Review of the Regulatory Framework Governing Agricultural Pollution Control in Romania

November 2000

Executive Summary

The first question that arises in the context of agricultural pollution control is what binding international obligations exist in the field of agricultural pollution control. This question is particularly important, since, in the view of the consultant, emphasis should not only be placed on the approximation of legislation with European Union law, but should also directed at complying with Romania's current obligations under international law

The most relevant obligations with regard to the envisaged agricultural pollution control project stem from the Danube River Protection Convention and, subordinate to it, the Strategic Action Plan, and are:

- the introduction of regulations for fertiliser storage, handling and application;
- the introduction of environmentally sound agriculture policy reforms;
- the demonstration of Best Environmental Practice (BEP) for the use of fertilisers, pesticides, and other agrochemicals in agriculture;
- the completion and application of pilot and demonstration projects for manure handling, storage and disposal.

Moreover, the Danube River Protection River Convention places particular emphasis on the development of water quality standards, including drinking water quality standards.

Finally, international law will affect the designation of the Iezer Calarasi Wetland a protected habitat. The consultant considers that developing and strengthening existing regulatory mechanisms for the protection of species is not within the scope of the proposed agricultural pollution control project. The consultant does, however, consider that obligations related to habitat protection should be taken into account when considering the regulatory framework necessary for the designation of the Iezer Calarsi Wetland. This may include designating the Iezar Calarasi Wetland a protected site under the Ramsar Convention.

European Union policy and legislation in the field of agricultural pollution control will also have to be taken into account when considering the legal framework for agricultural pollution control. In terms of policy, it is important to stress that good agricultural practices as set out in a Code of Good Agricultural Practice constitute minimum environmental standards, to which farmers can be required to adhere without being entitled to compensation. Farmers will have no legal ground to claim compensation if forced to adhere to a Code of Good Agricultural Practice.

Moreover, in view of the proven inadequacies of the Nitrates Directive to date, while implementation of the Nitrates Directive should certainly be a project objective, the project should also seek to identify and further alternative measure to solve problems related to diffuse agricultural pollution control.

Finally, in view of the limited scope of European Union legislation on drinking water quality, and given the drastic need for improvement in drinking water quality in the project area, it is of paramount importance that any Romanian legislation on water quality standards prepared before or during project implementation apply to water quality standards for water originating from private water supplies.

The Water Law, the Environment Protection Law and the Draft Action Plan will constitute the main legal basis governing agricultural pollution control in Romania. In this context, the Consultants consider that a link should be established between the regime on 'protected zones' as set out in the Water Law, and 'vulnerable zones' as designated in the Draft Action Plan. Moreover, attempts should be made to adapt the Draft Action Plan to current requirements of agricultural practices in Romania, even if this means moving away from the requirements set out in the Nitrates Directive. Finally, it will be necessary to draft a Code or Codes of Good Agriculture Practice, which on the one hand complies with the prerequisites of the Nitrates Directive, and on the other hand takes into account agricultural practices as currently found in Romania.

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1. Introduction

1.1 Background

Adoption of a National Environmental Action Plan

1. In 1999, the Government of Romania adopted a National Environmental Action Plan (NEAP). One component of the NEAP is that it identifies the reduction of nutrient run-off (nitrogen and phosphorous) into the Danube and Black Sea as a matter of priority.

2. This component of the NEAP reflects the contents of a number of international agreements and conventions related to the protection of international water courses to which Romania is a signatory, including:

- the Convention for the Protection of the Black Sea from Pollution of 1992 (Bucharest Convention);
- the Odessa Ministerial Declaration on the Protection of the Black sea of 1993 (Odessa Declaration);
- the Danube River Basin Pollution Reduction Program ; and
- the Danube River Protection Convention of 1994.

3. Moreover, this component of the NEAP reflects the commitment of the Government to harmonize national legislation on environmental protection with existing European Union legislation, in particular with Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources (the Nitrates Directive).[1] One prerequisite for the implementation of the Nitrates Directive is the elaboration of a 'code of good agricultural practice' to combat pollution of ground and surface waters with nitrates from agricultural sources.

Adoption of a Government Strategy for Agriculture

4. In addition to the NEAP adopted in 1999, the Government has adopted a 'Government Strategy for Agriculture'.[2] One of the components of this strategy is to promote on-farm environmental management, with a view to increasing agricultural productivity in a sustainable manner. The Government Strategy for Agriculture is complemented by measure 3.3 of the National Plan for Agriculture and Rural Development, 'Agricultural methods designed to protect the environment and preserve the rural landscape'.[3] Under this measure, the Government has also committed itself to drafting a 'code of good agricultural practice' as a prerequisite for receiving funding under the Special Accession Programme for Agriculture and Rural Development (SAPARD).

5. The environmental component of the Government Strategy for Agriculture reflects the current trend in the European Union and in EU member states to include environmental considerations in agricultural policies. For example, the Common Agricultural Policy (CAP) of the European Union as revised by Agenda 2000 raises environmental considerations which include: (1) problems related to water quality and water quantity; (2) physical, chemical and biological degradation of soil; (3) air and climate change and ozone depletion; (4) threats to biodiversity; (5) threats to the existent landscape.[4] While such environmental considerations are not always addressed in binding European legislation, members states of the European Union have developed codes of good agricultural practices that address a number of the considerations listed above, with a view to optimizing agricultural productivity while ensuring the long-term sustainability of agriculture.

Reconsidering the current regulatory framework governing agricultural pollution control

6. Consequently, there are at present two separate Government Strategies under which the Government has committed itself to reconsider the current regulatory framework governing agricultural pollution control and elaborating 'codes of good agricultural practice':

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[1] This commitment is rendered concrete by means of the 'Romanian Approximation Strategy for the Water Quality Sector', issued by the MWFEP in June 2000.
[2] This was being finalised during the second mission of the international legal consultant and was consequently not available for review.
[3] This measure is currently only available in draft form.
[4] 'Directions towards sustainable agriculture, Communication to the Council; The European Parliament; The Economic and Social Committee and the Committee of the Regions', COM(1999) 22 final, Brussels, 27.01.1999.

(1) the NEAP, in connection with the 'Romanian Approximation Strategy for the Water Quality Sector' (Water Sector Approximation Strategy), which is geared primarily at implementing the Nitrates Directive; and
(2) the Government Agricultural Strategy Plan.

The proposed Agricultural Pollution Control Project

7. In addition, there is a very practical need for reconsidering the current regulatory framework for agricultural pollution control in Romania, which became evident in the course of the preparation of a World Bank 'agricultural pollution control project' funded by the Global Environment Facility (GEF). The objective of the project in preparation is to support and develop the use of good agricultural practices in the selected project area, namely the Calarasi County, with a view to reducing pollution from agricultural sources in Romania to the Danube River and Black Sea.

8. The selected project area comprises seven *communas* in the Calarsi Judet, an area of about 74,200 ha with 64,000 as arable land, in the southeastern part of Romania. The southern part of the area borders the lower Danube River and includes the Boinau-Sticleanu polder, formerly a floodplain area. It now contains large areas of cultivated land, floodplain forests, degraded land and the Iezer Calarsi waterbody. The Iezar Calarsi waterbody provides a habitat for several species protected under international law, and merits protection.

9. Several issues have been identified that as needing to be addressed as a matter of priority, either in the project preparation phase or during project implementation. These issues include: (a) current poor agricultural practices which lead to uncontrolled diffuse agricultural pollution; (b) the possibility of intensive agricultural practices developing in the near future following the privatisation of former national agricultural companies; (c) health problems among the residents, particularly of infants, in the project area due to high levels of nitrates and bacteria in the drinking water; and (d) the need for introducing a regulatory instrument for protecting the Iezar Calarsi waterbody as a natural habitat for several endangered species.

1.2 Conduct of the Consultancy

10. In view of the urgent need for a revision of the current regulatory framework, both as a prerequisite for SAPARD funding as well as for the implementation of the planned World Bank agricultural pollution control project, the MAF requested technical assistance to facilitate the drafting process of a code of good agricultural practice and to identify gaps in the legal and institutional framework that may hinder effective implementation of good agricultural practices in Romania.

11. In response to this request for technical assistance, a legal team consisting of an international legal expert, Ms Petra Siegers, and a national legal expert, Mr Florin Badulescu, was established. The consultant (the consultant) traveled to Romania on 27 August and departed on 8 September. During her first mission to Romania, the consultant held discussions with representatives of the MAF, the MWFEP, the Ministry of Health and the Delegation of the European Commission in Romania. Moreover, the consultant undertook two field visits to gain a better understanding of institutional arrangements currently governing the cross-sector between environmental protection and agricultural development. Finally, the consultant held an initial meeting with the inter-ministerial task-force, consisting of representatives of the MFWE, the MAF and the Ministry of Health.

12. The consultant returned to Bucharest on 9 October and departed on 14 October. During her second mission, the consultant monitored progress in the drafting process. She conducted several meetings with representatives of the MFWE and the MAF to discussed the drafting process, and concluded her stay with a further meeting with the inter-ministerial task-force.

13. In the period between the missions of the consultant, the national consultant promoted the relationship between the two working groups, by liaising between responsible persons. Moreover, the national consultant assisted on the compilation and translation of material, and assisted in legal analysis of current legislation governing agricultural pollution control in Romania.

1.3 Contents of the report

14. This report sets out the findings of the consultant, and sets out legal and institutional measures which should be undertaken either prior to or during project implementation in order to ensure implementation of good agricultural practices in Romania. Annex I contains a list of persons met by the consultant during her missions

to Romania. Annex 2 contains a proposal for a scope of a Code of Good Agricultural Practice. Annex 3 contains a proposal time schedule for the drafting process.

2. International law aspects

15. The first issue that should be addressed in the context of agricultural pollution control are the binding international obligations in the field of agricultural pollution control. This question is particularly important, since, in the view of the consultant, emphasis should not only be placed on the approximation of legislation with European Union law, but should also geared to complying the current obligations under international law. The following paragraphs contain a brief summary of Romania's obligations under international law, in particular with regard to the protection of the Black Sea and the Danube River.

2.1 Convention on Cooperation for the Protection and Sustainable Use of the Danube River of June 1994 (Danube River Protection Convention)

16. The most important instrument of international law that deals with the protection of the Danube is the Convention on Cooperation for the Protection and Sustainable Use of the Danube River of June 1994 (Danube River Protection Convention). Romania is a signatory to the Danube River Protection Convention, although the consultant was unable to establish if and when the Convention was ratified by Romania.

