LITHUANIA'S NATIONAL FRAMEWORK FOR ENVIRONMENTAL ACTIONS

1. LEGAL BASIS FOR THE NATIONAL FRAMEWORK

1.1. Pursuant to paragraph 1 of Article 36 of the Regulation of the European Parliament and of the Council (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007, the Member States that have recognised producer organisations must establish a National Framework drawing up the general conditions relating to the environmental actions eligible for support under the operational programmes implemented by recognised producer organisations in the fruit and vegetable sector.

1.2. Pursuant to paragraph 1 of Article 3 of the Commission implementing regulation (EU) No 217/892 laying down rules for the application of Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to the fruit and vegetables and processed fruit and vegetables sectors, the National Framework must set out an exhaustive list of environmental actions and the conditions therefore applicable in the Member State and, for each environmental action selected, indicate:

(a) the justification of the action, on the basis of its environmental impact; and

(b) the specific commitments entailed.

1.3. Pursuant to paragraph 5 of Article 33 of the Regulation No. 1308/2013, is a mandatory requirement for production organisations that:

(a) operational programmes include two or more environmental actions; or

(b) at least 10% of the expenditures under operational programmes covers environmental actions.

1.4. Where at least 80% of the producer members of a producer organisation are subject to one or more identical agri-environmental commitments under the 2014-2020 Lithuania's Rural Development Programme (RDP), or participates in National quality programme, then each one of those commitments counts as an environmental action as referred to in the above point (a).

2. CURRENT ENVIRONMENTAL SITUATION AND OBJECTIVES

2.1. Over the past decade, water quality in Lithuania's rivers has improved significantly, however Curonian Lagoon, the cost of the Baltic Sea, about two thirds of Lithuania's rivers and about one third of the lakes still do not meet requirements of the good quality water conditions. In 2012, the share of the water meeting good water conditions as defined in the provisions of the Water Framework Directive, made 54 per cent.

In Lithuania, the quality and chemical status of most of the underground water basins is good. On the regional level the nitrogen and phosphorus compound concentration is in accordance with the requirements for drinking water, however, in urban territories and in areas of intensive farming one can notice an impact of scattered pollution. The concentration of nitrates in Lithuanian surface and underground waters is among the lowest in the EU. The balance of nitrogen in the farming soil was positive in 2009–2012 and was 13,5 kgN/ha/per year (EU 28 average is around 47 kgN/ha/per year). General balance of phosphorus in the farming soil in 2009–2012 was negative. During the same period, about 0,5 kgP/ha were "take out" of the soil annually. The need remains to further investments in means related to reduction of water pollution.

Seeking of the good quality water conditions through implementation of Water Framework Directive 2000/60/EB, Directive 2009/128/EB, defining the basis for the activity of the Community aimed at sustainable use of pesticides and Directive 91/676/EEB on Protection of Water Against Pollution Caused by Nitrates from Agricultural Sources in the period of 2014 - 2020, it is important to continue programs initiated in 2007 – 2013, such as improvement of status of water bodies at risk, protection of water from pollution and soil erosion in arable land, management of reclamation ditches, etc.

2.2. Lithuania **soil quality** is deteriorating due to natural or economic activities driven by natural processes, increasing anthropogenic physical and chemical soil contamination. The main issues to be addressed - declining organic matter of soils diffused (scattered) soil pollution, soil erosion and loss of soil on slopes and in the areas with developed surface karst processes. In recent years, some evidence of soil degradation has been noticed in Lithuania: the soil becomes increasingly acidic (especially in Žemaitija region), the plant nutrients and carbon are decreasing in the ploughland soil layer, and the soil erosion processes become more intensive. Cereal takes too large a share in the structure of the crop, while the share of perennial grass, which is an important source of the carbon, has considerable decreased. The abovementioned changes in the crop structure and rejection of rotation have negative impact on the agri-chemical, physical, and biological properties of the soil.

2.3. The impact of agriculture and forestry on the decrease of **climate change** is related to the generation of renewable energy. In Lithuania, the share of renewable sources in total energy consumption increased from 16.7 to 20.3 per cent in 2007–2011. The national strategy for the development of renewable sources or energy into 2020 projects the increase of this share up to 23 per cent. Agriculture and forestry contribute the most to the renewable energy. The largest proportion of renewable energy is generated from agricultural and forest biomass (90,9 per cent in 2012). The largest contribution to the renewable energy generation is made by the forestry – 82,8 per cent (the EU-28 average is 47,2 per cent), while agriculture contribution is 8.1 per cent (the EU-28 average is 9,7 per cent).

