

Annex II J: Country Report Lithuania

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Code of good agricultural practices for Lithuania

The “Code of good agricultural practices for Lithuania” was prepared in Lithuania 2001. The Lithuanian Institute of Water Management was coordinating this work. It was financed by The Danish Environmental protection agency, the Lithuanian Ministry of Agriculture and the Ministry of Environment. In this work were involved experts from Lithuanian University of Agriculture, Chamber of Agriculture, Agricultural Advisory Service, Farmers Union, Association of Agricultural Companies, institutes of Agriculture, Animal Science, Agricultural Engineering and Water Management. Experts from the Danish Agricultural advisory Service Centre provided methodological guiding during the preparation of the Code.

In the Code was published as separate publication. A farmer who follows its main rules and recommendations on good farming not only improves the environment, but also should achieve a profit that grants sufficiently good living conditions. It discusses:

1. Periods when application of certain fertilisers is prohibited;
2. Animal density corresponding to maximal manure application - 170 kg of nitrogen per year per hectare of agricultural area;
3. The capacity of storage vessels for livestock manure for the storage period no less than 6 months;
4. Limitation of fertiliser application, that is consistent with good farming and is taking into account the following:
 - a. soil conditions, soil type and slope;
 - b. climatic conditions and precipitation;
 - c. land use and agricultural practices, including crop rotation and a balance between:
 - i. the foreseeable nitrogen requirements of the crops, and
 - ii. the nitrogen supply to the crops from the soil and from fertilisation corresponding to:

1. the amount of nitrogen present in the mould plough layer at the moment when the crop starts to use it to a significant degree (at the beginning of plant vegetation),
 2. the supply of nitrogen through the net mineralization of the reserves of organic nitrogen in the mould plough layer,
 3. additional supply of nitrogen with livestock manure,
 4. supply of nitrogen with mineral fertilizers.
5. Ratio between perennial and annual crops;
 6. Increase of vegetation cover during periods when soil is most vulnerable to nitrate leaching; ecologically and economically balanced fertilisation norms, terms and technologies, fertilisation limitations in the zones vulnerable to nitrates.
 7. Measures that do not allow agricultural effluents to pollute surface and ground water;
 8. Land reclamation, biological diversity and landscape.

The Code (Rules and recommendations on good farming) is a complex of legal and recommendation measures implementation of which guarantees economic and ecological optimum. The Code is the first document of this type in Lithuania. The biggest attention is paid to crop production, but questions about animal production are also illuminated as the crop fertilisation is inherently related to manure storage and use. Rules of two different levels are incorporated in the Code:

1. Laws of the Republic of Lithuania, resolutions of the Government and other legal documents related to good farming. Implementation of these rules is mandatory for farmers who want to get national and SAPARD financial support.
2. Proposed new rules are prepared on the background of the directives and regulations of the EU, the HELCOM and Lithuanian scientists' recommendations. They are not binding yet but part of them will be legitimated in the near future.

Research data from the main Lithuanian science and study institutions and Lithuanian farmers' experience of many years were used for preparation of the RRGF. Besides main regulations of the Codes of Good Agriculture for Poland, Finland, Latvia, Ireland and Wales, as well as agri-environmental programmes of Sweden and Denmark were analysed and used for working out of these rules and recommendations.

Lithuanian Agriculture and Rural Development Plan 2000-2006

The Lithuanian government has not formally approved the Code yet. Farmers can follow requirements on a voluntary base. Some requirements are included in the **Agriculture and Rural Development Plan 2000-2006**. There are two annexes related with Good Farming Practice:

Summary of Lithuanian National agri-environmental programme

The Draft of Lithuanian National Agri-Environmental Programme (NAEP) is prepared according to the EU Council Regulation 1257/1999. This Programme provides for activities, which will be taken by the Ministry of Agriculture and other institutions to ensure environmental protection against harmful activities in rural areas. The Programme is based on current agri-environmental situation, analysis of problems and perspectives, governmental programmes and EU experience.

Agriculture in Lithuania causes some environmental problems such as water and soil pollution by nitrates, soil erosion, loss of grasslands (either due to abandonment and overgrowing with bushes, or ploughing) and biodiversity. Agriculture and other rural activities provide employment and income for roughly one third of the Lithuanian population. This is not directly connected with environment, but such initiative as implementation of farming practices maintaining landscape and the countryside could promote certain employment in rural areas, also create conditions for rural tourism, and maintain traditional architecture, countryside and landscape, which is already an environmental issue.

