Netherlands

Biodiversity points

TYPE OF TOOL
Methodology/ Guidelines/ Requirements

MAIN SECTORS
All sectors

THEME
Green

INFRASTRUCTURE GOVERNANCE PILLARS
Evidence-informed decision making

In a nutshell

OBJECTIVE: Biodiversity points is an innovative and practical method to measure the impact of policy measures on biodiversity.

Agency in charge
Netherlands Bureau for Economic Policy Analysis; Netherlands Environmental Assessment Agency

Year of implementation
2009

Levels of government
National

Current status
Fully operational

Overview

The Netherlands has a long-standing tradition of using cost-benefit analysis (CBA) to support decision-making for public investments. Within the CBA, however, the projects' impact on nature has long been disregarded. Nonetheless, biodiversity and ecosystem services are now increasingly being considered in the analysis of the social costs and benefits of public projects. Dutch CBAs increasingly use biodiversity points to value the impact of a project on ecosystem services and measure the effects on biodiversity. Biodiversity points is an innovative practice that helps enrich the scope of CBA by offering a robust methodology to measure the volume and quality of ecosystem services and biodiversity. This is in particular useful to compare the cost-effectiveness of project alternatives with respect to their impact on biodiversity. It opens the way to the integration of the information and data collected in impact studies - such as strategic environmental assessments and environmental impact assessments - into the project appraisal process, for example in cost-benefit or cost-effectiveness analyses. The biodiversity points method was developed to measure the amount and quality of ecosystem services and biodiversity and their changes (i.e., projects' impacts) in a standardized way. Its use is recommended by existing Dutch guidelines on CBA. The biodiversity points are calculated by multiplying three components: i) the area of natural or semi-natural ecosystems affected (in hectares or square km); ii) the ecological quality of each area; and iii) a weight factor per type of ecosystem, reflecting the contribution of the ecosystem to species richness at national, European or global level, which depends on the species present in the ecosystem and their threat level. The biodiversity points method gives a standardized quantitative summary value for the impact on biodiversity, providing decision-makers with a single objective measure to compare alternative interventions. Moreover, for assessing the overall effects of a project, biodiversity points is also considered more informative than qualitative or ordinal expert opinions, as these are generally not standardized and comparable for different CBAs, and cannot provide an indicator of change in biodiversity per euro invested.

REFERENCES:

- Netherlands Bureau for Economic Policy Analysis (2019), *Biodiversity in the Dutch practice of cost-benefit analysis*, https://www.cpb.nl/sites/default/files/omnidownload/CPB-Background-Document-feb2019-Biodiversity-in-the-Dutch-practice-of-cost-benefit-analysis.pdf