

WHY PEER REVIEW MATTERS

Scientific peer review is central to the integrity of research and is an accepted standard practice for U.S. Government (USG) agencies that fund and conduct research. It is used to evaluate the scientific and technical merits of research plans. Peer review is a requirement for all research plans.

The aim of scientific peer review is to review a study's research plan to assess the quality of the plan; to provide constructive feedback to investigators that enables them to clarify any outstanding questions and strengthen the design of the study; and to make sure the proposed research is in line with the overall goals and priorities of the award.

Scientific peer reviewers are subject matter experts who have in-depth expertise on the topic of the research and should not have a conflict of interest. The reviewers are usually active researchers in the subject matter of the research and, therefore, qualified "peers" of the primary investigators of the proposed research.

There are three approaches to the peer review process:

- **INTERNAL REVIEW:** Internal reviewers are scientific or program experts on staff at USAID who are not directly involved in the financial sponsorship of the research
- **COMBINED INTERNAL/EXTERNAL REVIEW:** Protocols are reviewed by technical staff as described above and at least one subject matter expert not from USAID.
- **EXTERNAL REVIEW:** The implementing partner or the USAID COR/AOR assembles a group of recognized technical experts from outside its own organization OR the Agency establishes a contract with an outside scientific body.

While all research plans require peer review, not all studies require the same level of scrutiny. For example, a small operations research study not intended to generalize beyond the specific setting in which it is conducted would not require the same level of scrutiny as a large, field trial of a new crop strain or a randomized clinical trial of a new vaccine. Simple, direct follow-ons to an existing research plan or the geographic expansion of a previously reviewed research project typically do not require a second scientific peer review.

THE PURPOSE OF PEER REVIEW

Reviewers should be able to comment on the scientific methodology and the relevance of the research to field programs and development priorities. When properly done, peer review:

- Assesses the quality of the science;
- Provides feedback to investigators to help them clarify questions and strengthen the design of the study;
- Ensures that the proposed research is aligned with the overall goals and priorities of the award.

When deciding the level and extensiveness of external scientific peer review, consider:

- Possible risks and benefits to humans, livestock, or the environment;
- The vulnerability of study subjects (e.g., pregnant women, children, prisoners, refugees, persons with disabilities);
- The study budget—large investments may require additional scrutiny;
- Whether the intervention or technology could have unintended uses or consequences, including dual use;

Conflict of Interest (COI) for a Peer Reviewer is Determined by:

- The affiliation of the reviewer with an applicant institution;
- A relationship with an investigator, project director, or other person who has a personal interest in the proposal or other application;
- Other affiliations or relationships between the reviewer and the applicants.

- Anticipated challenges to equitable participation in or benefit from research (for example, gender equity);
- Whether the study results will likely lead to policy changes.

Research Plans are Developed After Award in Three Circumstances:

- When projects are designed to conduct multiple studies over time.
- For studies that respond to emerging needs or requests from the field or headquarters.
- For projects where it would be impractical or impossible to develop research plans pre-award.

CONSIDERATIONS FOR PEER REVIEW PRE-AWARD

When reviewing an activity proposal that includes a research plan, the A/CORs, must:

- Determine which model of peer review is appropriate
 - Is it a single study or particular-focused question?
 - If so, then you must conduct peer-review with a Technical Evaluation Committee (TEC).
- Consider the composition of TEC panel.
 - Consult your own network and/or reach out to chief scientists
 - Identify and address conflict of interest for internal and external SMEs
 - Encourage 'blind' reviews
 - Ensure majority of reviewers must be USAID staff
 - Ensure that all external reviewers are recognized scientific or technical subject matter experts
 - Ensure all TEC members certify they have no COI and have signed a non-disclosure agreement (NDA)
- Resolve divergent opinions

The TEC chair is responsible for synthesizing, summarizing, and sharing the reviews with the submitter/implementing partner in a timely fashion.

When peer-reviewing research activities (including proposals, work plans, reports, and final products), consider the following question to ensure quality research:

- What is the best peer review approach for this type of research?
- Is the scope of the activity appropriate?
- What are the broader impacts of this research?
- What technical merits does this research have?
- Is the research plan robust?
 - Will it lead to good outcomes?
- Is the data management plan adequate?

CONSIDERATIONS FOR PEER REVIEW POST-AWARD

When a research funding mechanism exists and specific research plans are developed post-award/allocation:

- A/CORs evaluate research plans upon submission
- A/CORs complete peer review of plan prior to allocating funds
 - NOTE: Peer review should not extend more than a few weeks
- All research requires a detailed research plan prior to approval of the use of USAID funds. In addition to an abstract, a list of objectives, rationale, methodology, budget and timeline, and a list of persons responsible, the research plan should also discuss community and/or stakeholder involvement in the planning and dissemination and utilization of the research results.