

# Czech forests in the Rural Development Programme:

analysis of needs and gaps

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#### 1 Introduction

The Czech government is about to notify the country's draft Rural Development Programme (RDP) to the European Commission. The document, approved by the cabinet in mid-August, will set the rules for spending of the European Agricultural Fund for Rural Development (EAFRD) – the so-called second pillar of the Common Agricultural Policy – money in 2007–2013. With the proposed € 32 million of annual funding for forestry measures, the programme will have major impact on the Czech forestry and the situation of forest lands, both directly (investments and subsidies) and indirectly (motivation and priorities for forest owners).

Friends of the Earth Czech Republic is seriously concerned about the forestry measures in the draft RDP. Unless changes are introduced, the forestry subsidies will fail to bring added value to the Czech forest management and will undermine the EAFRD's own goals. Therefore, we ask the Commission to ensure that necessary changes are made in the Czech RDP before its approval.

These concerns were not properly dealt with on the national level because of the government's failure to implement the partnership principle – as guided by the Article 6 of the EAFRD regulation – properly. The shortcomings include biased membership of preparatory groups responsible for the initial development of proposed measures and the lack of formalised consultation of the RDP draft.

This paper is divided into four parts:

- a summary of the key barriers to sustainable management of Czech forests the main environmental problems faced by the country's forestry (Chapter 2);
- a brief discussion of some habitats conservation problems related to forestry (Chapter 3):
- Friends of the Earth's key concerns about the Czech Republic's draft RDP, including recommendations for possible improvements (Chapter 4);
- Chapter 5 gives some background on the failure to implement the partnership principle.

# **2 Forest sustainability**

Forestry is one of the key land uses in the Czech countryside. Some 33% of the country is covered by forests: one of the higher rates in the EU. Hundreds of rural communities depend on health and sustainable management of forests for their long-term economic future. Also, forestry is critically important for biological diversity of the country. A recent assessment of Important Plant Areas in central and eastern European countries found that "[p]oor forestry practices threaten 44% of IPAs in the region".1

However, health of Czech forests, as measured by defoliation, has deteriorated over the last several years. The Czech Republic had the highest defoliation rate of all European countries in 2001.<sup>2</sup> Improvement of forest health is the key priority for Czech forestry now. Neither economic (timber production) nor environmental functions of forests can be fulfilled in a longer term without substantial changes in forestry practices.

In a May 2006 joint statement on forest policy, 280+ Czech scientists said that

"poor condition of forests – forest dieback, decreased resistance to pests and weather extremes, increased frequency of disturbances, biodiversity loss, reduced water retention capacity, soil erosion – is due to a number of factors. Most of them are connected to the forest management. The Czech forestry insists on traditional, even-aged forest management."

Changing forestry practices will be important for achieving both the EU Sustainable Development Strategy's agreed goal of halting biodiversity loss by 2010 and economic and social development of rural areas in the Czech Republic.

In order to achieve this, the Czech government and the European Commission need to make sure that available policy tools are effectively utilised and coordinated.

Friends of the Earth believes that at least 10% of the Czech forest land should be reserved for biodiversity conservation in a longer term, i.e. that one tenth of country's forests should be gradually conversed to natural habitats with no forestry exploitation. Research suggests that this target is the minimum level necessary for restoration of forest species diversity.<sup>4</sup>

However, vast majority of forests in the Czech Republic is and will continue to be focused on wood production (as opposed to biodiversity protection as the primary function). But the current forestry practice is unsustainable even for commercial forestry. Degradation of forest soils damages long-term timber production, and artificial stands of conifers are unable to withstand extreme weather and fungi or insect pressures.

Also, changes in forestry practice are necessary in order to ensure some minimum standards of biodiversity protection in commercial forests. This is in accordance with the approach of the Common Agricultural Policy in general and the EAFRD in particular, which emphasises sustainability of and biodiversity protection in wider landscape, outside protected areas.

<sup>&</sup>lt;sup>1</sup> Important Plant Areas in Central and Eastern Europe: priority areas for plant conservation, Plantlife International 2005

<sup>&</sup>lt;sup>2</sup> State of Europe's forests 2003: the MCPFE report on sustainable forest management in Europe, Ministerial Conference on the Protection of Forests in Europe Liasion Unit, Vienna 2003

<sup>&</sup>lt;sup>3</sup> Scientist and expert statement on Czech forest protection, Prague, May 2006

<sup>&</sup>lt;sup>4</sup> Hanski, I., et Walsh, M.: How much, how to? – Practical tools for forest conservation, BirdLife International, Helsinki 2004

This chapter describes some key sustainability aspects of Czech forestry, including harvesting techniques, tree species mix and management of nutrients and deadwood habitats.

For implications of these issues for the RDP and suggested changes in the programme please see the Chapter 4 of this paper below (especially section 4.2).

# 2.1 Clearcutting

The most common type of harvesting/regeneration in the Czech Republic are clearcuts with replanting of new trees. About 15,000 hectares of clearcuts are created in the country every year.<sup>5</sup> Almost 84% of regeneration is planting or seeding.<sup>6</sup> Law limits the maximum size of clearcuts to 1 hectare (2 hectares in floodplain and pine forests and on inaccessible mountain slopes).

