

Policy Brief Programming Research and Innovation for Improved Impact

Kevin Heanue, Christophe Cotillon, Siegfried Harrer, Alex Percy-Smith
RTD Room CDMA Floor -1/SDR2 DG RTD Building
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Process

- First input to brief - joint SCAR SWG (ARCH, AKIS and Food Systems) workshop, April 6th 2018 Rome
- Writing group – Christophe Cotillon, Siegfried Harrer, Kevin Heanue supported by Alex Percy-Smith – several Skype meetings and rounds of drafting immediately afterwards.
- From late June 2018 – draft presented to/circulated to SWG's for comments and more widely circulated in late summer/early autumn.
- Final report agreed in mid October 2018
- Brief targeted primarily at *policy-makers and funders* in the European Commission and in national ministries and funding agencies. However, it is also intended to provide value to *researchers and their institutions*.

Sections of policy brief

1. Introduction/problem statement
2. Research & innovation pathways
3. Why ex ante evaluation?
4. Fostering impact
5. Recommendations



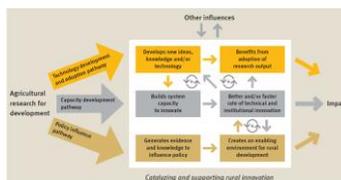
1. Introduction/problem statement

- Agriculture R&I systems – *open, complex and changing rapidly*.
- In recent years, the R&I community has been asked to focus on, measure, document and demonstrate *ex post impacts* of their activities be they economic, societal or environmental *in addition* to traditional scientific impact.
- There is a clear rationale for this, but relatively little attention has been paid to the likely effects of initiatives *before activities actually start* - how to foster impact, and to the generation within the R&I community of a *culture of impact*. Similarly, there is little understanding of how policy can support *ex ante* approaches.
- Key to addressing this challenge is improving understanding of the *pathways to impact*, including the feedback loops between pathways that can generate both intended and unintended positive and negative impacts.
- This suggests a *co-designed* approach to research programmes, projects and the identification of impact pathways is necessary, although the approach will likely differ depending on whether the research is basic or more applied.
- In terms of innovation, the need to support the type of interactive processes that underpin innovation means that a *co-designed, multi-actor approach* is also required.



2. Research & Innovation Pathways

- A clear understanding / building of impact pathways is key for programming R&I for impact.
- R&I policy makers and funders have considerable influence in shaping the enabling environment for research and innovation.
- However, impact assessment hindered by:
 - market and policy distortions
 - barriers to the diffusion of new technology
 - the difficulties for researchers to clearly define the beneficiaries of their research and the kind of impact they, have to achieve.



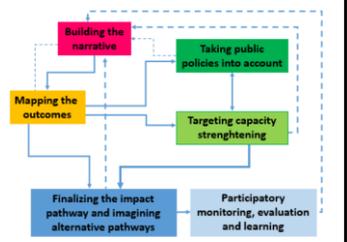
Source: EC Douthwaite, B., Mur, R., Audouin, S., Wopenis, M., Hellin, J., Moussa, A., Karbo, N., Kasten, W., and Bouyer, J. (2017). *Agricultural Research for Development to Intervene Effectively in Complex Systems and the Implications for Research Organizations*. KIT Working Paper 2017-12.

- Multi-actor and interdisciplinary approach required to embed research in broader context of economic, political, social and cultural aspects.



3. Why ex ante?

- A better understanding of the interactions between the various elements and actors and how this can be used to *generate changes in practices and behaviour* is the key to programming R&I that will ultimately lead to better impact.
- But, focusing more on *ex ante* in addition to *ex post* impact assessment → real *cultural shift* as it demands moving the framework from a purely linear approach to a multidimensional model of the R&I pathways.



Source: Blundo Canto G., Barret D., Faure G., Heinzlein E., Monier C., Triomphe B., Vall E. (illus.), 2018. *ImpactS ex ante: An approach for building ex ante impact pathways*. Montpellier, France, CIRAD, 64 p. ISBN: 978-2-87614-738-6.