2.4. Agricultural activity increases the thermal pollution of the atmosphere: the increasing concentration of the **greenhouse gasses** (GHG) strengthen the natural greenhouse effect and has a decisive impact on the increase of the global mean temperature. The GHG generated in the process of agricultural produce manufacturing is the second source of thermal pollution by importance in Lithuania. Proportion of the total GHG emission structure in agriculture (per cent of the total emissions, regardless of the impact on crops and grasslands) accounted for 23.4 per cent in Lithuania in 2012, while the average in the EU-28 - 10.3 percent. In addition, during the period 2007-2012 GHG emissions in agriculture decreased by 7.1 per cent, when the EU-28 - decreased by an average of 4.3 percent. In 2012 compared with 2010, the total emissions from agricultural increased (including crop and grassland influence) emissions, but decreased its share in the total national GHG structure.

2.5. Considering current situation, the Environmental actions set out in the National Framework is aiming for the implementation of following priority objectives of a general Union action programme in the field of the environment ('the 7th Environment Action programme'):

- to protect, conserve and enhance the Union's natural capital;

- to turn the Union into a resource-efficient, green and competitive low-carbon economy;

- to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing, and general objective of the 2014-2020 Lithuania's Rural Development Programme - Climate change mitigation and adaptation. All Environmental actions listed in the National Framework must meet the requirements set out in the Article 31 of the Commission Delegated Regulation (EU) No. 2017/891 and Article 3 of the Commission Implementing Regulation (EU) No. 2017/892.

3. GENERAL CONDITIONS FOR ENVIRONMENTAL ACTIONS

3.1. Environmental actions included in operational programme of a producer organisation must be:

- In accordance with the requirements for agri-environment and climate payments set out in the paragraph 3 of Article 28 of the Regulation of the European Parliament and of the Council (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005, and in particular go beyond the following:

a) relevant mandatory standards established pursuant to Chapter I of Title VI of Regulation (EU) No 1306/2013;

b) minimum requirements for the use of fertilisers and plant protection products established by the national legislation;

c) other relevant mandatory requirements established by the national legislation in relation to the environment and its protection.

- In accordance with provisions of this National Framework;

- Compatible and complementary with the other environmental actions implemented under the operational programme and, where appropriate, with the agri-environmental commitments, supported under the RDP, implemented by the members of the Producer Organisation.

3.2. Where an operational programme entails the possibility of combining different environmental actions and/or where the environmental actions selected under the operational programme may be combined with agri-environmental measures supported under the RDP, the level of support must take account of the specific income foregone. Actions or schemes supported under the RDP may not be included in the list environmental actions of the National framework and are not eligible for the support.

3.3. The support for the environmental actions selected under an operational programme, which is intended to cover additional costs and income foregone resulting from the actions, could be modified in case of amendments of the relevant reference level (i.e., the set of standards beyond which an environmental commitment must go).

3.4. The duration of an action should be sufficient to ensure that environmental benefits can be acquired. If the National framework includes an environmental action (other than investments) which is similar to an agri-environment action included under the Rural Development Programme (e.g. actions the duration of which significantly affects their effectiveness, i.e. the achievement of expected environmental benefits), the same duration should be applied as in the case of the agri-environment action concerned. If the duration of an operational programme is shorter (i.e. 3 or 4 years) that the above mentioned duration, a producer organisation is obliged to continue a given environmental action under a subsequent operational programme.

3.5. Actions may be undertaken at producer organization level or on individual premises.

3.6. If a member leaves a producer organization an investment or its residual value is to be recovered if its depreciation period has not yet expired.

3.7. Plant cultivation practices of producer members of a producer organization must meet the requirements, set out in the national legal acts implementing Annex III of the Sustainable Use of

Pesticide Directive 2009/128/EC. Action on the application of integrated pest management practices are described under point 4.4.1 and 4.4.2.

4. EXHAUSTIVE LIST OF ENVIRONMENTAL ACTIONS

4.1. Climate change mitigation and adaptation

4.1.1. Improvement of efficiency of energy use and reduction of CO2 emission

Justification of the action

Cogeneration is the simultaneous production of electrical (or mechanical) energy and useful heat from the same primary energy source. By using the same fuel for two different purposes, this system achieves a more efficient use of primary energy with an obvious repercussion on the consumption of fossil fuels. It can be used particularly in production processes where the use of electricity and the use of heat are virtually simultaneous.