Scope of the Convention

17. The scope of the Danube River Protection Convention includes the input of nutrients, both from point and non-point sources.[5] Consequently, implementation of the Danube River Protection Convention will play an important role in the project implementation.

Requirements of the Danube River Protection Convention

18. The following points seek to summarise and set out in very clear terms the requirements of the Danube River Protection Convention as they apply to the proposed Agricultural Pollution Control Project.

- *Sustainable and equitable water management.* Parties are required to strive at achieving the goals of a sustainable and equitable water management. This requirement includes the duty to, as far as possible, conserve, improve and rationally use surface waters and ground water in the catchment area.[6]

- *Reduction of pollution loads.* Parties are required to endeavour to contribute to reducing the pollution loads of the Black Sea from sources in the catchment area.[7]

- *Legal, administrative and technical measures.* Parties are required to take all appropriate legal, administrative and technical measures, to at least maintain and improve the current environmental and water quality conditions of the Danube River and of the waters in its catchment area and to prevent and reduce as far as possible adverse impacts and changes occurring or likely to be caused.[8]

  Such measures include: (a) legal provisions providing for requirements including time limits to be met by waste water discharges, and (b) legal provisions for reducing inputs of nutrients or hazardous substances from non-point sources, especially for the application of nutrients as well as of plant protection agents and pesticides in agriculture.[9]

- *Prioritising, strengthening, harmonisation and coordination of activities.* Parties are required to prioritise, strengthen, harmonise and coordinate measures taken at the domestic and international level in the Danube Basin area. One of the objectives in this regard should be to ensure the sustainable use of water resources for agricultural purposes.[10]

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[5] Article 3 (2) (a) of the Danube River Protection Convention.
[6] Article 2 (1) of the Danube River Protection Convention.
[7] Article 2 (1) of the Danube River Protection Convention.
[8] Article 2 (2) and Article 7 (2) of the Danube River Protection Convention.
[9] Article 5 (2) (b) and (c) of the Danube River Protection Convention.
[10] Article 2 (3) of the Danube River Protection Convention.

Such measures include preventing the pollution of groundwater resources, especially of drinking water supplies, in particular of pollution caused by nitrates, plant protection agents and pesticides.[11]

- *Polluter pays principle and precautionary principle.* Parties are required to observe the polluter pays principle and the precautionary principle with regard to all measures aimed at the protection of the Danube River.[12]

- *Water quality objectives.* Parties are required to define water quality objectives and apply water quality criteria for the purpose of preventing, controlling and reducing transboundary impact.[13]

- *Emission inventories and action programmes.* Parties are required: (a) to periodically undertake inventories of relevant point and non-point sources of pollution within the catchment area of the Danube Area and (b) to establish a list of further prevention and abatement measures to be taken. and (c) develop action programmes.[14]

- *Monitoring.* Parties are required to monitor the progress made in the implementation of the action programmes .[15]

19. A fundamental point of the Danube River Protection Convention if that it stresses the need for water quality standards as a prerequisite for an adequate regulatory framework for the control of diffuse pollution. The difficulty in dealing with diffuse pollution is that, unlike point sources emissions, it is not possible to monitor the enforcement of standards at source. The approach taken in controlling diffuse pollution is to set ambient standards in the form of water quality standards, and to implement monitoring of these standards on a regular basis.

20. The Danube River Protection Convention does not endeavour to set water quality objectives for all Parties. Instead, it requires Parties to draft water quality objectives and criteria on the basis of guidance set out in an Annex to the Convention. The contents of the Annex III to the Convention are set out below.

Annex III of the Danube River Protection Convention
General Guidance on Water Quality Objectives and Criteria*)

Water quality objectives and criteria developed for specific reaches of the Danube River and for surface waters with its catchment area shall:

(a) take into account the option of maintaining and, where necessary, improving the existing water quality;
(b) aim at the reduction of average pollution loads and concentrations (in particular hazardous substances) to a certain degree within a certain period of time;
(c) take into account specific water quality requirements (raw water for drinking-water purposes, irrigation, etc.);
(d) take into account specific requirements regarding sensitive and specially protected waters and their environment, e.g. lakes, zones for the protection of bank-filtered water and wetlands;
(e) be based on the application of biological classification methods and chemical indices for the medium- and long-term review of water quality maintenance and improvement;
(f) take into account the degree to which the objectives are reached and additional protective measures may be required in individual cases.

* Water quality objectives and criteria as a rule are individually developed and in particular adjusted to the prevailing conditions as to the ecosystems, the water resources and their utilization. Therefore in the framework of this Convention only general guidelines are addressed to the Contracting Parties.

[11] Article 6 (b) of the Danube River Protection Convention.
[12] Article 2 (4) of the Danube River Protection Convention.
[13] Article 7 (4) of the Danube River Protection Convention.
[14] Article 8 (2) of the Danube River Protection Convention.
[15] Article 8 (4) of the Danube River Protection Convention.

2.2 Strategic Action Plan for the Danube River Basin 1995 - 2005

Scope of the Strategic Action Plan

21. The obligations set out in the Danube River Protection Convention are rendered concrete by the Strategic Action Plan for the Danube River Basin 1995 - 2005 (the Strategic Action Plan). The Danube River Protection Convention identifies high nutrients loads (nitrogen and phosphorus) as one of the most important problems affecting the health of the Danube River ecosystems.[16] Furthermore, its identifies agriculture as one of the main sources of pollution problems.[17]

22. In its introductory paragraphs, the Danube River Protection Convention establishes that temporary pollution loads to the Danube River are reduced due to decline in industrial and agricultural production in countries in economic transition. Consequently, the Strategic Action Plan sets out that a 'breathing space' has been created in the field of agricultural pollution control, and that this is a valuable opportunity to integrate environmental concerns in agricultural practices. This is indeed the case for Romania, where the disruption caused to agricultural productivity in Romania has lead to a decline in the application of fertilizers containing Nitrates and Phosphorus. Consequently, the proposed Agricultural Pollution Control Project is fully in line with the objectives the Danube River Protection Convention as rendered concrete by the Strategic Action Plan

Reduction of emissions from agriculture as a strategic direction

23. In line with the Danube River Protection Convention, the strategic action plan identifies reduction of emissions from agriculture as one of the strategic directions to be taken. It identifies short-term, medium-term and long-term targets that are necessary for achieving this target.

24. *Short-term targets.* As a short-term target, the Strategic Action Plan requires the:

(1) introduction of environmentally sound national agricultural policies to control nutrients and hazardous substances, including:
   - erosion abatement;
   - nutrient balancing;
   - proper manure and fertiliser handling including storage; and
   - a decrease in the input of pesticides; and the

(2) conservation, restoration and management of wetlands and floodplain areas.[18]

25. The second requirement is particularly important with regard to the current proposal of designating the Iezer Calarsi as a protected wetland area. Site designation could occur under the Ramsar Convention, taking into account the requirements of the Bonn Convention and the Berne Convention. A detailed description of the requirements of the Ramsar Convention are set out below at 2.5.

25. *Medium-term target*. The Strategic Action Plan also sets out targets regarding the reduction of emissions from agriculture. Such targets include:

- the introduction of regulations for fertiliser storage, handling and application;
- the introduction of environmentally sound agriculture policy reforms;
- the demonstration of Best Environmental Practice (BEP) for the use of fertilisers, pesticides, and other agrochemicals in agriculture;
- the completion and application of pilot and demonstration projects for manure handling, storage and disposal.[19]

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[16] Environmental Programme for the Danube River Basin - Strategic Action Plan for the Danube River Basin 1995 - 2005, p. 2.
[17] Environmental Programme for the Danube River Basin - Strategic Action Plan for the Danube River Basin 1995 - 2005, p. 2.
[18] Environmental Programme for the Danube River Basin - Strategic Action Plan for the Danube River Basin 1995 - 2005, p. 19.

26. *Long-term target.* Finally, as a long-term target, the Strategic Action Plan sets out the need for a change to sustainable agricultural practices in Party States.

Actions with regard to reform regulation, permitting and enforcement

27. Moreover, the Strategic Action Plan identifies actions that are necessary to reform the regulatory framework governing agricultural pollution control in Party States. In this context, it identifies the adoption of provisions for preventing and reducing non-point source pollution from agriculture based on Best Environmental Practices.[20] A further priority identified by the Strategic Action Plan is to establish effective institutional arrangements to protect drinking water resources.

28. In this context, the action plan sets out short-term, medium-term and long-term targets for achieving the necessary reforms in the regulatory framework.

29. *Short-term measures.* On a short-term basis, the Strategic Action Plan established the need for establishing the legal and institutional framework for the monitoring and protection of raw drinking water sources. This should indeed be one of the priorities for the proposed Agricultural Pollution Control Project.

30. *Medium-term measures:* As a medium-term measure, the Strategic Action Plan requires that pilot and demonstration projects of Best Environmental Practice for the use of fertilisers, pesticides and other agro-chemicals, manure handling, storage and the disposal and water and soil conservation be carried out. Moreover, information should be disseminated about these practices. This again should be a priority for the proposed Agricultural Pollution Control Project.

2.3 Convention on the Protection of the Black Sea Against Pollution, 21 April 1992, in force since 1994 (Bucharest Convention)

31. The principle international legal instrument governing the protection of the Black Sea against Pollution is the Convention on the Protection of the Black Sea Against Pollution of 21 April 1992 (the Bucharest Convention) of which Romania is a signatory.[21]

32. The wording of the Bucharest Convention has been kept deliberately vague, and establishes in very broad terms general principles to be observed by Parties of the Convention. This weakens the legal value of the Convention, and minimises the relevance of the Bucharest Convention to the project preparation process. With regard to pollution from land based sources, the Bucharest Convention stipulates that '...Parties shall prevent, reduce and control pollution of the marine environment of the Black Sea from land-based sources.'[22]

2.4 Protocol on Protection of the Black Sea Marine Environment against Pollution from Land Based Sources.

33. The Bucharest Convention is complemented by the Protocol on the Protection of the Black Sea Marine Environment against Pollution from Land Based Sources, (the Protocol) signed on 21 April 1991 and in force since 1994. In keeping with the Bucharest Convention, the provisions of the Protocols have been kept deliberately vague, and impose general principles with regard to agricultural pollution control. Relevant provisions can be summarised as follows:

34. *General provision.* Parties must take all necessary provisions to prevent, reduce and control pollution of the marine environment of the Black Sea caused by discharges from land-based sources on their territories such as rivers, canals, coastal establishments, other artificial structures, outfalls or run-off, or emanating from any other land-based source, including through the atmosphere.[23]

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[19] Environmental Programme for the Danube River Basin - Strategic Action Plan for the Danube River Basin 1995 - 2005, p. 21.
[20] Environmental Programme for the Danube River Basin - Strategic Action Plan for the Danube River Basin 1995 - 2005, p. 24.
[21] The consultant was unable to establish if and when Romania has ratified the Bucharest Convention.
[22] Article VII of the Bucharest Convention.
[23] Article 1 of the Protocol on Protection of the Black Sea Marine Environment Against Pollution from Land Based Sources.

