



WORKSHOP ON BEST PRACTICE METHODS OF ASSESSING THE IMPACT OF POLICY-ORIENTED RESEARCH: SUMMARY AND RECOMMENDATIONS FOR THE CGIAR

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INTRODUCTION

There is a low number of studies on the impact of policy oriented research (PORIA) and an even lower number of those that undertake a quantitative assessment of impacts. In comparison, there are numerous quantitative impact assessment studies of technology research, thus creating an imbalance of evidence for decisionmakers interested in investing in agricultural research. There are many reasons for this, but one has been the challenges in PORIA, notably in methods to assess attribution of policy outcomes to research and the measurement of impacts of policy outcomes.

To respond to this, a workshop was convened from November 12-14, 2014 at IFPRI headquarters in Washington, DC. It was cosponsored by IFPRI; the CGIAR Research Program on Policies, Institutions, and Markets (PIM); and the Standing Panel on Impact Assessment (SPIA) of the CGIAR's Independent Science and Partnership Council (ISPC).

The workshop brought together practitioners and clients for such impact assessments in order to discuss approaches and methods for PORIA that would meet the needs of the research and funding community and overcome some of the challenges currently faced in PORIA studies.

This brief summarizes the workshop discussions and the [paper](#) that was developed from it.

CHALLENGES AND BEST PRACTICES IN PORIA

The usual practice in assessing impacts from policy-oriented research (POR) is to start with the POR and work through to its impact. Key steps of an ex post impact assessment are as follows:

1. Assess the POR outputs for relevance, timeliness, and quality.
2. Assess the influence of the research outputs on any policy outcome (or change), in the context of other providers of POR and influencers of policy.
3. Assess the economic, social and environmental impacts of the policy change, and compare these to the impacts that would have occurred with a relevant counterfactual.
4. Attribute a share of the gain in (3) to the POR.
5. Given a quantitative evaluation of the impact of the policy change in (3), an attribution share from (4), and an estimate of the costs of the POR, calculate a cost-benefit ratio.

Each step presents its own challenges, and the workshop discussions of these challenges and best practice solutions are summarized below for each of the five steps.

1. *Assessing the POR outputs*

- Outputs should include research publications and their quality and use, outreach and communications events, encounters with decisionmakers (policymakers, NGOs, private sector, etc.).
- Identifying the outputs is relatively straightforward if a research team has kept adequate records, but this has been rare in the past. Moreover, overlapping projects and researcher responsibilities can make it hard to assign outputs to specific POR investments.
- Bibliometric analyses provides an assessment of the quality of the research, but it still remains a judgment on how important this research is among other research in the thematic area.

2. *Assess the influence of the research outputs on any policy change*

- This generally takes the form of a narrative, and should be undertaken or at least validated by a skilled external assessor.
- In principle, one should try to assess influence over a policy change that the POR team had targeted in its project design, but sometimes serendipity rears its head and should not be ignored. Moreover, one should account for spillover effects of POR to other policy decision processes.
- There is need to decide whether one is assessing the influence of the evidence generated by POR, or the institution(s) that undertook and communicated the POR. This is done at least implicitly with a counterfactual in mind—i.e., what would have been the policy change/outcome in the absence of the evidence, or the institution? This is important because research is but one contribution to policymaking and it may be a relatively minor one. This is not easy and a common assumption is that the research was not essential to the policy change, but only to the speed of policy change, by providing the decisionmaker with information that helped to justify the decision.
- The workshop noted that it may not be important to rigorously quantify the level of attribution and this will be very difficult to do in many cases. For some purposes, it may suffice to demonstrate that the POR made a contribution to the policy decisionmaking process. In this respect, there was agreement that evaluators should adopt legal standards of causality such as ‘probable cause’, ‘preponderance of evidence’ or ‘beyond reasonable doubt’ and not be expected to prove the influence. To attempt to claim attribution or influence may moreover not be well taken by policymakers who will rightly claim ownership of the decision.
- The complexity of tracing influence increases as one moves from POR targeted at a micro (project), country, regional, or global problems. This is not only more difficult conceptually, but would be more costly to do as well.
- For many purposes, an impact assessment ends with the assessment of a POR’s influence over a policy change, since researchers cannot reasonably be held accountable for the implementation of a policy change or for other factors that may affect its impact.

3. *Assess the impacts of the policy change and compare with a relevant counterfactual*

- Quantitative methods (e.g., randomized trials, econometrics, and simulation models) can be useful for assessing the impacts of some kinds of policy changes, but one of the main challenges for PORIA is that many types of policy changes cannot be evaluated in this way, and evaluators have to rely on qualitative methods instead.
- Most assessments use an existing (old) policy as the counterfactual, but if the policy was going to change anyway, then the correct counterfactual is the policy

that would have been adopted without the benefit of the POR. This can be hard to estimate unless the POR is intended to modify a planned policy change (e.g., help refine the design of a conditional cash transfer program that is already going to be implemented).

- Sometimes the counterfactual is the new policy but brought forward in time as a result of the POR. If POR stops a bad policy from being implemented, then the policy change is not implementing it and the counterfactual is the bad policy. In some cases, the policy implemented partly as a result of POR may prove to have negative impacts as compared to a counterfactual (e.g., if the POR did not anticipate certain dynamics in the economy).

