Another quarter of respondents were unsure but might also be interested. Several farmers were also interested in cooperating on other issues, e.g. renting machinery, joint processing and marketing, exchange of knowledge and experience.

A map of the organic producers (Annex 2, figure 1) in Võru County who can potentially sell their products to kindergartens and schools is available [here](#).

3.8.2. Situation of organic farming in Latvia. Farmers interest to sell to educational institutions

Organic farming in Latvia is listed in the Food and Veterinary Service Register. The number of organic primary producers has remained relatively stable in recent years. According to the register, in 2021 there were 4121, on 1 January 2023 - 4453 organic farms. Data collected by the Food and Veterinary Service show that there has been a decrease in the number of organic farms from 2023 to 2024 - in 2024 there are 3886 organic farms in Latvia. The decrease is mainly due to generational change, business closures, the falling market (price) for organic products, and reluctance to take on new 5-year commitments.

The survey covered farms located within a 75 km radius around the administrative centres of Smiltene and Tukums municipalities - Smiltene and Tukums. The list of organic farms was compiled using data from the Agricultural Data Centre in order to locate the farms within the desired range. There are several hundred farms in a 75 km radius around Smiltene and Tukums that could be potential cooperation partners to provide organic products to educational institutions.

From the several hundred farms within the desired range, a list of those farms that produced the highest volume in the previous year was drawn up. Of these, the majority produced fruit and vegetables in both regions. When the list was created, there were initially around 50 organic farms in each region. During the survey, telephone calls were made with farm representatives. A large proportion of farmers said they were not interested in cooperating with educational institutions. In addition, some mentioned that: they only produce for themselves; their farm is too small and not developed to produce large quantities; it is possible that the farm will not continue with organic production in the near future. Based on the farm representatives' responses, a final target group was created for telephone interviews - a list of potential farms that showed a strong interest in cooperating and providing their own organic products. During the conversation, the questionnaire was successfully administered to 22 farms in both regions.

Some of the findings from telephone interviews with organic farmers:

- Farms in both Tukums and Smiltene would be ready to sell organic products to educational institutions in the next few years, and some farms are already doing so, for example, AS "Smiltenes piens".
- Most of the farms in the Smiltene region do not have any current problems that hinder their farming, but two of the farms noted that they have a lack of technical equipment, one farm faces low profitability and one a lack of storage space for products.
- In Tukums, on the other hand, the most common problems faced by farms were lack of technical equipment, lack of labour/personnel, lack of sales/distribution opportunities and lack of arable land suitable for organic production.
- Almost all farms in both Smiltene and Tukums mentioned that a motivating factor to increase the area and production would be better sales opportunities for organic products.
- Farms mentioned the value of their products and would like to be paid a fair price for their products, as organic products are more expensive than imported products.
- During the telephone interviews, farmers mentioned that it is important for them to know how much production will be needed for the school so that they know how much they need to harvest.

A map of the organic producers within a 75 km radius around Smiltene (Annex 2, figure 2) who can potentially sell their products to kindergartens and schools is [here](#).

A map of the organic producers within a 75 km radius around Tukums (Annex 2, figure 3) who can potentially sell their products to kindergartens and schools is [here](#).

3.9. The concept of a green school restaurant

Below are listed 10 easy-to-implement and effective ideas guiding the school-children towards healthier food choices in dining room

1. Fresh salad and a selection of fruits and vegetables are placed to the food counter first and/or are in the most visible position
2. Fruits and vegetables are served separately, so that the school children can assemble the salad themselves and choose the portion that suits them
3. Fruit and vegetables are served sliced, grated or chopped so that they can be eaten between the fingers or as a salad
4. Water is easily available
5. A sample portion following the plate rule is visibly displayed
6. Variety of vegetables, i.e use different vegetables in cooking and in offering salads
7. The menu includes as many seasonal products as possible
8. Chefs are active participants in the development of school catering and constantly improve their skills and knowledge
9. School children participate in the development of school meals (for example in recipe competitions etc.)
10. Colours and images associated with fruits, vegetables and berries are used in design of the dining room

Source: Piret Arusaar, Britt Vahter, "Green school canteen nudging package".



