4b.2 Adopt biodiversity criteria in public procurement policies to prevent biodiversity loss

Public authorities are major consumers. In Europe, for example, they spend 16% of the EU's gross domestic product. By using their purchasing power to purchase goods and services that also respect the environment and biodiversity, they can make an important contribution towards sustainable development. Public authorities can also show citizens, enterprises and organisations how they can really change their attitudes by making the right consumer choices.

Green public procurement can have a positive direct or indirect impact on biodiversity. It covers areas such as transport and construction, office equipment, recyclable paper, organic food in canteens and activities in developing countries with support from Belgian authorities.

Initiatives have already been taken in Belgium to use green procurement policies in order to promote goods that are less harmful to the environment (for instance, promotion of the use of wood products originating from sustainable forests or inclusion of environmental - including biodiversity - criteria in the procurement procedure for Clean Development Mechanism and Joint Implementation).

Belgium is preparing a national action plan on green public procurement for 2006. In 2006, the Belgian Parliament passed a new law on public procurement that provides some opportunities to integrate sustainable (biodiversity) criteria in public procurement procedures.

4c) Agriculture

The importance of agriculture for the natural environment and for biodiversity is emphasised by the fact that nearly half the land surface in Belgium is farmed. Farming is an activity which goes beyond simple food production, affecting and using natural resources such as soil and water. Over the centuries, farming has contributed to the creation and maintenance of a large variety of agricultural landscapes (fields, pastures, quickset hedges, mixed woodland and pasture, etc.) which provide important semi-natural habitats for wildlife. Furthermore, the agricultural sector plays a multi-functional role as a food producer, biodiversity manager, motor for the economy in rural areas and guarantor of *in situ* conservation of local species, varieties and domestic animal breeds. However, in recent decades, intensification and specialisation of agriculture, and at the same time marginalisation and under-tilisation of land, have resulted in significant biodiversity loss in and around farmland. Farmland bird populations in particular have shown a decline over last decades.

The Common Agricultural Policy (CAP), together with broader developmental dynamics of the agricultural sector, was one of the drivers for processes causing biodiversity loss. The CAP has its roots in 1950s Western Europe, whose societies had been damaged by years of war, and where agriculture had been crippled and food supplies could not be guaranteed. The emphasis of the early CAP was on encouraging better productivity in the food chain so that consumers had a stable supply of affordable food, but also to ensure that the EU had a viable agricultural sector. The CAP offered subsidies and guaranteed prices to farmers, thus providing them with incentives to produce. Financial assistance was provided for the restructuring of farming, for example by aiding farm investment, aiming to ensure that farms increased in size and that farmers developed management and technology skills so that they were adapted to the economic and social climate of the day. This policy supported the removal of hedgerows and the draining of wetlands, and intensification exerted a variety of pressures on ecosystems (high fertiliser inputs, drainage, increasing cutting frequencies and grazing pressures).

Since 1992, however, the CAP has been adapted to better integrate biodiversity needs. Increasing use of agri-environment measures, Good Farming Practice, organic farming and the support of Less Favoured Areas have favoured farmland biodiversity. The 2003 CAP reform (see box below) promotes these and other pro-biodiversity measures. Measures under market and income policy, including mandatory cross-compliance, the single farm payment (decoupling) and modulation, should provide indirect benefits to biodiversity. These measures have been implemented at EU level since 2005.

Reducing pressure on biodiversity from agriculture is a big challenge for farmers in Belgium because our agriculture is one of the most intensive, specialised and productive in Europe. Furthermore, farmers are currently facing serious challenges with regard to the continuation of their profession. The number of farmers is decreasing every year. They leave the profession for various reasons, including competitive pressures from the market, compensation for the drop in prices by a rise in the cultivated area and risks posed by the move towards energetic crops. Between 1998 and 2005, 14,134 farms ceased their ctivities (21.5 percent of Belgian farmers) with the

total agricultural area decreasing only slightly (decrease of only 0.4 percent), so that the average area per farm is growing (FPS Economy - Directorate-general Statistics Belgium, agriculture census 1998 and 2005[23]).

