

MORPHOLOGIE, OUTILS et MÉTHODES DU MARCHÉ DE L'ÉVALUATION ENVIRONNEMENTALE (MORPHEE)

Supported by Office Français de la Biodiversité

ABSTRACT

In France, environmental impact assessment tools and methods are not standardized, therefore complicating the task of administrations in charge of the ecological regulation of land development projects. The resulting diversity of tools and methods also moves the administrative procedure away from a level-playing field, and jeopardizes equal treatment of land developers and projects. MORPHEE research project seeks to understand the economic, social and technical factors underlying the heterogeneity of scientific grounds in environmental impact assessment. MORPHEE is based on a double objective. In France, environmental impact assessment is provided to land developers through a market economy where environmental consultants valorize their scientific and technical skills, and sell surveys and studies to land developers. To understand how this market economy influences the production of survey and studies, both supply and demand side of environmental impact assessment market ought to be analyzed.

ORIGINS OF THE PROJECT

The literature review highlights that the French Environmental Impact Assessment Regulatory Framework outlines the procedural sequence of the administrative procedure but it does not state any scientific framework or baseline scenario.

This absence leads to:

- Lack of standardisation,
- A proliferation of approaches,
- Difficulties in processing applications by under-resourced administrations,
- A lack of equal treatment between applicants and projects
- An impact on the ecological quality of regulations and environmental measures.

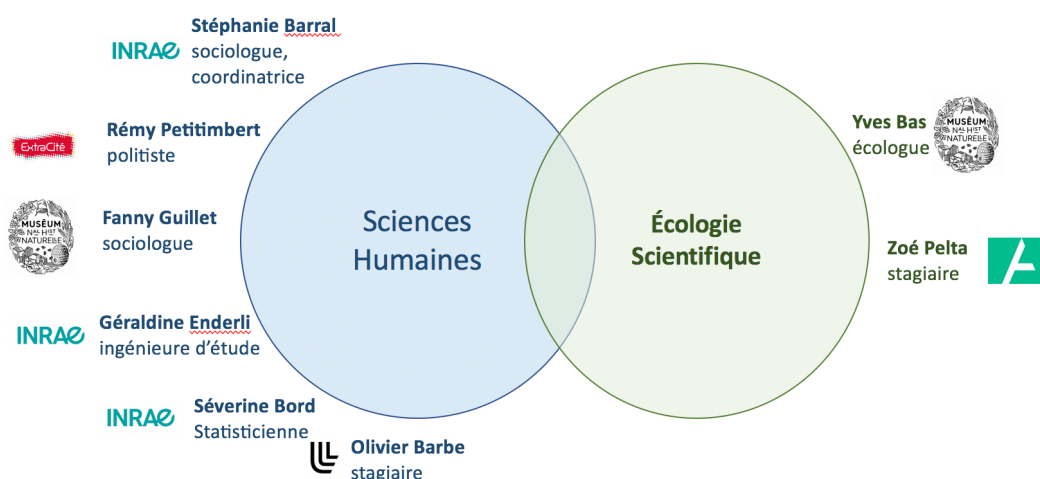
RESEARCH QUESTIONS

What factors explain the diversity of tools and methods proposed by environmental consultants on the environmental impact assessment market?

How do the private and business aspects of environmental impact assessment influence the tools and methods?

Is there a 'project' or 'environment' effect in the use of one method over another?

A CROSS-DISCIPLINARY TEAM



PROJECT HYPOTHESES

Hypothèse 1	The market-driven approach to environmental assessment affects the content of the tools and methods proposed
<i>Sub-hypothèse 1</i>	<i>The private nature of consultancy organisations gives rise to a set of organisational and economic constraints that influence the way research is produced</i>
<i>Sub-hypothèse 2</i>	<i>As consultancy organisations compete in the environmental assessment market, strategies are being developed to differentiate their offering.</i>
<i>Sub-hypothèse 3</i>	<i>Depending on their organisational characteristics, consultancy organisations have different criteria for determining the quality of their work.</i>
Hypothèse 2	The method chosen depends on the type of project and the environment and/or species affected.
<i>Sub-hypothèse 1</i>	<i>The type of project and its surface area influence the method employed</i>
<i>Sub-hypothèse 2</i>	<i>The type of environment or species influences the method employed</i>

WORKING PACKAGES

The project has two working packages.

