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Fax:	001 514 288 6588	Pages:	1+4
Phone:	001 514 288 2220	Date:	14 January 2009
Subject:	Notification 2008-130: Agriculture	REF:	3512/ENV/09-111/630/09

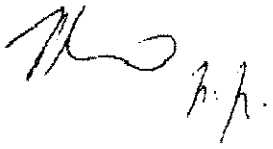
Dear Dr. Djoghlaf,

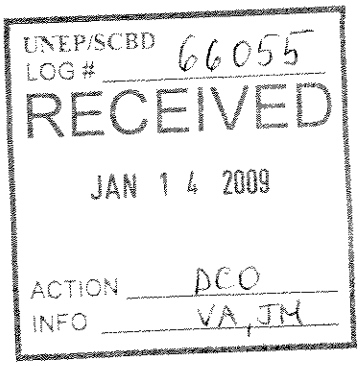
Please find attached the CZ response to the Notification 2008-130 on Agriculture Biodiversity in which Parties are according to Decision IX/1 invited to submit the following information:

1) Best practices concerning the issue of on-farm and in situ conservation of agricultural biodiversity.
2) Lessons learned about the conservation and sustainable use of agricultural biodiversity, for consideration in climate change adaptation and mitigation planning and cross-sectoral planning in agricultural areas.
3) Relevant activities to reduce the threat of nutrient loading, and especially nitrogen deposition, to the conservation and sustainable use of biodiversity.

The CZ response is structured in the same way as the Notification requested.

Yours sincerely,





Dr. Petr Roth

CBD NFP

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Prague, 14th January 2009

REF: 2512/ENV/09 - 111/630/09

THE CZECH REPUBLIC SUBMISSION to the Notification No. 2008 - 130 – Agricultural Biodiversity - call for submission of information

1. Best practices concerning the issue of on-farm and *in situ* conservation of agricultural biodiversity in the Czech Republic

The agri-biodiversity conservation in the Czech Republic is being carried out mainly within the National Programme on Conservation and Utilization of Plant, Animal and Microbial Genetic Resources for Food and Agriculture which is under the auspices of the Ministry of Agriculture of the Czech Republic (MoA). The new National Programme (National Programme) was launched by the MoA on 14 June 2006 and it is valid for years 2007-2011 as a common platform for conservation and utilization of genetic resources in agriculture. It consists of three separate National programmes:

1. National Programme on Conservation and Utilization of Plant Genetic Resources and Agro-biodiversity
2. National Programme on Protection of Genetic Resources of Economically Significant Microorganisms and Tiny Animals
3. National Programme on Protection and Utilization of Livestock and Other Animals for Food and Agriculture

The National Programme itself includes only cultivars of cultivated plants, farm animal breeds, bees, and fish in aquaculture. There are also microorganisms important for agriculture and for the agriculture industry (which processes agriculture products such as vine, beer, milk etc.) included in the programme. The biodiversity bounded to agriculture land or agriculture technology, such as wild birds, mammals, arthropods, weeds and other species connected to agriculture environment, are not covered and included in the National Programme (because these species are not taken as agriculture genetic resources).

The landownership of agricultural land was permanently damaged in the Czech Republic mainly by violent collectivization over historical period from 1948 to 1989. At this time also significant changes in technologies and land management systems appeared Intensification was being preferred (high amount of fertilizers have been used).

In the Czech Republic, there is most of the agricultural land under land tenancy and also under large enterprises ownership. Therefore Czech agriculture has in many areas very intensive character and that is why such areas which do have special character from the agri-biodiversity conservation point of view are in a very limited number (mainly in mountain areas). From the reasons mentioned above the biodiversity *in situ* and *on farm* is endangered.