CBD Instrument

A multi-year Programme of Work on Agricultural Biodiversity was adopted in 2000 (CBD Decision V/5). The programme of work focuses on assessing the status and trends of the world's agricultural biodiversity and pays attention to identifying and promoting adaptive-management practices, technologies, policies and incentives. In addition, it promotes the conservation and sustainable use of genetic resources that are of actual or potential value for food and agriculture. The programme of work focuses on various technical aspects of new technologies, such as Genetic Use of Restriction Technologies (GURT), and the potential implications of these technologies for agricultural biodiversity, biosecurity, farming and the economy. It also has as crosscutting initiatives the International Initiative for the Conservation and Sustainable Use of Pollinators and an International Initiative for the Conservation and Sustainable Use of Soil Biodiversity. The programme also supports, and sees cooperation with the International Treaty on Plant Genetic Resources for Food and Agriculture signed by Belgium in 2002 (CBD Decision VI/6).

Current European agricultural policy

In June 2003, EU agriculture ministers adopted a fundamental reform of the Common Agricultural Policy (CAP). The new CAP is more oriented towards consumer and taxpayer demands, while giving EU farmers the freedom to produce what the market wants. The vast majority of subsidies are paid independently from the volume of production. To avoid abandonment of production, Member States can choose to maintain a limited link between subsidy and production under well-defined conditions. These new "single farm payments" for EU farmers, independent from production, are dependent on observation of a set of environmental, food safety, animal and plant health and animal welfare standards, as well as the requirement to keep all farmland in good agricultural and environmental condition ("cross-compliance").

Other key elements of the reformed CAP

- Strengthened rural development policy with more EU money, new measures to promote the environment, quality and animal welfare and to help farmers to meet EU production standards starting in 2005,
- Reduction in direct payments ("modulation") for bigger farms to finance the new rural development policy,
- Mechanism for financial discipline to ensure that the farm budget fixed until 2013 is not exceeded,
- Revisions to the market policy of the CAP: milk, cereals, rice, nuts, starch potatoes, dried fodder sectors

Operational objectives

4c.1 Take biodiversity more into account in "cross-compliance" criteria

During the mid-term interim review of the CAP in 2002, it was decided that the whole-farm payments made by the CAP would be backed up by a compulsory set of cross-compliance requirements, covering environmental, food safety, and animal health and welfare standards. Farmers should observe a minimum level of environmental standards and have to maintain agricultural land in good agricultural and environmental condition as a condition for the full granting of the CAP direct payments. The CAP imposes a basic framework of minimum cross-compliance criteria. As a Member State, Belgium only has limited freedom in defining its minimum requirements for good agricultural and environmental conditions.

Environmental cross-compliance criteria address the protection of wild species and the conservation of habitats through ecologically managed Natura 2000 areas, protection of soils when spreading sewage sludge, protection of groundwater and protection of waters against pollution caused by nitrates from agricultural sources. These cross-compliance criteria are based on articles emanating from specific European directives, such as the Habitat Directive 92/43/EEC and the Directive on the conservation of wild birds 79/405. The requirements for good agricultural and environmental condition include the protection of permanent pasture and measures to ensure a minimum level of maintenance and to avoid the deterioration of habitats.

[23] http://statbel.fgov.be/pub/home_fr.asp#5

This operational objective aims to better integrate biodiversity concerns in the cross-compliance criteria applied in Belgium and to harmonise them. This could be achieved by strengthening specific requirements imposed by cross-compliance, among other things by taking more elements from the existing environmental legislation (e.g. pertaining to the protection of river banks and road embankments) and imposing new regulations favourable to nature development (e.g. localisation in priority of set-asides, maintenance of reversing areas to protect natural elements).