Heat loss may occur due to damages to the covering of a greenhouse. In this case, more fuel is required to provide plants with an optimal temperature in the period of vegetation. Two main ways to reduce heat loss from greenhouse and, thus, energy use and CO2 emissions associated with greenhouse heating, is to change the greenhouse covering with a more thermal insulating one or to install thermal screens. According to research, depending on the type and material of thermal screen installed, heat loss in winter months may be reduced by 30-60%.

 CO_2 emission can be reduced replacing an existing heating equipment by a new more efficient ones or systems using cleaner fuel (e.g. moving from oil to gas).

Commitments

- Purchase installation and project of a cogeneration system;

- Maintenance and use as intended of the cogeneration system installed during the whole depreciation period of the new equipment/structures purchased (minimum five years).

- Purchase and installation of a new, more thermal insulating covering, thermal screens in greenhouses, mushroom houses or packing sheds and / or other production units;

- Purchase installation of a new heating equipment or systems.

Eligible expenditure

Costs related to the investment made on the purchase of new equipment/structures or systems, installation and project.

Where investments are replaced, the residual value of the investments replaced must be:

- (a) added to the operational fund of the producer organisation; or
- (b) subtracted from the cost of the replacement.

Actions supported under 4.1.1. cannot be included and cannot be eligible for support under 4.1.2.

4.1.2. Increasing of use or renewable energy

Justification of the action

Use of renewable energy sources rather than non-renewable energy sources is one of the basic conditions of sustainable rural development. Cultivation of fruit and vegetables (especially in covered structures) consumes a lot of energy; therefore, actions are required for replacement of existing energy equipment running on fossil fuel with equipment running on renewable energy sources.

Commitments

- Purchase and installation of a new heating system running on renewable energy sources;

- Maintenance and use as intended of the new heating system installed during the whole depreciation period of the new equipment purchased (minimum five years). This is an obligatory requirement that is not eligible for support.

Eligible expenditure

Costs related to the investment made on the purchase of new equipment, installation and project (wind turbines, solar panels, geothermal systems).

Where investments are replaced, the residual value of the investments replaced must be:

(a) added to the operational fund of the producer organisation; or

(b) subtracted from the cost of the replacement.

Actions supported under 4.1.2. cannot be included and cannot be eligible for support under 4.1.1.

4.2. To protect, conserve and enhance the Union's natural capital

4.2.1. Collection of rainfall water and use in second circuit of irrigation water

Justification of the action

Cultivation of plants in greenhouses or other covered structures requires large amount of water, thus investment in equipment and structures allowing collection of rainfall from roofs of greenhouses and use of the water collected for irrigation of cultivated plants, as well as in equipment for creating closed irrigation water circuits is needed.

Commitments

- Purchase and installation of equipment and structures allowing the collection of rainfall from roofs of greenhouses and the use of the water collected for the irrigation of plants cultivated in the greenhouses;

- Purchase and installation of the equipment necessary for creating closed irrigation water circuits.

In both cases, the beneficiary of the support must ensure the maintenance and the use as intended of the new irrigation system installed during the whole depreciation period of the new equipment/structures purchased (minimum five years). This is an obligatory requirement that is not eligible for support.

The investment cannot lead to an increase in the irrigated area. The expected reduction in water use will be assessed ex-ante on the basis of technical specifications; the expected reduction in water use must be 5% at least. Where it is not possible to check ex-ante on the basis of technical specification, the reduction in water use must be checked on an ex-post basis.

Eligible expenditure

Costs related to the investment made on the new equipment/structures purchased, installation and project.

Where investments are replaced, the residual value of the investments replaced must be:

(a) added to the operational fund of the producer organisation; or

(b) subtracted from the cost of the replacement.

4.2.2. More efficient use of irrigation water:

Justification of the action

For cultivation of open-field vegetables mainly irrigation systems spraying water over the cultivation area are used. Such use of water resources is not efficient as in hot weather conditions part of the water lands on the ground, evaporates and does not soak into the soil.

