

● Societal impact assessments of research for sustainability science

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Background

The goal of sustainability science is to help find solutions to steer our societies towards more sustainable lifestyles. Its “problem-centred” approach is thus closely linked to the issue of research impact and evaluation. At the end of 2016, IRD launched a pilot project on identifying and describing the societal impact of IRD’s work in the Global South, using a qualitative approach based on ex-post case studies. To date, five studies have been carried out, providing sufficient data for an initial assessment of the project.

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Further reading

SMIT J. P., HESSELS L. K., 2021 – The Production of Scientific and Societal Value in Research Evaluation: A Review of Societal Impact Assessment Methods. *Research Evaluation* : 1-13.
<https://doi.org/10.1093/reseval/rvab002>

Background to the pilot project

Two principles guided the pilot project on identifying and describing the societal impact of IRD's work in the South.

Accountability: A research organisation such as IRD, funded mainly by public money, has a duty to account for the relevance and usefulness of the work it carries out: major scientific findings, the dynamics and importance of partnerships, contributions to society. It also has a duty to contribute to the sustainable development of countries in the Global South, which makes the question of research impact a central issue.

Reflexivity: Constructing and documenting the impact pathway of a research project means immediately questioning all aspects of scientific activity and becoming aware of the diversity of stakeholders who use research findings to achieve their objectives. Studying the impact of IRD research therefore means tracing the pathway taken and implemented to achieve research objectives, examining it, and emphasising that it is a long process, which is a prerequisite for successfully integrating our research into the priorities of countries in the Global South.

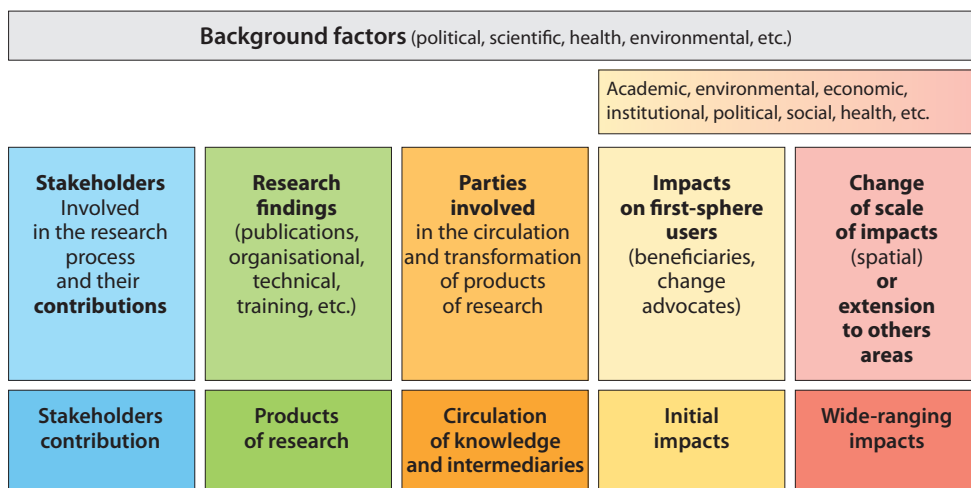
This project was supported by a methodological group, scientific rapporteurs for each case studied and a project team within the Research Evaluation and Programming Mission. The project had three main objectives: (i) to meet the expectations of IRD's supervisory bodies and the authorities of countries in the South with which IRD works regarding the

impact of its research; (ii) to improve the level of understanding of the stakeholders, factors and processes likely to facilitate the adoption of research findings, and thus their impact; (iii) to provide teams with tools for analysing and describing the potential societal impact of their work, extending beyond the scientific sphere.

Description of the method and studies

The approach adopted was an adaptation of the ASIRPA and ImpresS methods, developed respectively by INRAE and CIRAD. It focuses on highlighting the impact path, its analysis and chronology; it describes how the research was carried out, its findings and how they were circulated beyond the academic sphere, the conditions for transforming and adopting them, and the impacts generated. Several impact dimensions, defined by the methodological group, are examined: academic, economic, environmental, institutional, political, capacity building, social-health-educational and cultural. The method focuses on highlighting the role of the stakeholders involved in this pathway, the causal links and background factors. The studies are documented through interviews with key stakeholders in the impact pathway and a report is produced using a standard template, which is then shared with the stakeholders involved to garner their feedback before being finalised.

Five studies have now been completed. They cover the following topics: (i) mining in New Caledonia; (ii) the Humboldt Current and



Summary view of the impact pathway and its various components, documented with stakeholders.

fisheries management in Peru; (III) 1-2-3 surveys for measuring and analysing the informal economy; (IV) access to antiretrovirals in Africa; (v) volcanic processes and hazards in Ecuador. These studies were selected (from among 26 proposals from scientific departments) for their feasibility and the ability to cover differential impacts.

Some cross-cutting lessons

These studies describe research pathways with proven societal impacts. All of them highlight how important it is to involve IRD teams and their partners, not only in the research phase, but also in the intermediary phase (circulation, adaptation or transformation of knowledge, which leads to the first societal impacts).

In addition, they all lead to mutual capacity building. The partners consulted during the societal impact studies were interested in the methodology used and invested time in them. Aside from these shared characteristics, certain points specific to one or more studies appeared to be key to achieving a strong impact:

- multidisciplinary, a driving force in the production of new knowledge for the mining study in New Caledonia and for the Humboldt Current and fisheries management study in Peru;
- the links forged with communities on the ground at the earliest stage of research, which made it easier for the populations concerned to accept and adopt the findings (volcanoes, antiretrovirals);

- a rapid response to government requests, made possible thanks to a longstanding partnership (antiretrovirals, volcanoes, informal economy);
- one or more IRD schemes (LMI/JEAI – for two studies) or foundational projects have had a positive impact on research momentum. IRD facilities were either behind the production of knowledge (Humboldt) or the completion of the initial research effort (volcanoes).

There may also be unexpected impacts. For example, work on evaluating the informal economy has resulted in a South-South transfer (from Vietnam to Peru) and a South-North transfer (to France for implementation in Mayotte).

KEY POINTS

The studies carried out in this pilot project serve as examples of how research work leads to societal impact, the diversity of paths taken and the key factors that produce strong impacts. These studies provide insights into how to build an impact culture specific to IRD. Apart from providing an after-the-fact justification of the relevance of IRD's scientific strategy and its policy of fair partnership, this type of study will provide a basis for building sustainability science that learns from experience and anticipates future impacts more effectively.

SUSTAINABILITY SCIENCE

UNDERSTAND, CO-CONSTRUCT, TRANSFORM

Collective thinking coordinated
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