Revista de Estudios Andaluces (REA) | Núm. 48, julio (2024) | e-ISSN: 2340-2776
https://dx.doi.org/10.12795/rea.2024.i48 | © Editorial Universidad de Sevilla 2024
https://editorial.us.es/es/revistas/revista-de-estudios-andaluces
https://revistascientificas.us.es/index.php/REA

SUMMARY OF ARTICLE: HTTPS://DX.DOI.ORG/10.12795/REA.2024.I48.11

Territorial Impact Assessment, Cost Benefit Analysis and Do Not Significant Harms principle for sustainable works and plans design

Maria Prezioso
maria.prezioso@uniroma2.it 0000-0003-2548-8711
Dipartamento di Management e Diritto. Università degli Studi di Roma Tor Vergata.
Via Columbia, 2. 00133 Rome, Italy.

KEYWORDS

Territorial Impact Assessment
Cost Benefit Analysis
Do Not Significant Harms
Sustainable design
Economic Geography

INTRODUCTION

The article addresses the integration of three critical evaluation tools—Territorial Impact Assessment (TIA), Cost Benefit Analysis (CBA), and the Do Not Significant Harms (DNSH) principle—to enhance the sustainability of large public works and plans. The core focus is on ensuring that large-scale infrastructure projects and territorial plans are not only economically viable but also environmentally sustainable and socially equitable. By integrating these tools, the paper aims to provide a holistic framework that supports comprehensive decision-making, considering the full spectrum of economic, environmental, and social impacts. The emphasis is on aligning project evaluations with the goals of the European Green Deal and other sustainability policies, fostering resilience, and promoting balanced regional development.

The merit and originality of this work lies in the proposed innovative integration of TIA, CBA, and DNSH into a cohesive framework for sustainable project planning and evaluation. This comprehensive approach bridges the gap between economic, environmental, and social assessments, ensuring balanced and sustainable decision-making. The detailed methodological guidelines enhance the practical application of these tools, aligning project evaluations with European sustainability initiatives such as the European Green Deal and the Recovery and Resilience Facility (RRF). This novel approach permits to internalise external costs related to environmental degradation and social inequalities, promoting projects that deliver economic benefits while preserving environmental and social well-being. Leveraging insights from economic geography, the work advances the understanding of spatial dimensions in economic activities, fostering projects that are economically viable, environmentally sustainable, and socially inclusive.

Therefore, the article addresses four main objectives: 1. to highlight the necessity of integrating TIA, CBA, and DNSH in evaluating and planning large infrastructure territorial projects; 2. to provide methodological and operational guidelines for incorporating these tools to ensure that environmental and social costs are internalised in project evaluations; 3. to improve the support to the decision-making and evaluation processes related to climate change, strategic investments, and reporting; 4. to promote sustainable development through innovative and cohesive economic-geographical approaches.

DOI: https://dx.doi.org/10.12795/rea.2024.i48.11
Formato de cita / Citation: Prezioso, M. (2024). Territorial Impact Assessment, Cost Benefit Analysis and Do Not Significant Harms principle for sustainable works and plans design. *Revista de Estudios Andaluces,*(48), 221-238. https://dx.doi.org/10.12795/rea.2024.i48.11
Correspondencia autores: maria.prezioso@uniroma2.it (Maria Prezioso)

METHODOLOGY

The work methodology provides guidelines for incorporating TIA, CBA, and DNSH into planning and evaluation processes. It analyses and combines different methods to highlight their contact point in calculating impacts and related values in the framework of the *Economic, Financial, and Spatial Models*, discussing their use as integral parts of large territorial designs and plans. These models are essential for understanding and evaluating the comprehensive sustainability of projects. The paper focuses and combines three tools and related methods adopting a quali-quantitative view:

- *Territorial Impact Assessment (TIA)*: it is a tool designed to assess the broader geographical and social impacts of policy, programs and projects. It considers factors such as local economic conditions, environmental impacts, and social dynamics. TIA helps to understand how projects influence regional development, environmental sustainability, and community welfare. It involves analysing spatial data and socio-economic indicators to predict the outcomes of proposed projects taking in charge the geographical diversity.
- *Cost Benefit Analysis (CBA):* Traditionally, it focused on the monetary and financial evaluation of the positive and negative impacts associated with a project. However, the methodology has evolved to include environmental and social externalities. This broader approach ensures that all costs and benefits, including those related to environmental degradation and social welfare, are considered in the evaluation process.
- *Do Not Significant Harms (DNSH) principle:* it ensures that projects do not cause significant harm to the environment or society. The DNSH principle is aligned with the European Union's sustainable finance taxonomy, which aims to guide investments towards projects that contribute positively to environmental and social goals. The principle requires that projects be assessed for their potential negative impacts and that measures be taken to mitigate any identified harms.