Different ways to serve vegetables and salads in the school cafeteria



4. Vision and strategic objectives

4.1. Objectives related to the share of organic products in school-meals

Share of organic food in catering in educational institutions		
	Rõuge and Setomaa	Tukums and Smiltene
Long-term: 2025-2028	40% of organic food in 2028	20% of organic food in 2028

4.2. Objectives related to the implementation of school-restaurant concept

Launching the school restaurant concept	
	Rõuge, Setomaa, Smiltene and Tukums
Long-term: 2025-2028	Launch of the school restaurant concept. 85% of respondents are satisfied or very satisfied with the food offered and with the school/kindergarten restaurant.

4.3. Objectives related to the improvement of the awareness of children, teachers etc. about environmental aspects related to the organic food and about healthy nutrition

Raising awareness about organic food, the environmental impact of food production and healthy diet	
	Rõuge, Setomaa, Smiltene and Tukums
Long-term: 2025-2028	80% of the action plan's educational activities are implemented



5. Action plan for 2024-2028

Objective 1: Share of organic food in catering in educational establishments	Rõuge, Setomaa		Smiltene, Tukums	
	Short-term	Long-term	Short-term	Long-term
Carrying out a more detailed analysis in each of the kitchens to see where there is room for a greater proportion of organic products	x		x	
Finding suppliers for product groups where the use of organic ingredients is at a low level		x		x
Informing vegetable/fruit/potato growers of next season's volume requirements by November		x		x
Organising regular market/contact days/meetings/visits twice a year (one event can be online) between local producers and schools and kindergartens in order to involve the farmers in the organisation of the process and to look for common solutions in cooperation and listening to their views.		x	x	
Organising study trips for organic farmers in order to initiate the production of the product groups needed in educational institutions		x	x	
Simplifying tendering procedures to allow smaller organic producers to participate in tenders --> procurement guide for organic food	x			x
Organising regular trainings for municipal procurement officers (on organic products, their importance, relevance etc.)		x		x
Organising regular trainings for chefs (also after the end of the project) on the use of organic raw materials --> training plan for every year		x	x	
Rewarding chefs for achieving organic targets		x		x
Organising a contact event before the launch of the Obinitsa Centre in 2025		x		
Introducing cooperation opportunities with A.M.F Hulgi for local organic producers (an already operational ordering and delivery solution for sales to schools and kindergartens)	x			
Introducing a control system (data recording) in Latvia to facilitate monitoring of the use of organic products				x
Indicating each time an organic product is included in the menu of the educational establishment				x
Making recommendations to the Ministry of Agriculture/Ministry of Health in 2028 on the inclusion of organic products in catering in educational institutions, based on our experience				x

Objective 2: Launching the school restaurant concept	Rõuge, Setomaa		Smiltene, Tukums	
	Short-term	Long-term	Short-term	Long-term
Asking for feedback at least once a year: pupils, school staff, parents, trustees (in school and kindergarten)	x		x	
Analysing the lunch break arraignment and length, providing longer lunch breaks where needed (min 20 min for eating + walking)		x		x
Encouraging teachers and school staff to eat at school rather than using a lunchbox		x		x
Designing canteens more child-friendly by using simple solutions (banners, photos, pictures, posters designed by children etc.)	x		x	
Working with children to make spaces more inviting for eating/enjoying food - when redesigning or renovating		x		x
Improving the comfort of chairs and tables: where children's satisfaction is very low, ways could be found to upgrade canteen furniture		x		x
Improving the acoustics in the canteen	x			x
Improving the ventilation systems of the canteen where the smell is the problem		x		x
Using more plants in the canteen, shared responsibility with children in taking care of plants	x			
Increasing the consumption of salads, salad components separately, so that children can make their own salad. Olive oil based sauces are offered	x		x	
Encouraging children to design their meals using the healthy plate principle (posters or other visual materials), use sample portions according to age in canteens	x		x	
Ensuring that water is provided with all meals, recommended to use instead of sugary drinks	x		x	
Setting up a display of different spices and herbs		x		x
Offering two alternatives as side dish in school lunch, e.g. potatoes/buckwheat etc. to children to choose from		x		x
Using more berries and fruits in desserts		x		x
Monitoring and analysing which dishes children eat least and changing these recipes	x			x
Using different main ingredients in the weeks' menu to get more variety		x		x
Using recipes suggested by pupils in the school restaurant	x			x
Organising thematic weeks to introduce different foods/cultures/regions (2x year)	x		x	
Providing family bonding activities, e.g. once a year		x		x
Analysing the menus about the use different food ingredients, designing a better system of menu planning to achieve better variety		x		
Involving students in menu planning (incl. informing about the menu requirements and why etc.)	x			
Training of chefs on various topics (vegetarian dishes, menu planning, meat free dishes, use of herbs, fish dishes)	x		x	

