







Introduction

QUALIFY¹ is a European Union project aimed at promoting the competitiveness of small and medium-sized enterprises (SMEs) in the agri-food sector. The project deals with three thematic areas:

Improving the quality processes of these SMEs; Fight against fraud in the sector; Promotion of the authenticity of the products.

The project deals specifically with SMEs, as it is considered that large companies have better management of the issues at stake (quality assurance, food fraud prevention and product authenticity). At the same time, the aim is to increase the competitiveness and market share of SMEs.

The project also aims to increase the capacity of managing authorities, SME representatives and other stakeholders to better address quality, fraud, and authenticity aspects and to develop better and more efficient projects. This action plan focuses on the two thematic areas of the QUALIFY project, which are improving quality processes and combating food fraud. The action plan links these thematic areas in such a way that the main objective of the plan is to detect and prevent food fraud, which will be achieved in part by improving the food safety and quality assurance processes of businesses.

¹ https://www.interregeurope.eu/qualify/

Part I – General information

Quality standards and authenticity to foster competitiveness

of agrifood SMEs (QUALIFY)

Partner organization Estonian Chamber of Commerce and Industry (ECCI)

Other partner organisations involved (if relevant)

Country Estonia

NUTS2 region

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Part II – Policy context

The Action Plan aims to impact:	☐ Investment for Growth and Jobs programme
	☐ European Territorial Cooperation programme
	⊠ Other regional development policy instrument

The policy instruments addressed:

The Estonian Agriculture and Fisheries Strategy 2030 (AFS 2030).

The vision document "Estonian food 2022-2025" for introducing and promoting Estonian food.

Development Plan "Estonian Agriculture and Food 2030".

The Estonian Agriculture and Fisheries Strategy 2030

The Estonian Agriculture and Fisheries Strategy 2030 (AFS 2030)²³ was approved by the Government of the Republic in April 2021. The aim of the development plan is, among others, to contribute to the development and competitiveness of Estonian agriculture, fisheries, aquaculture and the food processing industry, as well as the ensuring of food safety. In the coming years, a number of other framework documents will influence the food and agriculture sector, including the European Green Deal and the Farm to Fork Strategy⁴.

The overarching goal of AFS 2030 is: "Estonia will have a preference for local food, a healthy environment and biodiversity, thriving food businesses and viable rural and coastal communities".

² https://www.agri.ee/et/pollumajanduse-ja-kalanduse-valdkonna-arengukava-aastani-2030

³ https://www.agri.ee/en/agriculture-and-fisheries-strategy-2030

⁴ Communication from the Commission: Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system COM/2020/381fin (2020)

The strategy has two sub-objectives. The first sub-objective of Smart and sustain agriculture, food production and rural life, safe food and a well-maintained environment is linked to seven integrated directions. The second sub-objective Sustainable fisheries, that ensure the competitiveness of the fisheries sector and the sustainable management of fish stocks, includes one course of action.

According to the AFS 2030 Estonia has the potential for on-site increasing of the value of agricultural production exported as raw material today. Estonia is able to supply itself well in several sectors (especially milk, fish, cereals), so there is enough domestic food for us, and it can also be exported in several sectors.

AFS 2030 describes the state intervention measures to achieve the set objectives. In the situation of limited resources, the state must ensure a functioning economic environment, which in the framework of AFS 2030 means primarily science-based decisions negotiated with various target groups, ensuring a legal system that meet the society's expectations, providing risk-based surveillance system, and expanding trade opportunities. More specific interventions for the implementation of AFS 2030 and for taking into account the objectives of the EU Farm to Fork Strategy will be agreed in the AFS 2030 programmes, the EU Common Agricultural Policy Strategic Plan, and the Operational Programme of the EU Maritime, Fisheries and Aquaculture Fund.

This action plan is related to the following objectives of AFS 2030 and is aimed at fulfilling them:

AFS 2030, sub-objective 1: "Smart and sustainable agriculture, food production and rural life, safe food and a well-maintained environment".

Direction 3: Food safety

Objective: Food produced and consumed in Estonia is safe.

Direction 5: Production, valorisation and distribution of agricultural products Objective: Estonian food sector is competitive in both the internal and external markets.

The current situation in ensuring food safety, and the state's intervention measures [source: AFS, direction 3].

The food safety situation in Estonia is good; there have been no major food safety crises. In order to maintain the good status and to mitigate new risks (e.g. new technologies, environmental risks), it is necessary for all parties to make a continuous contribution towards ensuring food safety. Food businesses are responsible for food safety, and facing increasingly complex issues arising from various risk factors. On the positive side,

the food sector has introduced voluntary quality management systems (e.g. ISO, in addition to the existing legal requirements. There is a long-term knowledge transfer programme to inform food businesses; various information channels are also used for information and the food safety training for the sector is supported. In Estonia, the legal framework on food safety is mainly regulated by EU legislation. In addition, Codex Alimentarius standards governing international food trade are taken into account.

As future interventions, the state plans the following food safety activities, among others [source: AFS, direction 3]:

- The state encourages and supports the sector to implement voluntary quality management schemes (e.g. ISO, BRC).
- The need to update and supplement national food safety legislation will be analysed, including the possible introduction of mandatory food safety training and the requirements for training providers, motivation measures to ensure food safety (e.g. the bonus-malus principle – the supervision fee depends on the results of the supervision). Food safety guidance materials for the food sector will also be developed as appropriate.
- Systematic knowledge transfer on food safety will be continued and complemented by information for consumers and certain stakeholders (e.g. teachers, primary level health professionals and nutritionists). The food safety training module will be extended from food hygiene to other food safety topics.

The current situation regarding the development of the food sector, and the intervention measures planned by the state [source: AFS, direction 5]

Direction 5 covers activities aimed at creating the conditions for the food sector's sustainable development, the functioning of the food supply chain, the management of market and production risks, and the sustainable valorisation and marketing of agricultural products and foodstuffs.

