Integrating economic development and biodiversity conservation in the Hautes Fagnes - Eifel Nature Park

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Résumé

La valeur écologique du Parc naturel Hautes Fagnes - Eifel germano-belge réside d'une part dans les tourbières hautes de la Réserve Naturelle des Hautes Fagnes, et d'autre part du réseau dense des cours d'eau bordés d'une végétation riveraine variée (« fonds de vallées »). Dans ces fonds de vallées, des prairies seminaturelles, à grande biodiversité se sont mises en place depuis le Moyen Âge grâce aux pratiques agricoles extensives. Depuis les années 1950, des changements profonds dans l'agriculture (mécanisation et apparition des engrais chimiques) ont conduit à l'abandon de ces fonds de vallées humides et à leur reboisement avec des épicéas (Picea abies). A cause de sa croissance rapide, ce conifère rapporte un bénéfice à court terme, mais contribue à la régression rapide des habitats favorables aux plantes et aux animaux indigènes. Dans le cadre d'un vaste projet de protection des vallées, les épicéas plantés le long des ruisseaux ont été coupés avant l'âge d'exploitation sur presque 300 ha (200 ha en Belgique et 100 ha en Allemagne), et ceci contre un dédommagement financier pour les propriétaires. En contrepartie, les propriétaires des parcelles déboisées se sont engagés par contrat à respecter la faune et flore sauvages dans une certaine mesure.

1. What is a nature park in the Walloon Region?

In the Walloon Region, a nature park is defined as "a rural area, of high biological and geographical interest, subject to measures aimed at the protection of nature and the environment, in accordance with the aspirations of the population and the economic and social development of the area". Therefore, a nature park is not a strictly protected area -even if it can contain nature reserves- and includes villages and agricultural lands.

The Hautes Fagnes - Eifel Nature Park is situated in the eastern part of Belgium and covers 70,000 ha. It corresponds to the Belgian section of a transboundary Belgian-German nature park, which covers 170,000 ha in Germany. To the north, the Belgian park is covered by vast coniferous and broadleaved forests, as well as by moors and peat bogs, the well-known 'Hautes Fagnes' or 'High Fens'. The southern part is a mosaic of forest clumps, grasslands used for a milkbased agriculture, villages and humid valley bottoms.

2. Where economic interests encounter biodiversity ...

Along winding rivers and on abandoned grassland, these valley bottoms concentrate a large part of the biodiversity of the nature park. Unfortunately, the natural vegetation has suffered from the plantation of Norway spruce (*Picea abies*) since the 19th century. Indeed, *P. abies* is a non-native species, which acidifies the soil and water. Furthermore, plantations of *P. abies* in narrow valleys work like barriers and prevent some animal species from dispersing through the valley (e.g. butterflies and birds). Thus, because of the economic value of wood, a conflict between the economic interests of owners and the interests of nature protection seems *a priori* unavoidable.

3. How to proceed with private owners?

Within the framework of a large nature protection project supported by the European Union, the aim of the Belgian-German nature park was the deforestation of *P. abies* in humid zones of these biodiversity-rich valleys bottoms, where they are not adapted. These actions principally targeted the property of private owners and municipalities.

The participation was voluntary. The Nature Park proposed a financial compensation for the premature deforestation, but did not become - and did not want to become - the owner of the land. Thus, because of this voluntary participation and because private owners kept their land, the Nature Park had to establish restrictions for the future use of the concerned plots.

The contracts between the Nature Park and owners accepting the deforestation of their plot fixed the following restrictions for the 30 years subsequent to the signature of the contract:

- no conifers, only native broadleaf species accepted;
- no chemical fertilisers;
- no relief modification;
- in case of sale, these conditions must be maintained.

The selection of these restrictions was not easy, as their severity could influence the owners in their decision to accept or to refuse participation, and this in a significant manner.

4. The results of the project

During the two years of the project, 153 private forest owners (68% of the owners contacted by the Nature Park) participated and 110 ha of humid valley bottoms were deforested on the Belgian side of the nature park. About 80% of these owners later on sold their land to the Walloon Region or to the Réserves naturelles ornithologiques de Belgique (RNOB), an association for nature protection. Both buyers gave the status of nature reserve to these plots. Municipalities, which are important forest owners in this region, participated with an additional 100 ha. A total of 25 to 30 km of riverbanks was restored in this way.

Despite the economic interests of the forest owners, the project achieved a good result. This is probably due to its manner of proceeding:

- the financial compensation, for private owners and municipalities, was essential;
- the approach was very personal: individual contacts per mail with personal data, local information meetings for the owners, in collaboration with foresters, and individual visits of the conifer plots;
- no administrative work for the owners.

5. Risks and benefits of voluntary participation

What are the risks of voluntary participation? Indeed, these risks exist. Firstly, the results of nature protection actions will vary according to the number of participants, and it is difficult to predict this number because one does not know how owners will react to the imposed restrictions. Secondly, it is not possible to have total control of future activities on the plots: despite the restrictions, owners keep the land and thus retain a certain liberty by using it. However, even if these risks are real, the benefits of voluntary participation are multiple:

- the work is more pleasant for the project manager of the nature park;
- owners feel respected because they are not forced to undertake the deforestation;
- the owners trust the project manager;
- the owner gives more thoughts to nature protection, because he stays owner of the land after the deforestation. On the opposite, if he had been forced to sell the land, he would not have to think about it as he would not be concerned by the future use of the land. The main interest would be the financial compensation.

6. Conclusion

Thus, nature protection activities must be carried out together with, and not without, the local population. This will make future actions within the framework of other projects easier, as public awareness would be already raised positively.

Consequently, even if in the short term the decision of voluntary participation may include some risks, the resulting high awareness of the population yields significant opportunities for further projects. Working with such a long-term vision is what we call sustainable development!

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