In practice, there can be a significant separation in time between steps 2 and 3. That means that the ideal timing of a study focusing on influence may be too early to detect policy impacts. A PORIA that is implemented after policy impacts runs into difficulties of assessing influence which may have taken place many years earlier. Furthermore, assessment of influence requires different skills than estimation of quantitative impacts. Existing PORIA studies rarely assemble the required breadth of team members and include information collected at different times along the impact pathway.

4. *Attribute a share of the impact gains to the POR*

- The method of attribution depends on the type of counterfactual used. If the counterfactual is the old policy then the impact gain from the new policy is due to many things, including the POR, and an attribution share needs to be allocated to the POR.
- If the counterfactual is what the policy change would have been without the POR, then if correctly estimated all the gain can be attributed to POR. This, however, may be difficult to identify in practice.
- There can be sensitivities among policymakers and partner organizations in trying to assess the influence of specific research organizations, so many prefer to assess contribution instead, i.e., that the “researchers were part of the conversation”).
- Unfortunately, one does need something firmer and more causal—an attribution—for any cost-benefit analysis. For many purposes, it is better to undertake the analysis for the output or knowledge generated by the POR rather than any particular organization that worked on it.
- Even when quantitative methods can be successfully used to evaluate impacts in step 3, still the evaluator typically has to rely on qualitative approaches in step 4.

5. *Calculate a cost-benefit ratio for the POR*

- If the POR being evaluated is a research program, then the total costs should be included, not just the costs of any successful projects (cherries) that may have been evaluated.
- There have been very few cost-benefit estimates for POR, and most of the ones that have been done are for micro-oriented POR studies within single countries where it is relatively easy to track influence and

impacts. These studies mostly yield good cost-benefit ratios.

We expect much higher cost-benefit ratios for POR that leads to cross-country spillovers or global international public goods, but sadly there have been hardly any attempts to quantify these.

SELECTING CASE STUDIES

When evaluating an entire research program or institution, it is rarely possible to evaluate in depth all the component projects. A pragmatic compromise is to assess the relevance, outputs and influence of a high proportion of projects, and then select a few case studies for in-depth analysis. In these cases, a particularly important decision is the choice of which projects to select for impact assessment. If this is not an *a priori* decision, but rather *ex post* (after some observations can be made on possible influence and impact), then one choice is between purposefully selecting possible successes (i.e., cherry picking) versus a more neutral approach.

Reasons to cherry pick:

- The successes may be enough to justify an entire research program or institution; as with oil drilling where the odd gusher justifies the cost of all the trial wells.
- There is really no need to assess the impact of failed projects because there would not be anything to measure. However, it is important to include the costs of all the research projects in a portfolio, including the failures, when calculating a cost-benefit ratio or rate of return.

Reasons not to cherry pick:

- POR not like oil drilling because there should be less chance involved in choosing successful POR than wells. Good ex-ante impact analyses can help ensure that more POR projects become cherries.
- While it is reasonable to expect some POR to fail, one would also like to know why failures occurred (was it due to poor design, poor management or changed circumstances). Either way, picking a representative sample can make good sense.

While cherry picking may be adequate to justify overall investment in POR it will not likely be able to inform the decision of which types of POR to invest in, i.e., which are more likely to lead to policy outcomes and impacts.

RECOMMENDATIONS FOR CGIAR RESEARCH PROGRAMS

A common problem in impact studies of POR is a lack of credible evidence available for ex-post evaluations. Very few research teams compile a systematic evidence trail about the impact of their work, leaving it to evaluators to try and create such evidence in an ex-post setting. Sadly, much valuable information relevant to the conduct and influence of research is lost as memories fade or individuals with knowledge of specific research activities relocate. Regular and well-designed monitoring and evaluation may be expected to pay high dividends on a number of fronts: by sustaining long-run support from developing country governments and donors alike, by providing learning and feedback loops, and by providing solid empirical data on outputs and, with time, outcomes. Establishing such a system involves clarification of intended outcomes and theories of change, improved tracking of outputs and outreach activities and timely coordination of studies of influence or impact.

The table below summarizes these key steps.

Stage of POR / PORIA	PORIA Method
Onset of POR research	<ul style="list-style-type: none"> ▪ Determine major outcomes and impacts to be targeted ▪ Develop a theory of change
During POR research	<ul style="list-style-type: none"> ▪ Track outreach activities ▪ Accumulate evidence for use of outputs in policy decisionmaking (compile documents, conduct strategic interviews) ▪ POR may itself be an evaluation of a pilot policy intervention and results may be useful to ex-post evaluation
Policy outcome	<ul style="list-style-type: none"> ▪ Document the change that had made ▪ External professional to assess influence of research ▪ Select policy outcomes to be followed up by impact analyses
Post-policy outcome	<ul style="list-style-type: none"> ▪ Identify key indicators for the targeted impacts to measure ▪ Collect or compile baseline measures of indicators (before the policy outcome takes effect)
Policy impact	<ul style="list-style-type: none"> ▪ Measure quantitative impacts from the policy outcome, likely through use of modeling ▪ Use qualitative methods to assess certain types of impacts and the contribution of policy outcome to the impacts

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