4c.2 Enhance and encourage the role of farmers as biodiversity actors

The role of farmers as actors for biodiversity protection through implementation of good farming practices and technologies should be encouraged. Farmers play a key role in agro-ecosystems, protecting and enhancing the environment, biodiversity, natural resources, soil and genetic diversity (for instance, crop rotation, organic farming and set-aside of small land parcels) and maintaining the landscape and the countryside (for instance, maintenance of open environments, management of linear and small landscape features, ecological compensation areas*). In several areas, semi-natural habitats can be preserved only if appropriate farming activities are continued.

Apart from the principle that farmers should observe a minimum level of environmental standards (cross-compliance) as a condition for the full granting of the CAP direct payments, the CAP provides financial incentives called "agri-environmental measures" within the framework of the rural development policy (see also 4c.4). These measures support specific farming practices that go beyond the baseline level of "Good Farming Practice[24]" (GFP) and help to protect the environment and maintain the countryside.

Farmers who commit themselves, for a five-year minimum period, to adopt environmentally-friendly farming techniques that go beyond usual good farming practice, receive in return payments that compensate for additional costs and loss of income that arise as a result of altered farming practices. Examples of commitments covered by regional agri-environmental schemes are: environmentally favourable extensification of farming; management of low-intensity pasture systems; integrated farm management and organic agriculture; preservation of landscape and historical features such as hedgerows, ditches and woods; conservation of high-value habitats and their associated biodiversity.

This operational objective complements the previous one, by targeting the development of clear and detailed guidance at exactly what farmers should do to implement cross-compliance criteria and agri-environmental measures. This could be achieved for example through the establishment of guidelines that will provide an easy and understandable way of getting information across given that the wording of CAP reform is rather complex. Continuous appropriate education of and the provision of information to farmers, farm contractors, agriculture advisers and teachers in agricultural colleges are crucial. For instance, guidebooks, workshops, conferences, publications and information campaigns could address the following issues: soil management best practices, impacts of pesticides on wild fauna, the establishment of set-aside strips and their appropriate management, importance of the preservation of notable indigenous farmland trees and other small landscape elements, the protection of breeding wildlife and nests in pasture and fields, the protection of ponds and rivers from pollution from manure, etc.

4c.3 Promote agricultural diversification

Agricultural diversification can be defined as all gainful activities by farmers outside agricultural core activities, i.e. outside production zones. This operational objective aims to encourage agricultural diversification that specifically benefits biodiversity and to support creative research into new diversification possibilities that can stimulate the conservation of local biodiversity, including traditional varieties. The system of advisory councils could provide guidance to farmers interested in diversification. Diversification is promoted in the Rural Development Policy and can be further promoted by the Regional Rural Development Plans.

Agricultural diversification can meet the demand for varied quality products as well as rural recreation activities and at the same time stimulate public interest in biodiversity conservation. It can lead to an increase in a product's added value and farms' profitability and to

[24] Good Farming Practice corresponds to the type of farming that a reasonable farmer would follow in the region concerned. This includes at least compliance with the EU and the national environmental legislation. GFP entails, for example, compliance with the requirements of the Nitrates Directive and the use of plant protection products

an improvement in the image of agriculture. Creative solutions could also seek to meet sanitary constraints of neighbourhood production, promote the interests of consumers and ensure access of the products concerned to the market.

Examples of such diversification activities in rural areas are (i) assisting in the management of nature reserves, (ii) the development of agricultural and nature tourism which arouse the interest of the public in biodiversity conservation, (iii) organic production of fruit and vegetables or organically reared chickens, (iv) neighbourhood production such as farm cheese, ancient varieties of fruit and vegetables, snails, and (v) other initiatives that reduce standardisation of agricultural production.

4c.4 Promote the integration of biodiversity into rural development

Agricultural and environmental policies must give farmers complementary signals if environmentally sound agricultural practices are to be applied to the necessary extent. A new policy for rural development was introduced in 1999 as the second pillar of the CAP. This second pillar of the CAP aims to accompany market and income policy ("first pillar") by providing direct financial aid to farmers in order to influence rural structures. In its revised version for the period 2007-2013, the Rural Development Policy includes important biodiversity-friendly measures, like agri-environmental measures, compensatory schemes in Natura 2000 sites, ecological forest-management aid, etc. They have to be scheduled by a national (regional) rural development plan and may be co-financed by the EU. These measures can be a useful financial instrument for farmers who face a drop in income as they comply with the set regulations.