Objective 2: Launching the school restaurant concept	Rõuge, Setomaa		Smiltene, Tukums	
	Short-term	Long-term	Short-term	Long-term
Organising exchanges between cooks (if they are interested)		x		x
Creating a motivation plan for chefs and other staff involved in catering		x		
Better planning (e.g. choosing more interesting and tasty recipes) of the offering of plant-based food, as Plant Tuesday is not working in its current form	x			
Thinking through the concept of a fish day - what children would actually eat and what not	x			
Organising an event where meals are served outdoors, with children helping to cook together with the kitchen staff (in spring)		x		
Involving children in the school kitchen work (where there is interest and possibility)		x		
Using organic food in relevant classes/subjects in schools and kindergartens. Making these classes more practical and creative. Encouraging children to do research about organic food, healthy eating, reducing waste etc.		x		x
Encouraging pupils to pick up their own plates and put away their dishes after the meal to make the cooks' job easier				x

Objective 3: Raising awareness about organic food, the environmental impact of food production and healthy diet

	Rõuge, Setomaa		Smiltene, Tukums	
	Short-term	Long-term	Short-term	Long-term
Promotion of the organic food and catering eco-label: on the website, on the dining hall/school wall, etc.	x			x
Including the use of organic food in the development plans of institutions and municipalities		x		x
Explaining the environmental aspect of using local and organic food (e.g. relevant school lessons, materials for teachers)		x		x
Organising field trips to organic producers in the region (planned in the project): for children	x		x	
Organising field trips to organic producers in the region: for school/kindergarten staff	x		x	
Analysing curricula where is possible to integrate topics related to organic food and healthy eating		x		x
Compiling the list of available teaching materials about organic farming and food (including videos) for teachers	x			
(Re)introducing of different local fruits and vegetables, integrating with lessons	x			x
Making videos about organic farming and food for educational use (can be a part of school work etc.)		x	x	
Reducing food waste and food wastage in educational institutions, analysing what practical steps can be taken		x		x
Offering the surplus of the lunch at a reduced price to those who are interested as a later meal/lunch meal/for their own staff		x		
Growing your own vegetables/herbs in the classroom		x		x
Involving children in growing food on school and kindergarten grounds (where it is not happening already)		x		x
Organising "School and kindergarten canteen open days". Parents can taste the food offered in schools and kindergartens, 2x a year	x			
Organising various activities, competitions and campaigns for children. Ideas included in the list:	x			x
<i>Displaying informative pictures/collages/infographics, order sticker pictures (e.g. on the walls infographics about potato etc., how it grows, what it is made of, where it is used, etc.) and change infographics cyclically</i>				
<i>Organising organic weeks (in-class activities, competition in spring related to fruit and vegetable juices, autumn parties etc.)</i>				
<i>Inviting a local farmer to the school to tell more about organic products, their cultivation</i>				
<i>Inviting a well-known chef to the school</i>				
<i>Organising cooking workshops with organic products</i>				
<i>Organising surprises for the chefs from the children and teachers</i>				
<i>Creating a kahoot/mentimeter to students and valuable prizes for the best class with the best knowledge of organic products</i>				
<i>Involving the student council as much as possible in the organisation of events</i>				
<i>Organising organic family days in the region, where only organic entrepreneurs meet, e.g. festival in Smiltene - organic corner/tent, tastings</i>				
<i>Appointing an activist in the student council who cultivates organic products in the school (e.g. Bio Ambassador), who makes sure that people are aware of and around organic</i>				
<i>Encouraging (by classroom teachers) children and parents to get involved in eating vegetables and fruit, e.g. activity: "Don't be stingy - share!" Parents voluntarily bring their own home-grown produce (apples, juices, vegetables) to the educational establishment</i>				
<i>Creating an audiobook, a podcast on healthy eating, where students can interview personalities they find interesting on health topics</i>				