This practice has been repeatedly criticised for soil degradation and biodiversity impacts. Soil life is damaged by radical, large-scale change of conditions (insolation, microclimate); increased insolation leads to mineralisation of organic matter, microclimate changes damage soil and clearcuts are prone to erosion. Rapid change of habitat causes extinction of most of forest species, and periodic clearcuts (every 105 years in average) prevent full return of plants and soil biota in particular. Also, artificial replanting that follows clearcutting leads to unified structure of even-aged forests with low biodiversity.

The problems are reinforced by the regeneration practice. New trees are planted directly to the clearcut, instead of use of pioneer tree species as a transition stand, in the shelter of which the target species would be planted after roughly 10 years, in order to create succession-like conditions.

Natural conditions are radically different in Central Europe: average size of gaps created by fallen trees in natural beech forests in Slovakia is 250 m<sup>2</sup> and the gaps never exceed 0.4 hectare.<sup>7</sup>

May 2006 scientists statement on the situation of Czech forests says that "consequences of clearcutting are serious", including soil damage, erosion and radical impact on biodiversity, and "[t]rees planted in the clearing tend to be more vulnerable to pests and wind",

"[I]egislation must significantly reduce or eliminate clearcutting. Small area shelterwood felling and selective harvesting methods should be preferred. At the same time, regulations should ensure that clear-cut areas which were created in the past (or which will emerge as a result of future salvage cuts) will be reforested with pioneer species."

A major report of government experts warned that "loss of humus [due to clearcutting]...may be large", and recommended substantial shift from this practice, and towards selective logging with natural regeneration.

<sup>&</sup>lt;sup>5</sup> Zpráva o stavu lesa a lesního hospodaření České republiky [Report on forests and forestry in the Czech Republic], Ministry of Agriculture, Prague 2005
<sup>6</sup> Ibid

<sup>&</sup>lt;sup>7</sup> Drößler, L., et von Lüpke, B. (2005): Canopy gaps in two virgin beech forest reserves in Slovakia, Journal of Forest Science 51 (10): 446-457

The government, in principle, agrees. Its National Forest Programme says that

"it is advisable to...create legislative, silvicultural and economic preconditions for natural regeneration of genetically suitable forest stands in the conditions where it is effective from biological and economic aspects ...recommend forest owners that they should support the growth of successive forest stands under shelterwood of regenerated stands and reduce the use of clear-cutting system where it underlies sustainable management of forests" (p. 4),

and calls for new subsidies "supporting the application of natural regeneration of genetically suitable stands" (p. 13).

# 2.2 Monocultures and inappropriate tree species

Most of Czech forests are conifer monocultures. Natural ratio of Norwergian spruce in Czech forests would be 11%. Beech, oak and fir should be the most common species. However, current ratio of spruce is 53%. Despite some positive developments, progress towards better species mix has been very slow. Ratio of broadleaved species has increased by 3% only since 1970. In fact, forest practice continues to conserve this situation: about 45% of trees planted in 2004 were spruce, more than all broadleaved species combined.<sup>8</sup>

Table 1: Natural species mix of Czech forests versus real planting (2004)

Species	Natural ratio	Planting
Oak	19%	10%
European beech	40%	18%
Broadleaved total	65%	35%
Norwergian spruce	11%	45%
Silver fir	20%	5%
European pine	3%	12%
Conifers total	35%	65%

Source: Ministry of Agriculture 2005

According to Czech scientists' statement on forest policy,

"monoculture-like stands are ecologically less stabile. This is particularly true in the case of spruce...Unnatural spruce monocultures degrade the forest soil...The government should, in the first place, eliminate any subsidies for planting tree species unsuitable for the specific habitat (of spruce at medium altitudes, for example)."

Widespread conversion of broadleaved and mixed forests to conifer monocultures has lead to major loss of important habitats of thousand of plant and animal species. A number of once common species virtually disappeared from most of Czech forests and survived in small fragmented refugees only.

Conifers damage forest soil, triggering further acidification. Research in Krkonoše National Park revealed that broadleaved stands may reduce soil acidity by up to 1.3 pH (in average 0.7 pH). For comparison, acid deposition in Krkonoše Mts. – one of the most damaged

<sup>&</sup>lt;sup>8</sup> Ministry of Agriculture 2005, op. cit. 5

<sup>&</sup>lt;sup>9</sup> Hruška, J., et Cienciala, E. (eds.): Dlouhodobá acidifikace a nutriční degradace lesních půd – limitující faktor současného lesnictví [Long-term acidification and nutritional degradation of forest soils – limiting factor of current forestry], Ministry of Environment, Prague 2001

mountain ranges in Europe – lead to acidification of about 1 pH.<sup>10</sup> Czech field experiments showed a broadleaved trees plantation is able to undo acidification caused by 100 years of spruce monoculture within thirty years.<sup>11</sup> Government modelling research shows that "in a near future [by 2030]...forestry practices may become the dominant cause of soil degradation" in areas with poor soils (low content of basic elements), with an impact larger than that of acid deposition.<sup>12</sup>

Widespread planting of spruce – a mountain species – in relatively low elevations causes large scale deterioration and diebacks of forests due to insect and fungi attacks, windbreaks, droughts and other weather events. Spruce is weak in warm weather with low precipitation, so that stands are unstable, and unable to cope with environmental pressures such as fungi and weather. Forests with locally native tree species are more stable and resistant. Conifer monocultures are one of the key reasons for a negative trend of tree defoliation in the Czech Republic since the late 1990s. Large tracts of forests in some regions died over the last several years, despite radical decrease in air pollution. Salvage logging is responsible for about 30% of timber production in the country (54% in the warm year of 2003). 13

The National Forest Programme calls for

"gradual conversion of the present species composition using available tools of forest policy in favour of tree species that are characterised by higher tolerance to harmful factors, ameliorating effects on the soil and that provide high wood-producing and non-wood producing functional effects" (p. 4).

