

# Considering research impacts along the way in a project on agricultural transition pathways

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**Research topic**  
 Renewing productions in quality-quantity while closing cycles of biomass and energy and redeveloping landscape functions:  
*what kinds of conciliation between such issues in livestock farms and territories?*

AMPERA project<sup>[1]</sup> (metabolism and landscape approach for a territorialised agro-ecological transition in livestock farming)

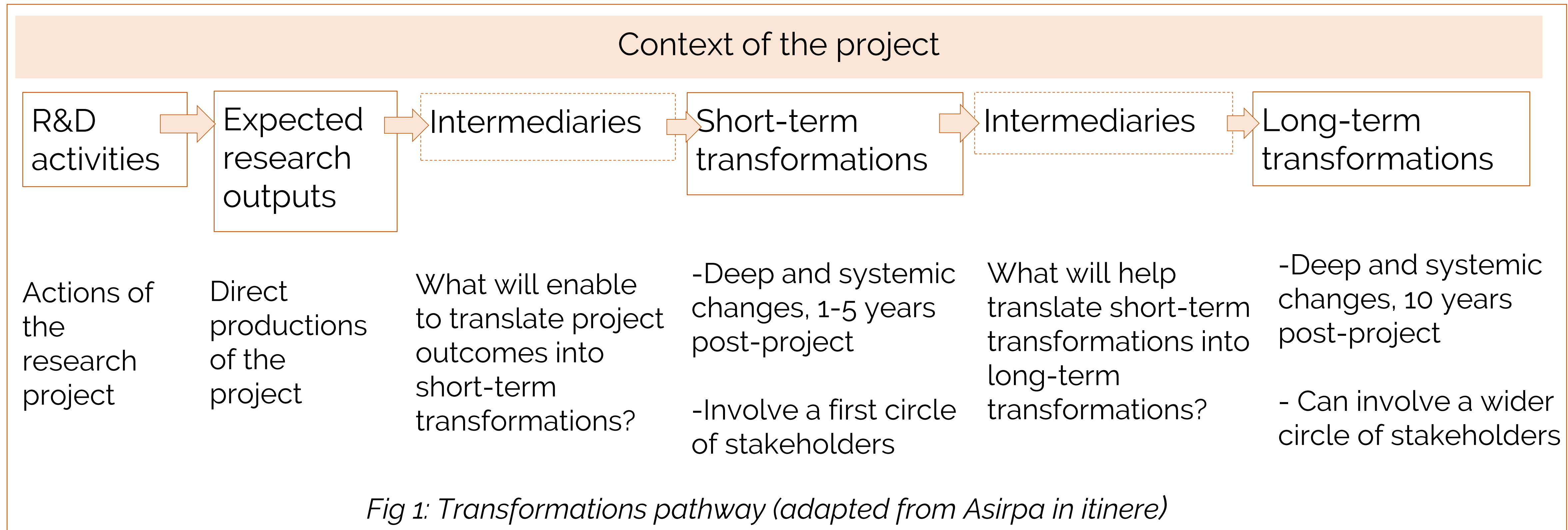
**Collaborative inter- and trans-disciplinary project:**

- Partners: 6 research laboratories (dealing with livestock farming/agronomy, environment/ecology, geography and law/policies), the agricultural chamber of Brittany, the French Livestock Institute and agricultural education structures
- Stakeholders from 2 territories (here, municipalities associations): farmers, local authorities, water managers...

**Consideration and evaluation of our targeted research impacts along the research process:**  
*how to better manage the research process, based on expected transformations and targeted impacts?*

## Materials and methods: working collectively on desired transformations and transformations pathway:

(1) Experiment of ASIRPA (Socio-Economic Analysis of the Impacts of Public Agricultural Research) in *itinere* methodology<sup>[2,3]</sup>.  
Method positioning: transformations involve "a long-term process that needs the involvement of multiple stakeholders"<sup>[3]</sup>;  
**a better understanding of the mechanisms** leading to the desired transformations enables the research process to be more effective in contributing to these transformations.



One of our method adaptation: defining **transformations** as systemic changes, which may concern knowledge production, teaching, agrosystems, ecosystems, socio-ecological systems, etc. They involve distinct targets (e.g: farmers, resources, public decision-makers...).

(2) 1<sup>st</sup> stage of implementation: designing a **transformation pathway** (Fig 1) from workshops and individual interviews (both with partners and stakeholders).

**First results:**

- Under-estimated diversity of vision of agriculture development and agroecology (Fig 2).
- Building a common definition of these transformations is not obvious.
- Following steps: (1) making the definition of agroecology more explicit, and clarifying the way in which the production function is assessed; (2) specifying the transformation pathway and get the partners and territories stakeholders to share their visions.

R&D activities	Desired long-term transformations	Scale
Working on methods and knowledges to:	Farmers have acquired the means and resources to implement agro-ecological changes in their practices	Farms
- identify and assess agro-ecological levers with a focus group of farmers	Brittany livestock farming has evolved in line with the desired changes. Different points of view: -Maintaining milk production in Brittany -Maintaining farms, especially grasslands -Diversification of farms and relocation of part of the food production needed in the region	Farms + territories
- develop shared representations of the contributions of livestock farming to the multifunctionality of the regions in which they are located with local stakeholders	Agro-ecological transformations are managed collectively, with a permanent forum for exchange, coordination and decision-making	Territories

*Fig 2: examples of R&D activities and of long-term desired transformations (3 out of 14)*

**Discussion:**  
 We expect this study to enable us to (1) identify common grounds and ways of managing discrepancies among scientists from various disciplines and among scientists and non-scientists; (2) identify points of attention to manage the project in a collaborative way, and (3) adjust the research objectives and actions along the way.

<sup>[1]</sup> <https://www.tetrae.fr/les-projets/ampera>  
<sup>[2]</sup> Joly, P. B., Matt, m., Gaunand, A., Colinet, L., Larédo, P. and Lemarié, S. (2015). ASIRPA: a comprehensive theory-based approach to assess societal impacts of a research organization.  
<sup>[3]</sup> Matt, M., D. K. R. Robinson, P.-B. Joly, R. Van Dis and L. Colinet (2023). ASIRPA Real-Time in the making or how to empower researchers to steer research towards desired societal goals,  
 → Also see G. Volpini's PhD research study.