The first one looks at the effects of market competition among environmental consultants in order to understand how market economy fosters differentiation of offers.

The second one looks at the correlations between the type of project, the type of environment and the tools and methods developed in environmental impact assessment studies, through the cases of transportation infrastructures and joint development zones in two French regions (Occitanie and Hauts de France).

METHODOLOGY

A three-stage methodology:

1) **A questionnaire sent to 255 participants** (108 respondents: 42.5% return) asking questions about:

The "size" of environmental consultant firms: turnover, number of employees, number of agencies, date of creation and geographical location and area

Internal skills

Market configurations (relationships between consultants).

2) Qualitative interviews with 23 environmental consultants:

Topics covered: content of a study; Division of labour; Historical evolution of environmental impact assessment policies; Business model of consultancy firms; Relations with clients; Relations with other consultancy firms; Relations with administrations; Representations of biodiversity and environmental action; Types of offers; Types of projects.

3) **A quantitative analysis of 48 impact research studies** on transportation infrastructure projects and joint development zones: Occitanie, Midi-Pyrénées and Hauts-de-France.

CONTRIBUTIONS AND RESULTS

It is not possible to draw a correlation between the organizational characteristics of consultancy firms, and the tools and methods they use. Impact assessment units and equivalence methods vary not only from one organization to another, but also from one project to another within the same consultancy firm. What appears to be more discriminating is the use of internal databases, which is a specific feature of large consultancy firms and goes along with a specific organization of labor that limits control on the quality of data collection.

The statistical analysis of methodologies in environmental impact assessment documents hasn't showed any correlation between their heterogeneity and the type of land development project, the type of ecosystem or the consultancy firm involved.

Altogether, these results point to the absence of a scientific or regulatory rationale for the construction of environmental impact assessments. Interviews with managers and ecologists show that, as these consultancy firms grow in size, data production chains become longer and the capacity for quality control becomes more limited.

Ultimately, while the environmental impact assessment policy justifies the lack of tools and methods standardization to facilitate adaptation to local conditions, MORPHÉE shows that **in practice this adaptation to local conditions means integration of business constraints more than ecological context of the projects.**

RECOMMANDATIONS

Greater formalization of the scientific framework for environmental assessment by the regulator appears as a necessary condition for protecting the work of consultants as political and economic pressures can be detrimental to biodiversity. This could involve experimenting a system of ratios as it exists in other countries such as the USA.

Strengthening ecological and methodological frameworks for administrative control of environmental impact assessments to facilitate the evaluation of technical choices and ecological outcomes.

Increase the ecological justification of technical and methodological choices to make them easier to understand at the time of appraisal.

PUBLICATIONS

Articles in peer-reviewed scientific journals

- Pelta, Zoé, Yves Bas, et Fanny Guillet. « The impact assessment: A hidden form of flexibility in the mitigation hierarchy ». *Biological Conservation* 286 (2023) : 110301

- Barral, Stéphanie, Petitimbert, Rémy, « Régulations locales du droit de l'environnement. Le cas du marché de l'évaluation environnementale », *Gouvernement et Action Publique*, (envoyé le 5 février 2024, accepté, en révision)

Book chapter

- Barral, Stéphanie, Rémy Petitimbert, Yves Bas, Séverine Bord, Géraldine Enderli, Fanny Guillet, et Zoé Pelta, « Au cœur de la séquence ERC – Tentatives de caractérisation de l'hétérogénéité des méthodes d'évaluation des impacts ». *Infrastructures de transport créatives : Mieux les intégrer aux écosystèmes, paysages et territoires*, 2024, 165 177.

CONTACTS

Scientific Director: Stéphanie Barral, Laboratoire Interdisciplinaire Sciences Innovations Sociétés (LISIS), CNRS/INRAE/Univ. Gustave Eiffel, stephanie.barral@inrae.fr

Coordinator: Rémy Petitimbert, Centre d'études et de recherches administratives, politiques et sociales, ExtraCité, r.petitimbert@extracite.coop

In association with Centre d'Ecologie et des Sciences de la Conservation (CESCO)