About 20% of the Estonian mainland is agricultural land, of which more than 80% is in active agricultural use and the rest is kept in a condition that allows it to be used for additional agricultural production, if necessary, without needing major investments. The number of food and drink businesses, including organic processors, has increased. Yet, the number of people employed in food companies has decreased over the years and labour shortages are a growing problem. 70% of the companies operating in the food industry are small companies with 1-9 employees, 10% are companies with more than 50 employees.

The food industry faces problems, such as a lack of companies with economies of scale, small production volumes and a low capacity for internal product development and innovation. Estonia's largest food industries are smaller than the EU average (OECD report "Innovation, Agricultural Productivity and Sustainability in Estonia", 2018.) At the same

time, global food demand is constantly growing and consumer expectations for food ity are higher. Estonia has good preconditions for the export of high-quality agricultural products, food products and other production inputs. It is supported by a clean environment, good animal and plant health conditions, as well as well-functioning supervision systems.

As future intervention activities, the state plans the following activities among others regarding the production, valorisation and marketing of agricultural products [source: AFS, direction 5]:

- In order to ensure the competitiveness of the food sector the focus must be continuously on the market orientation. [...] The advisory system needs to be strengthened and developed and it needs to become more needs-based. At the same time, efforts must be made to improve cooperation between companies and research and development institutions, to foster knowledge diffusion and innovation for higher added value products. In particular, innovative and digitally-enabled investments that are productivity-driven, in areas where Estonia has advantages, shall be supported. To do this, companies constantly need training in innovative methods, product development, and investments risk/cost-effectiveness assessment. When planning support measures, it is important to take into account the needs of various target groups.
- The food sector must focus on demand-side production models, producing in particular products that meet consumers' expectations, while ensuring food security. [...] In order to better meet the demand, there is an opportunity to add more value to agricultural production, for example by implementing EU quality schemes, applying geographical indications for products or using environmentally friendly production methods, including organic production.
- In order to increase the value of food grown in Estonia for export, it is important to ensure high quality, security of supply and competitiveness at the price level of the world market. At the same time, it is important to provide support to companies in export activities and to create effective communication channels in the sector.

Vision document "Estonian food 2022-2025" for introducing and promoting Estonian food.

The vision document "Estonian food 2022-2025" for introducing and promoting Estonian food⁵ contributes to the achievement of the goals of AFS 2030 and defines the directions for the introduction and promotion of the food sector.

The general objectives of the vision document "Estonian Food 2022-2025" derive from the objectives of the AFS and are as follows:

⁵ https://www.agri.ee/et/visioonidokument-eesti-toit-2022-2025

- 1. The Estonian food sector is competitive in both the domestic and foreign many
- 2. The manufacturer has a strong market position.
- 3. Estonian consumers prefer and consume food produced in Estonia.

In order to achieve the first goal, the vision document envisages a number of intervention activities, to the implementation of which this action plan also contributes.

This action plan contributes to the implementation of the following activities of the vision document "Estonian Food 2022-2025":

Implementation of higher quality, environmental and other standards;
Activities related to ensuring food safety and reliability (including prevention of food fraud).

Development Plan "Estonian Agriculture and Food 2030"

The development plan "Estonian Agriculture and Food 2030" is a development plan for four main agricultural sectors (dairy, cereals, meat, horticulture), the initial impetus of which was AFS 2030. The main goal is a 50% increase of the added value of the Estonian agricultural and food supply chain by 2030. The development plan was prepared in the cooperation between the sector and the state, under the leadership of the private sector. The plan sets goals and outlines activities to achieve the goals set. With regard to food safety and fraud, the document includes a chapter on the quality and traceability of food, which emphasises that apart from the ensuring of food safety, there is a need to provide consumers with more transparent and clear information on the origin and quality of food and its raw materials, and the method and technology of primary production and food processing.

Part III - Prevention of and fight against food fraud, situation and activities required

Introduction

This action plan focuses on the two thematic areas of the QUALIFY project, which are improving quality processes and combating food fraud. The main objective of

⁶ https://epkk.ee/ept2030/

the plan is to detect and prevent food fraud, which will be achieved in partproving the food safety and quality assurance processes of businesses.

In this chapter we describe and analyse the Estonian situation related to food fraud from prospective of the state, enterprises and analytical capacity, and also draw conclusions for future actions.

Food fraud is a collective term that encompasses a variety of intentional and deliberate actions aimed at deceiving the purchasers and thereby obtaining economic gain. There is always food fraud if individuals or businesses deliberately deceive consumers, gaining an unfair advantage and violating agri-food chain legislation. Various activities, like dilution, substitution, concealment, mislabelling, use of unapproved enhancements, counterfeiting, diversion and misuse of Intellectual Property, are considered to be food fraud.

According to the website of the European Commission's Knowledge Centre for Food Fraud and Quality,⁷ the most common sources of food fraud are olive oil, milk, honey, saffron, orange juice, apple juice, grape wine, vanilla extract and fish.

EU Member States have been cooperating in the Food Fraud Network (FFN) on cross-border food fraud since 2013⁸. The Estonian representative in the network is the Agriculture and Food Board (fraud@pta.agri.ee).

Legal framework in Estonia

In the context of food fraud, it is important to highlight the following legislation.

Regulation (EU) 2017/625 on official controls⁹, Article 9, according to which:

- 1. Competent authorities shall perform official controls on all operators regularly, on a risk basis and with appropriate frequency, taking account of:
- [...] any information indicating the likelihood that consumers might be misled, in particular as to the nature, identity, properties, composition, quantity, durability, country of origin or place of provenance, method of manufacture or production of food;
- 2. Competent authorities shall perform official controls regularly, with appropriate frequencies determined on a risk basis, to identify possible intentional violations of the rules [....], perpetrated through fraudulent or deceptive practices, and taking into account information regarding such violations shared through the mechanisms of administrative assistance [....] and any other information pointing to the possibility of such violations.