ANNEX 1. Estimated annual use of food ingredients

Table 4. Estimated annual use of food ingredients (based on use in 2023) in kindergartens and schools in municipalities of Rõuge and Setomaa

Food group	Rõuge municipality kg/l	Setomaa municipality kg/l	Food group	Rõuge municipality kg/l	Setomaa municipality kg/l	Food group	Rõuge municipality kg/l	Setomaa municipality kg/l
Bakery products and dry food			Fruits			Meat		
Bread	1 870	1 600	Apple	960	760	Leek	90	40
Brown bread	760	360	Plum	120	100	Chinese cabbage	180	140
White bread	480	170	Pear	740	440	Sauerkraut	200	110
Flour			Cherries	40	0	Frozen vegetable/vegetable mix	180	130
Wheat flour	580	310	Other fruits (not possible to grown in EE)	2 600	1 150	Fermented and marinated cucumber	880	430
Other flours	50	50	Berries			Canned peas	100	30
Flakes			Strawberry (incl. frozen)	110	60	Other products		
Oatmeal flakes (incl. whole grain)	70	70	Raspberry	70	30	Eggs (pcs)	13 900	4 200
Other flakes	280	300	Blueberry	0	30	Honey	2	1
Legumes and pulses			Rhubarb	5	10	Oils, margarine	540	350
Peas (dry)	110	60	Other berries	5	5	Sugar	1 000	530
Beans (dry)	10	30	Frozen berry mix	230	100	Other products		
Lentils	80	5	Juices/juice concentrates			Minced meat – pork + mixed (pork+beef)	1 100	400
Other dry food categories			Black currant juice	290	90	Minced meat – beef	0	250
Semolina (unspecified)	250	80	Apple juice	5	50	Soup bones	170	30
Groats + millet (barley, wheat)	260	60	Other juices	15	190	Processed meat products	1 570	1 100
Buckwheat (groats)	180	140	Juice concentrates	360	220	Other products		
Kama	15	20	Jams and purees	770	400	Minced meat – pork + mixed (pork+beef)	1 100	400
Pasta (incl. whole grain)	770	590	Potatoes	12 000	6 100	Minced meat – beef	0	250
Rice	500	420	Vegetables			Soup bones	170	30
Milk products			Cabbage	1 050	750	Processed meat products	1 570	1 100
Milk	15 200	6 700	Turnip	380	100	Other products		
Kefir	1 200	630	Carrot	1 700	1 000	Eggs (pcs)	13 900	4 200
Yoghurt	400	250	Beetroot	400	320	Honey	2	1
Yoghurt (flavoured, incl. drink, yoghurt)	270	500	Beetroot (boiled)	90	0	Oils, margarine	540	350
Curd	250	70	Pumpkin	140	40	Sugar	1 000	530
Curd cream (incl. flavoured)	550	400	Zucchini	70	5	Other products		
Cottage cheese	140	170	Broccoli (incl. frozen)	80	5	Minced meat – pork + mixed (pork+beef)	1 100	400
Sour cream	780	570	Cauliflower	160	50	Minced meat – beef	0	250
Cream (35%)	1 000	310	Kohlrabi	150	90	Soup bones	170	30
Kitchen cream	70	40	Tomato	600	300	Processed meat products	1 570	1 100
Cheese	130	100	Cucumber	710	280	Other products		
Cream cheese	110	20	Paprika	290	190	Eggs (pcs)	13 900	4 200
Melted cheese (incl. flavoured)	110	30	Onion	1 000	470	Honey	2	1
Butter	240	200	Garlic	20	10	Oils, margarine	540	350
			Leek	90	40	Sugar	1 000	530