35. *Reduction of nitrates.* Parties must undertake to reduce, and wherever possible, eliminate pollution of the marine environment of the Black-Sea with inorganic phosphorus, nitrogen, organic matter and other nutrient compounds.[24]

2.5 The Convention on Wetlands of International Importance especially as Waterfowl Habitat, 1971

36. The Convention on Wetlands of International Importance of 1971 (the Ramsar Convention) provides a framework for conserving wetland sites, especially sites that are important for waterfowl. Its basic tool is the inclusion of wetlands in a „List of Wetlands of International Importance". Romania is a signatory of the Ramsar Convention, and has designated 647,000 hectares within the Danube Delta as a wetland of international importance.

37. In the context of the project preparation, the possibility of designating the Iezer Calarasi Wetland as a protected area was raised. One consideration would be to designate the site a wetland of international importance under the Ramsar Convention. The following paragraphs seek to set out, in brief, the contents of the Ramsar Convention and identify the legal obligations that would result from such a site designation with regard to agricultural pollution control.

Coverage of the Ramsar Convention

38. The broad objectives of the Ramsar Convention are to stem the progressive encroachment on and loss of wetlands now and in the future, and to conserve wetlands and their flora and fauna by combining far-sighted national policies with co-ordinated international action.[25]

39. Article 1 of the Convention defines wetlands as:

- areas of marsh, fen, peat land or water,
- which are natural or artificial, permanent or temporary,
- with water that is static or flowing, fresh, brackish or salt, and
- which can include marine water up to a depth at low tide of six metres.

40. Article 2(1) adds that sites designated as wetlands by the Parties to the Convention can incorporate:

- riparian and coastal zones adjacent to the wetlands; and
- islands or bodies of water deeper than six metres at low tide lying within the wetlands.

41. The coverage of the Convention extends to a wide variety of habitats including rivers, coastal areas and coral reefs.[26]

Obligations under the Ramsar Convention

42. Although the Ramsar Convention has proved to be very useful in conserving wetlands, the Convention imposes very few legally enforceable obligations upon its States Parties.[27] Obligations arising under the Convention are as follows:

Site designation

43. The States Parties to the Convention are required to designate at least one relevant site in their territory for inclusion in the list (Article 2 (4)). The designation occurs unilaterally by the State in whose territory the site lies. There is no Committee responsible for taking the final decision regarding the inclusion of the site in the list.[28]

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[24] Article 4 and Annex 2 of the Protocol on Protection of the Black Sea Marine Environment Against Pollution from Land Based Sources.
[25] See the preamble to the convention.
[26] Navid, Daniel, „The Ramsar Convenion" in *Natural Resources Journal, Fall 1989,* p. 1001 et seq., p. 1004.
[27] Lyster, S., International Wildlife Law, Cambridge, 1985, p.191.
[28] Lyster, S., International Wildlife Law, Cambridge, 1985, p.185.

44. Article 2(2) of the Convention states that wetlands should be selected for the List on account of their international significance in terms of:

- ecology (which should include wetlands of international importance to waterfowl at any season),
- botany,
- zoology,
- limnology, and
- hydrology.

45. The States Parties have agreed upon criteria for identifying Wetlands of International Importance.[29] A wetland is identified as being of international importance if it meets at least one of the criteria set out in Articles 1 or 2.

46. Article 4 of the Convention stipulates that a Contracting Party can delete or restrict the boundaries of a wetland included in the List, subject to the following conditions:

- it can only delete or restrict the boundaries of the wetland where there is an urgent national interest;
- it should compensate for any loss of wetland resources;
- it should create additional nature reserves for waterfowl; and
- it should create additional nature reserves for the protection of an adequate portion of the original habitat either in the same area or elsewhere.

47. The Contracting Party is only required take these compensatory measures „as far as possible".

48. Furthermore, Article 2(6) of the Convention stipulates that States Parties shall consider their international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl when designating entries for the List and when exercising their rights to change entries in the List.

Site Conservation

49. The obligations regarding the conservation of wetland sites under the Ramsar Convention are, from a strictly legal viewpoint, very weakly drafted.[30] The main duties regarding site conservation can be summarised as follows:

- to formulate and implement planning so as to:
  - promote the conservation of the Wetlands included in the List, and
  - as far as possible, promote the wise use of wetlands in their territory, Art.3(1);
- to arrange to be informed at the earliest possible time about changes to any wetland in its territory and included in the list and to inform the IUCN about such changes (Article 3(2));
- to promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are include in the list or not, and to provide for their wardening (Art.4(1));
- to encourage research and the exchange of data and publications regarding wetlands and their flora and fauna (Article 4(3));
- to endeavour through management to increase waterfowl populations on appropriate wetlands (Article 4(4)); and
- to promote the training of personnel competent in the fields of wetland research, management and wardening (Article 4(5)).

50. It should be noted that there is no direct obligation to „conserve" listed sites, simply the obligation to „promote" the conservation of the site. Similarly, there is no actual legal obligation to prohibit activities which will change, or are likely to change, the ecological character of the sites.[31]

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[29] *The Criteria for Identifying Wetlands of International Importance as adopted by the 4th and 6th Meetings of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971) to guide implementation of Article 2.1 on designation of Ramsar site*s.
[30] Lyster, S., International Wildlife Law, Cambridge, 1985, p.191.
[31] Lyster, S., International Wildlife Law, Cambridge, 1985, p.193.

2.6 The Convention on the Conservation of European Wildlife and Natural Habitats, 1979

51. A further legal instrument which will be of relevance to the option of designating the Iezer Calarasi Wetland as a protected wetland would be the Convention on the Conservation of European Wildlife and Natural Habitats of 1979 (the Bern Convention). Romania ratified the Convention in 1993.

Scope of the Convention

52. The aim of the Convention is to conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several States, and to promote such co-operation.[32] The proposed Iezar Calarasi Wetland provides a natural habitat for the otter and a variety of birds, including the red-necked goose, the white-head duck, the white pelican, the winter swan and the white stork, all of which are strictly protected fauna species under the Bern Convention.[33]

Legal obligations under the Convention

53. *Habitat protection.* Parties are required to take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of strictly protected fauna species.[34]

54. *Species protection.* Moreover, parties are required to take a series of measures related to species protection. In particular, they must prohibit:

- all forms of deliberate capture and keeping and deliberate killing;
- the deliberate damage to or destruction of breeding or resting sites;
- the deliberate disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation, insofar as disturbance would be significant in relation to the objectives of this Convention;
- the deliberate destruction or taking of eggs from the wild or keeping these eggs even if empty;
- the possession of and internal trade in animals, alive or dead, including stuffed animals and any readily recognisable part or derivative thereof, where this would contribute to the effectiveness of the provisions of this article.[35]

55. In the view of the consultant, it would be outside the scope of the proposed project on agricultural pollution control to ensure that the regulatory framework for species protection of the species listed above is in place. However, the consultant does it consider it important that habitat protection be one of the project objectives, especially when considering the designation of a protected wetland.

2.7 The Convention on the Conservation of Migratory Species of Wild Animals

56. The Convention on the Conservation of Migratory Species of Wild Animals of 1979 (the Bonn Convention) will also be of relevance to the regulatory framework regarding the designation of the Iezer Calarasi Wetland a protected wetland. Romania became a signatory of the Bonn Convention in 1998.

57. The Bonn Convention differentiates between (a) migratory species which are endangered, and (b) migratory species which have an unfavourable conservation status and which require international agreements for their conservation and management. Of the species that can be found in the proposed area, the white pelican is an endangered migratory species.[36] Moreover, the white stork is considered to be a migratory species which has an unfavourable conservation status.[37]

58. *Habitat protection.* With regard to the habitat protection of endangered migratory species, Parties are obliged to:

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[32] Article 1 of the Bern Convention.
[33] Appendix of the Bern Convention.
[34] Article 4 of the Bern Convention.
[35] Article 6 of the Bern Convention.
[36] Annex I of the Bonn Convention.
[37] Annex II of the Bonn Convention.

- conserve, and where feasible and appropriate, restore the habitats of the species which are of importance in removing the species from danger of extinction;
- prevent, remove, compensate for or minimise, as appropriate, the adverse effects of activities or obstacles that seriously impede or prevent the migration of the species;
- to the extent feasible and possible, to prevent, reduce or control factors that are endangering or are likely to further endanger the species.[38]

59. *Species protection.* With regard to the species protection of migratory species, Parties are obliged to prohibit the taking of animals belonging to such species.

60. *International agreements.* Regarding migratory species with an unfavourable conservation status, on the other hand, parties are obliged to endeavour to conclude agreements where these should benefit the species and should give priority to those species in an unfavourable conservation status.[39]

70. The consultant considers that specific measures related to species protection are outside of the scope of the Agricultural Pollution Control Project currently under proposal. However, habitat protection requirements should be taken into account when designating the Iezer Calarasi Wetland a protected habitat.

2.9 Conclusion

71. In conclusion, several international legal instruments will affect the legal and regulatory framework governing agricultural pollution control in Romania. The most important of these is the Danube River Protection Convention and, subordinate to it, the Strategic Action Plan. The most relevant obligations with regard to the envisaged agricultural pollution control project are:

- the introduction of regulations for fertiliser storage, handling and application;
- the introduction of environmentally sound agriculture policy reforms;
- the demonstration of Best Environmental Practice (BEP) for the use of fertilisers, pesticides, and other agrochemicals in agriculture;
- the completion and application of pilot and demonstration projects for manure handling, storage and disposal.

72. Moreover, the Danube River Protection River Convention places particular emphasis on the development of water quality standards, including drinking water quality standards.