⁷ https://knowledge4policy.ec.europa.eu/food-fraud-quality/topic/food-fraud en

⁸ https://ec.europa.eu/food/safety/agri-food-fraud/eu-food-fraud-network en

⁹ https://eur-lex.europa.eu/legal-content/ET/TXT/?uri=CELEX:02017R0625-20211028

The Food Act,¹⁰ § 20, according to which:

- (1) It is prohibited to counterfeit food and handle counterfeit food.
- (2) The following are deemed to be counterfeiting:
- 1) alteration the composition of food without alteration the labelling;
- 2) alteration the labelling without alteration the actual composition;
- 3) adding another substance to food in any manner or processing food with it in order to conceal the lower value of the food or its non-compliance with the requirements;
- 31) non-compliant use of a health mark or an identification mark on the label;
- 4) handling using the business name or trademark of another undertaking without its permission.

Article 139 of the Regulation (EU) 2017/625 on official controls states that the penalties provided for shall be effective, proportionate and dissuasive. In order to be sufficiently effective, the financial penalties applicable to violations perpetrated through fraudulent or deceptive practices should be set at a level which exceeds the undue advantage obtained by the offender. It should be assessed whether Estonian national law meets these requirements or whether stricter financial penalties should be imposed in order to prevent fraudulent and unfair practices more effectively.

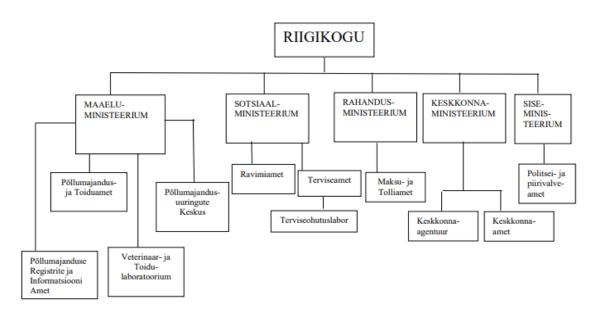
In the field of organic farming, steps have already been taken to increase penalties. In order to prevent the fraudulent use of labels referring to organic agriculture, the fine for a deliberate marketing of a non-organic product with labels referring to organic farming has been increased since 1 January 2022.

National authorities and activities

Estonia has a risk-based surveillance system, supported by a network of laboratories and an increasing number of different IT solutions (Agriculture and Food Board's supervision information system, various registers). While direct public health risks (food-borne infectious diseases) are a priority for authorities, risks with long-term effects (e.g. contaminants, additives, GMOs) have so far been insufficiently assessed. So far, the precepts issued have mainly been related to food labelling, food traceability and non-compliance with food handling requirements. Due to new influencing factors, new areas (e.g. food fraud, food reformulation and AMR) are constantly being added to the tasks of supervisory authorities.

¹⁰ https://www.riigiteataja.ee/akt/117112021020?leiaKehtiv

Five ministries and their administrative authorities are involved in the organisation ficial controls in the areas of feed, food, animal health, animal welfare, animal by-products, plant health, plant protection and organic farming (Figure 1, source: Estonian integrated multi-annual national control plan 2021-2024). With regard to food fraud, no one of those authorities can be excluded, but only the tasks of the main authorities are described below.



Joonis 1. Sööda, toidu, loomatervise, loomade heaolu, taimetervise, taimekaitse ning mahepõllumajanduse valdkonna järelevalve korraldusse hõlmatud ministeeriumid ning nende haldusala asutused.

RIIGIKOGU

MINISTRY OF RURAL AFFAIRS / MINISTRY OF SOCIAL AFFAIRS / MINISTRY OF FINANCE / MINISTRY OF ENVIRONMENT / MINISTRY OF INTERNAL AFFAIRS

Agriculture and Food Board / Agricultural Research Centre / Agency of Medicines / Health Board / Tax and Customs Board / Police and Border Guard Board

Health Safety Laboratory / Environmental Agency / Environmental Board

Agricultural Registers and Information Board / Veterinary and Food Laboratory

The task of the Ministry of Rural Affairs (MEM) is to develop food safety policy (incl. development plans) and to organise its financing, implementation and evaluation of results. The Ministry develops legislation, participates in international cooperation, the European Union's decision-making process, Codex Alimentarius activities and coordination with the European Food Safety Authority (EFSA). In order to ensure research support, the Ministry of Rural Affairs coordinates and finances research and development, innovation and knowledge transfer through various programmes and measures.

The Agriculture and Food Board (PTA) carries out official control on a Farm to Forkon Areas of responsibility of the PTA include food and feed safety, veterinary activities, animal welfare and farm animal breeding, plant protection and plant health, plant variety protection, seed and propagating material, organic farming, handling of genetically modified crops, fertilisers, common market organisation and commercial fishing. In the food sector, the PTA carries out official controls on all food businesses (primary production, food industries, wholesale warehouses, transport companies, retail (including catering)), as well as food contact materials. Official controls activities also cover the use of protected geographical indications (agricultural products and foodstuffs, spirits and wine products).

The areas of activity of the Tax and Customs Board (MTA) are the management of state revenues, the implementation of state tax and customs policy, and the protection of the society and legal economic activities. The MTA also carries out checks on the documents required for the import of certain goods (e.g. documents required for the import of animals and animal products subject to veterinary control, non-animal food subject to import control, and organic products).

The Health Board (TA) supervises, among other responsibilities, the safety of natural mineral water and spring water as well as drinking water in public water supply systems.

The Veterinary and Food Laboratory (VTL) performs various microbiological, parasitological, chemical and molecular biological analyses to determine the quality and safety of food, feed, water and alcohol. The laboratory acts as a national reference laboratory in many fields (mainly food microbiology and the residues of veterinary medicines and contaminants in food).