Therefore, one priority of this Strategy is to integrate biodiversity aspects better and more clearly in current and future rural development plans.

In particular, the revision of rural development plans for the period 2007-2013 will be an occasion to streamline integration of biodiversity in these plans at Belgian level.

Furthermore, policies for nature conservation and rural development must take into account the commitments of the Kiev Resolution on biodiversity (2003) which foresees (i) the identification, using agreed common criteria, of all high nature value (HNV) areas in agricultural ecosystems in the pan-European region and (ii) their biodiversity-friendly management through appropriate measures (e.g. instruments of rural development). Designation of HNV and integration of ad hoc protection tools should be fully implemented in the Rural Development Plans.

4c.5 Promote sustainable use of genetic resources for food, and agriculture

Humans' age-old agricultural activities have contributed, in the course of history, to the creation of a large pool of biodiversity. Since the 1950s, however, due to economic pressure and intensive urbanisation, drastic genetic erosion of old landraces and cultivars took place and actions for collecting, evaluating and conserving them became, and still are, urgently needed. Data show that about 50 percent of the main native livestock breeds (cattle, pig, sheep, goat and poultry) in the EU-15 countries are either extinct or classed as endangered or critical (EEA, 2006).

Biological and genetic diversity in agriculture is essential for the sustainable development of agricultural production and of rural areas. Genetically poorly diversified agricultural areas are indeed more threatened by environmental stresses and disasters; besides, genetically diversified food offers a greater variety of nutrients useful for good general health and resistance to disease. The necessary measures should be taken to collect, conserve, characterise and utilise the potential of that biodiversity in a sustainable way to promote the global aims of the CAP. The conservation and sustainable use of genetic resources in agriculture is one of the objectives of the CBD. It is also a major objective of the FAO's Global Plan of Action for the Conservation and Sustainable Utilisation of Plant Genetic Resources for Food and Agriculture and it is a key topic of the International Treaty on Plant Genetic Resources for Food and Agriculture.

Coordinated actions at Belgian level (including regional level) must be set up for a better, safe conservation strategy for the genetic diversity that is essential for food and agriculture. The conservation of agricultural genetic diversity is to be achieved through *in situ* conservation of local species, varieties, domestic animal breeds and microbial life forms with actual or potential value. Actions should also be taken to improve the development of adequate gene banks useful for the *ex situ* conservation of genetic resources for food and agriculture. Such conservation requires an adequate system of economic and social incentives, combined with increased consumer awareness. The Regions take the

conservation of breeds and varieties into consideration in their agri-environment measures. Ongoing initiatives cover, among other things, the establishment of private orchards, the safeguarding of poultry varieties and a programme to promote the rearing of the "Blanc-Bleu mixte" breed of cattle and the "mouton ardennais roux" breed of sheep in Wallonia (*in situ* conservation) and the establishment of cryo-banks for ruminant rearing in Wallonia (*ex situ* conservation).

A specific national strategy focusing on the management of agricultural biodiversity should be developed in the first place for coordinating the diverse actions already going on and to promote new ones. All the actions will contribute to the implementation of both the FAO's Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (PGRFA) and the International Treaty on Plant Genetic Resources for Food and Agriculture that stipulate clearly the implementation of a National Strategy and a National Inventory of plant genetic resources for agriculture.

Furthermore, the importance of biodiversity for food and nutrition should be taken more into account by public health and food chain safety policies and their scientific bodies.

4c.6 Reduce the impacts of pesticides on biodiversity

Pesticides are used to combat organisms considered to be harmful to crops and have therefore a detrimental effect on biodiversity. It is nevertheless possible to reduce the impacts of pesticides on biodiversity by lessening their impacts on non-target organisms. A range of measures, if correctly applied, can contribute to reducing these impacts; they are either related to the choice of the pesticide or to the way it is spread into the environment (for example, organic agriculture, integrated agriculture, biological control, prohibition of pesticides with long-term repercussions for the abundance and diversity of non-target species; and application of risk mitigation measures such as buffer zones in order to protect aquatic organisms).