73. Finally, international law will affect the designation of the Iezer Calarasi Wetland as a protected habitat. The consultant considers that developing and strengthening existing regulatory mechanisms for the protection of individual species is not within the scope of the proposed agricultural pollution control project. The consultant does, however, that obligations related to habitat protection should be taken into account when considering the regulatory framework necessary for the designation of the Iezer Calarsi Wetland. This may indeed include designating the Iezar Calarasi Wetland a protected site under the Ramsar Convention.

[38] Article III of the Bonn Convention.
[39] Article IV of the Bonn Convention.

3. Legal and policy framework of the European Union

74. In view of the commitment of the Government to harmonise national legislation on environmental protection with existing European Union legislation, requirement of European Community policy and legislation in the field of agricultural pollution control should be taken into account in the project preparation phase.

3.1 Policy

75. Agricultural Pollution Control Policies at the level of the European Union are defined mainly by the Common Agricultural Policy as reformed by Agenda 2000. The main points of this policy can be summarised as follows:

- *Polluter pays principle.* Farmers should be expected to observe basic environmental standards without compensation.[40]
- *Compensation as an exception.* Farmers are only entitled to compensation for environmental services in exceptional cases, namely where society desires that farmers deliver an environmental service beyond this base-line level.[41]
- *Environmental requirements to be linked with CAP funding.* CAP funding should not lead to environmental degradation, and funding granted under the CAP should be conditional upon implementation of appropriate agri-environment measure and rural development programmes.[42]
- *Direct payments.* Direct payments should be made conditional to specific environmental measures.[43]
- *Rural development measures.* Regions are encouraged to develop integrated programmes for the sustainable development of rural ares.[44]
- *Agri-environment measures.* In principle there is a clear support for agricultural methods designed to protect the environment and to maintain the countryside. However, payment are only to be made for measures which go beyond the application of good agricultural practice.[45]

76. The last of these points is fundamental to the proposed agricultural pollution control project. In discussion with the task-force, concerns were raised by task-force members that rendering the Codes of Agricultural Practice compulsory would lead to claims by farmers for financial compensation. European Union Policy is very clear that provisions in Codes of Good Agricultural Practice reflect basic environmental standards, and should not lead to claims for compensation by farmers. Consequently, in the view of the consultant, the MAF and the MWFEP can impose mandatory compliance with Codes of Good Agricultural Practice without incurring any obligation to compensate farmers.

3.2 Legislation

77. European Union legislation in the field of diffuse agricultural pollution control is governed mainly by the Nitrates Directive, as well as by legislation on water quality objectives, such as the use of water for drinking

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[40] 'Directions toward sustainable agriculture', *Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee Regions*, COM (1999) 22 final, p. 20.

[41] 'Directions toward sustainable agriculture', *Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee Regions*, COM (1999) 22 final, p. 21.

[42] 'Directions toward sustainable agriculture', *Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee Regions*, COM (1999) 22 final, p. 21.

[43] 'Directions toward sustainable agriculture', *Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee Regions*, COM (1999) 22 final, p. 22.

[44] 'Directions toward sustainable agriculture', *Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee Regions*, COM (1999) 22 final, p. 23.

[45] 'Directions toward sustainable agriculture', *Communication from the Commission to the Council; the European Parliament; the Economic and Social Committee and the Committee Regions*, COM (1999) 22 final, p. 25.

and bathing purposes and the cultivation of shellfish.[46] Of the existent legislation on water quality objectives, the consultant considers that - for the purposes of the project preparation - emphasis should be placed on drinking water quality objectives, as a matter of priority. This directly reflects the prioritisation of tasks as established under the Danube River Protection Convention and the Strategic Action Plan. Moreover, the quality of drinking water is one of the most critical problems of the selected project area. Most of the drinking water in the project area originates from private wells, and according to the Directorate for Public Health in Calarsi, 79.66% of the total number of samples taken from wells is substandard in terms of nitrates and bacteriological content. Consequently, the legal analysis below has been restricted to drinking water quality objectives.

Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (the Nitrates Directive)[47]

78. The Nitrates Directive has as an objective to reduce or prevent water pollution caused or induced by nitrates from agricultural sources. The duties established by the Nitrates Directive can be summarised as follows:

- *Identification.* Member States must identify (a) surface water and groundwaters affected or which could be affected by pollution, in accordance with the procedure and criteria set out in the Directive and (b) vulnerable zones which contribute to pollution.

- *Codes of Good Agricultural Practice.* Member States must establish codes of good agricultural practice to be implemented by farmers on a voluntary basis. The contents of a code of good agricultural practice are set out below.

Contents of code of good agricultural practice as set out in Annex II of the Nitrates Directive:

A. A code or codes of good agricultural practice with the objective of reducing pollution by nitrates and taking account of conditions in the different regions of the Community should certain provisions covering the following items, in so far as they are relevant:

1. periods when the land application of fertilizer is inappropriate;
2. the land application of fertilizer to steeply sloping ground;
3. the land application of fertilizer to water-saturated, flooded, frozen or snow-covered ground;
4. the conditions for land application of fertilizer near water courses;
5. the capacity and construction of storage vessels for livestock manures, including measures to prevent water pollution by run-off and seepage into the groundwater and surface water of liquids containing livestock manures and effluents from stored plant materials such as silage;
6. procedures for the land application, including rate and uniformity of spreading, of both chemical fertilizer and livestock manure, that will maintain nutrient losses to water at an acceptable level.

B. Member States may also include in their code(s) of good agricultural practices the following items:

7. land use management, including the use of crop rotation systems and the proportion of the land area devoted to permanent crops relative to annual tillage crops;
8. the maintenance of a minimum quantity of vegetation cover during (rainy) periods that will take up the nitrogen from the soil that could otherwise cause nitrate pollution of water;
9. the establishment of fertilizer plans on a farm-by-farm basis and the keeping of records on fertilizer use;
10. the prevention of water pollution from run-off and the downward water movement beyond the reach of crop roots in irrigation systems.

[46] The Drinking Water Directives 74/440/EEC and 80/778/EEC,the Bathing Water Directive 76/160/EEC, the Freshwater Fish Directive 78/659/EEC and the Shellfish Waters Directive 79/923/EEC .
[47] http://europa.eu.int/scadplus/leg/en/lvb/128913.htm.

- *Action programmes.* Member States must establish and implement action programmes in respect of vulnerable zones. The contents of the action programmes should render the measures set out in the codes of good agricultural practice compulsory. They should also include the following measures:[48]

1) periods when the land application of certain type of fertilizer is prohibited;
2) the capacity of storage vessels for livestock manure; this capacity must exceed that required for storage throughout the longest period during which land application in the vulnerable zone is prohibited, except where it can be demonstrated to the competent authority that any quantity of manure in excess of the actual storage capacity will be disposed of in a manner which will not cause harm to the environment;
3) limitation of the land application of fertilizers, consistent with good agricultural practice and taking into account the characteristics of the vulnerable zone concerned, in particular:
   (a) soil conditions, soil type and slope;
   (b) climatic conditions, rainfall and irrigation;
   (c) land use and agricultural practices, including crop rotation systems;

   and to be based on a balance between:

   (i) the foreseeable nitrogen requirements of crops,
   and
   (ii) the nitrogen supply to the crops from the soil and from fertilization corresponding to:

   - the amount of nitrogen present in the soil at the moment when the crop starts to use it to a significant degree (outstanding amounts at the end of winter),
   - the supply of nitrogen through the net miniralization of the reserves of organic nitrogen in the soil,
   - additions of nitrogen compounds from livestock manure,
   - additions of nitrogen compounds from chemical and other fertilizers.

Moreover, the Directive specifies that in principle no more than 170 kg nitrogen per hectare be applied in a given year within a vulnerable zone. In the first four years as of implementation of the Nitrates Directive, actions programmes may specify that the permissible nitrogen content of fertiliser used per year is 210 kg/h.

- *Additional measures.* Members States may take additional measures or to reinforce the action programme where they feel it is necessary to attain the objectives of the Directive.

- *Monitoring of water quality.* Member States must monitor water quality. For this purpose, they must use standardised reference methods to measure the nitrogen compound content of water.

- *Reporting requirements.* Member States must report to the Commission on the implementation of the Directive.

Problems with the implementation of the Nitrates Directive

79. The implementation of the Nitrates Directive has been deemed to be unsatisfactory throughout most of the European Union. In 1997, the European Commission set out its findings on the unsatisfactory implementation of the Nitrates Directive.[49] In particular, the Commission set out that, in 1995, 87% of the agricultural area in Europe still had nitrate concentrations in goundwater that are above the 25 mg/l guide value of the drinking water directive 80/778/EEC.[50] By 1998, few Members States were found fully compliant with

[48] Annex III of the Nitrates Directive.
[49] Implementation of the nitrates Directive, Report COM (97) 473, http:/europa.eu.int/water/water-nitrates/report.html .
[50] European Parliament (Committee on the Environment, Public Health and Consumer Protection) Report on the Commission reports on the Implementation of Council Directive 91/676/EEC (COM(967)0473-COM(98)0016-C4-0040/98) of 24 July 1998, p. 5.

the Nitrates Directive. Several Member States had not drafted Codes of Good Agricultural practice, whilst even fewer had presented Action programmes to the European Commission.

80. The difficulties faced with regard to the implementation of the Nitrates Directive has lead experts within the European Union to seek alternatives to approach taken by the Nitrates Directive.[51] Alternative solutions considered include:

(1) the further promotion of organic farming;
(2) fiscal solutions, such as introducing a nitrogen levy on animal manure and on artificial fertilizer used by farmers; and
(3) structural measures, which include:
    (a) reducing the number of animals per hectare;
    (b) introducing environmental audits for the large farms; and
    (c) introducing buffer zones in the form of a manure and agricultural free zone of 10 metres near water areas.

81. None of these alternatives have materialised in legislation to date, although ever more Member States are promoting organic farming as a sustainable alternative to present day intensive agricultural practices. However, the national legal consultant recommends that one objective of the proposed project on agricultural pollution control should be to seek alternatives to the approach taken by the Nitrates Directive.

Council Directives on drinking water quality.

82. As set out above at paragraph 77 , the attainment of drinking water quality objectives in the project area should be one of the objectives of the project area. European Union legislation in drinking water quality can be found in several Directives, namely in:

- Council Directive 80/778/EEC of 15 July 1980 1998 on the quality of water intended for human consumption (Drinking Water Directive);
- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption (Drinking Water Directive), which will replace Council Directive 80/778/EEC in 2003; and
- Council Directive 75/440/EEC of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States (Surface Water Directive).