Among other responsibilities, the Agricultural Research Centre (PMK) carries out analyses and acts as a reference laboratory for residues of mycotoxins and plant protection products.

Microbiological, virological, chemical and physical analyses are performed in the Health Safety Laboratory. The Laboratory acts as a reference laboratory for polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), food contact materials and, to a certain extent, residues of plant protection products.

There are number of cooperation agreements to enhance inter-agency cooperation¹¹. None of the existing cooperation agreements specifically deals with cooperation in the food fraud area. Yet, a number of national documents have emphasised the importance of tackling food fraud.

¹¹ https://pta.agri.ee/mitmeaastane-kontrollikava

Estonia's integrated multi-annual national control plan 2021-2024¹² highlight issue of food fraud as a food priority:

- 3. Priorities in the food sector [....]
- 2) Identifying food fraud and increasing of preparedness to act.

[....] The purpose is to detect possible fraud or intentional violations by misleading activities in the course of official controls. The broader goal is to increase preparedness and response to potential food fraud.

Activities:

- Agreeing a cross-sectoral approach to tackling fraud in the PTA (including the appointment of an internal PTA coordinator, the appointment of officials in the departments, and the provision of other necessary resources). Topics include food, feed, animals, plants, market organization, organic, by-products, etc.
- Mapping and analyzing the possibilities of creating a national cooperation network.
- Actively participating in international cooperation.
- Raising the awareness of officials, businesses and consumers on this issue, for example through information activities.
- Add samples to the sampling plan to detect possible food fraud. [source: Estonia's integrated multi-annual national control plan 2021-2024]

The Ministry of Rural Affairs has set up a Food Safety Council, which includes the representatives of ministries (the Ministry of Rural Affairs, the Ministry of the Environment, the Ministry of Social Affairs, the Ministry of Economic Affairs and Communications) and of agencies (the Agriculture and Food Board, the Health Board) and also the representatives of the Food Industry Association, the Association of Traders, the Estonian Association of Nutrition Advisers, the Estonian Chamber of Agriculture and Commerce, the Institute for Health Development, the Tallinn University of Technology and the Estonian University of Life Sciences. The Council discusses food safety issues. At the February 2020 meeting, the importance of increasing states surveillance capacity to detect food fraud was emphasised.

Estonian Agriculture and Fisheries Strategy 2030 has noted that dealing with food fraud has been a task of the supervisory authorities since 2014. A representative of the Agriculture and Food Board participates in the work of the EU Food Fraud Network (FFN) and the relevant working groups of the European Commission.

^{12 &}lt;a href="https://pta.agri.ee/mitmeaastane-kontrollikava">https://pta.agri.ee/mitmeaastane-kontrollikava

The reports of the Veterinary and Food Board and the Agricultural Board in 2020 the information published on the activities of the Agriculture and Food Board¹⁴ in 2021 show that in terms of suspected fraud honey, olive oil and strawberries has been addressed systematically and as a matter of priority.

Over the years, the representative organisations of honey producers have repeatedly drawn attention to the suspicion of fraud, demanding that the state take action to inspect the origin and composition of honey. According to the Agriculture and Food Board (PTA), six fraud cases were reported in 2020, all concerning honey - three cases were mixtures of honey from outside the European Union and three cases were mixtures of honey from inside and outside the European Union. In 2021, 49 honey samples were taken to analyse the authenticity of honey. A total of five products were found to contain foreign sugars, all of which were of non-Estonian origin.

In 2020 and 2021, the PTA has repeatedly taken samples to check the compliance of olive oil. Several cases have been identified where lower grade olive oil was sold under the name of higher-grade olive oil. In most cases, the problem was that the product did not comply with the extra virgin olive oil category, but complied with a lower virgin olive oil category instead.

In 2021, the PTA also identified 8,479 bottles of non-compliant Scotch whiskey GlenAl-adale that were sent for destruction. During the manufacture of the product, flavourings, sugar and food colour were added to the Scotch whiskey distillate imported from the United Kingdom. In the course of the case, PTA cooperated with the Tax and Customs Board and HMRC, the competent authority in the UK. Food Fraud (FF) notifications were also sent to Latvia, Lithuania and Bulgaria, as according to the data available to the PTA, the beverage also moved to the warehouses of these countries.

There was also a case in 2021 where the acetic acid content of vinegar did not correspond to what was indicated on the labels. The PTA checked the commercially available acetic acid content of 30% vinegar. A total of seven samples were taken and for five samples the acetic acid content did not correspond to the percentage indicated on the label. These five products concerned one producer who had to withdraw non-compliant products from the market.

In the summer of 2021, the PTA paid close attention to the origin of fruits and vegetables sold in the markets, checking shipping, purchase and sales documents and compliance with other requirements. Intensified attention was paid to the control of the origin and compliance of strawberries. From time to time, doubts have been expressed that berries from other countries are sold as strawberries of Estonian origin during the high season.

¹³ https://pta.agri.ee/pta-aasta-aruanded

 $^{^{14}}$ As of 1.01.2021, the Agriculture and Food Board was formed by merging the Veterinary and Food Board and the Agricultural Board.

A total of 4 raids were carried out in the markets. In some cases, it was found that accompanying documents were missing or that the goods could not be reconciled with the accompanying documents or that the labelling was incomplete.

A case of food fraud is known from the end of 2018 in which minced meat labelled as containing beef also contained poultry which was not marked on the label.

Conclusions important for Action Plan regarding national authorities and activities

At the national level the main authorities in question are the Ministry of Rural Affairs, the Agriculture and Food Board, the Tax and Customs Board, the Health Board, and the Police and Border Guard Board.

There are number of cooperation agreements to enhance inter-agency cooperation. None of the existing cooperation agreements specifically deals with cooperation in the food fraud area.