A number of initiatives contributing to the reduction of the impact of pesticides on non-target organisms are ongoing or will be developed in the near future. These initiatives are as follow:

1. All authorised pesticides will be re-evaluated according to EU legislation by the end of 2012;
2. The comparative assessment and substitution principle will be integrated into pesticides legislation, in accordance with an upcoming proposal of the European Commission (expected to be operational in 2008 or 2009);
3. The pesticide reduction programme adopted by the Federal Government in 2005 aims to reduce the adverse impact of pesticides between 2001 and 2010 by 25% for those used in agriculture, and by 50% for the others. This programme foresees the establishment of specialised working groups examining the possibility of reducing the impact of pesticides used on a certain crop or group of crops (for instance potatoes or cereals); the obligation for all professional pesticides to have an application licence, and splitting of pesticide authorisations between professional use on the one hand and amateur use on the other. Amendments to the first programme will be examined in the course of 2007 where necessary.
4. Adequate indicators (taking into account both health and environmental aspects) will be defined and used to monitor the impacts of pesticides on biodiversity. Despite all efforts made so far to decrease the impacts of pesticides on biodiversity, it remains difficult to evaluate the progress made that benefits the protection of biodiversity. This is due to the lack of availability of suitable indicators.

Therefore, in the framework of the update of the European Strategy for Biodiversity, Belgium should seek to set up a list of indicators specifically addressing the issue created by pesticides.

Indicators developed to monitor the pesticide reduction programme in Belgium should focus explicitly on measuring the reduction of the risk by 25% and 50% in each of the areas they cover. For instance, the PRIBEL indicator (Pesticide Risk Index Belgium) covers consumers, farmers, birds, bees, aquatic organisms, earthworms and underground water. The risk reduction objective should be reached by ensuring an effective reduction of risk by 25% and 50% for the biodiversity-related categories (i.e. birds, bees, aquatic organisms and earthworms).

4c.7 Prevent cultivated GMOs from leading to the loss, displacement or genetic contamination of local agricultural varieties and related wild flora and prevent them from affecting the surrounding natural biodiversity

The use of genetically modified organisms (GMOs) in agriculture for food or feed crops and their release into the environment *per se* are issues of growing importance. This importance increases in line with the technological progress made in this area, as the use of GMOs can potentially have negative impacts on the biodiversity of the environment. One risk is the escape of newly introduced genes into the surrounding environment (especially through pollen) so that the genetic material of local agricultural varieties or wild related flora can become contaminated. This can be prejudicial for instance if the newly introduced gene (transgene), aimed at agricultural purposes, has adverse effects if spread into the wild nature. Since the purpose of genetic modification will often be acceleration of the growth of cultivated plants or growth in adverse environmental conditions, cross-pollination could lead to mutations in wild plants that make such plants more invasive. Depending on the new character conferred by the transgenes, the impact of genetically modified plants should be carefully evaluated with regard to various components of biodiversity, representative of the various functions of the ecosystem, not only in the agricultural ecosystem itself but also with regard to the related vicinal wild terrestrial and aquatic ecosystems.

There is also a risk that GM standardised cultivated varieties will supplant locally adapted agricultural varieties, mainly for economical and marketing reasons and generally as large monocultures, and would therefore counteract Objectives 4.c 2. to c.5. and Objective 5.8

Moreover, with GM varieties being covered by patents generally owned by multinationals, efforts must be made to prevent that their release in the environment would alter traditional agricultural practices, thus counteracting Objectives 5.10 and 6.

We must also prevent marketing, economical forces and consumption habits from threatening and contaminating wild ecosystems. Public awareness of consumption behaviours increasing such threats should be raised (cf. obj. 4g.1).

On the other hand, GM plants are developed for industrial purposes (to make pharmaceuticals, bioplastics and other biomaterials), and industrial crops take over the area previously used for food crops. Once again, it is extremely important to carefully monitor the ecological consequences of the spreading of those transgenes as well as the ethical and social consequences, and decisions must be taken to avoid negative impacts.