#### 2.3 Lack of deadwood

Lack of deadwood and veteran trees is one of the key health and biodiversity problems of Czech forestry.

Research shows that there is about 50-230 m3/ha of deadwood in Czech natural forests (i.e. in nature reserves with longer-term non-intervention regime). The most usual amounts range between 100 and 150 m3. Since the data come from a wide range of sites from lowland floodplain forests to mountain spruce forests, we can assume that these figures are more or less indicative for natural situation in Czech forests in general. However, government inventory shows that in reality there is only 7 m3 of deadwood in an average Czech forest. Trees are logged in average age of 105 years.

Lack of deadwood leads to further acidification of forest soils and loss of nutrients. This is reinforced by burning or removal of branches and other waste during logging, a common practice in Czech forestry. Leaving branches on site would reduce loss of basic elements and nutrients (calcium and magnesium) by 40%. Also, fallen trees would enrich humus, help to keep soil humid and prevent erosion.

<sup>&</sup>lt;sup>10</sup> Ibid

<sup>&</sup>lt;sup>11</sup> Podrázský, V., Remeš, J., et Čížek, M. (2004): Přírodě blízké LH a stav lesních půd [Close-to-nature forest management and situation of forest soils], Lesnická práce 83 (1): 18

<sup>&</sup>lt;sup>12</sup> Hruška, J., et Cienciala, E. (eds.) 2001, op. cit. 9

<sup>&</sup>lt;sup>13</sup> Ministry of Agriculture 2005, op. cit. 5

<sup>&</sup>lt;sup>14</sup> Vrška, T., et Hort, L.: Podíl tlejícího dřeva v přírodních lesích ČR [Amounts of decaying wood in natural forests of the Czech Republic], in: Jankovský, L., et Čermák, P. (eds.): Tlející dřevo 2001. Sborník referátů [Decaying wood 2001. Conference Proceedings], Mendel University of Agriculture and Forestry in Brno, Brno 2001

<sup>&</sup>lt;sup>15</sup> Forest and Management Institute: http://www.uhul.cz/en/il/NIL\_AJ.pdf

Perhaps even more important is the biodiversity impact of deadwood removal. Actually, this is probably the most important biodiversity problem of Czech forestry. Old veteran trees and dead wood are an important habitat for thousands of species of birds including woodpeckers, owls or flycatchers, squirrels, bats and dormouse, rare beetles and other insects, fungi, lichens, mosses and other life. WWF estimates that about one third of European forest fauna and flora depends on deadwood.<sup>16</sup>

The Government policy explicitly calls for more old trees and decaying wood in forests. National Forest Programme requires

"inclusion of leaving some trees (standing, particularly den trees and exceptionally the fallen ones) as biotopes of birds, mammals, plants and microorganisms in current [or 'common' – 'běžný' – in the Czech languague version of the programme] methods of forest management." (p. 6)

#### 2.4 Overpopulation of deer

Overpopulated game ungulates (roe deer, red deer, mouflon) cause major damage to Czech forests. Animals literally graze young trees and seedlings of broadleaved species and fir. Therefore, deer population effectively prevents development of natural regeneration and destroys planted broadleaves and firs. Young trees are not able to survive without artificial protection, such as fences or wrappings.

Direct damage was estimated to be roughly € 1.2 million in 2004. Costs of protective measures were much higher: about € 10.7 million in state-owned forests alone.

There is a general consensus on the need to reduce deer population between government forestry experts, forest owners, scientists and environmental groups in the Czech Republic. However, political influence of hunting interests has prevented any effective action so far.

#### 2.5 Air pollution

Air pollution – acid deposition – was the cause of massive dying of Czech forests in 1980s. Some 80,000 hectares, mainly mountain spruce forests, died<sup>17</sup> mainly because of SO2 emissions from coal power plants and other sources.

Pollution was dramatically reduced thanks to effective environmental legislation. SO2 emissions decreased by 81% between 1990 and 2004. Despite this, acid deposition and tropospheric ozone remain a problem in some regions. Large Combustion Sources Directive will require further decrease of pollution from energy and industrial sources in coming years.

However, chemical change of forest soils caused by air pollution in the past remains a major problem. The government report on the issue recommended major changes in forest practice in order to improve soil chemistry: substantial increase in planting of broadleaved tree species, reduction of clearcuts and increased amount of decaying wood in forests. The report criticised the current focus on liming as a misguided and ineffective way of dealing with the problem.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> Dudley, N., et Vallauri, D.: Deadwood – living forests, WWF, Gland 2004

<sup>&</sup>lt;sup>17</sup> Emmer, I.M., Fanta, J., Kobus, A.T., Kooijman, A., et Sevink, J.: Reversing borealization as a means to restore biodiversity in Central-European mountain forests – an example from the Krkonoše Mountains, Czech Republic, Biodiversity and Conservation 7(2): 229-247

<sup>&</sup>lt;sup>18</sup> Hruška, J., et Cienciala, E. (eds.) 2001, op. cit. 9

# 3 Biodiversity and nature conservation

Apart of unsustainable management – that, *inter alia*, reduces biodiversity in forests –, some forestry practices directly damage important natural habitats and wildlife sites. Here we discuss two specific issues that are of particular relevance for RDP funding.