Yet, a number of national documents have emphasised the importance of tackling food fraud and foresee activities to strengthen the official surveillance and make supervision more systematic, focused and effective. So, the continuous state activities addressing food fraud can be foreseen.

Non-governmental organisations, including Estonian Chamber of Commerce and Industry, can be partner to the government authorities in their actions by providing input information coming from enterprises, disseminating information about state plans to enterprises and collecting their feedback. Estonian Chamber of Commerce and Industry continues to emphasise the importance of fight against food fraud, will participate in relevant meetings and provide written input and feedback where appropriate.

Activities at company level

Small and medium sized food processing businesses increasingly have to consider the production of good quality products as essential to their survival. Food safety and quality are the responsibility of food businesses, which must deal with increasingly complex issues arising from a need to meet food safety and quality assurance criteria on a routine basis as well as from various risk factors, including food fraud. The latter can occur intentionally or unintentionally if a business inadvertently uses or resells counterfeit food.

There are a little more than 700 food production companies in Estonia. 70% of producers are micro-enterprises (1-9 people), 23% are small and medium-sized enterprises (up to 250 employees) and 7% are large companies.

Several national policy documents encourage the development of short supply chains and the promotion of sustainable and local food. The development of the organic food sector is also strongly encouraged. The more consumers valued and preferred (organic) local food, the higher is risk of possible fraud. This in turn raises the question for the companies about how to prevent and detect fraud.

SMEs can be expected to be more vulnerable to food fraud because they lack the resources and knowledge to prevent and detect fraud. As many companies are not yet even aware of the problem, it is also important to bring basic knowledge about food fraud to them. A mandatory self-check plan, consisting of a programme of preconditions and the implementation of HACCP principles, must be established in all companies. This is the primary basis for SMEs to ensure quality of production and meet food safety requirements.

It is noted that in addition to the food fraud information SMEs need updated information also in other aspects covered by the QUALIFY project. Due to smaller dimension they tend to be less informed about requirements and implementations practises in areas of quality assurance, self-check practises (HACCP, VASSP), products authenticity, food quality schemes etc.

Certified companies are obligated to deal more thoroughly with food fraud. Each certificate holder shall have a documented procedure for assessing vulnerability to food fraud in order to identify potential vulnerabilities and prioritise fraud mitigation. Quality system certification is a complex and costly process for SMEs, which requires a company to be strongly motivated by internal or external factors.

The most common food safety and quality standards used in Estonia are ISO 22000, FSSC 22000, BRC Global Standard for Food Safety and IFS Food. The Global Food Safety Initiative (GFSI) currently recognises the last three standards, which deal thoroughly with the prevention of food fraud.

At present, there are 39 food-related companies in Estonia that have a valid ISO 22000 certificate. 25 companies are FSSC 22000 certified¹⁵, 22 companies have BRC certification¹⁶ and less than 20 have corporate IFS certificates (personal query from the IFS website). Some companies overlap by having several or all of these certificates. In total,

¹⁵ https://www.fssc22000.com/certified-organizations/

¹⁶ https://directory.brcgs.com/

about 50 companies have GFSI-recognised certificates. Mostly, it is the larger of nies that are certified.

For companies that have implemented a quality standard it is critical to find relevant information on food fraud for risk analysis, and it is not always easy.

One way to improve quality processes and prevent food fraud is to implement certified quality management standards in the company. The Estonian Agriculture and Fisheries Strategy 2030 outlines as a positive aspect that the food sector has introduced additional voluntary quality management systems (e.g. ISO, BRC). It is also noted that the state encourages and supports the sector to implement voluntary quality standards more. The vision document "Estonian Food 2022-2025" also highlights the implementation of higher quality, environmental and other standards as one of the activities.

In order to combat food fraud, it is useful to increase the number of certified food businesses in Estonia. However, the aim cannot be to certify all companies. Implementing, certifying and subsequently managing a quality system requires considerable time and money. Therefore, the introduction of certified quality systems could indeed be supported and encouraged for companies with export potential. Another motivating factor could be a reduction in the burden of state supervision, as certified companies are inspected by auditors at least once a year.

Long-term knowledge transfer programmes (PIP-programmes) are being implemented within the framework of the Estonian Rural Development Plan 2014–2020, financed by the European Agricultural Fund for Rural Development (EAFRD), which aims to systematically disseminate food safety and quality related information to the agri-food sector. Activities of food safety and quality in this programme are carried out by the Estonian Chamber of Agriculture and Commerce (EPKK), the Estonian Food Industry Association (Food Association) and the Estonian University of Life Sciences (EMÜ). The programme website is toiduteave.ee, which provides information on the various topics of food safety. This programme and website could be used to disseminate more widely the information needed to detect and prevent food fraud and information linked to the other aspects of the QUALIFY project.

Conclusions important for Action Plan regarding activities at company level

Food safety is the responsibility of food businesses, which have to deal with increasingly complex issues arising from a various risk factors, including food fraud.

SMEs can be expected to be more vulnerable to food fraud because they lack the resources and knowledge to prevent and detect fraud. At the same time, for the companies aware of the problem, it is difficult to find relevant information for risk analysis.

It is noted that in addition to the food fraud information SMEs need updated in mation also in other aspects covered by the QUALIFY project.

One option to improve quality processes and prevent food fraud is to implement certified quality management standards in the company. However, the aim cannot be to certify all companies, information dissemination activities targeting companies with interest of implementation certified quality systems, should be foreseen.

Action plan should include awareness raising activities, in particular workshops and trainings, on different topics covered by the QUALIFY, and for SMEs at different levels of knowledge.

In addition, digital tools for dissemination information and helping prevent food fraud at companies' level shall be developed.

It is possible to cooperate with PIP-programme to achieve better results.