The MoA in cooperation with the Ministry of the Environment of the Czech Republic (MoE) supports the agri-biodiversity management mainly through the system of subsidies (for example from the Axis II of the Rural Development Programme for the period 2007-2013 called "Improving of environment and landscape"). Among other priorities of the Axis II of this Programme belong also biological diversity conservation, as well as preservation and development of agricultural and forest systems with high natural value, traditional character of maintaining agriculture land and climate change adaptation and mitigation. In the framework of these priorities, which are included in the approved "National Strategic Plan" and "Programming document of the Rural Development Programme", are measures aimed at the following:

- Promotion of the environmentally friendly farming methods leading to biodiversity and promotion of suitable farming systems to preserve rural landscape. Promotion of the protection of the environment on agricultural land and in forest areas of high nature value.
  - Measure II.1.1 Lese favourable areas payments (provided in mountain and other LFA);
  - Measure II.1.2.1 Payments on agricultural land within Natura 2000 sites and payments linked to Water Framework Directive 2000/60/EC;
  - Measure II.1.3.1 Agri-environmental measure – Environmental friendly farming (including organic farming and integrated production);
  - Measure II.1.3.2 Agri-environmental measure – Grassland maintenance;
  - Measure II.2.2. Payments for forest areas within Natura 2000;
  - Measure II.2.3. Forest-environmental payments.

- Promotion of renewable energy sources usage through the existing forest potential and through possibilities of its expansion and preservation of forest's positive functions.
  - Measure II.2.1. Afforestation of agricultural land
  - Measure II.2.4. Restoring forest potential after disasters and promoting social forest functions

More information about the Rural Development Programme is available in the document itself: **http://www.mze.cz/UserFiles/File/EAFRD/RDP%20November%202008.pdf**

The agri-biodiversity protection and sustainable land use is mainly carried out through the organic farming mentioned above. It includes for example cultivation of old fruit varieties, breeding of traditional stocks, welfare and avoiding using industrial fertilizers, pesticides, heavy mechanisation, etc.

MoA supports planting of old and native plant and fruit tree varieties from national sources. MoE supports special management measures from nature protection view and takes care about nature protection in general.

Good agricultural and environmental condition (GAEC) relates also to this topic. In the Czech Republic it contains nature features (such as trees, bushes and others) protection and some measures to avoid land erosion. There are discussions about possible enlargement of these demands on subsidy receivers.

2. Lessons learned about the conservation and sustainable use of agricultural biodiversity, for consideration in climate change adaptation and mitigation planning and cross-sectoral planning in agricultural areas in the Czech Republic.

According to studies and scenarios of the climate change in the Czech Republic and its impacts on agriculture, it is predicted that most of the CZ territory will have arider character then today. The consequences of this would most probably be the need to change the currently cultivated varieties in the crop production in such a way that would be possible to profit the positive climate change impacts (higher temperature sum, prolonging of the vegetative period, shift and enlargement of productive areas), and to better face the negative climate change impacts (change in the distribution of precipitation throughout the year within the CZ territory, higher appearance of agriculture and vegetation drought, the appearance of new and mounting of numbers of generation of pests and parasites and livestock diseases). From the above mentioned reasons the preservation of genetic diversity of old and native and regional varieties are very important in the climate change adaptation measures. These varieties can be used while increasing the resistance to some negative impacts of climate change.

There would be an increase in the water and wind erosion in relation climate change impacts. The agri-biodiversity protection is very important in relation to the fight with the water and wind erosion which has been already damaging the agriculture land.

The organic farming together with the reduction of doses of synthetic nitrogen fertilizes contributes to the biodiversity resistance and resilience in relation to climate change impacts. Main greenhouse gases arising from agriculture in the central Europe conditions are mainly nitrogen oxides. The areal source is the change of mineral nitrogen in the soil and methane from enterofermentation from livestock digestive tract and from excrement and farmyard manure disposal. Apart from, the organic farming is important because of the seqvestatration of carbon bounded in the soil humus. The substantial part of such carbon would be - in case of intensive soil management – released to atmosphere as the carbon dioxide.

Looking at figures from the Czech Statistical Office, there is a dynamic increase of organic farming (see table No. 1). At the end of October 2008, there have been 1802 organic farm units which are almost more then 500 units in comparison to 2007. The numbers of the BIO-food producers have increased from 253 in 2007 to 410 in 2008 which is an increase of 62%. The agriculture land area of organic farming is 338 722 ha in 2008 which is almost 8% of total agriculture land. The fastest expanding organic farming land is among others vineyards and fruit orchards. Their area has increased of about 70% this year. This mean that the organic farming is becoming widely used system of agriculture management with a wide range of positive "side-effects" on the climate change, the greenhouse gas emissions, the agri-biodiversity preservation and other parts of sustainable development.