Some GM cultures are resistant to herbicides or insecticides. Cultivation of these plants could lead to adjustments in agricultural practices (a change in the amount and type of herbicides/insecticides used) that have a direct impact on the environment and on biodiversity in particular.

In order to pursue the operational objective mentioned above, case-by-case studies on environmental risks for biodiversity and on socio-economical considerations of introduction of GMO cultures in Belgium are needed. Such studies would provide a scientific background to facilitate cooperative discussions between the Regional and Federal authorities and between the various stakeholders in Belgium when deciding to import and/or cultivate GMOs.

Finally, such environmental and socio-economical impact studies would have to be based on a good knowledge of the existing agricultural biodiversity of our country. The establishment of complete "living" (adaptable) catalogues covering this should therefore be encouraged.

4c.8 Ensure that the production of plants for renewable energy does not negatively impact on biodiversity

Biomass* and biofuels* are set to cover an ever-increasing share of the EU's future transport and heating needs. The EU is supporting biofuels with the aim of reducing greenhouse gas emissions, boosting the decarbonisation of transport fuels, diversifying fuel supply sources, offering new income opportunities in rural areas and developing long-term replacements for fossil fuel.

In 2003, the Biofuels Directive on the promotion of the use of biofuels and other renewable fuels for transport set out indicative targets for Member States.

In December 2005: the European Commission adopted an Action Plan designed to increase the use of energy from forestry, agriculture and waste materials.

The European Union is already working towards achieving a 5.75% share for biofuels in transport by 2010. To help meet this target, the European Commission has adopted an EU Strategy for Biofuels.

With regard to CAP, the decoupling of income support from production introduced in 2003 by the reformed CAP helps to facilitate the supply of energy crops. In particular, crops that were eligible for direct payments only under the non-food regime on set-aside areas may now be cultivated on any area without loss of income support.

Under Rural development policy, investments on or near farms, for example in biomass processing, as well as the mobilisation of unused biomass by forest holders, can also be supported. The Commission has proposed Community strategic guidelines for rural development that emphasise renewable energy, including biofuels. It is also proposing a specific ad hoc group to consider biomass and biofuel opportunities within national rural development programmes.

Bio-energies derived from agricultural crops are set to increase in importance in the coming years. Impacts of biofuel crops on biodiversity are not known yet. However, it is clear that the increasing area devoted to energetic crops has an impact on biodiversity. Furthermore, intensive production of any form of biomass has serious negative impacts on biodiversity as a result of the use of fertilisers, pesticides, monoculture and forest clearing.

It is therefore necessary to control, monitor and assess the impacts of those crops on biodiversity and to consider carefully how policies can best increase use of biomass and biofuels without damaging biodiversity. Implementation of the EU Biomass Action Plan must therefore take due account of biodiversity in assessments in order to ensure ecological sustainability of biomass production.

Tropical countries have clear comparative advantages, at least in the field of bio-ethanol production. In order to meet the growing demand for biomass and bio-fuels, the EU already imports large quantities of crops with substantial environmental impacts, such as palm oil or sugar cane. This must not lead to unacceptable pressures on biodiversity and food production in the exporting countries. This is not only an issue for bio-fuels, but bio-fuels will increase the pressure.

4d) Fishery in marine and inland waters

Marine waters

Belgium has a limited coastline and the country's professional marine fishing fleet is relatively small. Its ships only land 1% of total landings of the countries bordering the North Sea. About 30,000 tons of fish[25] (mostly flat fish and cod) are brought ashore by Belgian fishermen each year. Other marine products (shrimps and oysters) and the aquaculture* production in marine waters and freshwaters are limited. Nevertheless, marine biodiversity is particularly threatened in our coastal zone and shelf sea, where direct and indirect disturbances are concentrated. Two important threats are the overexploitation of marine resources and the adverse effects on the sea bottom of certain fishing methods (such as beam trawling) employed not only by Belgian fisheries but also by fishing vessels from foreign countries active in Belgium. Despite the creation of several international instruments to regulate fishery and its impact on the environment, the pressure on the marine ecosystem and fish populations has drastically increased over the last decade. Besides professional fishermen, also recreational fishermen are active at sea.