#### 3.1 Lack of non-intervention forests

There is a critical lack of non-intervention forests in the Czech Republic. National Nature Reserves – in theory, IUCN category I sites – cover about 0.9% of Czech forests. However, commercial logging is a legal and normal practice even in a number of them. Also, logging is widespread in some national parks; trees are cut (but not removed) as a measure against bark beetle outbreaks even in the core zones.

Logging in National Nature Reserves is, in many cases, caused by the lack of funds for financial compensations of forest owners and for buying of nature reserve land by the government.

For implications for the RDP please see the section 4.1 below.

#### 3.2 Afforestation

Subsidies have been a significant driver of afforestation in the country, financed first by the national budget and, since 2004, by the EU via EAGGF (both the Guidance and Guarantee funding instruments).

The EU Biodiversity Strategy requires that

"measures should be taken in relation to the afforestation or reforestation of areas to avoid endangering important and/or valuable ecosystems (e.g. wetlands, steppes, heathlands, etc) or the use of inappropriate tree species." <sup>19</sup>

Afforestation funding without effective safeguards may lead to a loss of extensive, high conservation value meadows and pastures, including habitats of endangered plant and animal species. This has repeatedly happened with government-funded afforestation projects in the Czech Republic. For example, a recent academic research identified afforestation projects as one of the key threats to the remaining colonies of *Euphydras aurinia*, a butterfly species protected under the Habitats Directive, in the country.<sup>20</sup> Afforestation contributes to decline of several other threatened butterfly species.<sup>21</sup>

This is an indication that the current biodiversity safeguards for afforestation projects are unsufficient. There is no specification in the draft RDP as of to what kind of land can be included in EAFRD-funded afforestation.

In fact, there is hardly much need to fund afforestation projects in mountain and highland

<sup>&</sup>lt;sup>19</sup> Communication of the European Commission to the Council and to the Parliament on a European Community Biodiversity Strategy, COM (98) 42, February 1998

<sup>&</sup>lt;sup>20</sup> Hula, V., Konvička, M., Pavlíčko, A., et Frič, Z. (2004): Marsh Fritillary (*Ephydryas aurinia*) in the Czech Republic: monitoring, metapopulation structure, and conservation of an endangered butterfly, Entomologica Fennica 15: 231-241

<sup>&</sup>lt;sup>21</sup> Beneš J. et al. (eds.): Butterflies of the Czech Republic: distribution and conservation, Butterfly Conservation Society, Prague 2002

grasslands. Afforestation of this land is not only damaging for biodiversity, but it also does not substantially contribute to the measure's other goals: increase of forest cover and prevention of soil erosion. The Czech Republic is a country with relatively high forest cover (33%) and the proportion of forests in mountain and upland areas is even higher, often more than 50%. At the same time, there is a lack of forests and a geniue need for afforestation of arable land in some lowland floodplain areas. Also, soil erosion is not a major problem in extensive meadows.

Another problem is with "the use of inappropriate tree species". A major part of the afforestation budget in the Czech Republic has actually gone into low-biodiversity, commercial monocultures or semi-monocultures. Government data show that 47% of forest acreage planted with support of the EU RDP funding in 2004-2005 is Norway spruce or European pine. Natural ratio of these two species combined in Czech forests would be 15%. European beech and silver fir planting received only 15% and 3%, respectively (natural ratio: 40%, 20%). The current RDP draft includes a requirement that applicants for afforestation support submit an assessment of suitable species by the government's Forest Management Institute (FMI) with their project. However, the RDP does not require that the project actually follows the FMI recommendation. Also, planting of pioneer species such as birch, rowan and poplar, in advance of planting of the final tree mix, should be an explicit requirement of the measure in order to ensure succession-like conditions and stability of the new forest.

Therefore, the proposed afforestation measure is, in several respects, clearly in breach of the Göteborg strategy aim of halting biodiversity loss by 2010, the EU's Biodiversity Strategy and the EAFRD's own goal to "contribute to...commitment to reverse biodiversity decline by 2010".

For suggested changes in the RDP afforestation measure please see the section 4.3 below.

<sup>&</sup>lt;sup>22</sup> State Agricultural Intervention Fund: letter to Friends of the Earth, 23 February 2006

<sup>&</sup>lt;sup>23</sup> Ministry of Agriculture 2005, op. cit. 5

# 4 Implications for the RDP

Friends of the Earth believes that the Czech Republic's draft Rural Development Programme needs to reflect the problems discussed above. Three key steps are needed to make sure that it does so:

- sufficient funding for sustainable forestry measures;
- effective synergies between Axis 1 and Axis 2 measures;
- safeguards that will prevent damage to biodiversity by RDP-funded projects.

Unfortunately, the government's draft RDP fails to ensure any of these priorities.

We discuss these three concerns – underfunded measures, missing synergies and missing biodiversity safeguards – in the following three sections of this chapter.

In the last section of the chapter, we question consistence of one of the proposed RDP measures (Restoring Forestry Potential and Introducing Prevention Actions, II.2.4.1) with the EAFRD regulation.

#### 4.1 Underfunded measures

Sustainable forestry projects should be funded by Axis 2 measures. But the relevant budget lines in the draft RDP are severely underfunded.

Combined budgets of Natura 2000 payments in forests, forest-environment payments and non-productive investment in forests are less than half of the allocation for the controversial afforestation subsidy (for discussion of problems with this subsidy see the section 3.2 above) alone.