The main objective of the draft agri-environmental programme (NAEP) is to prepare measures that ensure normal economic and social conditions for rural population, decrease negative impact of agriculture on the environment, restore traditional landscape and increase biodiversity.

The draft of NAEP consists of the description of the relationship of Lithuanian agriculture and environment, current problems and possible ways of solution. The second part of the draft of NAEP describes agri-environmental schemes. The agri-environmental programme consists of four elements:

- Agri-environmental schemes (AES)
- Consultation and training
- Demonstration projects

AES will be applied in the whole territory of Lithuania according to the agri-environmental protection needs. Participants of the scheme who will fulfil the programme's provisions, get premium payment which cover income loss due to implementation of the provisions.

Advisory service, districts agricultural units, together with scientific and training institutions will organise courses where they explain agri-environmental schemes, agreement process, implementation of measures, sustainable agriculture methods, etc.

Training and consultation for farmers participating in the programme will be free and financed from the programme's funds.

Demonstration projects will be implemented through demonstration days on farms that are already implementing agri-environmental schemes. Some demonstration projects are already being implemented in Lithuania.

AES comprises the following measures that participant of the programme will be able to implement in his farm:

1. Fertilising and proper manure handling;
2. Sustainable application of plant protection measures;
3. Protective belts and other technical measures;
4. Landscape protection and increase of biodiversity;
5. Preservation of historic and archaeological objects;
6. Organic agriculture;
7. Local breeds in danger of extinction;
8. Water protection, care for agricultural run-off. For implementation of this measure, sedimentation ponds have to be built in cultivated land.
9. Environmentally friendly farming. The aim of this measure is to decrease possibility of leakage of nitrates and pesticides into layers of ground drinking water. The measure is applied in territories sensitive to ground water pollution.
10. Landscape management and enhancement of biodiversity.

It is expected that in 5-10 years after implementation of NAES run-off of nitrate from agricultural territories will decrease by 30-50%, that of phosphates by 10-20%. Establishment of individual farms will increase mosaic structure of Lithuanian landscape; a smaller size of fields with crop rotation will decrease wind erosion. Measures related to the landscape and biodiversity protection will maintain traditional rural landscape and enhance biodiversity in agricultural lands. Protection belts, artificial wetlands, sedimentation ponds, replacement of some drainage collectors by ditches, re-naturalisation of the ditches and other anti-erosion measures will decrease run-off of P and N into watercourses.

For evaluation of effectiveness of the agri-environmental measures and improvement of the programme, control of implemented measures and monitoring of their effect on water quality, landscapes and biological diversity will be carried out.

Environmental requirements

(Mandatory rules of the Lithuanian Code of Good Agricultural Practice)

I.

1. When making the commodity production plans, a land user has to take into consideration the national requirements for agricultural production in discrete regions, the territorial planning and particular land use conditions.

Resolution of the Government of the LR 1995 12 29 No. 1640 on partial alteration of LRVN 1992 05 12 resolution No.343 "On approval of special conditions of forest and land use".

2. Structure of lands in national parks, reserves and their protective zones could be changed only according to the projects complied with Ministry of Environment and administration of the parks.

Law on preserved territories of the Republic of Lithuania. 1993, V.

3. Organic farms have to follow requirements of rules for organic farms. The organic farm has to be certificated; its whole production has to be marked with the label of organic production. The farm has to prepare an activity plan, to make crop rotation and fertilisation plans and to carry out the account according to a set form.

Rules on ecological farming: production, processing, realisation, labelling (Lithuanian). - Ekoagros, 1999.

4. In the protective areas and zone of intensive karst it is forbidden to use sinkholes as an outlet for subsurface drainage and rainwater.