Research and analytical capabilities

The Veterinary and Food Laboratory, the Agricultural Research Centre and the Laboratory of the Health Board perform food analyses, which can also be used to detect various types of food fraud. It is also possible to use the capabilities of foreign laboratories. However, an overview of the different laboratory options is not easily available to operators. Such an overview would help them find a laboratory to order the analyses if needed. On the laboratory websites the list of analyses can be found, but without thorough knowledge, it is difficult to identify which method could be used in case of specific suspicion of fraud and which laboratory to contact.

The development of methodologies is carried out at the initiative or with the support of the state, mainly in the context of product origin identification and related food fraud.

In recent years, honey has been on the agenda in connection with counterfeiting with sugar and misleading with origin. The most common forms of counterfeiting are the addition of sugars (e.g. the addition of sugar syrup to the honey, the feeding of bees with sugar syrup during nectar collection), the removal of moisture from the immature honey, ultrafiltration (removal of pollen to hide origin) and presenting an incorrect origin. The state has taken an important step to create an additional way to prove the Estonian (geographical) origin of honey. In order to determine the origin of honey according to the characteristic chemical compounds, it is necessary to analyse the characteristics of honey harvested in Estonia and assess how well they allow to distinguish Estonian honey

from the honey of other countries. As a result of a public procurement¹⁷, an agree was signed between the Ministry of Rural Affairs on the one hand and the Estonian University of Life Sciences and Quality Services International GmbH in Germany on the other hand, the first stage of which will be the preparation of a plan to obtain representative samples of Estonian honey and the second stage will be creating a method for identifying honey of Estonian origin. All this work should be completed in the middle of 2026.

In 2020, at the request of the Ministry of Rural Affairs, the Agricultural Research Centre started applied research within the framework of the programme "Agricultural Applied Research and Development in 2015–2021" to create a reference database of strawberries of Estonian origin. As a result of the project, a database of analytical data characterising strawberries of Estonian origin will be completed. The reference database to be created must enable laboratory confirmation or rejection of the Estonian origin of the strawberries. To this end, it is necessary to map the characteristic parameters of strawberries grown in different regions of Estonia, including stable isotopes, and to analyse the indicators of water and soil in their growing environment. The final report of the study is due at the end of 2022.

In the summer of 2020, honey producers and Tervisetehnoloogiate Arenduskeskus AS started creating a DNA-based method for identifying the composition, origin and authenticity of honey. The main goal of the project is to develop innovative DNA sequencing-based methods for determining the composition and origin of honey. The new method will make it possible to identify the plants from which honey comes, the DNA of other organisms (e.g. insects) in the honey, the geographical origin of the honey and whether it is syrup-based or genuine honey. As a result of the analysis, a so-called DNA passport for honey is created. The project is supported within the framework of measure 16.2 "Support for the development of new products, practices, processes and technologies" of the Estonian Rural Development Plan 2014-2020. In addition, bioinformatics and botany researchers from the University of Tartu and the competence of the Estonian University of Life Sciences will be involved in the development of honey DNA. The duration of the project is July 2020-March 2023.

Bioinformatics researchers from the University of Tartu, in cooperation with Tervisetehnoloogiate Arenduskeskus AS, published a research article in the journal *Frontiers in Plant Science*, which showed that the ingredients of cooked food can be identified by DNA analysis even in very small quantities. DNA analysis can provide valuable information on the composition, origin, safety and health of food and will make it much more reliable in the future to detect counterfeits and non-compliances with the list of ingredients on the packaging. The research used a methodology based on short, unique DNA sequences (k-mers) to analyse genomic DNA data, which allows the rapid identification of the plant or bacterial DNA from a food or environmental sample. Thus, the method

¹⁷ https://riigihanked.riik.ee/rhr-web/#/procurement/2722852/general-info

helps to identify the true biological composition and origin of food using DNA mation¹⁸.

Conclusions important for Action Plan regarding research and analytical capabilities

The Veterinary and Food Laboratory, the Agricultural Research Centre and the Laboratory of the Health Board perform food analyses, which can also be used to detect various types of fraud. It is also possible to use the capabilities of foreign laboratories. Also, several development projects of methodologies is carried out at the initiative or with the support of the state, in the context of tracing the origin of products and the related food fraud.

However, an overview of the different laboratory options is not easily available to operators. This Action Plan should foresee mapping of laboratory capabilities in order to make it easier to the SMEs in case of specific suspicion of fraud to find information on methods of detection and laboratory which could be contacted.

Part IV – Details of the actions envisaged

The present action plan is developed based on the knowledge accumulated during the QUALIFY project implementation. Good practices exchanged, participation in consortium meetings and study visits have provided important input. Also, information gathered from national authorities, policy documents and action plans has been valuable input in planning further activities.

During the project we also got acquainted with other projects and success stories from different countries and have learned from other project partners, eg project **NICHE** - **Building innovative food value chains in regions** - we learned the food sector development plan of South-Estonian and the importance of the coherence of the development strategy with different national strategies and policies, well-coordinated cooperation between development organizations and other stakeholders. The need for information,

¹⁸https://novaator.err.ee/1099491/uus-dna-analuusimeetod-voimaldab-tuvastada-toidu-paritolu-ja-voltsinguid

access to fraud prevention materials and training for SMEs in the field of food frau also emphasized here.

Through the Qualify project the different activities were presented during **Online Partner meeting on 18 November 2020 in Tallinn** and were reviewed by the project partners. As was discussed, the micro and small businesses in Estonia don't know enough the existing channels of alert information. Companies need good channel/system of alert information. More information on these channels and related information could be provided. The Estonian Veterinary and Food Board publish information about <u>violations</u>, it's public information. Estonia has a risk-based food monitoring system. The purpose of authorities is to verify that producers comply with legal requirements and that goods and animals comply with the regulations. One of the programs on food safety is "Long - term knowledge transfer program - Food and Food Safety (2017 – 2023)" which since 2017 has carried out annual information days and in-service trainings, food safety conferences. It also issues manuals and information materials (incl. Instructional videos). The information is gathered on the website <u>www.toiduteave.ee</u>.