83. In all three Directives, upper permissible limits for concentrations of NO3 in drinking water are set at a maximum level of 50 mg/l and at a recommended level of 25 mg/l.

84. The main problem that will arise with regard to the implementation of the Drinking Water Directives with regard to the proposed project area is that private household wells are not subject to regulation by any of the Directives.

85. The scope of the Surface Water Directive does not include ground water, brackish water and water intended to replenish water bearing beds.[52] The wells of private households, however, usually extract water from groundwater levels, and not from surface water. The quality of water drawn from private wells is consequently not covered by the Surface Water Directive.

86. Under the Drinking Water Directive 80/778/EEC, 'water intended for human consumption' is water used for the purpose of human consumption either in its original state or after treatment, regardless of origin,

- whether **supplied for consumption,** or
- whether
    - **used in a food production** undertaking for the manufacture, processing, preservation or marketing of products or substances intended for intended for human consumption, and

[51] European Parliament (Committee on the Environment, Public Health and Consumer Protection) Report on the Commission reports on the Implementation of Council Directive 91/676/EEC concerning the Protection of Waters against Pollution caused by Nitrates from Agricultural Sources (COM(967)0473-COM(98)0016-C4-0040/98) of 24 July 1998, p. 5.
[52] Article 1 of the Surface Water Directive.

– and affecting the wholesomeness of the foodstuff in its finished form.[53]

87. Under the Drinking Water Directive 98/83/EC, 'water intended for human consumption' means:

(a) all water either in its original state or after treatment, intended for drinking, cooking, food preparation or other domestic purposes, regardless of its origin and **whether it is supplied from a distribution network, from a tanker, or in bottles or containers**;
(b) all water used in any food-production undertaking for the manufacture, processing, preservation or marketing of products or substances intended for human consumption unless the competent national authorities are satisfied that the quality of the water cannot affect the wholesomeness of the foodstuff in its finished form.

88. In both instances the Drinking Water limit the definition of water intended for human consumption to public water supply and drinking water from private supplies sold to consumers, as well as water used for the production of food for human consumption. This again does not include water drawn from private wells.

89. In conclusion, legislation enacted to implement the Surface Water Directive or the Drinking Water will not necessarily take into account the largest source private water supply in the proposed project area. The implication for the project preparation phase is that care must be taken that this point is not overlooked when water legislation is revised to conform with European Union water quality standards.

3.2 Conclusion

90. In conclusion, European Union policy and legislation in the field of agricultural pollution control must be taken into account when considering the legal framework for agricultural pollution control. In terms of European Union Policy, it is important to stress that good agricultural practices as set out in a Code of Good Agricultural Practice constitute minimum environmental standards, to which farmers can be required to adhere without being entitled to compensation.

91. Moreover, in view of the proven inadequacies of the Nitrates Directive to date, while implementation of the Nitrates Directive should certainly be a project objective, the project should also seek to identify and further alternative measure to solve problems related to diffuse agricultural pollution control.

92. Finally, in view of the limited scope of European Union legislation on drinking water quality and given the drastic need for improvement in drinking water quality in the project area, it is of paramount importance that any draft legislation in water quality standards include water quality standards for water originating from private water supplies.

4. National legislation

4.1 Water law No. 107/September 25, 1996

93. The Water Law No. 107 of 1996 (the Water Law) is the basic piece of national legislation that will govern water pollution control in Romania. The Water Law contains a series of provisions prohibiting water pollution.

Regulation of point sources emissions

94. Most provisions regarding the control of water pollution in the Water Law regulate point source emissions, instead of regulating specific activities that can result in diffuse water pollution.

For example, the Water Law sets out that:

> '... the effluent limits stated in the water management permit or licence shall represent the maximum allowable limits, and it shall be forbidden to exceed such limits.'[54]

[53] Article 2 of the Drinking Water Directive 80/778/EEC (emphasis added).
[54] Article 15 (5) of the Water Law.

A further example is Article 16 (1) of the Water Law, which sets out that, for the protection of water resources it shall be forbidden to:

> 'set into operation new economic units or to develop the existing ones, to set new human settlements into place, to introduce modified production technologies in the existing economic units, which increase the waste waters pollution content, without simultaneously setting into operation sewerage networks and waste water treatment installations, or without carrying out other works or measures to ensure that the provisions imposed by the water management licence for waste water being discharged are met.'

While it is important to regulate point sources of pollution, such provisions do not regulate activities related to diffuse pollution control. The regulation of diffuse pollution requires a different approach, whereby the polluting activities as such are regulated.

Regulation of diffuse sources of pollution

In some instances the Water Law does attempt to identify and regulate specific polluting activities that result in diffuse pollution. For example, the Water Law contains provisions which make it an offence to:[55]

- throw or introduce in any way wastes of any kind, into the watercourses beds, the basins of lakes or ponds, into the Black Sea and the wet lands, as well as to deposit them on the banks and shores thereof.
- discharge waste waters into ground waters, natural lakes or reservoirs, into swamps or ponds;
- use any kind of open channels in order to discharge domestic fecaloid waters or waters of dangerous content;
- wash in the watercourses, lakes or on the banks vehicles, equipment and mechanic devices, as well as packages or objectives that contain pesticides or other dangerous substances;
- wash domestic animals, disinfected with toxic substances, outside the places specially arranged for this purpose;
- throw or discharge oil residues or dangerous substances into the sanitary installations or the sewage networks;
- wash households objects in the watercourses, lakes or on their banks, on embankments or dams, by using chemical substances of any kind.

These provisions will be of particular relevance when drafting the Code of Good Agricultural Practice. Activities such as the washing of vehicles or domestic animals, or the disposal of empty oil drums, are activities that should be the subject of a code of good practices, and should be included in the Code of Good Agricultural Practice.

General provisions

One weakness of the Water Law is that in some instances, provisions are so general in nature that they are unenforceable in practice. This renders their legal value virtually meaningless. For example, the Water Law states categorically that '...water resources pollution of any kind shall be forbidden.' [56] Such a categorical statement is virtually unenforceable and adds little to the legal content of the law. On the other hand, the existence such general provisions will not negatively affect the implementation of the proposed project, and will not need to be changed at this stage.

Penalties for water pollution activities

A very positive point of the Water Law is that it sets out very clear penalties for water pollution activities prohibited by law, and that it allows for a regular update of the fines by governmental decision. The penalties were updated by means of Governmental Decision no. 948/1999 'Concerning the updating of contravention penalties provided by the Water Law no. 107/1996.'

Competence for the elaboration of water quality norms

[55] Article 16 of the Water Law.
[56] Article 15 (1) of the Water Law.

A further positive aspect of the Water Law is that it allocates clear competences for the elaboration of secondary legislation, in particular with regard to the elaboration of water quality norms and water quality monitoring norms. Article 15 of the Water Law states quite clearly that:[57]

- the quality norms of the water resources shall be approved by standards, on the proposal of the Ministry of Waters, Forests and Environmental Protection;
- the norms for drinking water quality shall be approved through standards, on the proposal of then Ministry of Health; and
- the limits of pollutants contents of waste waters, discharged in the water resources, shall be approved by governmental decision, on the proposal of the Ministry of Waters, Forests and Environmental Protection and the Ministry of Health.

Drinking water quality standards are currently governed by STAS 1342-91, issued by the Ministry of Health. This standard is currently being revised to comply with European Union legislation.

Limited scope. The current scope of STAS 1342-91 is limited to: (1) drinking water supplied by the central plants or the local water supply sources, by the transportable storage tanks, and (2) water used for domestic water (bathroom and kitchen hot water). It is unclear from this provision whether drinking water standards also apply to water from private water supplies such as wells. It appears that this provision is restricted to governing the quality of hot water used in private households, and does not address water supply from private wells. As already discussed above, the scope of European Union Directives on drinking water quality does not extend to water supply from private wells either. Consequently, one objective of the project should be to ensure that, where water quality standards are revised, these include water supply from private wells.

Admissible concentration of Nitrates. The admissible level of nitrates as set out in STAS 1342-91 is 45 mg/l , which is slightly lower than the 50 mg/l allowed in European Union legislation. However, no mention is made of the recommended value limit if 25 mg/l as set out in European Union legislation. While this omission will almost certainly be rectified when the water quality standards are revised, one objective of the project should be to ensure adequate revision of water quality standards.

Establishment of 'protected zones'

Finally, the Water Law establishes a system of 'protected zones', which might be useful mechanism to introduce use when introducing 'vulnerable zones' as required for the implementation of the Nitrates Directive.

In particular, Article 16 (2) of the Water Law sets out that:

> 'In the protected zones, established in accordance with the provisions of the present law, it is forbidden to deposit or to use chemical fertilizers or pesticides, or any other dangerous substances.'

In addition, Article 97 of the Water Law deems certain actions as infringements subject to the Criminal Law. These include:

- the failure of the natural and juristic persons to comply with the regime imposed in the protected zones;[58]
  (...)
- the storage of materials of any kind in the beds or on the banks of watercourses, channels, lakes, ponds, sea shore, on dams and embankments or in the protected zones thereof. [59]

Definition of Protected Zones

The question then, is whether the regime on 'protected zones' as established under the Water Law can be used to establish 'vulnerable zones' as required under the Nitrates Directive.

[57] Article 15 (2) - (4) of the Water Law.
[58] Article 97 (4) of the Water Law.
[59] Article 97 (18) of the Water Law.

A preliminary assessment of the purpose of 'protected zones' as established under the Water Law is that these are established primarily for the fulfilment of two objectives: (a) to prevent the corruption of meteorological observations, and (b) to ensure the stability of banks and structures. Pollution control appears to be a secondary consideration.

Article 37 (1) of the Water Law stipulates that

> '... in order to ensure a **proper quality of the specific meteorological observations and measurements**, protected zones within limit of 30 metres shall be established around the meteorological units. In these protected zones, it shall be forbidden to realize any overground structures or installations.'[60]

In addition, Article 40 (1) of the Water Law stipulates:

'... in order to assure the protection of the **river beds, banks, hydraulic structures** and to **improve the water flow regime**, protected zones shall be established for:[61]

a) the minor bed of watercourses;
b) the surface of the natural lakes and of the ponds covered by water and aquatic vegetation, as well as the sea shore;
c) the surface of the reservoirs corresponding to the level of the dam crest;
d) the surfaces occupied by hydraulic structures or protection works for the minor river beds, channels and flow diverting works, at their maximum transport capacity, as well as other hydraulic structures realized on waters;
e) flood prevention and control works;
f) the hydrometric constructions and installations, as well as the automatic water quality measuring installations.