In the zone of intensive karst, the following crop structure, fertiliser and plant protection systems are set:

- **I group land (under 20 sinkholes/100 ha): Cereals should form not more than 50%, perennial grasses – not less than 40%, and row crops – not more than 10% of the sown area. Yearly fertilisation norm has not to exceed 90 kg/ha nitrogen, phosphorus and potassium (active matter). It is forbidden to use triazine herbicides and chloro-organic insecticides.**
- **II group land (20-25 sinkholes/100 ha): It is not allowed to plant row crops and to grow up new industrial gardens. Seven-field crop rotation is applicable for the II group land where cereals occupy about 43% of the sown area and perennial grasses 57%. Yearly fertilisation norm has not to exceed 60 kg/ha nitrogen, phosphorus and potassium (active matter). It is forbidden to use herbicides, retardant and insecticides.**

- **III group land (50-80 sinkholes/100 ha):** Meadows and pastures of perennial grasses should dominate; cereals may be sown only as forecrop for the grasses. It is forbidden to apply mineral nitrogen fertiliser. Yearly norm of phosphorus and potassium fertiliser is allowed no more than 60 kg/ha (active matter). It is forbidden to use pesticides with exception of mordant.
- **IV group land (more than 80 sinkholes/100 ha):** Only meadows and forests are allowed. Melliferous plants and herbs may be grown. It is forbidden any fertilisation and use of plant protection measures.
- **On I-IV group land a strip not less than 25-m width is left around every pit.** Fertilisation and grazing of cattle is forbidden, only mowing is allowed. If landowner or user has signed an agreement to grow organic products on I-IV group land, the crop structure may be not regulated, but the rules on fertilisation and usage of chemical compounds, set for the respective land group, have to be followed.

II.

1. Every activity of Lithuanian citizens with respect to plant protection from diseases, pests and weeds with help of chemical or biological plant protection measures has to be performed in compliance with Republic of Lithuania Plant Protection Law and Rules on Use of Plant Protection Measures.

Republic of Lithuania. Law on Plant Protection (Lithuanian). 1998 06 04 No. VIII-769

Rules on Use of Plant Protection Means (Lithuanian). - V., 1999. - P.29.

2. It is forbidden to use those pesticides in Lithuania that are not registered and written in the Lists of Professional or Individual Use of Plant Protection Measures, regulating pesticides use in the country.

List of Professional Use of Plant Protection Measures (Lithuanian). - V., 1999. - P. 72.

List of Individual Use of Plant Protection Measures (Lithuanian). - V., 1999. - P.16.

3. The amount of prepared solution should comply an area to be sprayed. Sprayer should be washed after work. Washing water can be sprayed on the same plants. It is forbidden to wash sprayer or spill used water where the cleaning water can run to drain or other water bodies.

Rules on Use of Plant Protection Means (Lithuanian). -V., 1999. -P.29.

4. Every operation with plant protection preparations has to be carried out exactly following work safety and environmental requirements that are described in detail in the “Rules on Use of Plant Protection Means”. The most important requirements are the following:

- Only trained persons who have acknowledged with the characteristics of preparations and requirements of work safety may work with pesticides.
- Only healthy persons who have health examination certificates can work with pesticides.
- It is necessary to use personal safety precautions and to follow rules of hygiene during operations.
- Use only correct, calibrated and checked prior to operations machines and equipment for spraying of pesticides on crop fields and for dressing of seeds. New sprayers must be certified and sprayers in use must be checked by technical inspection.
- It is forbidden to apply pesticides on blooming plants. The blooming plants could be sprayed only in exception, following special recommendations.

Rules on Use of Plant Protection Means (Lithuanian). -V., 1999. -P.29.

III.

1. Every animal shall be kept, fed and treated according to its species, age, physiology and behaviour. The owner of animals must constantly take care about their health, feeding, adequate care and appropriate environment. Animals shall be protected from suffering, cruel behaviour and other negative impact.

Republic of Lithuania. Veterinary law. 1991 12 17 LRAT No. I-2110. V.

Republic of Lithuania. Law on animal care, housing and use. 1997 11 6 LRAT No. VIII-500. V.

2. It shall be prohibited to feed stimulating substances to animals in order to improve their productivity, capacity for work and sport results, except for those substances that are allowed by the Government and its authorised service.

Republic of Lithuania. Veterinary law. 1991 12 17 LRAT No. I-2110. V.

3. With regard to the instruction of state veterinary surgeon the animal carcasses, aborted embryos, damaged skins and furs, waste of slaughtered animals and other animal waste have to be fired, buried or brought (according to veterinary requirements) to animal waste processing companies.