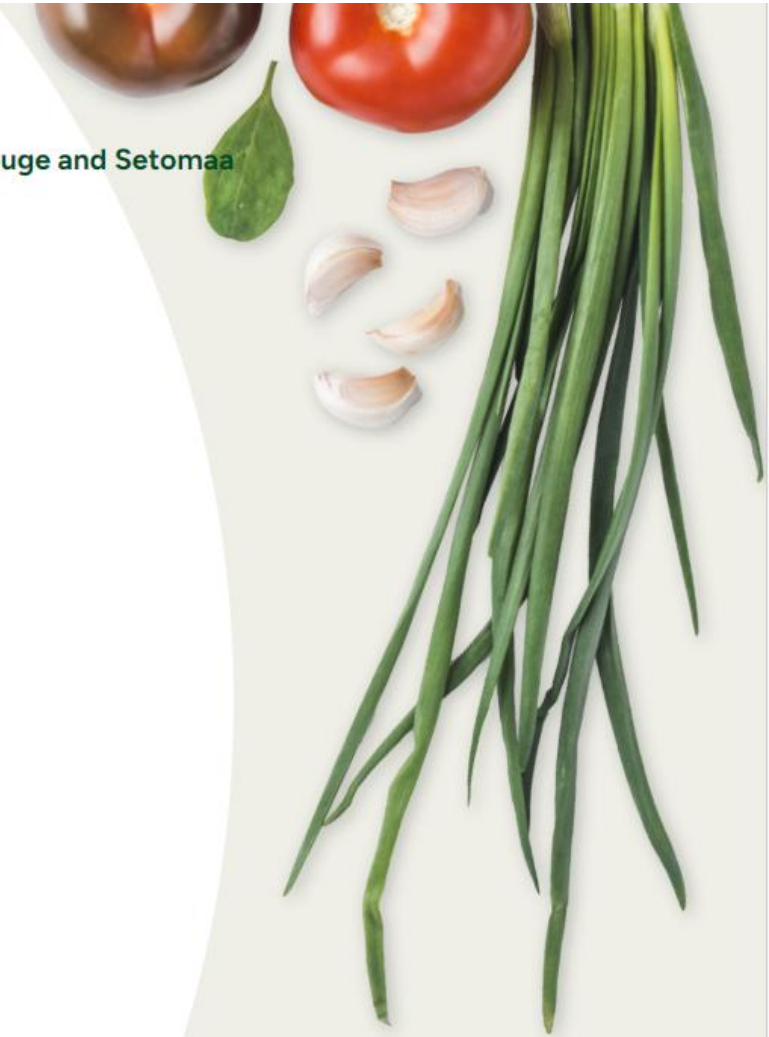


Table 5. Estimated annual use of food ingredients (based on use in 2023) in pilot schools and kindergartens in municipalities of Tukums and Smiltene