On the other hand, the definition of a 'protected zone' as set out in Annex 1 of the Water Law includes the prevention of water pollution as a purpose for establishing protected zones:

> Annex No.1 Protected Zone
>
> The zone adjacent to the watercourses, water management works, associated structures and installations in which, as appropriate, restrictions and interdictions are introduced, regarding the constructions regime or the land resources exploitation, in order to ensure the stability of the banks and structures, **as well as to prevent the water resources pollution**;

Consequently, one consideration might be to establish a link between the current regime on 'protected zones' under the Water Law and the 'vulnerable areas' required under the Nitrates Directive. Such a link could be introduced by means of the Romanian 'Action plan for water protection against pollution with nitrates originating from agricultural sources` (Action Plan), a copy of which was made available to the consultants in draft form.

4.2 Draft Action Plan 'For water protection against pollution with nitrates originating from agricultural sources'

Contents of the Action Plan

The action plan sets out the necessary regulatory framework for the implementation of the Nitrates Directive. The following points summarise in brief the contents of the action plan:

- ***Inter-ministerial Commission.*** It establishes an inter-ministerial Commission and Support Group for implementing the Action Plan consisting of representatives from the MWFEP, MAF and Ministry of Health, and from institutions subordinate to it.

[60] Emphasis added.
[61] Emphasis added.

- ***Identification of polluted waters and vulnerable areas.*** It requires the MWFEP to identify waters polluted with nitrates and designate vulnerable areas which drain into waters polluted with nitrates and which contribute to their pollution. The designation of vulnerable areas is to occur two years after publication of the Action Plan in the Official Journal.

- ***Elaboration of a Code of Good Agricultural Practice and a Training Programme for farmers.*** It requires the inter-ministerial Commission to elaborate a Code of Good Agricultural Practice within one year as of publication of the Action Plan in the Official Journal. It also requires the Commission to develop a programme that will include various specifications regarding the training and the information of farmers, with a view to promoting the Code of Good Agricultural Practice.

- ***Establishment of Action Programmes.*** It requires the inter-ministerial commission to establish Action Programmes regarding the vulnerable areas. The criteria for the establishment of vulnerable zones coincide almost literally with the wording of the Nitrates Directive. This means that maximum permissible levels of Nitrates in fertilisers allowed to be applied on an annual basis in vulnerable zones is 170 kg, or in some instances, 210 kg.

Practical application of the Action Plan

The Action Plan contains several very positive points, and one of the proposed aims of the project may be to further the implementation of these points.

In the first place, it furthers the institutional aspects of agricultural pollution control, by establishing an inter-ministerial commission to deal with the cross-sectoral aspects of agricultural pollution control. The work of the inter-ministerial commission should be furthered during the project preparation phase.

The inter-ministerial commission could, however, be complemented by two further institutional arrangements.

- *Designation of a permanent position in the MFWE regarding diffuse water pollution control.* In the first place, it would make sense to designate one representative of the MFWE as permanently responsible for all issues related to diffuse water pollution matters. This would help ensure continuity in the implementation of national policies and strategies on agricultural pollution control.

- *Regional co-ordination measures.* A further consideration would be to introduce a permanent institution for cross-sectoral cooperation at a regional or *Judet* level. This would require the establishment of Regional 'Commissions for good agricultural practices to prevent pollution of soil and water', consisting of representatives of the MAF, the Environment Protection Agency and the local health authorities. The Commission would be headed by the a representative of the Environment Protection Agency. The function of such a Commission would be to (1) provide a venue for dispersing information and providing training on Good Agricultural Practices as set out in the Code of Good Agricultural Practice; (2) provide for a venue for exchanging information and feedback on information gained on the practical implementation of the Code; and (3) address specific questions that may arise from farmers with regard to the application of the Code of Good Agricultural Practice.

The introduction of such institutional arrangements would be, in legal terms, very straightforward, and could easily be done by means of a simple amendment to the Action Plan.

A further positive point of the Action Plan is that is sets out a deadline of one year for the drafting of the Code of Good Agricultural Practice. The consultants have proposed a schedule for the drafting process, which will be circulated among representatives of the Ministries involved.

One weakness of the current Action Plan is that the limit values for it Nitrates in fertilizers in vulnerable zones do not necessarily take into account the current practical requirements of agricultural in Romania. As stated in the Danube River Pollution Strategic Action Plan, Romania is currently undergoing a reprieve from highly intensive farming practices, mainly due to the disruption to agricultural productivity brought about by the transition to a market economy. The commercial companies currently operating farms in the Boianu-Sticleanu Polder use fertilizers with a Nitrogen and Phosphorus quantity of 100-120 kg of active substance/ha, considerably less than the 170 kg N/h, or indeed 240 kg N/h per hectare, permissible under the Nitrates

Directive in designated protected zones.[62] In view of the recognised inadequacies of the Nitrates Directive in implementing effective agricultural pollution control, the consultant considers it advisable to reconsider the current limits set out in the draft Action Plan, with a view to restricting the application of fertilizers to a level more consistent with the current needs of agriculture in Romania, even if this means introducing standards which are more stringent than set out in the Nitrates Directive.

4.3 Law No. 137/December 29, 1995 Law 'On environmental protection'

The Law 'on environmental protection' (the Environment Protection Law) will also be of relevance to the proposed project. In the first place, the Law 'on environmental protection' will govern the designation of the proposed Iezar Calarasi Wetland a protected area. Secondly, the licensing regime set out in the Environment Protection Law may provide for a legal solution for rendering compliance with the Code of Good Agricultural Practice mandatory.

Site designation

As discussed above at 2.5, one possibility may be to designate the Uezar Calarasi a protected site under the Ramsar Convention. The Environment Protection Law established a regulatory framework for setting up protected areas and biodiversity conservation.

Article 34 of the Environment Protection Law establishes that:

> '... the central environmental protection authority, in consultation with the Romanian Academy and UNESCO National Commission, shall establish the criteria for the setting up of protected areas and for the biodiversity conservation.'

Article 54 of the Environment Protection Law stipulates that:

> '... The protected areas ... shall be declared by normative acts or regulations.'

Consequently, designation of the Uezar Calarasi will require the enactment of a primary or secondary legislative instrument, subject to criteria set out be the central Environment Protection Agency, and may indeed take considerable time to finalise.

However, Article 57 of the Environment Protection Law stipulates that:

> 'Upon the request of the environmental protection agencies, of other interested agencies, of other interested organizations, natural or legal persons, the local public administration authorities may, based on the documentation endorsed by the Romanian Academy, place protected areas ... under temporary protection, with the view of declaration.'

This provision allows for a 'fast-track', albeit temporary, solution, which, in the view of the consultants, addresses the current prerequisites for successful project implementation. Consequently, the consultants would recommend that the Environment Protection Agency Calarsi make a proposal to the Calarsi *Judet* administration regarding the temporary site designation of Calarsi, with a view to applying for a permanent site designation, possibly even under the Ramsar Convention.

Licensing regime

In discussions between the consultants and officers of the Environment Protection Agency Calarasi, the question was raised how, in view of the proposed privatisation of the state owned agricultural companies (ISC's), these could be obliged to comply with the provisions of the Codes of Good Agricultural Practice. Several options were discussed with how this could be done.

The first option discussed was to insert clauses within the leasing agreements between the MAF and the operators of privatised the farms rendering compliance with the Codes of Good Agricultural Practice mandatory. The advantage of this approach is that it would not require any introduction of new legislation. The drawback,

[62] The IAS Agriservcom Calarasi-Gradistea indicated that it is applying 150-160 kg N/ha to land for raising maize, but this appears to constitute an exceptionally high amount of Nitrates.

however, would be that there would be no legally binding obligation upon the MAF to place such a clause in a leasing agreement. The leasing agreements would be open to negotiation, and in the event of the agreements being rescinded, the relevant clauses would also become null and void and subject to renegotiation with the lease-holder. Consequently, while a definite possibility as a short-term solution, the consultant does not consider this a sustainable solution in the long term.

The other option would be to introduce compulsory clauses into binding legislation. This could be done in two ways. One possibility would be to render all or parts of the Code binding upon large farms in the legal instrument by which the Code is published. The other possibility would be to introduce a piece of legislation subsidiary to the Environment Protection Law, obliging licensing authorities to require adherence to the Code when issuing environmental permits.

The second of these possibilities have been considered carefully by the consultants. The main difficulty faced by the consultants in this regard is the lack of clarity of the Environment Protection Act with regard to installations requiring an environmental permit. In the view of the consultants, it is doubtful if the activities undertaken by the ISC's will lead to a compulsory licensing requirement.

Kinds of licenses. Article 8 of the Environment Protection Law allows Environment Protection Authorities to issue either environmental agreements and environmental permits.

Prerequisites for environmental agreements. Environmental agreements are compulsory for new investments, for the modification of the existent ones, and for the activities provided in Appendix No. II to the present law. Appendix II item 8, subparagraph c), on the other hand, includes the following constructions and installations for raising farm animals, with capacities bigger than:

(a) 100 heads for beef cattle;
(b) 500 heads for meat pigs;
(c) 6,000 heads for egg-laying hens;
(d) 6,000 heads of chicken for poultry; and
(e) 1,500 heads of turkey.

It is not clear that the privatisation of the former IAS will result in 'new investments or modifications of the existent ones', nor do any of the former IAS's currently existing in the Boianu-Sticleanu Polder appear to be involved in the breeding or raising of livestock. Consequently, it does not appear that any of the IAS's will have to apply for environmental agreements.

Prerequisites for an environmental permit. Permits are compulsory for new activities subject to an environmental agreement and, within one year from the date the present law comes into force, for existent activities. Moreover, activities which do not involve construction and erection works only require environmental permits.[63]
It is unclear whether the privatised farms will require environmental agreements. Moreover, it is not clear to the consultants as of what size farms need environmental permits if they do not require construction works. Indeed, it is rather unusual to requires farms to acquire environmental permits.

The consultants were told by experts within the Environment Protection Authority Calarasi that 'all economic activities' require environmental permits in Romania, and that this would apply to the privatised former IAS. While this may indeed be the case in practice, the consultants find the regulatory framework for this unclear.