Republic of Lithuania. Veterinary law. 1991 12 17 LRAT No. I-2110. V.

4. As animal carcasses could be used as raw material for processing companies producing feeds, pharmaceutical or special purpose products, persons having such waste shall inform the processing company and keep it before the collection under veterinary sanitation requirements.

Veterinary rules on annihilation and processing of animal waste and placing produced products on the market (Project).

EU Council Directive concerning the disposal and processing of animal waste and its placing on the market (90/667/EEC).

5. Place for construction of livestock-farm (barn) is selected according to sanitary, zooveterinarian, environmental and fire-prevention norm requirements.

Special conditions of forest and land use. GR 1992 05 12 resolution No. 343. V.

Rules on design of agricultural buildings, confirmed by LRAF and LRBU ministries 1997 07 11 order No.640/247.

6. Designing barns in farmsteads within settlements or small towns the shortest sanitary distances to dwelling house and between farmstead buildings and neighbouring constructions are determined under guidance of construction norms regulating design of farmsteads in towns and settlements.

Rules on technological design of animal buildings, confirmed by LRAF and LRBU ministries 1997 07 11 order No. 640/247.

7. Lithuanian Republic normative acts do not allow building new animal husbandry buildings, manure storage and silage storage places and expanding the existing ones in the following zones:

- protective zones of communications and electricity supply lines;
- sanitary protective zones of roads, railways and their facilities, and airports;
- protective zones of main gas and oil pipelines and their facilities, fuel supply bases, gas stations and solid fuel shops;
- protective zones of health resorts;
- zones of the territory of historical and cultural monuments, protected landscapes;
- sanitary protective zones of water bodies (watering places).

Special conditions of forest and land use. GR 1992 05 12 resolution No. 343. V.

8. Farms that use more than 10 m³ of water per day have to get License for use of nature resources. Control (monitoring) of environment is compulsory on big farms where annual production of 500 AU is planned and some times on other farms, if it is prescribed in the License for use of nature resources. Monitoring of liquid manure watering, field drainage systems and surface water is compulsory when the size of a farm is 200 AU and more.

The order of rendering of licenses for nature resources use, for use of nature resources limits and for settling of permitted environmental pollution norm (Lithuanian). LAND 32 - 99. V., - 1999.

Environmental requirements for manure and sewage handling on livestock-farms (Lithuanian). LAND 33 - 99. V., - 1999.

Republic of Lithuania. Law on environmental monitoring. - V., 1997.

IV

1. Animals have to be reared and kept under such conditions that are not harmful for animals. Rearing and housing conditions have to be chosen with regard to peculiarities of animal species and breed. Animal husbandry systems and types, the size of barns are designed according to the branch and specialisation of a farm. The chosen animal keeping system has to ensure good animal health and high productivity, low expenditure of fodder, labour, low monetary costs, qualitative production and to protect environment from pollution with production wastes.

Republic of Lithuania. Law on animal care, housing and use. 1997 11 06 VIII-500. V.

Rules on pig housing confirmed by the State Veterinary Service 1998 12 31 by the order No. 4-359.

Rules on technological design of animal buildings, confirmed by LRAF and LRBU ministries 1997 07 11 order No. 640/247.

2. In the farms having more than 10 animal units there should be manure storage of sufficient capacity in order to reduce nutrient losses and preserve environment.

HELCOM 1992 February 6. Recommendation 13/7. Reduction of ammonia emissions from manure storage.

Environmental requirements for manure and sewage handling on farms LAND 33-99. -V., 1999.

3. When selecting a place for manure storage, as for every other production building of livestock-farm, the distance to dwelling houses, water bodies and roads is determined under the guidance of existing normative.

Special conditions of forest and land use. (Lithuanian) LRG 1992 05 12 resolution No.343.

V.

1. Wastewater may be discharged to natural environment only when its pollution does not exceed norms approved by the Lithuanian Ministry of Environment.

Republic of Lithuania. Law on water 1997 10 21. No. VIII-474. V. 31 article.