During Qualify study visits, our partner from **La Vienne**, **France** has invited to our meeting a representative of The General Directorate for Competition Policy-Consummation and Fraud Repression (DGCCRF) who introduced the systems and networks, which all deal with food fraud and food safety in France. Among other things, they focus on prevent and control unfair trading, practices between businesses in trade and industry, inform and protect against unfair and unlawful market practices, give clear and honest information on products (labelling rules, prices, ingredients, descriptions).

A survey in France a few years ago found that most food fraud and quality deviation are not related to imported goods but are mostly in domestic production. Practice shows that 70% of the anomalies found are not punished but are directed to comply with existing guidelines and standards by officials, and companies are happy to make corrections and correct their mistakes. Thus, the targeted training for food producers is particularly important here. The same fact was confirmed in a survey conducted among entrepreneurs in Estonia in the initial phase of QUALIFY, where it was understood that many companies know about different requirements, but as the requirements change and the employees in the companies change as well, the need for training is still high. That's why we have emphasized the necessity of continuation of systematic training activities in our action plan.

The partners meeting in **Greece** partners provided us useful information about good practices for the promotion of authenticity of the agri-food sector. And as was presented in seminars during the partners meeting in **Ljubljana**, the fraud prevention trainings in Slovenia were also considered as a good practice by us when designing the actions included in these axes.

The action plan is also designed as a result of the 5 meetings with our stakehold where we got valuable knowledge and information about actual situation and plans for the future in our country 's polices and other actions towards food fraud, authenticity and work with agri-food companies. Definitely these meetings with respectful food processing and certifying experts in Estonia during the project implementation period has also huge impact on our action plan.

We also got to know other countries good practices:

https://www.interregeurope.eu/policy-solutions/policy-briefs

https://projects2014-2020.interregeurope.eu/gualify/good-practices/

Scope: Improving the food fraud prevention, detection and action in case of food fraud suspicion at companies' level in SMEs

Axes:

- 1. Awareness raising and networking at state level.
- 2. Awareness raising at companies' level and training for SMEs.
- 3. Creation of digital tools for companies.

Axis 1. Awareness raising and networking at state level

Introduction

During the phase 1 of QUALIFY project and development of this Action Plan we had several meetings with national authorities, and we familiarized ourselves with the content of the national polices and action plan. This, together with lessons learned during phase 1 of QUALIFY, is a valuable input for planning further activities for cooperation between state and non-governmental sector.

Regarding food fraud prevention the main authorities in question are the Ministry of Rural Affairs, the Ministry of Justice, the Agriculture and Food Board, the Tax and Customs Board, and the Health Board. None of the existing cooperation agreements to enhance inter-agency cooperation specifically deals with cooperation in the food fraud area.

Yet, a number of national documents have emphasised the importance of tackling food fraud and foresee activities to strengthen the official surveillance, cooperation between authorities and networking with non-governmental organisations.

For Estonian Chamber of Commerce and Industry it is important to network with authorities regarding food fraud issues. Non-governmental organisations, including Estonian Chamber of Commerce and Industry, must be active in emphasizing the importance of the tackling food fraud. They can be partner to the government authorities by providing input information coming from enterprises, disseminating information about state plans to enterprises and collecting their feedback.

Activities

Networking and cooperation with state authorities and other organisations on tackling food fraud. Estonian Chamber of Commerce and Industry among other non-governmental organisations will participate in relevant meetings and provide written input and feedback where appropriate. They continue to emphasize the importance of the tackling food fraud.

Stakeholders involved

Estonian Chamber of Commerce and Industry and other non-governmental organisations; Ministry of Rural Affairs; Agriculture and Food Board; Health Board, Tax and Customs Board.

Timeframe

At least 2 relevant meetings are expected to take place in period from September 2022 to July 2023.

Monitoring scheme

Meetings of business representatives (Estonian Chamber of Commerce and Industry and other non-governmental organisations) and state authorities have been carried out in order to give industry's input and feedback.

Funding sources, expected costs

Annual budget of the organisations involved. It is not possible to estimate precise costs of those activities.

Axis 2. Awareness raising at companies' level and training for SMEs

Introduction

Food safety is the responsibility of food businesses, which have to deal with increasingly complex issues arising from a various risk factors, including food fraud. While analysing

the Estonian situation it was noted that several national policy documents encourage development of short supply chains and the promotion of sustainable, local food and organic. The more consumers valued and preferred (organic) local food, the higher is risk of possible fraud. This in turn raises the question for the companies about how to prevent and detect fraud.

SMEs can be expected to be more vulnerable to food fraud because they lack the resources and knowledge to prevent and detect fraud. As many companies are not yet even aware of the problem, it is also important to bring basic knowledge about food fraud to them. It is noted that in addition to the food fraud information SMEs need updated information also in other aspects covered by the QUALIFY project. Due to smaller dimension they tend to be less informed about requirements and implementation practises in areas of quality assurance, self-check practises (HACCP, VASSP), products authenticity, food quality schemes etc.

This axis of the action plan focusses in general on awareness raising of SMEs on different food safety/quality aspects and improving quality processes of SMEs, and more specifically on preventing food fraud at company level. Action plan includes awareness raising activities, in particular workshops and trainings, on different topics covered by the QUALIFY, and for SMEs at different levels of knowledge. Only companies with certified quality management systems are obligated to deal more thoroughly with food fraud. However, the aim cannot be to certify all companies, information dissemination activities targeting companies with interest of implementation certified quality systems, are also foreseen in this axis.

It is possible to cooperate with long-term knowledge transfer programme (PIP-programme) to organize workshops and trainings.

Activities

Three types on awareness raising activities are foreseen.