In view of the difficulties with the licensing system, in particularly with regard to defining the scope of an environmental licence, the consultants favour the option of rendering all or parts of the Code binding upon large farms in the legal instrument by which the Code is published. This would require (a) defining the size of farms for which the Code would be binding, and (b) defining the parts of the Code that would be binding upon such farms. In particular, compulsory Farm Waste Management Plans could be introduced for large farms.

Provisions on diffuse pollution

Finally, the Environment Protection Law contains a series of provisions on diffuse pollution which should be taken into consideration when drafting the Code of God Agricultural Practice. Article 28 of the Environment

[63] Article 11 of the Environment Protection Law.

Protection Law stipulates that '...natural and legal persons producing, trading and/or **utilising** chemical fertilisers and pesticides shall have the following obligations:[64]

a) to require an environmental agreement and/or permit for their manufacture;
b) to deliver, handle, transport and trade chemical fertilisers and pesticides packed and bearing identification, warning labels, safety and utilisation instructions, in conditions that shall not cause contamination of the transport means and of the environment;
c) to store the chemical fertilisers and pesticides only packed and in protected areas;
d) not to use the chemical fertilisers and pesticides in areas or on surfaces where special protection measures have been set up;
(...)
f) to apply, during the blooming period of insect pollinated crops, only such pesticides treatments that do not harm the pollinating insects.

4.4 Conclusion

The Water Law, the Environment Protection Law and the Draft Action Plan will constitute the main legal basis governing agricultural pollution control in Romania. In this context, the Consultants consider that a link should be established between the regime on 'protected zones' as set out in the Water Law, and 'vulnerable zones' as designated in the Draft Action Plan. Moreover, attempts should be made to adapt the Draft Action Plan to current requirements of agricultural practices in Romania, even if this means moving away from the requirements set out in the Nitrates Directive. Finally, it will be necessary to draft a Code or Codes of Good Agriculture Practice, which on the one hand complies with the prerequisites of the Nitrates Directive, and on the other hand takes into account agricultural practices as currently found in Romania.

5. Final recommendations

In conclusion, it can be seen that although Romania has recent legislation in place relating to water resources management, it does not adequately address problems related to agricultural pollution control. The reason for this shortcoming is not however necessarily the result of a general underlying weakness of the existing legal framework.

There is, in fact, no easy regulatory solution to the problem of diffuse water pollution in agriculture. As discussed above, most European countries have fallen short in their requirements with regard to the implementation of the Nitrates Directive, and concentration of nitrates in drinking water and groundwater still remain a problem. Moreover, enforcement of the Nitrates Directive remains very difficult, since it is difficult to prove a causal link between the polluting action and the polluting incident when bringing actions against farmers in court.

Consequently, the consultant considers it particularly important that the regulatory solution for diffuse agricultural pollution control in Romania is not geared exclusively at implementing the Nitrates Directive, but is directed at finding a solution that suits the current reality in Romania and that effectively implements Romania's obligations under binding international law, such as the Danube River Basin Convention and the Bucharest Convention. This may involve taking measures which are stricter than measure imposed by the Nitrates Directive. In particular, the consultant would suggest that the following actions be taken.

5.1 Amendments to the legal framework

Several modifications should be made to the current legal framework, and can be summarised as follows.

Strengthen regulatory framework for water quality standards. One fundamental prerequisite for the proper regulation of diffuse agricultural pollution is the existence of water quality norms, especially for drinking water. Indeed, as discussed above, the implementation of the Drinking Water Directive is currently a priority under the Romanian Approximation Strategy for the Water Quality Sector. However, the Drinking Water Directive applies only to public water supply and drinking water from private supplies sold to consumers, and for water used for the production of food for human consumption. The Drinking Water Directive does not, however, apply to

[64] Emphasis added.

private water supplies. Most rural households currently located in the proposed project area, are, however, dependent on their own wells for drinking water supply.

The Water Law specifically allocates powers to the Ministry of Health to propose norms for the quality of drinking water, and for the MWFEP to approve the norms.[65] Indeed, one of the legislative projects currently being undertaken by the MWFEP is the establishment of quality norms concerning drinking water, as well as the control and monitoring of drinking water. The consultant considers it of paramount importance to ensure that (a) revised drinking water quality norms and the monitoring of drinking water quality norms be in place prior to or during project implementation, and the (b) drinking water quality norms specifically also take into account private water supply in rural areas.

Establish a link between Water Law and Action Plan. The consultant recommends that a link be established between the Water Law and the draft Action Plan, in particular with regard to the designation of vulnerable areas. As discussed above, the Water Law currently allows for the establishment of 'protected zones', and attaches a series of legal consequences and sanctions to the non-observance of specific requirements within these areas. One possibility would be to use this existing regulatory framework to control diffuse agricultural pollution.

Adjust limits to reflect the current need for fertiliser. A further recommendation of the consultant would be to adjust the current limits on permissible fertilisers to suit the current practices in Romania. As discussed above, Romania is currently undergoing a reprieve from highly intensive farming practices, mainly due to the disruption to agricultural productivity brought about by the transition to a market economy. The commercial companies currently operating farms in the Boianu-Sticleanu Polder use fertilizers with a Nitrogen and Phosphorus quantity of 100-120 kg of active substance/ha, considerably less than the 170 kg N/h, or indeed 240 kg N/h per hectare, permissible under the Nitrates Directive in designated protected zones. In view of the recognised inadequacies of the Nitrates Directive in implementing effective agricultural pollution control, the consultant considers it advisable to reconsider the current limits set out in the draft Action Plan, with a view to restricting the application of fertilizers to a level more consistent with the current needs of agriculture in Romania.

Draft a Code of Good Agricultural Practice. The main addition to the current regulatory framework will be to draft a Code or Codes of Good Agricultural Practice. The consultant has proposed a scope for a Code of Good Agricultural Practice, and discussed models currently used in different European countries with the inter-ministerial task-force established during the missions of the consultant. Both the MWFEP and the MAF were presented with copies of Codes of Agricultural Practice from France, Ireland, Portugal, Germany and England.

Discussions with the task force inter-focused mainly on identifying the scope of the proposed Code for Romania. An initial proposal for such a Code can be found at Annex 2.

The task force also discussed various options for 'packaging' the Code, based on models found in various European countries. One solution favoured by members of the task-force was to draft a general Manual on Good Agricultural Practices, complemented by a Code of Good Agricultural Practice geared specifically at preventing or mitigating the pollution of water with Nitrates from agricultural sources. This is the model that was chosen in Portugal.

Finally, the consultant presented the task-force with a schedule for preparing a draft Code or Codes. The proposed time-frame for the drafting process would constitute one year, allowing for a consultation process with persons in all relevant Ministries, and allowing for the conclusions of further international and national experts involved in the preparation to be taken into account. This takes into account the time-frame as set out in the draft Action Plan, which requires the drafting of a Code of Good Agricultural Practice within one year from the publication of the Action Plan. The proposed time-frame is set out at Annex 3.

Render the code or parts thereof mandatory. Finally, the consultant would suggest amendments to the legal framework to ensure that the Code or parts of the Code become mandatory for large commercial farms currently operating in the polder area. There are essentially three possible ways in which this could be done.

The first possibility would simply be to insert clauses within the leasing agreements between the MAF and the operators of privatised the farms rendering compliance with the Codes of Good Agricultural Practice mandatory.

[65] Article 15 of the Water Law.

The advantage of this approach is that it would not require any introduction of new legislation. The drawback, however, would be that there would be no legally binding obligation upon the MAF to place such a clause in a leasing agreement. The leasing agreements would be open to negotiation, and in the event of the agreements being rescinded, the relevant clauses would also become null and void and subject to renegotiation with the lease-holder. Consequently, while a definite possibility as a short-term solution, the consultant does not consider this a sustainable solution in the long term.

Moreover, the international consultant does not consider it a viable solution to wait for the designation of the project area as a 'vulnerable zone' under the draft Action Plan. The designation of 'vulnerable zones' under the draft Action Plan will only take place within years from the publication of the Action Plan in the Official Journal, and the concerns related to intensive farming practices in the project area might materialise prior to this time.

Consequently, the consultant would prefer the possibility of introducing compulsory clauses into binding legislation. This could be done in two ways. One option would be to render all or parts of the Code binding upon large farms in the legal instrument by which the Code is published. The other option would be to introduce a piece of legislation subsidiary to the Law 'on environment', obliging licensing authorities to require adherence to the Code when issuing environmental licenses. In view of the difficulties with the licensing system set out above, in particularly with regard to defining the scope of an environmental licence, the consultant would recommend the first of these two options.

This option should be taken into account when drafting the Code of Good Agricultural Practice. During the drafting process, it would be advisable that parties involved in the drafting process seek to identify provisions that should be compulsory for large farms. One consideration in particular might be impose compulsory farm waste management plans upon large scale farms, as a way of facilitating implementation of the Code.

5.2 Changes to the institutional framework

A further question that was addressed is whether any institutional changes are necessary prior to project implementation.

Temporary site designation

With regard to the designation of the Uezar Calarasi Wetland as a protected site, while a long-term objective might be site designation under the Ramsar Convention, the consultants recommend that for project implementation a the 'fast-track' solution set out in Article 57 of the Environment Protection Law be selceted. This would allow the Environment Protection Agency Calarsi to make a proposal to the Calarsi *Judet* administration regarding the temporary site designation of Calarsi, with a view to applying for a permanent site designation, possibly even under the Ramsar Convention.

Training measures

In the view of the consultant, the main objective of the project should be train and introduce farmers in the project area to the agricultural practices set out in the Codes of Good Agricultural Practice. In the project area, the Code will also be used by representatives of the local health authorities and the Environment Protection Agency, as a mechanism for educating citizens and monitoring environmental and health concerns in rural households. This will require capacity building both with the Environment Protection Agency as well as with the local health authorities, which will not necessarily require the establishment of further or new institutions. One objective of the project could be to assist the inter-ministerial commission to develop a training programme as set out in the Action Plan.

Educational measures will, however, also require the existence of a strong presence of the Ministry of Agriculture and Food in the project area at Communal level. Options discussed with the consultant when in the field included reintroducing 'agricultural rooms' at a communal level, in which a agronomist is made available to advise farmers on agricultural practices. Such 'agricultural rooms' existed prior to the transition to a market economy, and gradually disappeared due to lack of funding. Since the reintroduction of such as institution would require considerable funds and may, indeed, be greeted with suspicion by local farmers, one consideration might be to introduce such advisory positions on a pilot basis in the course of the project, in order to assess the acceptance by the local population.