Fishery and aquaculture in the North Sea are governed by the EU's Common Fisheries Policy (CFP), established in 1983 and reviewed in 1992 and 2002. The CFP takes into account the biological, economic and social dimensions of fishing. The CFP addresses four main areas, dealing with (1) conservation of fish stocks (such as establishment of total allowable catches (TACs) of sea fish that can safely be caught every year to allow for renewal of fish stock), (2) structures (such as vessels, port facilities and fish-processing plants), (3) the common organisation of the market and (4) an external fisheries policy which includes fishing agreements with non-Community members and negotiations in international organisations.

The EU Marine Strategy on the protection and conservation of the marine environment (expected in 2005) has four objectives: (1) to protect, conserve and improve the quality of the marine environment; (2) to phase out pollution; (3) to control the use of marine services and goods and other activities in marine areas that have, or may have, a negative impact on the status of the marine environment; and (4) to apply the principles of good governance both within Europe and globally.

[25] from Earth Trends Country Profile (http://earthtrends.wri.org)

An important national instrument is the Law of 20 January 1999 on the protection of the marine environment in the areas under Belgian jurisdiction. This foresees the identification and designation of marine protected areas (among others in application of the EU Habitat and Birds Directives). Work on MPAs and threatened and declining species is also ongoing under OSPAR. Measures for MPAs are currently being finalised and will be published soon. Management measures for all relevant sectors will be included in the instruments to be published and the necessary conflict analysis has been conducted with all of these sectors, including fisheries.

Inland waters

In Belgium, inland water fishery can be considered to be a leisure activity or a sport. It is practised mostly for entertainment and on a limited basis for food, both in artificial areas specially managed for fishing (private ponds, fishing grounds) and in the public hydrographic network of rivers and canals. Belgium's current legislation only covers the management of the public hydrographical network. Several improvements in the management of standing waters by fishermen should be promoted both to ensure an ecological management of the aquatic ecosystems and improve the quality of the local fish populations.

Belgium is a Party to the Ramsar Convention on the protection of wetlands (i.e. inland waters and marine waters) established in 1971 which provides the framework for conservation and sustainable utilisation of wetlands.

The ICES Code of Practice on the Introductions and Transfers of Marine Organisms sets forth recommended procedures and practices to diminish the risks of detrimental effects from the intentional introduction and transfer of marine (including brackish water) organisms (ICES, 2005).

CBD instruments

The Programme of Work on Marine and Coastal biodiversity adopted in 1998 (CBD Decision IV/5) aims to assist the implementation of the Jakarta Mandate, the CBD's general framework for action on marine and coastal biodiversity, at the national, regional and global levels. It identifies key operational objectives and priority activities (implementation of integrated marine and coastal area management, marine and coastal living resources, marine and coastal protected areas, mariculture and alien species and genotypes).

The Programme of Work on Inland Waters adopted the same year (CBD Decision IV/4) promotes the ecosystem approach, including integrated watershed management, as the best way to reconcile competing demands for dwindling supplies of inland waters.

Operational objectives

4d.1 Promote the implementation of good fishing practices in the North Sea, favourable to fish protection and their habitats

Belgium will promote the implementation of the FAO Code of Conduct for Responsible Fisheries to ensure the long-term sustainability of living marine resources and protection of their habitat. To help implement the provisions regarding fishing operations (Article 8 of the Code), Technical Guidelines are addressed to the individual states, international organisations, fishery management bodies, owners, managers and charters of fishing vessels as well as fishermen and the general public. They provide practical advice to ensure all fishing operations are conducted responsibly. Particular attention will be paid to minimising bycatch. Implementation of this objective should be in accordance with the management of marine protected areas and an Integrated Coastal Zone Management strategy (see Operational objective 3.2), as well as with the future European Marine Strategy.