#### Natura 2000 payments in forests (RDP measure II.2.2, based on EAFRD Art. 46)

The RDP budget appropriates € 1.9 million/year for this important measure. However, in order to meet Natura 2000 commitments, a substantial budget increase would be necessary.

It should be noted that the government decided to phase-in one additional sub-measure into this measure from 2010 (see the August 2006 cabinet decree which formally approved the draft RDP). However, the budget of this measure is unclear.

This is particularly important since the additional payment will support non-intervention regime in (some) Natura 2000 sites. This is much more effective in meeting Natura 2000 objectives than the current submeasure. Native trees and appropriate tree species mix are indeed important for many species of Community importance and listed habitats (Habitats Directive), or Annex 1 species (Birds Directive). It is important to make sure that they continute to be planted in Natura 2000 sites. However, many Natura 2000 species actually require much more: multi-storey forests, natural dynamics of the forest stand, old trees, hollows, deadwood or avoidance of fragmentation caused by unsustainable harvesting (clearcuts).

That is why the focus on conservation of more aspects of the forest habitat – including native tree species – by non-intervention regime would be much more effective than conservation of the native tree species mix alone.

#### Forest-environment payments (RDP measure II.2.3, EAFRD Art. 47)

This measure supports planting of broadleaved trees and firs. It is also underfunded, with an allocation of less than € 2.6 million/year. Just for comparison: the controversial afforestation sub-measure (II.2.1.1) alone is supposed to receive almost € 10.3 million/year, even though many projects will actually undermine Axis 2 objectives. Just like with Natura 2000 in forests, an additional payment which is supposed to finance leaving veteran trees and dead wood in forests will be will be added from 2010, but its budget remains unclear.

#### **Recommendations:**

The Commission might want to request that budget of the Natura 2000 in forest and forest-environment measures is substantially increased in order to ensure that the Czech Republic meets Natura 2000 objectives, and EU's goal of halting biodiversity loss by 2010. An advisable solution would be to reduce the afforestation budget and shift part of the money into the two underfunded measures.

To be concrete, we suggest the following budget re-allocation between the Axis 2 forestry measures in the draft RDP:

Table 2: Proposed shift in afforestation and Natura 2000 in forests payments budgets

Measure	Proposed RDP budget	Friends of the Earth proposal
First afforestation of agricultural land (Art. 43)	€ 65.87 million	€ 12.50 million
Natura 2000 in forests: local species (Art. 46)	€ 13.52 million	€ 40.00 million
Natura 2000 in forests: non-intervention (Art. 46)	no budget	€ 4.50 million
Forest-environment payments (Art. 47) – local species	€ 17.85 million	€ 20.24 million
Forest-environment payments (Art. 47) – dead wood	no budget	€ 20 million

#### 4.2 Missing synergies

The EAFRD strategic guidelines require that "synergies between and within the axes are maximised". This is probably the most important aspect of the Czech RDP.

There is a huge potential for additional synergies in some measures. This is, in particular, the case with the Axis 1 forestry measure. The Investment in Forests (RDP measure I.1.2) support could be extremely effective in motivating forest owners to deliver on Axis 2 goals (and those of the Czech Republic's National Forestry Programme, as discussed in section 2 of this paper), while fulfilling its primary objective of supporting forestry competitiveness. This subsidy is highly attractive for forest owners (100% uptake of the equivalent Structural Funds measure). Therefore, additional sustainable forest management requirements (in the form of eligibility criteria) would strongly motivate them to change their forestry practice in accordance with policy priorities.

For example, the government's National Forestry Programme calls for an increased share of

forests with native tree species mix, and the same objective is clearly a key priority for Czech forestry. There are some basic standards of minimum broadleaved species planting in the national legislation (Forest Act and accompanied regulations). However, as the data discussed above (see section 2.2 of this paper) show, this is not nearly enough to ensure an appropriate level of broadleaved species planting. The RDP is a unique opportunity to motivate forest owners to change their forestry practice without strict regulation.

Such a change would also lead to an increase of biodiversity, an EAFRD goal.

This could be dealt with by simple additional eligibility criteria in the relevant measures (I.1.2. Investment in Forests, II.2.4.1 Restoring Forestry Potential and Introducing Prevention Actions, II.2.4.2 Non-productive Investments in Forests, and, possibly, II.2.3. Forest-environment Payments). Lack of such criteria is a wasted opportunity to motivate forest owners to help with achieving biodiversity goals and objectives in otherwise economic projects, while keeping the primary, economic objectives of Axis 1.

There is a significant precedent for this approach in the proposed draft RDP already. Only forest properties which leave minimum five trees per hectare unlogged (to support biodiversity of veteran trees and decaying wood), are eligible for the program's economic forestry subsidies. The Czech government acknowledged that this is an opportunity to achieve synergies between various forestry measures of the RDP.

The government's National Forest Programme explicitly recommends "to focus subsidizing policy...preferentially on realization of the principles of sustainable forest management", and "to motivate the owners of forests...to pursue sustained and long-term enhancement of forest property with regard to public interest in development of beneficial functions of forests" (p. 4).