Cross-sectoral coordination measures

A further objective of the project, however, should be to promote the cross-sectoral work initiated during the project preparation phase.

At a Ministerial level, the draft Action Plan currently foresees the establishment of a 'Commission for implementing the Action Plan for water protection against the pollution with nitrates originating from agriculture'), which will consist of specialists from the Ministry of Waters, Forests and Environment Protection, from the Ministry of Agriculture and Food and from the Ministry of Health. This Commission is to be supported by a 'Support Group', consisting of representatives of the National Company Romanian Waters, representatives of hydrographic basins and other specialised institutes. Subject to adequate implementation of the Action Plan, this Commission should provide for adequate promotion of cross-sectoral cooperation at a Ministerial level. One of the objectives of the project should be support this Commission in its work, by continuing the communication process initiated during project preparation.

Further institutional measures could, however, also have been included in the Draft Action Plan. These might still be added through the amendment or an addendum to the Action Plan, and are as follows:

- *Designation of a permanent position in the MFWE regarding diffuse water pollution control.* In the first place, it would make sense to designate one representative of the MFWE as permanently responsible for all issues related to diffuse water pollution matters. This would help ensure continuity in the implementation of national policies and strategies on agricultural pollution control.

- *Regional co-ordination measures.* A further consideration would be to introduce a permanent institution for cross-sectoral cooperation at a regional or *Judet* level. This would require the establishment of Regional 'Commissions for good agricultural practices to prevent pollution of soil and water', consisting of representatives of the MAF, the Environment Protection Agency and the local health authorities. The Commission would be headed by the a representative of the Environment Protection Agency. The function of such a Commission would be to (1) provide a venue for dispersing information and providing training on Good Agricultural Practices as set out in the Code of Good Agricultural Practice; (2) provide for a venue for exchanging information and feedback on information gained on the practical implementation of the Code; and (3) address specific questions that may arise from farmers with regard to the application of the Code of Good Agricultural Practice.

6. Conclusion

There is a need for introducing a more comprehensive regulatory framework for agricultural pollution control in Romania. While there are certain provisions in place already, the in some instance these are fragmented and uncoordinated. In other instances, the legislation and draft environmental legislation does not adequately take into account current agricultural practices in Romania. In the view of the consultants, the main reason for this is that communication and co-ordination between relevant Ministries involved in agricultural pollution control could be improved.

One of the main objectives of the project preparation is to foster the communication between Ministries, in particular through the inter-ministerial task force that was established during the second mission of the international legal consultant to Romania. The national legal consultant has fostered the cross-sectoral co-operation, and will finalise a discussion on the scope of the Code of Good Agricultural Practice at the end of November. This co-operation process should be continued throughout project preparation, particularly with a view to finalising a draft Code of Good Agricultural Practice and introducing a legislative instrument that renders it binding upon certain sizes of farms.

Annex 1

Persons met

1. **Mr Liviu Creanga, MAF**
2. **Mr Alexandru Radulescu, MAF**
3. **Cristina Pop, MAF**
4. **Vasile Stamcu, MAF**

5. **Ms Liliana Bara, Water Directorate, MWFEP**
6. **Dr Eng Martin Pohlmann, pre-accession advisor**
7. **Mr Denis Besozzi, pre-accession adviser to the MWFEP**
8. **Mr Radu Paunescu, MWFEP**
9. **Valeria Rosioara, Water Directorate, MWFEP**
10. **Diona Cocoi, Directorate of Nature and Biodiversity Preservation, MWFEP**
11. **Carmen Margina, Directorate for European Integration, MWFEP**
12. **Toma Daniela, Directorate for Monitoring the State of the Environment, MWFEP**

13. **Ms Dana Dubrescu, World Bank Consultant**

14. **Mr Ciofu Ion, General Director of the EPA Calarsi**
15. **Ms Lili Georgescu, Director of the Monitoring Department Calarsi**
16. **Ms Graziela, Director of Programmes and European International Department**

17. **Mrs Truica, Director of the Public Health Department of Calarasi**

18. **Ms Daniela Pitigoi, Director of the Department for Public Health, Ministry of Health**
19. **Ileana Braguescu, Institute for Public Health**
20. **Mrs Jacob Ioana, Researcher in the Institute for Public Health**

21. **Cesar Nicolau, Task Manager, Delegation of the Commission of the EU**

Annex II

Preliminary Proposals for Contents of a Code of Good Agricultural Practice in Romania

1. Introduction

1.1 Purpose and importance of the Code

The code should contain a brief explanation of its purpose and its value and importance within the Romanian legal system. In particular, the Code should set out whether it is legally binding or not, and what its value would within the existing licensing system. Options that have been discussed can be summarized as follows:

(1) a code of good agricultural practice that is mandatory for all users of agricultural land;
(2) a code of good agricultural practice that is mandatory for 'large' farmers, i.e. for persons who farm large plots of agricultural land, but that are voluntary for 'smaller' farmers;
(3) a code of good agricultural practice that is, in principle, voluntary for all farmers, with the possibility of:
(a) inserting clauses into leasing agreements of the privatised ISA's; or
(b) allowing EPA's and the Health and Safety Authorities to use non-compliance with the code of good agricultural practice as evidence in prosecutions and charges for non-compliance with the law.

1.2 Principle of minimizing waste

When drafting the code, it should be taken into account the main purpose of the code is to educate farmers and promote good agricultural practices in Romania. Consequently, the code should contain brief and pragmatic explanations of the principles governing agricultural pollution control. When explaining such principles, the language should be as simple and clear as possible, keeping in mind the fact that the target audience will be farmers and households in rural areas.

1.3 Explanation of water pollution problems

The code should set out, in brief and very clear terms, what the problems related to water pollution are. The purpose of such an explanation should be to educate farmers and increase there awareness of how their farming practices can affect water quality in their immediate surroundings, and how improved practices can lead to an increase in agricultural productivity.

1.4 Explanation of concept of diffuse pollution

The code should set out the difference between diffuse pollution and pollution resulting from discharges from point sources. In particular, the code should explain how the law deals with these different kinds of sources of pollution. Due to the nature of diffuse pollution, it is very difficult to regulate diffuse pollution by law. The main difficulty is proving a causal link between a specific polluting activity and the damage to the environment.

Consequently, the main method of dealing with diffuse pollution is to set ambient standards in order to ensure the good quality of air, water and soil. This approach, however, does not adequately deal with agricultural pollution control. Enforcement of ambient standards is very difficult and requires constant monitoring. Moreover, since ambient standards do not establish a causal link between the polluter and the polluting effect upon the environment, it is difficult to implement the 'polluter pays' principle.

Consequently, in the field of agricultural pollution control, potential polluters are provided with guidance on how to mitigate pollution in the form of Codes of Good Agricultural Practice, in order to ensure that ambience standards are achieved.

1.5 Explanation of soil erosion

Finally, the code should set out the importance of soil erosion control and its relevance to soil conservation and water pollution control.

The Code should then set out in clear and simple terms practical measures that should be used by the farmers to address some or all of the following points:

2. Slurry

2.1 Storage of slurry

This point would also ensure implementation of the Nitrates Directive. In particular it would have to take into account the capacity and construction of storage vessels for livestock manures, including measures to prevent water pollution by run-off and seepage into the groundwater and surface water of liquids containing livestock manures. It is also important to include good agricultural practices related to the storage and usage of slurries to prevent pollution to air.

2.2 Treating slurry

2.3 Ways of applying slurry to the land through recycling

3. Solid manure

3.1 Storage and treatment of manure

3.2 Disposal of manure

3.3 Applying the manure to the land

4. Silage

4.1 Minimising the amount of effluent

4.2 Design of the Silo

4.3 Applying effluent to land

4.4 Feeding effluent to livestock

4.5 Silage additives

5. Other wastes

5.1 Dirty Water

In particular, it is important to emphasize the need for minimizing the amount of dirty water flowing from farms.

5.2 Sewage disposal

5.3 Household wastes

One consideration may be to address the question of household wastes and sewage disposal in the Code, even though this is not, strictly speaking, a matter related to good agricultural practice. In particular, it is important to point out the importance of disposing of household wastes separately from agricultural wastes, in order to ensure purity of waste management. It is also important to set out good practices in positioning latrines in the yards of rural households, in order to minimize the possibility of contamination of drinking water.

5.4 Paint

5.5 Veterinary products

5.6 Packaging

5.7 Timber wood

5.8 Spoiled and contaminated food-stuff

5.9 Tyres

5.10 Tractor oil

5.11 Disposing of Animal Carcasses

In particular, this point should deal with issues related to animal health and diseases prevention.

6. Fertilizers

6.1 Types of fertilizers

- **Organic manures**

At this stage, it may be possible to make a cross-reference to provisions elaborated on manure and slurry.

- **Inorganic nitrogen fertilizer**
- **Other chemical fertilizers**

6.2 Storing of fertilizers

6.3 Handling of fertilizers

6.4 Spreading of fertilizers

This chapter in particular should address the Nitrates Directive. In this context, it is important to address the following points:

- **periods when the land application of fertilizer is inappropriate;**
- **the land application of fertilizer to steeply sloping ground;**
- **the land application of fertilizer to water-saturated, flooded, frozen or snow-covered ground;**
- **the conditions for land application of fertilizer near water courses.**

7. Soil erosion control

7.1 Soil compaction

7.2 Removing topsoil

7.3 Erosion by water

7.4 Erosion by wind

8. Restoring Disturbed Soils

8.1 Soil stripping

8.2 Soil storage

8.3 Soil reinstatement

8.4 Agricultural aftercare

9. Drainage

10. Irrigation

11. Pesticides

11.1 Storage

11.2 Handling

11.3 Application

- **Disposal of containers**
- **Excess spray material**

12. Protection of fauna and flora

Finally, a further consideration may be to include a section in the Code on good agricultural practices to protect local fauna and flora. While this may prove to be too extensive for a first code of good agricultural practice, it certainly would be helpful to point out to farmers that protection of local biodiversity begins in their own backyard, and to set out, in very basic terms, farming measures that can be undertaken to protect local species

Annex 3

Proposed time frame for the drafting of a Code of Good Agricultural Practice