Wastewater pollution norms (LAND 10-96) (Lithuanian). V. 1997

Environmental rules on design and exploitation of domestic wastewater filtration facilities (LAND 21-97) (Lithuanian). V. 1997

2. Choice of biological wastewater treatment facilities of second step is determined by local conditions (relief, ground, distance to outlet to rivulet, etc.) and valid sanitary environmental restrictions.

Special conditions of forest and land use. LRG 1992 05 12 resolution No. 343.

3. Sludge from biological treatment facilities may be used for fertilisation of fields if the sludge meets the requirements of environmental norms.

Norms for sludge use (LAND 20-96) (Lithuanian). 1997, V.

4. Effluents from wet silage, wastewater formed during feedstuffs preparation, milking and livestock slaughtering, and also colostrum, whey and buttermilk have to be discharged to urine reservoir, slurry storage or separate reservoir or it may be used in compost production. Then the wastewater is spread on the fields with help of mobile spreaders or watering equipment. Single and annual watering norms are restricted according to the fertilisation value of the wastewater. It is strictly forbidden to discharge this wastewater to biological wastewater treatment plant.

Environmental requirements for manure and sewage handling on livestock-farms (Lithuanian). LAND 33 - 99. V., - 1999.

5. By wastewater treatment plants there should be installed sanitary protective zones restricting economic activity; besides, minimal sanitary distances to other objects have to be kept.

Special conditions of forest and land use. GR 1992 05 12 resolution No. 343. V.

VI.

1. Landowner is responsible and he cannot impede to ensure functioning of land reclamation facilities in adjacent lands and also has not to violate the rights of other users of water resources. Every earthwork and construction of new buildings in drained areas must be co-ordinated with State Land Reclamation Service.

Republic of Lithuania. Law on Land Reclamation, 1993, V.

Republic of Lithuania. Law on Water, 1997, V.

Republic of Lithuania. Law on Land Reclamation, 1993, V.

**2. Coastal protective strips are established at surface water bodies. For regulated rivulets and reclamation ditches, which have basin area smaller than 10 km², width of the preservation strip is determined depending on local conditions:
When inclination of riverside is up to 5 degrees – 1 m;
When inclination of riverside is 5-10 degrees – not smaller than 2.5 m;
When inclination of riverside is more than 10 degrees – not smaller than 5 m.**

Regulations on formation and maintenance of preservation zones for water bodies, LTSR MT 1982 12 06 resolution No. 335.

3. Landowner must:

- maintain a ditch that goes through his land in order to create conditions for draining of adjacent areas;¹
- not violate requirements of preservation strips and zones.

Special conditions on forest and land use. LRG 1992.05.12, Resolution No. 343. V.

4. Drilled and dug wells located in the territory of land user are sources of drinking water and laws regulate their protection. Sanitary protective zones and strips shall be designated around the water extraction sites and single wells; economic activities shall be regulated or prohibited there.

Lithuanian Republic. Law on Water, 1997.

Special conditions of forest and land use. LRG 1992 05 12, resolution No. 343

Order on design, installation, preservation and liquidation of bore wells for water supply and thermal energy use. LAND 4-99. V., 1999.

5. Territory of the strip of strict regime has to be fenced (in exceptional cases it may stay without fence if owner of the drilled well ensures safety of the strip and pump of the well), planted, kept clean and protected. In the strip of strict regime it is prohibited to store oil products, chemical and organic materials, use pesticides, perform intensive agriculture, build objects that are not related to water supply, etc.

Order on design, installation, preservation and liquidation of bore wells for water supply and thermal energy use. LAND 4-99. V., 1999.

6. Consumers, who are not connected to centralised water supply network, provide drinking water themselves and take care about its quality. Concentration of nitrate in drinking water cannot exceed 50mg/l. If because of installation of new bore well there could arise wastewater, the installation is allowed only when water consumer guarantees wastewater management.

Drinking water. Quality requirements and program care. HN 24:1998. V., 1998.

Order on design, installation, preservation and liquidation of bore wells for water supply and thermal energy use. LAND 4-99. V., 1999.

7. When cultural landscape is being formed, geocological balance of landscape has to be accomplished, i.e. green areas of natural frame (nuclear) have not to be infringed. It preserves structure of the landscape.

Republic of Lithuania. Law on Protected Areas, 1993, V.