Friends of the Earth suggests that five additional minimum standards (project eligibility criteria) are included into all relevant RDP forestry measures (I.1.2., II.2.4.1, II.2.4.2):

- The owner avoids clearcut logging (two possible definitions: clearcut logging of areas where any one dimension exceeds the height of the highest tree in the logged stand, or any clearcuts larger than 0.3 hectare).
- Only tree species native to the relevant habitat type are used in planting or seeding, in the appropriate mutual ratio/mix (as defined by an independent assessment by the government's Forestry Management Institute – similar to the requirement proposed by the government for the afforestation measure).
- Thinning supports gradual reconstruction of native tree species mix (so that thinning
  does not target broadleaved trees in order to remove them from the forest several
  years after planting a practice used by some forest owners to bypass the current
  minimum broadleaved species standard).
- Planting of fir and beech in clearcuts is avoided without previous use of pioneer tree species (rowan, birch, poplar) as shelter to ensure succession-like conditions.
- Natural regeneration is preferred wherever possible.

The minimum standards should be included into all relevant RDP forestry subsidies – whether the forest owner applies for funding for harvesting technology, tree planting, infrastructure, forest regeneration after a windbreak or anything else.

The only exemption should be afforestation, where the subsidy should be explicitly restricted to projects with appropriate species anyway (see below, section 4.3), and the other proposed

requirements (avoidance of clearcuts) do not make sense (the subsidy target group are farmers, not forest owners). Also, they are not necessary in the Natura 2000 in Forests Payments measure, as strong environmental standards will be ensured by the Natura 2000 site management plans here.

Potential concerns about readiness of forest owners to change their practice fast enough to be eligible for subsidies could be resolved by a delay of applicability of these standards. Instead of practising them at the time of application, the owners can be required to commit themselves in the subsidy contract to change the practice before, say, 2014.

These minimum standards are necessary to ensure that goals of EAFRD, EU Sustainable Development Strategy and National Forest Programme are supported throughout the RDP. Also, they provide for effective synergies between Axis 2 goals and measures in other axes, and between measures within Axis 2. They will make sure that minimum standards of sustainable forest management are met, and stability of forest ecosystems increases.

Direct relevance of the proposed standards to the National Forest Programme goals and priorities (as well as specific aspects of EU Sustainable Development Strategy and EAFRD biodiversity goal) is discussed above, in the relevant sections of the Chapter 2 of this paper.

#### Recommendation:

The European Commission should ask the Czech government to include the proposed five minimum standards (see above) into all relevant forestry measures.

# 4.3 Missing biodiversity safeguards

According to the Community strategic guidelines for rural development, in CAP measures "strong economic performance must go hand in hand with the sustainable use of natural resources...maintaining biodiversity, preserving ecosystems", and the CAP should "contribute to...the protection of biodiversity" (Art. 2.1). Especially "resources devoted to axis 2 should contribute to...biodiversity and development of high nature value farming and forestry systems", and measures "should...contribute to...the Göteborg commitment to reverse biodiversity decline by 2010" (Art. 3.2). However, the other axes are supposed to ensure that EU's biodiversity and environment objectives are not compromised, too. "Member states should ensure that synergies between and within the axes are maximised and potential contradictions avoided." (Art. 3.5)

But some of the Czech draft RDP's proposed measures can both benefit the environment and cause major environmental damage – depending on individual projects, and specific criteria that they will be subject to.

Concerning forestry, this is, in particular, the case with the following types of activities:

- afforestation (measure II.2.1.1 of the draft RDP, based on Art. 43 of the EAFRD Regulation);
- water drainage and machinery for water drainage construction (measure I.1.2 based on Art. 30 and Art. 27, respectively);
- liming and fertilisation of forests (measure I.1.2 Art. 27);
- insecticide use in forests (measure II.2.4.1 Art. 48);

- various forest production investments (measure I.1.2 Art. 27);
- construction of new forest roads (measure I.1.2 Art. 30);
- utilisation of branches and other logging (not sawmill) waste as energy biomass (measure I.1.2 Art. 28).

We are especially concerned that some of the proposed Axis 2 measures will – completely contrary to Axis 2 purpose and goals – fund activities that lead to further loss of biodiversity and damage important habitats.

Some projects funded by these measures will further reinforce the problems discussed in Chapters 2 and 3 of this paper.

According to the RDP, Ministry of Environment approval will be required for funding of some (but not all) of the risky activities listed above. While this is a welcome requirement, we do not believe that it solves the problem completely. In particular, we are concerned that it will be difficult for the Ministry of Environment to deal properly with activities where almost every project should be rejected (afforestation of meadows, construction of new water drainage in forests). There will be an obvious pressure on the Ministry to use its power to reject projects only as an exemption.

#### **Recommendations:**

While the minimum standards proposed above (see the section 4.2) will motivate forest owners to shift to more sustainable management, here we recommend several criteria that will prevent the opposite: funding of projects that actually damage, rather than support, biodiversity.

The Commission should request that the relevant measures include specific environmental eligibility criteria that will ensure that funding of projects damaging for biodiversity is avoided. Some possible criteria for the most risky measures are proposed below:

#### Afforestation (RDP measure II.2.1.1, EAFRD Art. 43)

Afforestation projects may (and do) lead to actual biodiversity loss and destruction of high nature value habitats, including those of species of Community interest.

At the same time, the proposed afforestation measure fails to deliever on some of the key Axis 2 goals (restoration of biodiversity) and priorities of the National Forestry Programme.

However, the EAFRD regulation requires that "[a]ny first afforestation should be adapted to local conditions and compatible with the environment and enhance biodiversity." (Preamble, Para. 38).

The Commission should ask the Czech government to include the following funding criteria in the measure:

Projects should be limited to arable land only. This will prevent damage of high
conservation value habitats. Afforestation of pastures and meadows is not a priority
anyway, whether for biodiversity, erosion or floods prevention. Therefore efficiency of
the measure will be reinforced rather than limited by this change.