RESULTS

Coherently with the objectives, results are listed in the following:

- Integration of Tools: The integration of TIA, CBA, and DNSH results in a comprehensive framework for evaluating projects. This framework addresses economic, social, and environmental impacts in a cohesive manner, ensuring that all relevant factors are considered in the decision-making process. The integrated approach allows for a more holistic assessment, highlighting the interconnections between different types of impacts. This comprehensive evaluation helps to identify potential synergies and trade-offs, ensuring that projects contribute positively to sustainable development.
- Methodological Guidelines: The paper provides methodological guidelines for incorporating TIA, CBA, and DNSH into planning and evaluation processes. These guidelines include steps for data collection, impact analysis, and the application of the DNSH principle. By following these guidelines, planners and decision-makers can ensure that projects are designed and implemented in a sustainable manner. The guidelines help to standardise the evaluation process, ensuring consistency and transparency in project assessments.
- Policy Coordination: The framework helps to minimize costs associated with the lack of policy coordination. By understanding the territorial impacts of projects, planners can ensure that regional and local plans are cohesive and sustainable. The integration of these tools helps to avoid duplicative efforts and ensures that policies are aligned with broader sustainability goals. This coordination is particularly important for large infrastructure projects that span multiple jurisdictions and require the

 | e-ISSN: 2340-2776 | doi: https://dx.doi.org/10.12795/rea.2024.i48.11

collaboration of various stakeholders. Effective policy coordination helps to maximise the benefits of projects while minimising potential conflicts and inefficiencies.

CONCLUSION

To conclude**:** The integration of TIA, CBA, and DNSH is essential for achieving sustainable development goals. This integrated approach allows for the internalisation of external costs, such as environmental degradation and social inequalities, promoting more comprehensive project evaluations. By considering all relevant impacts, decision-makers can design projects that contribute to long-term sustainability. This approach ensures that projects not only deliver economic benefits but also support environmental preservation and social well-being.

The field of economic geography provides valuable insights for integrating these tools. By understanding the spatial dimensions of economic activities, planners can create strong links between the economy, territory, and environment. This understanding helps to design projects that are not only economically viable but also environmentally sustainable and socially inclusive. Economic geography offers a framework for analysing the spatial distribution of economic activities and their impacts on regional development. TIA highlights the geographical diversity and the asymmetric impacts of projects across different regions. This understanding is crucial for ensuring territorial cohesion and balanced regional development. By considering the unique characteristics and needs of different regions, planners can design projects that promote inclusive growth and reduce regional disparities. Territorial cohesion ensures that all regions benefit from development efforts, fostering equity and social inclusion.

The paper supports innovative planning approaches that align with the European Green Deal and the Recovery and Resilience Facility (RRF). These initiatives aim to foster sustainable and inclusive growth by promoting projects that contribute to environmental sustainability, social equity, and economic development. The integrated approach encourages the use of innovative solutions to address complex challenges. By leveraging new technologies and innovative planning methods, projects can achieve greater sustainability and resilience.

The guidelines and methodologies proposed in the article enhance the operational effectiveness of public works. By incorporating TIA, CBA, and DNSH, planners and designers can ensure that projects contribute positively to regional and local development while minimising negative impacts. This approach helps to optimise the allocation of resources and ensures that projects deliver maximum benefits to communities. Effective project management and implementation are critical for achieving the desired outcomes of sustainable development.

The incorporation of environmental and social externalities into CBA ensures that projects are evaluated not just on their economic returns but also on their broader impacts. This holistic evaluation helps in identifying projects that provide substantial environmental and social benefits, thereby supporting the goals of sustainable development. By recognising the value of ecosystem services and social well-being, the evaluation process promotes projects that enhance overall quality of life.

By integrating TIA, CBA, and DNSH, the framework helps in minimising costs resulting from the lack of policy coordination. This integration ensures that various policy instruments work together harmoniously, avoiding conflicts and redundancies. It also facilitates better alignment of regional and local plans with national and international sustainability goals. Effective coordination helps to streamline project approvals and implementation, reducing delays and costs.

The integrated approach supports decision-making related to climate change and strategic investments. By considering the comprehensive impacts of projects, including their contributions to climate change mitigation and adaptation, planners can prioritise investments that support resilience and sustainability. This approach aligns with the objectives of the European Green Deal and other climate policies. By focusing on climate resilience, projects can help communities adapt to changing environmental conditions.

 | e-ISSN: 2340-2776 | doi: https://dx.doi.org/10.12795/rea.2024.i48.11

The paper also supports the design of projects that enhance resilience and adaptation to climate change. By incorporating DNSH and evaluating the long-term impacts of projects, planners can ensure that infrastructure is designed to withstand future environmental challenges and contribute to overall resilience. Resilient infrastructure helps communities to better cope with natural disasters and other environmental shocks, ensuring continuous development and prosperity.

 | e-ISSN: 2340-2776 | doi: https://dx.doi.org/10.12795/rea.2024.i48.11