- Fostering and documenting impact both in the short and the long term will increase impact to R&I programmes and provide useful insights for R&I policy makers, helping them to better shape future R&I policies.



4. Fostering impact

- Better understanding of the different impact pathways will enable research managers and funders to *influence or even take advantage of the interactions and feedback loops* between the different pathways.
- Furthermore, to foster impact, research and innovation, actors from both the public and private sectors need to be brought into a *multi-actor dialogue*
- The multi-actor approach will vary depending on the *type of research being undertaken* i.e. from basic to applied, as it is clear that not all research needs to integrate stakeholders to the same extent.
- This will require a change in the *culture of research organisations*:
 - As researchers can no longer define their research goals in isolation, but have to interact with other stakeholders to define the real needs of end users of research results
 - Researchers must encompass "knowledge exchange activities" and consider potential applications for end-users of project results.
- An *environment for supporting impact generation* should be strengthened by including actors from knowledge transfer organisations as well as innovation support services and innovation brokering.



7

4. Fostering impact (2)

- Policy makers and funders should *ensure the application of research results* by ensuring appropriate and timely participation of end-users as well as knowledge transfer organisations and innovation support services and innovation brokering.
- Impact must be taken into account by researchers when designing projects so that, while producing knowledge, they are able to work with others on *co-designing and co-delivery of outputs and outcomes*.
 - Incentives to encourage researchers' engagement in interactive research and innovation processes should be improved
 - Success in using and achieving impact indicators by researchers should be used in a novel way to provide incentives. It is also necessary to build or strengthen relevant capacities at all stakeholder levels as new competencies are required.
- Changes could be encouraged by providing more flexible funding regulations.
 - Adapt project time frames in order to encompass a more complete process to also include impact assessment.
 - Allow a broader involvement of stakeholders and beneficiaries from a very early stage, addressing their needs and taking into account the broader framework for research and innovation.
 - The need for evaluation of impact should be emphasised and the attention given to defining impact in the overall proposal evaluation increased.



8

5. Recommendations

Research institutions:

- Develop a *culture of impact* at institutional level including the capacity to understand and work with impact pathways from project design to project completion in order to strengthen the impact of R&I policies and programmes.
- *Widen collaboration and communication* to include all relevant stakeholders in the research and innovation pathways including end-users of project results, knowledge transfer organisations and innovation support services and innovation brokering.
- Include use of and achievement of *impact indicators* as a parameter for assessing researchers

Funding agencies:

- Require a consideration of *impact both ex ante and ex post* and that projects and programmes are *co-designed and co-delivered*, where appropriate.
- Examples of, and learning from, *existing good practices of ex ante evaluation planning and monitoring* in, for example, EIP Operational Groups and H2020 multi-actor projects should be collated and analysed with a view to translation and implementation in other programmes.



9

5. Recommendations (2)

Policy makers:

- *Foster an enabling environment for impact* and provide researchers with the support needed to develop the capacity for this.
- Ensure that funding regulations are *flexible* enough to support impact by, for instance, supporting the preparation of project proposals with a view to better planning of activities which help non-scientists and end-users of project results to effectively co-operate all along the research project (as is done for EIP Operational Groups).

SCAR Working Groups:

- Provide *advice* on ex ante evaluation planning and monitoring.



10

5. Recommendations (3)

All:

- Ensure a *co-design and co-delivery* approach to research and innovation where appropriate. At a strategic level, enable regular exchanges between researchers, funding agencies, policy makers and end-users at the national and European level including through the better use of existing mechanisms such as SCAR and its working groups.
- Strengthen *incentives and evaluation criteria* for research organisations and individual researchers to encourage a focus on impact and a multi-actor approach in addition to purely scientific excellence, and also to encourage individual researchers to take part in multi-actor research and innovation processes.
- Strengthen the *environment for supporting impact generation* by including actors from knowledge transfer organisations as well as innovation support services and innovation brokering where appropriate.
- *Train researchers* in multi-actor and co-creative working methods.



11

Thank you



12