SUPPLY OF ECOSYSTEM SERVICES BY NATURA-2000 PAYMENTS
ANALYSIS OF THE INSTRUMENT AND ITS IMPLEMENTATION

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Summary
The paper presents the results of mid-term-evaluation of rural development plans of five German Federal States. It focuses on a comparative analysis of the implementation of Natura-2000-Payments (Code 213) and shows the relationship between voluntariness on one hand and administrative law in Natura-2000 areas and Cross Compliance Standards on the other hand.

Keywords

1 Background
The European Agricultural Fund for Rural Development (EAFRD) is the most important financial fund to implement the Natura-2000 network of protected areas. Within EAFRD, Natura-2000 payments are beside agri-environment-measures (AEM) or payments for conservation and upgrading of rural heritage - a core instrument aiming at farmers in Natura-2000 areas. Farmers applying for Natura-2000 or AEM payments have to comply with Cross Compliance (CC) Standards. While AEM payments compensate only those commitments going beyond the relevant CC-Standards, Natura-2000 payments compensate for farmers’ additional costs and income forgone related to the handicap for agricultural production in Natura-2000 areas. Thus, handicaps resulting from CC-Standards directly linked to Natura-2000 sites can be compensated, too.

2 Methods
The evaluation of Natura-2000 payments is conducted according to the Common Monitoring and Evaluation Framework of the European Commission. Output indicators as UAA supported are based on an analysis of IACS-data. Target areas supported are based on an additional geographic intersection of UAA supported (IACS-GIS-Data) with Natura-2000 sites. To quantify the share of UAA which show additional environmental effects resulting from the Natura-2000 payments (net effect) of the total UAA supported, dead weight effects have to be estimated. Roughly, dead weight effects occur on those Natura-2000 areas supported for which the standard legal requirements are similar to the commitments according to the Natura-2000 payments.

3 Results
Fig. 1 shows options of Natura-2000 payments realised in the evaluated Federal States in relation to the different protection levels. The blue blocks reflect the different CC-Standards for no-Natura-2000 sites, Natura-2000 sites and Natura-2000 sites under higher protection level resulting from additional State by-laws ("Naturschutzgebietsverordnungen", NSG-VO). The two latter categories are characterised by higher CC-Standards resulting from the Natura-2000 management plans and the applicable legal obligations of the NSG-VO. The hatched blocks reflect options of Natura-2000 payments. If Natura-2000 payments solely compensate handicaps resulting from legal obligations, these payments do not trigger additional environmental services but have to be regarded as dead weight effects.
Figure 1: Schematic presentation of options of Natura-2000 payments

Natura 2000 payments according to different types of Rural Development Programs of the Bundesländer protection level resulting from cross-compliance provisions for normal landscapes as defined by EU protection level resulting from cross-compliance provisions for Natura 2000 (added standard: prohibition of degradation) protection level resulting from cross-compliance provisions for Natura 2000 plus added standards imposed by national regulations share of Natura 2000 payments for compensation resulting from disadvantages of Natura 2000 regulations share of Natura 2000 payments for added farming requirements

Fig. 2 shows the relation between net and dead weight effects in the evaluated Federal States. We determine the effects by intersecting the different GIS layers and comparing the commitments of Natura-2000 payments with the legal obligations imposed by the various NSG-VOs.

Figure 2: Ecosystem services triggered by Natura-2000 payments

Portion of dead weight and ecosystem services in the Bundesländer (% of supported UAA)

Ecosystem services:
- maintain groundwater level
- maintain grassland, no ploughing
- maintain micro relief
- maintenance of land use

Source: Extrapolation on the basis of case studies (Reiter & Sander 2010)

References