Food group	Tukums municipality	Smiltene municipality
	kg/l	kg/l
Bread, grains and grain products		
White bread	1193	1051
Brown bread	1314	948
Other bread	0	173
Wheat flour (incl. whole grain)	554	736
Potato starch	144	51
Oatmeal flakes (incl. whole grain)	355	159
Multigrain cereal flakes	176	41
Cornflakes	0	187
Rice flakes	129	78
Wheat semolina	96	110
Barley groats/millet	4	43
Buckwheat (groats)	640	362
Pasta (incl. whole grain)	945	1211
Rice	767	627
Legumes and pulses		
Peas	85	174
Beans	85	125
Milk and dairy		
Milk	6551	8250
Kefir	294	1355
Yogurt (natural)	0	138
Yogurt, drinking yogurt (flavoured)	1469	198
Curd and curd cream (incl. flavoured)	572	776
Sour cream	396	1012
Whipped cream	684	735
Cheese	288	220
Cream cheese	0	16
Melted cheese (incl. flavoured)	0	88
Butter	268	273
Fruits, berries and juices		
Banana	823	2104
Orange and mandarin	248	1317
Apple	98	2963
Pear	0	410
Watermelon and melon	40	526
Strawberry (incl. frozen)	237	104
Rhubarb	10	40
Other fruits	91	69
Table grape	0	175
Cranberry	0	32
Frozen berry mix	313	349
Fruit/berry compotes	59	75
Juices	4321	1761
Juice concentrate (incl. sugar)	0	30
Jams	420	388
Potatoes	8419	8453
Vegetables		
Cabbage	499	810
Carrot	1212	1494
Beetroot	1324	824
Pumpkin	79	144
Broccoli and cauliflower	34	42
Tomato	471	1060
Cucumber	344	795
Sweet pepper/paprika	0	275
Radish	0	38
Onion	543	950
Garlic	46	63
Lettuce	0	33
Chinese cabbage	780	290
Meat and meat products, fish		
Pork	1984	3171
Beef	0	52
Poultry	935	1592
Soup bones	0	315
Sausages and hams	546	644
Fish (fresh and frozen)	292	655
Other products		
Eggs (pcs)	8281	7451
Olive oil	0	17
Rapeseed oil	617	751
Sugar	1384	1131



ANNEX 2. Maps of organic producers in Võru County and in Smiltene and Tukums regions

Figure 1. A map of the organic producers in Võru County who can potentially sell their products to kindergartens and schools

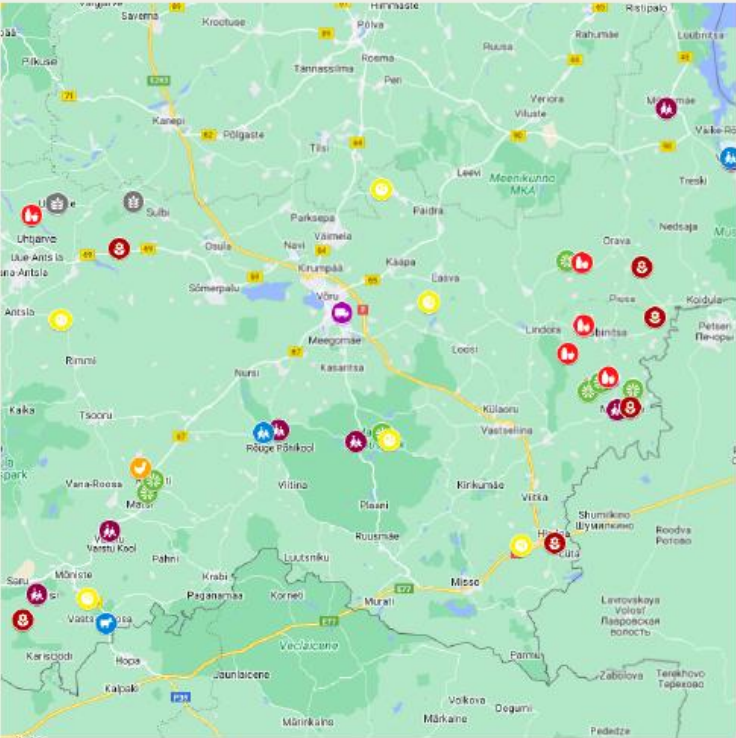


Figure 2. A map of the organic producers in within a 75 km radius around Smiltene who can potentially sell their products to kindergartens and schools