Organic agriculture includes:

1. Responsible use of natural resources with limited or prohibited use of substances and procedures negatively impacting the environment;
2. The breeding of farm animals in accordance with ethological considerations, and a natural manner of breeding with limited use of veterinary pharmaceuticals;
3. Environmentally-friendly processing methods.

The legislation for organic agriculture is governed by an internal regulation by the Ministry of Agriculture of the Czech Republic, Methodical Instructions for Organic Agriculture No. 655/93-340 dated 22 June 1993 with subsequent amendments. The agricultural management of entities that wish to designate their products as environmentally friendly products, with the certified "BIO trademark", is subject to independent controls.

Organic Agriculture 2003-2007

		2003	2004	2005	2006	2007	2008
Organic economic units	No.	810	836	829	963	1318	1802
Soil area with environmentally friendly management	hectares	254 995	263 299	254 982	281 535	312 890	338 722
	%	5,97	6,16	8,95	6,61	7,35	8

Source: Ministry of Agriculture

State support (repeatedly renewed from 1998) was disbursed until 2003 on the basis of a Government Order by which support programmes for the non-production functions of agriculture were defined. From 2004 to 2006 the conditions for state support were amended by the Horizontal Rural Development Plan (HRDP), which included the "Organic Farming" measure stipulated by Commission Regulation (EC) No. 242/2004 as one of its agri-environmental measures. Organic farmers also had the option to use advantageous point allowances when applying for support from the Agricultural Operational Program (OP). Starting in 2007, OP support was secured by the Rural Development Program 2007-2013 (RDP) program document, which replaces the HRDP and the Rural

Development and Multi-Functional Agriculture Operational Program. In the framework of AEO/ RDP, OP is supported by Government Order No. 79/2007 Coll.

The Table below presents an overview of the amount of funds disbursed from 1998 to the present in the framework of the RDP. In the table, you will find an overview of the growth of payments that occurred during the transition to the RDP. The greatest growth was seen in funds for permanent crops (vineyards, orchards, hop gardens): 90% and permanent grasslands: 70%.

The Evolution of State Support for OP in CZK/ha

Use of land	1998	1999-2000	2001-2003	2004-2006	2007	Growth IV/III	Growth V/IV
	I	II	III	IV	V	(%)	(%)
Arable land	2,200	2,130	2,000	3,520	**4,266**	76	21
Permanent Grasslands	2,200	1,065	1,000	1,100	**1,954**	10	77
Permanent Crops	2,200	3,195	3,500	12,235	**23,368**	250	90
Vegetable	2,200	2,130	3,500	11,050	**15,524**	216	40
Special Herbs	2,200	2,130	2,000	11,050	**15,524**	453	40

Source of Data: The Ministry of Agriculture

More information can be found in the Organic farming yearbook 2007, downloaded here: http://www.organic-europe.net/country_reports/czech_republic/bioinstitut-probio-2007-yearbook-2007.pdf

3. Relevant activities to reduce the threat of nutrient loading, and especially nitrogen deposition, to the conservation and sustainable use of biodiversity

The basic material which secures the minimisation of area nitrogen eutrophication is the Council Directive concerning the protection of waters against pollution caused by nitrates from agricultural sources (**91/676/EEC**) (**"nitrate directive").**

The main reason for the directive development was the fact that agriculture is the main nitrogen water polluter threatening the environment and human health (displayed higher nitrogen concentration in surface and groundwater which are used for obtaining drinking water mainly in areas with intensive agriculture). Nitrogen directive is one of 17 EU directives focused on the protection and use of water sources.

The main implementation body in the Czech Republic is the Ministry of Agriculture of the Czech Republic together with the Ministry of the Environment of the Czech Republic. The main aim of the nitrogen directive is to decrease the water pollution caused by nitrogen from agriculture sources and avoid such pollution. This is important not only for securing enough high quality drinking water but also for minimising the surface water and sea eutrophication. The Directive was transposed to the Czech legislation into the §33 of the Act No. 254/2001 Coll., on waters as amended. According to this act, the Government approved the Government decree n. 103/2003 Coll., on designation of vulnerable zones and on use and storage of fertilizers and manure, crop rotation and execution of counter – erosion measures in these zones, as amended. Government decree has been published in the Collection of laws, see: **http://www.mvcr.cz/sbirka/2003/sb042-03.pdf**

Other information can be found in the 3rd National Report and other reports, the CZ has already submitted to the CBD Secretariat.