8. It is prohibited to destroy and infringe protected kinds of fauna, fungi and its communities as well as habitats and residence.

Republic of Lithuania. Law on Protected Animal, Plant and Fungi Species and Communities, 1997.

9. Landowners and users are obliged to preserve natural and cultural heritage objects.

Republic of Lithuania. Law on Protected Areas, 1993, V.

10. Physical and juridical persons who use soil resources must:

- **preserve and enhance soil fertility;**
- **take measures in order to avoid negative effect of soil erosion.**

Republic of Lithuania. Law on Change of the Law on Land (draft), 1999.

11. In flooded and springy areas it is forbidden:

- **to drain, plough (except for polders) and change otherwise state of flood meadows and pastures and their grass composition;**
- **to destroy vegetative cover of natural marshes mechanically;**
- **to change hydrological regime of springs that do not dry up and their groups;**
- **to drain and make agricultural lands or waters out of upland moors, intermediate marshes and low-lying marshes that have area of more than 0.5 ha and depth of peat more than 1 m.**

Special conditions on forest and land use. LRG 1992.05.12, Resolution No. 343. V.

Implementation control of Good Farming Practice

Implementation of the Code of Good Agricultural Practice for Lithuania is voluntary. But some requirements as they are described in Lithuanian Agriculture and Rural Development Plan 2000-2006 are set up as minimal to follow if farmer wants to receive financial support.

A substantial number of organisations and agents are involved in agri-environmental policy formation, implementation, monitoring and control in Lithuania. The Ministry of Agriculture and Ministry of Environment head these agents.

The Ministry of Environment (MoE) undertakes the state management functions designated by laws and other legal acts in the field of environmental protection, forestry, use of natural resources, and territorial planning and implements national policy in these fields. It describes its main task as ensuring the protection of the environment according to sustainable development principles, forming principles and guidelines of the regional management policy of the country and ensure application of the said principles.

It perceives sustainable development as ensuring a healthy and clean environment, rational use, protection and restoration of natural resources, including forests and the underground in the Republic of Lithuania and ...protecting landscapes, ecosystems, nature values, biological diversity and gene characteristics of Lithuania.

Institutions subordinated to the Ministry and designated to the regulation sphere of the Ministry include the *State Environmental Protection Inspection agency, regional environmental protection departments, a joint research centre, the Lithuanian Geological Survey, nature reserves, national parks and the national land register (the latter managed jointly with the Ministry of Agriculture).*

Table 1: Subordinate Agencies of the Lithuanian MoE related to GFP

Agency	Function
State Environmental Protection Inspection Agency	Organises, co-ordinates and controls activities of the state environmental protection control institutions and inspections.
Regional Environmental Protection Departments	The state control of environmental protection is carried out by 8 Regional Environmental Protection Departments. Environmental Inspectors in Districts are the main actors who directly control farmers with regard to environmental protection, including supervision of special rules of land use and penalties.
Joint Research Centre	Organises state environment monitoring. The JRC is directly involved surface water quality monitoring and control.
Lithuanian Geological Survey	Regulates the use, protection and exploration of underground sites and undertakes underground water protection projects.
Land Register (jointly with the MoA)	<i>The Enterprise has 12 subdivisions as well as 53 service offices. Manages the register of immovable property and the Register of special conditions on the use of land. Directly connected with farmers as it keeps records on land ownership and restrictions on land use for each parcel of land, including the karst area.</i>
Lithuanian Environmental Investment Fund	Offers soft loans, loan guaranties and grants to cover interest to Lithuanian enterprises, institutions, organisations and other institutions for the implementation of environmental investment projects.

The Ministry of Agriculture heads the list of governmental organisations with regard to agriculture. Within the Agricultural Development and Food Department is the Land Reclamation and Environmental Protection Division, which is directly responsible for the implementation of the Ministry's environment protection policy. This division prepared the state regulations and subsidy schemes for the development of organic agriculture.

In the **Department of Finance and Economy**, which has a **Rural Development Division**, proposals about the level financial support are evaluated. The *Rural Support Fund (RSF)* and *Guarantee Fund* was initiated, developed and is monitored by this Department.

Institutions subordinated to the Ministry and designed to enforce its policies include the newly established **National Paying Agency**. Its' role is mainly related to administering EU SAPARD payments.