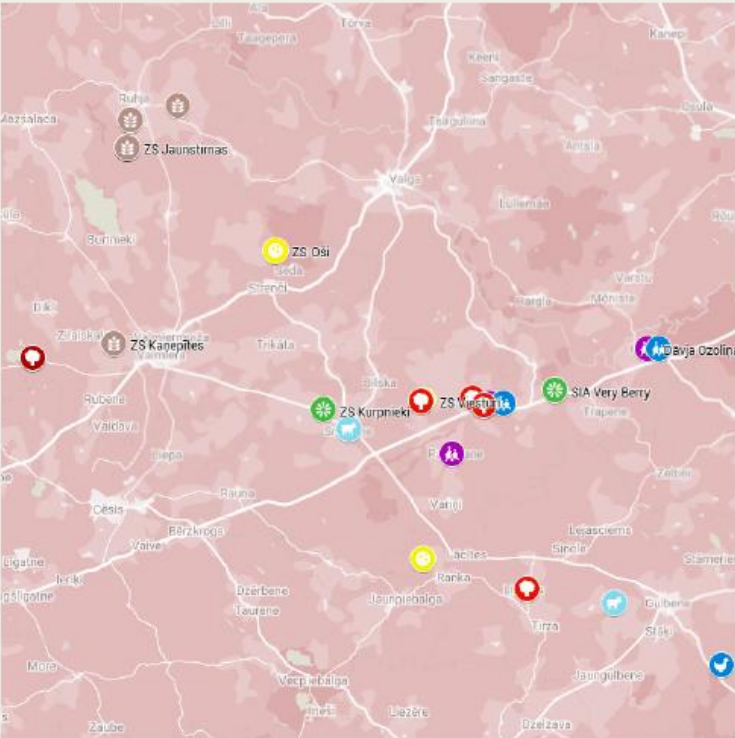


Figure 3. A map of the organic producers in within a 75 km radius around Tukums who can potentially sell their products to kindergartens and schools



ANNEX 3. Criterias of school restaurant

The “School Restaurant” title represents a carefully created environment where a satisfied kitchen team provides local, organic, and healthy food with an emphasis on quality and continuous development.

1. Planning and Improving Catering

- Catering in the educational institution is strategically planned, reflected in the documentation, and includes clear objectives, organisational plans, and a long-term direction to ensure quality and sustainability.
- The value of food and catering is visibly recognised in the school environment (for example, catering-related posters are displayed; development goals outlined in strategic documents are made visible to students).
- Regular development and cooperation meetings are held with the caterer, and solutions are sought for issues identified during these discussions.
- Students can make suggestions for the development of school meals.
- Feedback is regularly collected from students and teachers.
- Cooks actively participate in the development of school meals.
- Catering planning follows the county's or municipality's organic food agreement, ensuring the agreed share of organic products.
- The school board and parents participate in the development of school meals.

2. Conditions for Food Preparation

- The kitchen and other rooms are suitable and sufficient for organizing catering.
- There are enough kitchen equipment and tools for preparing various dishes and for processing ingredients.
- Staffing is adequate, and work is planned rationally.
- Staff members are competent and provided with training and lifelong learning opportunities.
- All dishes have a technological card (recipe specification).

3. Menu Planning

- National dietary guidelines are followed in food offerings.
- The menu includes all major macronutrients (quantities meet national regulations — proteins, fats, carbohydrates).
- The menu includes sufficient amount of fresh fruits and vegetables, preferring local seasonal produce whenever possible.
- The menu is planned at least ten days in advance and offers a diverse selection.
- The menu includes traditional local dishes at least twice a year.
- The menu offers options such as build-your-own salads, different side dishes, and plant-based choices.
- Local ingredients are used as much as possible, of which agreed % are organic.
- The menu includes as much seasonal produce as possible.
- Processed and unhealthy ingredients are avoided.

4. Developing Food Culture

- Lunch breaks are planned long enough to allow children to eat without rushing.
- In case snacks are on sale, then these are healthy snacks, such as nuts or fruit and vegetable cups.
- A system for recognising or labelling dishes is in place in the dining hall.
- Quantities of leftovers are regularly analysed and efforts are made to reduce food waste.
- The plate model (balanced meal guide) is visible and easy to follow.
- Clean, plain drinking water is the first and most visible drink option.
- The dining area is comfortable, calm, and well designed to support mindful eating.
- Age-appropriate and motivating serving solutions are used.

5. Shaping Healthy Eating Habits

- Students are supported in developing healthy eating habits through awareness-raising activities.
- Explanations about foods and their origins are provided (e.g., information boards, workshops).
- School staff and parents are involved in raising awareness and promoting healthy eating habits.
- Students are encouraged and guided to try different foods.



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