4d.2 Provide for a management of inland water fisheries catering for sport purposes that responds to ecological management objectives and ensures the balance and the quality of the fish populations

Wherever it takes place, inland water fisheries should respect ecosystem quality by avoiding overstocking with fish. Planting of indigenous fish, respecting local genetic strains, should be promoted. Populations of species of no fishing interest should be respected. Stocking of non-indigenous species should be avoided in order to prevent the introduction and spread of invasive alien species. Exaggerated baiting and consequent eutrophication must be avoided.

Restoration of inland water systems should be promoted: through biomanipulation*, fisheries may contribute to rehabilitation of clear water systems with macrophytes and high species richness instead of poor and banal turbid water systems characterised by algal blooms. Stocking of fish should achieve a balance between the carrying ca-

pacity of aquatic ecosystems and the size and structure of fish populations in order to promote clear water systems, so preventing turbid water systems with poor species diversity. Stocking of pools should be avoided: they are too small to carry populations of large fish. Furthermore, maintenance and creation of fish-free ponds should be promoted for specific biota, for example amphibians.

4d.3 Prevent GM fish from threatening fish biodiversity and populations

GM varieties of fish have already been commercialised in some parts of the world, mainly intended to grow faster and reach a bigger size. This practice is not applied in Belgium yet. Whereas those fish are supposed to be raised in confined areas, drastic measures should be taken to prevent those varieties from escaping into the wild. After all, some GM varieties of fish have already been shown to threaten the future of the species when they come into reproductive contact with the wild related members. Furthermore, GM fish could threaten local species through their invasive behaviour.

Similarly for other marine GM products, the consequences of interbreeding and competitive behaviour with wild relatives should be carefully investigated and, as a rule, should be avoided at all cost.

Specific attention needs to be given to side effects of genetic manipulations aimed at increasing the size of commercial species (amplification of growth hormone gene). (see also Objective 7.8.)

4e) Wise use of wetlands

Wetlands are essential components of Belgian biodiversity which are under severe threat. They provide for useful ecosystem services such as water retention, water purification, recreational areas, wildfowl habitats and more.

The Convention requires that *"The Contracting Parties shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory"* (art. 3.1). Wise use of wetlands has been defined by the COP of the convention as *"the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development"*. *"Ecological character"* is *"the combination of the ecosystem components, processes and benefits/services that characterise the wetland at a given point in time"* (Rés. XI.1. Annex A COP Ramsar Convention, 2005).
Nine Ramsar sites are designated in Belgium (4 in Flanders and 4 in Wallonia).

The Water Framework Directive (Directive 2000/60/CE) sets a framework for a Community policy in the field of water. It establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwate in order, among other things, to prevent further deterioration and protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems.

The wise use provisions of the Convention apply, as far as possible, to all wetland ecosystems. Societal choice is inherent in advancing human well-being and poverty alleviation, which depends on the maintenance of ecosystem benefits/services. Within the context of ecosystem approaches, planning processes for promoting the delivery of wetland ecosystem benefits/services should be formulated and implemented in the context of the maintenance or enhancement, as appropriate, of wetland ecological character at appropriate spatial and temporal scales. (Rés. XI.1. Annex A COP Ramsar Convention, 2005).

Operational objective

4e.1 Apply Ramsar Convention guidelines on Wise use of Wetlands Concept as far as relevant

The COP of Ramsar Convention has published detailed guidelines on various issues of wetlands use. Main guidelines are about: Integrated Coastal Zone Management; Inventory; Laws and institutions; Management planning; National wetland policies; Participation in management; Restoration; Risk assessment; River basin management; Water and water allocation; Wise Use concept. Those Guidelines should be implemented through relevant public authorities competent with wetlands management or wetlands related uses.

4f) Forestry

The forestry sector plays a multi-functional role as a producer of a renewable natural resource, provider of income and employment, biodiversity manager, guarantor of *in situ* conservation of local tree varieties and provider of environmental services (like soil and water protection) and of recreational activities.