- Funding should be explicitly limited to projects that follow the Forest Management Institute recommendation for tree species mix (submission of which is one of application requirements in this measure).
- The subsidy should be targeted on projects in sites (or regions) with higher need for afforestation. There are several possible options:
  - (a) funding could be limited to floodplain zones (since this is a key priority: change of land use in floodplain zones from arable land to forests, meadows or wetlands is an urgent priority in the country, and targeted afforestation subsidy would be an effective stimulus for this; 'floodplain zones' are legally defined by the Czech law so that there should be no problem with clear definition of the measure);
  - (b) funding could be limited to administrative districts with less than 25% forest cover (20 out of 76 districts in the Czech Republic);
  - (c) funding in districts with forest cover above 25% could be limited to establishment costs, as defined by the EAFRD regulation Art. 43(1)(a), and the annual premium covering maintenance costs, according to the Art. 43(1)(b) i.e. loss of agricultural income would not be covered by the subsidy in non-priority areas;
  - (d) funding in districts with forest cover above 25% could be limited to projects that prevent soil erosion (the recipient would have to demonstrate this in the project).
- Forest owners should be explicitly required to use pioneer species (birch, rowan, poplar) for a given time period (minimum five, maximum ten years) before they plant the target trees.

## Water drainage in forests (RDP measure I.1.2, EAFRD Art. 27 and 30)

Water drainage projects may damage biodiversity of valuable wetland habitats (waterlogged forests, small forest wetlands). Also, they lead to a higher water run-off, worsening flood situations.

The Czech government is well aware of that. The Ministry of Environment warned that EAFRD-funded construction and reconstruction of water drainage would "contribute to biodiversity loss", "damage water and wetland habitats", "pollute surface water and, potentially, groundwater" etc.<sup>24</sup> Funding of such activities would be clearly in breach of the EAFRD stated goals and EU's Sustainable Development Strategy.

Friends of the Earth recommends that funding for water drainage projects is eliminated from the RDP altogether.

#### Liming and fertilisation of forests (RDP measure I.1.2, EAFRD Art. 27)

Liming and fertilisation projects are highly controversial. While they may benefit forest soils in some cases, other projects damage soils and biodiversity.

A major government report on the health status of Czech forests warned that (so far heavily subsidised) liming of forests "sharply and for relatively short time changes chemical conditions", "leads to homogenisation of soil environment", "speeds up" degradation of soils

<sup>&</sup>lt;sup>24</sup> Ladislav Miko, vice-minister of environment: letter to Martin Fantyš, section director, Ministry of Agriculture, 17 March 2005

and may be beneficial somewhere but "have minimum or even negative effect in other conditions".<sup>25</sup>

There are two possible options: either (a) to remove liming and fertilisation projects from funding altogether, or (b) to limit funding to projects that meet following criteria:

- Only local liming and fertilisation of individual trees i.e. no aerial application is eligible for funding.
- The recipient submits a wider project to demonstrate that the proposed, urgent
  application of liming and/or fertilisation will be accompanied with other measures
  aimed at long-term reduction of acidity and improvement of soils. It would not make
  much sense to subsidise liming if the forest owner subsequently continues to plant
  conifer species that further acidify the soil, or practices clearcuts with a similar effect.

The RDP should explicitly require that the project includes the following: planting of broadleaved tree species, avoidance of clearcuts and leaving of a substantial part of biomass (all branches and other post-logging waste) on the site after harvest.

# Utilisation of branches and other logging residues as energy biomass (RDP measure I.1.2, EAFRD Art. 28)

Friends of the Earth in principle welcomes support for biomass use in energy production. There are several measures in the draft RDP that will fund renewable energy projects in general and biomass in particular. This funding will bring important environmental and economic benefits: CO2 emission reduction and regional development of rural economies.

This is, generally speaking, also the case with timber production waste utilisation that is to be supported by the proposed Investment in Forests measure (I.1.2).

However, such a support needs to be limited on sawmill waste. Logging residues are a critically important source of nutrients and basic elements for forest soils, and measures aimed at their utilisation should be removed from the scope of eligible projects. Government report warned that to reduce soil acidification,

"logging waste [needs to be] used for gradual enrichment of the soil with nutrients...

Deacidification depends on slow decomposition of organic matter...In contrary, burning of logging waste or its collection and removal outside the harvest site is the prevailing method [of dealing with the waste] in most of the forests in the Czech Republic." 26

Loss of basic elements and nutrients (calcium and magnesium) in spruce forest harvest is reduced by about 60 % if branches and needles are left on site, compared to removal of entire trees.<sup>27</sup>

#### Insecticide use in forests (RDP measure II.2.4.1, EAFRD Art. 48)

Insecticide use – in particular indiscriminate, large-scale spraying – may cause serious damage to forest biota, especially insect communities and soil life. Friends of the Earth recommends that this support is constrained by strict environmental criteria. Again, two possible options are available:

<sup>&</sup>lt;sup>25</sup> Hruška, J., et Cienciala, E. (eds.) 2001, op. cit. 9

<sup>&</sup>lt;sup>26</sup> Hruška, J., et Cienciala, E. (eds.) 2001, op. cit. 9

<sup>&</sup>lt;sup>27</sup> Hruška, J., et Cienciala, E. (eds.) 2001, op. cit. 9

- (a) Application of insecticides should be limited to timber piles, and support for large-scale spraying should be removed from the RDP.
- (b) An alternative solution is to add three specific criteria to this measure: insecticide applications against leaf-eating insects in broadleaved trees are not eligible for funding (because leaf-eating insects usually do not kill broadleaved trees in a large scale while bark beetles and similar species do so in conifers), any protected areas are off-limits for funding and the recipient must provide an independent assessment demonstrating that there is no alternative solution available.

