Measuring Livelihoods and Environmental Dependence

Methods for Research and Fieldwork

Edited by
Arild Angelsen, Helle Overgaard Larsen, Jens Friis Lund,
Carsten Smith-Hall and Sven Wunder

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Chapter 14

Communicating Research for Influence and Impact

Brian Belcher, Ronnie Babigumira and Theresa Bell

Good communication is as stimulating as black coffee and just as hard to sleep after.
Anne Morrow Lindbergh (1955, Gift From the Sea, Pantheon Books)

Communicating research

In the myth of the classical research cycle, the researcher develops an idea with a solid theoretical foundation, elaborates the conceptual model and hypotheses, collects and analyses the required data and then ‘writes it up’ as a lucid and compelling paper or thesis. The paper then influences its readers and so contributes to the advancement of the science. In practice, such a linear process would be unlikely to be successful, especially if success is measured in terms of the influence the research achieves. Socially and politically relevant research requires engagement and iteration. Moreover, such a strictly sequential process would be isolating, particularly for an inexperienced researcher. ‘Writing up’ can be a lonely and painful experience if it is all left to the end, and many a PhD has foundered at this stage. In this chapter we consider the process and the key elements of successful research communication.

We begin with the assumption that the research aims to be policy relevant. Indeed, there is increasing pressure on researchers and research organizations to demonstrate their worth with evidence of impact. In academic work, evidence may be sought in the form of publication records, with increasing attention to citation indices and journal impact factors. There is also increasing emphasis on measuring research achievement in terms of uptake (evidence that influential people/organizations have used research information), influence (evidence of changes to policy or practice) and impact (evidence of actual livelihoods and/or
environmental benefits ‘on the ground’) (Meagher et al, 2008). Contemporary understanding of the role of research in policy-making recognizes multiple and iterative pathways. Peer-reviewed publications remain a fundamental part of research communications, but there are ways of doing research and of reporting it that can make the research more effective. Moreover, there are other ways of communicating research that can complement and supplement journal articles to help get the message across.

The first step is to ensure that the research focus is relevant and important. It is a recurrent message throughout this book, but it is truly the key to success. When it comes to reporting, the basic guidance is simple: be clear about who you are talking to and what message you want to deliver, then tailor the writing accordingly. There is plenty of good advice regarding how to write. There are books, online resources and university writing centres (Box 14.2). But it is not always easy to know who the audience really is. Who are you trying to influence? What argument will move them? How can the research results and recommendations be presented most effectively? The chapter begins with a brief discussion of how research can influence policy, and specifically regarding the policy environment for international development research. We then discuss the research itself and the kinds of information and analyses that can be influential. Then we look at the writing process, with hints and tips on how to present empirical data in an accessible and informative way. Finally, we consider the publishing process, and again offer some suggestions to increase the effectiveness and the success of submissions.

**Influencing policy**

‘*Policy* aims for continuity or change of a practice, including plans and their evolution when put into practice (that is, the “how” as well as the “what” of decisions)’ (Shankland, 2000, cited in Crewe and Young, 2002, p3). Whether and how research influences policy is a well-established topic of inquiry for social scientists. In the 1950s, Lasswell suggested a model of the policy-making process as a series of stages during which information is rationally considered by policy-makers, but that model has been contested for at least 30 years (Crewe and Young, 2002). Modern concepts see it as a complex interplay between political interests, competing discourses and the agency of multiple actors (Keeley and Scoones, 1999; Crewe and Young, 2002). Research can inform the process at different stages. Research can also be ignored or misused at different stages! There may be very different worldviews among researchers and policy-makers, a cultural gap that prevents adequate use of research (Neilson, 2001). And of course, research is more likely to be used if it is politically expedient.
A source of frustration among researchers is that policy-makers selectively pick research results and arguments that fit their agenda.

Notwithstanding this attention to the impact of research on policy, there is still a certain amount of naïvety among some researchers who seem to assume that their responsibility starts and ends with publishing in the peer-reviewed press. The idea that published research will somehow ‘inform policy’ still seems to hold sway and the old linear model of policy formation is implicit in the way some researchers work.

How does research get to policy-makers? The Millennium Ecosystem Assessment (2003, p213) defined a policy-maker as, ‘a person with power to influence or determine policies and practices at an international, national, regional, or local level’. David Kaimowitz, former director general of the Center for International Forestry Research (CIFOR), argued that researchers should know not only who their work was aimed at in a general sense, but also their names and email addresses (personal communication). Depending on the issue, it may be appropriate to focus at the level of officials who are deciding policy within government or other organizations, or it may be more effective to focus on lower levels where regulations are made or enforced or projects are implemented.