Therefore, a large amount of water is required to provide optimal humidity for vegetation of cultivated plants. Also, cultivation and fertilisation of cultivated plants in covered structures requires large amount of water; therefore, actions for replacement of existing irrigation equipment with equipment consuming less water are required.

Commitments

- Purchase and installation of a new water saving irrigation system replacing the existing one;

- Maintenance and use as intended of new irrigation system installed during the whole depreciation period of the new equipment purchased (minimum five years). This is an obligatory requirement that is not eligible for support.

The investment cannot lead to an increase in the irrigated area. The expected reduction in water use will be assessed ex-ante on the basis of technical specifications; the expected reduction in water use must be 5% at least. Where it is not possible to check ex-ante on the basis of technical specification, the reduction in water use must be checked on an ex-post basis.

Eligible expenditure

Costs related to the investment made on the new equipment purchased, installation and project.

Where investments are replaced, the residual value of the investments replaced must be:

(a) added to the operational fund of the producer organisation; or

(b) subtracted from the cost of the replacement.

4.2.3. Reuse of water for washing fruit and vegetables

Justification of the action

In the process of washing fruit and vegetables preparing those for sale a large amount of water is used; actions aimed at storing, cleaning, disinfecting and reuse water for washing vegetables or for irrigation can contribute to reducing water consumption.

Commitments

- Purchase and installation of a equipment and structures for collecting, storing, cleaning, disinfecting and reusing water used for washing fruit and vegetables;

- Maintenance and use as intended of new system installed during the whole depreciation period of the new equipment/structures purchased (minimum five years). This is an obligatory requirement that is not eligible for support.

The investment cannot lead to an increase in the irrigated area. The expected reduction in water use will be assessed ex-ante on the basis of technical specifications; the expected reduction in water use must be 5% at least. Where it is not possible to check ex-ante on the basis of technical specification, the reduction in water use must be checked on an ex-post basis.

Eligible expenditure

Costs related to the investment made on the new equipment/structures purchased, installation and project.

Where investments are replaced, the residual value of the investments replaced must be:

- (a) added to the operational fund of the producer organisation; or
- (b) subtracted from the cost of the replacement.

4.2.3. Preservation of Soil fertility and reduction of erosion

Justification of the action

The risk of erosion can be mitigated by adopting appropriate agricultural practices such as conservation tillage and mulching inter-rows in fruit and vegetable cultivation by organic mulch. In order to carry out this kind of treatment special equipment and machinery the use of which does not influence the structure and condition of soil is necessary. Mulching is one of the most beneficial acts raising the organic matter content of soil and supporting life in the soil, helps reduce soil moisture loss through evaporation

Commitments

- Purchase of a specialised machinery and equipment necessary to implement agricultural practices and/or activities aimed at improving and maintaining good soil and going beyond the obligatory requirements established by the national legislation condition to prevent soil erosion;

- Maintenance and use as intended of the machinery and equipment purchased for the minimum duration of 5 years.

Eligible expenditure

Costs related to a purchase of a new specialised machinery or equipment to keep soil in good condition (mulching machines, branch crushers and other similar equipment).

4.3. To turn the Union into a resource-efficient, green and competitive low-carbon economy

4.3.1. Creating waste composting systems:

Justification of the action

Composting is a process of decomposition of organic matter performed by aerobic microorganisms. The result of this process is compost which can be used to enrich soil with organic matter.

Some organic by-products and residues generated in horticultural holdings can be used to produce compost (damaged or sub-standard fruit and vegetables, peelings, residues from crop cultivation, etc.).

The development of composting systems requires investments – to prepare the location and purchase appropriate equipment.

Commitments

- Purchase and installation of the equipment and installations necessary to create an organic waste composting system. The capacity of the composting system put in place must be proportionate to the volume of organic residues and by-products produced by the PO or its members;

- Maintenance and use as intended of the composting system put in place for a minimum duration of 5 years;

- Use by the PO's members or sale of the compost produced.

Eligible expenditure

Costs related to a purchase and installation of project and equipment necessary to create the composting system, including materials and installations intended for protection of the ground water and soil against leaking pollutants.

4.3.2. Reduction of waste:

Justification of the action

In order to increase the amount of light plants cultivated in covered structures, the plants are mulched with white polythene and tied with a synthetic strap, which do not decompose and every year result in a lot of waste. Therefore, it is required to promote the use of bio-degradable material for both mulching and tying, which by the end of season can be composted together with plant remains.