- 2.1 Training programme consisiting of workshops, seminars and trainings for SMEs aimed at raising their general knowledge on food safety/quality topics covered by the QUALIFY project. This programme will cover at least the following topics: quality assurance principles, self-check practises (HACCP, VASSP), traceability, products authenticity, food quality schemes, possibilities for laboratory analyses. This programme will also help SMEs to meet the relevant legal requirements they are subject to.
- 2.2 Specific seminars aimed at informing businesses specifically about the nature of food fraud and how to combat it. As a result of these seminars participants will be aware of food fraud concept and the potential of the VACCP system in combating food fraud and they use it.

2.3 Specific training for companies with interest of implementation certified quality tems. These trainings will cover implementation aspects of different quality assurance standards, for example are ISO 22000, FSSC 22000, BRC Global Standard for Food Safety and IFS Food.

Stakeholders involved

Chamber of Commerce and Industry; University of Life Sciences; Food Industry Association; Chamber of Agriculture and Commerce.

Timeframe

In frame of general training programme at least 12 workshops, seminars and trainings are conducted for SMEs within period from August 2022 to July 2023.

2 seminars on food fraud have been held for company's representatives within period from August 2022 to July 2023.

2 specific training for companies with interest of implementation certified quality systems have been organised within period from August 2022 to July 2023.

Funding sources, expected costs

Expected costs 40,000 euros will be funded from the European Agricultural Fund for Rural Development (EAFRD) in the frame of long-term knowledge transfer programme (PIP-programme).

Axis 3. Creation of digital tools for companies to tackle food fraud

Introduction

As many companies are not yet even aware of the food fraud problem, it is important to bring basic knowledge about food fraud to them by easy-accessible means. Workshops and trainings described in axis 2 will not be enough to inform whole potential target group. It is also noted that for the companies aware of the food fraud problem, it is difficult to find relevant information for risk analysis.

A website providing information on food fraud nature in general and specific technical information to businesses is foreseen in this axis of the Action Plan.

Activities

- 3.1 A website will be set up providing information on food fraud nature in general and specific technical information to businesses. The site will be created as part of website toiduteave.ee, which provides information in the frame of the PIP-programme.
- 3.2 The databases where companies can find up-to-date information on food fraud will be mapped and information will be published on the food fraud website.
- 3.3 To make it easier to find information on methods of detection and laboratory which could be contacted in case of specific suspicion of fraud, also the mapping of laboratory capabilities will be carried out and results will be published at this website.
- 3.4 The digital toolbox for fraud prevention will be created which contains, for example, questions and answers for analysing a company's situation and vulnerability in context of food fraud, fraud prevention measures etc.

Stakeholders involved

Chamber of Commerce and Industry; University of Life Sciences; Food Industry Association; Chamber of Agriculture and Commerce; Ministry of Rural Affairs; Agriculture and Food Board.

Timeframe

A website will be set up providing information on food fraud nature in general and specific technical information to businesses by the June 2023.

The digital toolbox for fraud prevention will be created by the end of 2022.

Funding sources, expected costs

Expected costs of setting up the food fraud website and creation of the digital toolbox 15,000 euros will be funded from the European Agricultural Fund for Rural Development (EAFRD) in the frame of long-term knowledge transfer programme (PIP-programme)

Part V – Monitoring scheme

Action	Indicator	Target by
		July 2023
1.1 Networking and	Meetings with participation of Estonian Cham-	At least 2
cooperation with	ber of Commerce and Industry have been con-	meetings
state authorities	ducted.	
and other organi-		
sations on tackling		
food fraud		
2.1 Training	Workshops, seminars and trainings are	At least 12
programme for	conducted.	events (at
SMEs aimed at		least for 20
raising their gen-		participates at
eral knowledge on		a time)
food safety/quality		
topics		
2.2 Seminars on	2 seminars on food fraud have been held for	2 seminars (at
food fraud	SMEs.	least for 30
		participates at
		a time)
2.3 Specific train-	Trainings have been organised.	2 trainings (at
ings on implemen-		least for 20
tation of quality		participates at
systems		a time)
3.1 A website will	Food Fraud website is published	1 website
be set up providing		
information on food		
fraud nature in		
general and spe-		
cific technical infor-		
mation to busi-		
nesses.		
3.2 The databases	Information on relevant databases is pub-	Information is
where companies	lished on the website.	published
can find up-to-date		
information on food		

fraud will be		
mapped		
3.3 Laboratory capabilities will be mapped	Information on relevant laboratories and their analytical capabilities is published on the website	Information is published
3.4 The digital toolbox for fraud prevention will be created	Digital toolbox is created and published on the website	Toolbox is created by end of 2022



Mr Mait Palts Estonian Chamber of Commerce and Industry 6 June 2022

Confirmation letter on QUALIFY's action plan for Estonia

Dear Mr Palts,

With the present letter, we confirm that Food Safety Department of the Ministry of Rural Affairs of Estonia, is in general aware of the activities undertaken in the QUALIFY project, funded by the Interreg Europe programme and implemented by the Estonian Chamber of Commerce and Industry.

We have exchanged information with the Estonian Chamber of Commerce and Industry in order to review and discuss activities foreseen in the action plan. We know the content of the action plan focusing on the two thematic areas of the QUALIFY project, which are improving quality processes and combating food fraud.

We confirm that this action plan follows policy instruments described in the Estonian Agriculture and Fisheries Strategy 2030 (AFS 2030). In particular, the action plan supports fulfilling of the sub-objective 1: "Smart and sustainable agriculture, food production and rural life, safe food and a well-maintained environment" of the AFS 2030.

The action plan mentions the possibility of cooperating with the long-term knowledge transfer program (PIP-program) to implement some of the planned activities. We would like to point out that the governing bodies of the PIP-program must approve such cooperation and this confirmation letter should not be considered as approval of the implementation of the action plan under that program.

Yours sincerely,

Pille Tammemägi

Head of Food Safety Department