## Construction of new forest roads (RDP measure I.1.2, EAFRD Art. 30)

The Czech forest road network is very dense. There is no reasonable need to invest substantially in construction of new roads. Further construction would increase water runoff and soil erosion – two problems that some Axis 2 measures are supposed to deal with. The National Forest Programme says that "excessive density of internal traffic infrastructure" in the Czech forest sector is already a problem (p. 10).

There are two possible options for this measure:

- (a) funding could be limited to reconstruction of existing roads,
- (b) applicants could be required to submit an independent assessment of hydrological impact and alternative solutions with the project, to ensure that risky or unnecessary projects do not receive funding.

#### 4.4 Scope of the EAFRD Regulation: Article 48

The Restoring Forestry Potential and Introducing Prevention Actions measure (II.2.4.1) in the draft Czech RDP based on Art. 48 of the EAFRD Regulation includes some highly controversial activities that may be outside the scope of the mandate provided by the regulation.

Article 48 of the regulation says that support for restoring forestry potential and introducing prevention actions

"shall be granted for restoring forestry potential in forests damaged by natural disasters and fire and for introducing appropriate prevention actions";

and that:

"Preventive actions against fires shall concern forests classified by the Member States as high or medium forest fire risk according to their forest protection plans."

The measure in the draft Czech RDP clearly focuses on insect outbreaks and/or windbreaks, floods and erosion. It will provide funding for both preventive and restoration measures. An argument for eligibility of restoration after windbreaks and insect outbreaks, restoration of (some) erosion-damaged soils and prevention of erosion is plausible.

However, we are not certain to what extent floods may damage – in a scale bigger than some individual trees – forestry potential of any land. Particularly the proposed support for *"restoration of flood damage in small streams"* is somewhat perplexing. Such an activity might make sense if it would be explicitly restricted to, say, reconstruction of forest bridges (and roads bordering with a stream) directly hit by a flood. They may be necessary for

utilisation of 'forestry potential' of the relevant forest. However, 'damage' (if we permit ourselves to use this term for natural changes of a streambed) of a watercourse alone, even an embanked or altered one, hardly limits forestry potential of surrounding forests. We are concerned that the funding may be used for unnecessary and often environmentally damaging projects that are common in Czech forests.

Also, major erosion in forests is seldom caused by 'natural disasters'. Usually it is a result of damaging forestry practices, such as the use of heavy machinery, unsensitive transport of timber or wrongly designed forest roads. Therefore, clear limitation of funding to erosion caused primarily by natural factors is necessary to avoid situations where EAFRD will pay for forest owners' own mistakes, and motivate them to repeat this practice.

Another issue is that this is one of the measures that should be, in Friends of the Earth view, made subject to environmental eligibility criteria in order to prevent biodiversity loss in water, wetland and forest habitats (see section 4.3).

# **5 Partnership principle**

The problems discussed above should – in principle – be dealt with by implementation of the partnership principle as defined by the EAFRD regulation:

"EAFRD assistance shall be implemented through close consultations (hereinafter partnership) between the Commission and the Member State and with the authorities and bodies designated by the Member State under national rules and practices, including...any other appropriate body representing civil society, non-governmental organisations, including environmental organisations..." (Council Regulation (EC) 1698/2005, Art. 6)

However, the process in the Czech Republic was rather weak and chaotic.

An original set of proposals for individual measures was prepared by working groups of government and independent experts during the first half of 2005, under coordination of the Research Institute of Agricultural Economics. The non-governmental experts were mainly farmers organisation or individual company officers. There was not a single environmental NGO representative between approximately 140 members of the working groups. (An animal welfare organisation and one community development NGO were represented in two different WGs.) Since then, several draft versions of the RDP were developed by the Ministry of Agriculture.

The Ministry of Agriculture organised a series of eight regional seminars on RDP/EAFRD open to the public, farmers, community leaders and other stakeholders during February 2006. The seminars were attended by high-level ministry officials, including the minister, and provided an opportunity for brief oral comments and/or discussion on general issues and the budget. Details of the proposed measures were not even available. The seminars were totally inadequate as (the only) tool of public consultation due to lack of opportunities for debate of individual measures, extreme shortage of time (the concluding seminar in Prague, which was explicitly prepared for NGOs and trade bodies, had about 80-100 participants – our estimate – and lasted for three hours) and the format of the event (oral discussion, brief statements).

Strategic Environmental Assessment is meant to be the key opportunity for public consultation. But the key phases of the SEA came only very late in the process: the public hearing (3 July 2006) followed several days after the formal closure of the official government inter-service consultation (which is the final step before the proposal goes to the cabinet for approval). The deadline for public comments is five days after the hearing. Therefore, there is hardly any chance that issues raised in the hearing or in public comments will lead to changes in the draft RDP.

We understand that government somehow opened the inter-service consultation for some non-government actors, since comments of some trade bodies and other actors were replied to in the process. However, environmental groups (including those who proactively submitted their comments during the process in previous months and received response letters from the Ministry of Agriculture) were not invited to comment on the draft RDP in this procedure.

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