Ecological fiscal transfers in Germany and their role in the policy mix for biodiversity conservation

Christoph Schröter-Schlaack[1], Irene Ring[1], Stefan Möckel[1], Christiane Schulz-Zunkel[1], Nele Lienhoop[1], Reinhard Klenke[1], Thomas Lenk[2]

[1]Helmholtz-Centre for Environmental Research – UFZ, Leipzig, Germany

[2]University of Leipzig, Germany

Protected areas (PA) are the centrepiece of Germany's efforts towards biodiversity conservation. Although economic instruments such as payments for environmental services are a now a common tool to create incentives for nature conservation among private landowners there is an insufficient consideration of public opportunity costs attached with PA, causing opposition against the designation of further conservation areas or strict implementation of existing ones. Fiscal transfers based on conservation efforts undertaken by German states might correct for this and help to foster acceptance of biodiversity conservation among subnational government levels.

Fiscal transfers redistribute public revenue from national to subnational governments in order to provide resources to carry out public functions at subnational level. Transfers between the federal government and German states play an important role in local and regional development. Currently, lump-sum grants from the federal government are assigned on the basis of 'fiscal needs' in relation to 'fiscal capacity' (revenues based on taxes, etc.) of states. Fiscal needs are determined by the product of the number of inhabitants and a weighting factor that increases with population numbers. This is most beneficial to heavily developed German states with high population numbers. In turn, less dense populated states that play an important role in biodiversity conservation suffer as their fiscal need is comparatively low. Hence, the existing fiscal transfer system in Germany poses an incentive on states towards development and acts as a driver of opposition against more comprehensive biodiversity conservation via PA.

Against this backdrop, the objective of this study is to analyze the institutional context and conduct an assessment of the role of ecological fiscal transfers (EFT) in the policy mix for biodiversity conservation in Germany. It proposes the integration of ecological indicators into Germany's fiscal transfer scheme. Indicators are expressed as weighting factors of population to correct the fiscal needs of states. Such indicators may encompass the size and strictness of PAs as well as their connectivity. They could also build upon the responsibility of states to maintain Germany's natural heritage, e.g. to safeguard a unique but threatened species. When modeled against the backdrop of existing allocation rules the distribution of winners and losers among states and the amount of transfers redistributed depend on the type of indicator used and the weighting factor assigned to it.

In assessing EFTs role in a policy mix the study builds on the conceptual framework developed within the POLICYMIX project and is working towards two guiding questions: Firstly, what is the functional role of EFT in the policy mix in terms of synergies, conflict or temporal sequencing with other instruments? Secondly, what is the additional value of EFT in the policy mix in terms of conservation

policy outcomes? To these ends, the study analyses the institutional and legal background of biodiversity conservation and existing conservation policies in Germany and models the impacts of potential EFT between the federal level and German states. EFT have the potential to turn the opposition towards protected areas at subnational government levels into support for further conservation action as biodiversity conservation and associated opportunity costs are acknowledged as important public functions. Furthermore, EFT may provide necessary funds to subnational governments to fully implement and maintain the network of protected areas essential for biodiversity conservation.