Every year, by the end of the season of cultivation of open-air and greenhouse plants, a large amount of waste is produced, made up of plant remains and/or mineral wool used as plant substratum. Afterwards planters must re-utilise the mineral wool or to recycle it. In order to reduce the amount of waste by the end of the growing season, the mineral wool substratum in greenhouses should be replaced with biodegradable substratum (e.g., coconut fibre or wood fibre).

All the above-mentioned practices can contribute to reducing the production of waste associated with the production of fruits and vegetables.

Commitments

- Purchase and use of bio-degradable mulch polythene and/or bio-degradable tying material;

- Purchase and use of bio-degradable substratum.

The minimum duration of the action is 5 years. If the operational programme is shorter than 5 years, the commitment is extended until completed in the subsequent operational programme.

Eligible expenditure

Costs related to a purchase bio-degradable mulch polythene, bio-degradable tying material and biodegradable substratum. Supported only difference between the price of biodegradable material and the standard material can be compensated.

4.4. To safeguard the Union's citizens from environment-related pressures and risks to health and well-being

4.4.1. Optimisation of use of plant protection products

Justification of the action

In individual stages of conventional cultivation of fruit and vegetables biological plant protection products and materials (such as pheromones and pheromone traps and/or dispensers) or natural enemies of pests (e.g. predators, pest parasites) can be used for managing or eliminating pests, instead of chemical plant protection products. Limiting the use of chemical plant protection agents contributes to reducing risks of negative impacts on the environment.

The early use of plant protection substances is an important element for correctly combating crop pests and diseases. An inappropriate or mistimed intervention creates a series of problems, such as inadequate treatment and reduction of the population of beneficial insects and micro-organisms, while it also burdens the environment.

Moreover, the control of environmental conditions is of crucial importance in predicting the presence and development of various pests and diseases that infect fruit and vegetables both during production and post-harvest.

The pesticides sprayed on crops, spread by the wind, may affect the adjacent area. Therefore, it is necessary to improve the spraying methods in order to prevent this from happening and reduce the usage of spray liquid. This can be done by replacing the old spraying equipment or its components (e.g. spraying nozzles) with new ones, less affecting the environment of the adjacent areas and more effective, and thus reducing the use of water and plant protection products.

Commitments

- Purchase and use as intended of biological plant protection products and materials and/or natural enemies of pests;

- Purchase and installation of the products, materials and equipment needed to establish the decision support system (including appropriate pheromones and traps, forecast equipment, meteorological stations and required software) for optimising the spread of plant protection products;

- Purchase of a new spraying equipment or its components replacing an existing one which use brings benefits for the environment. The replacement of old equipment for a new equipment with the same technical specifications is not eligible

The minimum duration of the action is 5 years. If the operational programme is shorter than 5 years, the commitment is extended until completed in the subsequent operational programme.

Eligible expenditure

Costs related to a purchase of biological plant protection products and materials and/or natural enemies of pests, pheromones, traps, forecast equipment, meteorological stations and required software, spraying equipment or its components. Supported only additional costs for the products and/or materials purchased, as compared to the costs of conventional plant protection methods, and the possible income foregone resulting from the action.

4.4.2. Introduction of natural methods of plant pollination

Justification of the action

Introduction of pollinating insects, such as bees and bumblebees, into planted areas contributes to maintain or restore biodiversity of local flora.

Commitments

Purchase, installation and use as intended (use of natural methods of plant pollination) of hives of pollinating insects in greenhouses.

Eligible expenditure

Actual costs for the purchase of hives of pollinating insects.

4.5. Activities in support to environmental actions

4.51. Training, advice and technical assistance

Justification of the action

The implementation and the effectiveness of certain environmental actions selected under the National Framework, to be implemented by a producer organisation or its members, can be fostered by support activities (training, advice and/or technical assistance) performed by qualified personnel internal or external to the producer organisation.

Commitments

- Implementing at least one of the environmental actions indicated in chapters 4 of the framework;

- Using additional qualified personnel to perform activities of training, advice and/or technical assistance, which complement (i.e., accompany and are associated with) one or more of the environmental actions implemented and are targeted to reinforce the effects of these actions.

Eligible expenditure

Cost of the working time of the qualified personnel used. Detailed records must be kept showing the actual number of the POs members having access to the advisory service and the specific tasks performed by the qualified personnel used. In case of use of internal qualified personnel, the time worked must be documented.