This book deals primarily with research regarding livelihoods and natural resources in developing countries and there are particular characteristics to keep in mind when communicating such research. Government decision-makers in poor countries often lack well-developed institutions to generate and use research and (partly for that reason) much of the research-based information they do have comes from other providers, such as the World Bank (Weiss, 2009). More to the point, government decision-makers may have little real influence on what happens on the ground. Government agencies in developing countries often lack the personnel and other resources to reach rural populations. Other kinds of organizations, such as private resource extraction and processing companies, the BINGOs (big international non-governmental organizations), bilateral donor agencies and other conservation and development organizations often have a larger presence and greater influence than government, especially in rural and remote areas. Research-based knowledge that influences the policies of such organizations can directly impact people’s livelihoods and natural resources.

Policy-relevant research

You have already given considerable thought to the policy implications of your research while defining your research problem (see Chapter 3). Well-focused
research will delve into a relevant and important issue and offer information and analyses to help to understand and address the problem.

Research may focus directly on the impact of policy. For example, research can predict (ex ante) or measure (ex post) the impact and distributional effects of policies or policy tools. Research can also provide knowledge for forming, implementing or contesting policy by: identifying and explaining trends; raising awareness of a problem; improving understanding of underlying causes of economic behaviour and environmental outcomes; contradicting conventional wisdom; identifying best practices; developing/influencing methods; or developing a useful theory or conceptual framework or model. By providing a clear theoretical explanation for a phenomenon or a conceptual framework for thinking about a problem, research can facilitate practical interventions.

**Reaching the audience**

It is not enough to publish a paper and hope for uptake. A citation analysis by Meho (2007, p32) noted: ‘It is a sobering fact that some 90% of papers that have been published in academic journals are never cited. Indeed, as many as 50% of papers are never read by anyone other than their authors, referees and journal editors.’ This suggests two important strategies for a researcher who wants to make a difference. First, when publishing in peer-reviewed journals, make sure the article is well targeted and well presented, so it will be read and used. Secondly, consider using other forms of communication to supplement and complement the journal articles – get the message across in different ways, to different sectors of the intended audience. Exposing the research more broadly can stimulate extra interest in the journal articles and increase the potential for impact.

Research impact studies find that the way the research is done strongly influences its impact (Carden, 2009). Engaging the intended audience during the research process helps to ensure the relevance of the research question, and it also prepares the audience to be more interested and receptive to the results and recommendations. Lomas (2000, p140) observed:

> Researchers need to appreciate that decision making is not so much an event as it is a diffuse, haphazard, and somewhat volatile process. Similarly, decision makers need to recognize that research, too, is more a process than a product. Better links between research and decision making depends on the two communities finding points of exchange at more than the ‘product’ stage of each of their processes.
O’Neil (2005, p762) identifies two key characteristics of influential research: intent and engagement. She notes: ‘Research influence will only survive if research is designed from the start and carried out and translated to the policy people with a resolute and explicit and specific intent.’ In addition: ‘Where researchers form personal relationships with people in policy-making, their influence on policy is both more immediate and more lasting. Where those relationships fail to develop, influence is precarious or non-existent’ (O’Neil, 2005, p762). This analysis does not negate the importance of focus and quality in the research, but it highlights the importance of engagement as another necessary element to help influence policy.

Spilsbury and Kaimowitz (2000) asked forest policy experts to identify publications that had been influential in national and international policy. They found little evidence that publications directly influence policy, but some were important in enhancing awareness and shaping conventional wisdom and policy narratives. The authors concluded that it was probably not the documents per se that had the impact, but rather the processes accompanying their creation. Research that targets or associates itself with major policy processes or powerful organizations has a better chance of having an impact and being recognized. They noted that being right is not necessary to have an impact – work that is later criticized or discredited by scientific peers can be highly influential in raising issues, shifting scientific debate and shaping policy outcomes, as in the example of a paper by Peters et al (1989) on non-timber forest products. But credibility is important, and this is at least partly determined by the reputations and track records of the authors, the prestige of the publishers and the influence of the organizations that sponsored the research and/or promoted the findings. They noted that research that tells policy-makers and opinion leaders what they want to hear has a better chance of being influential than work that goes against the current popular understanding. The overall recommendation was that policy researchers can increase their impact not only by providing good answers to the right questions but also by supplying these messages to the right people at the right time and in an appropriate format. The most influential researchers and institutions will be those who effectively build ‘coalitions’ to support their viewpoints in the policy arena and succeed in associating their work with well-funded initiatives.

People in the communities where the research has been done are still too often overlooked as an important audience for research outputs. Research-based knowledge, and the research processes themselves (especially participatory processes), can inform and empower stakeholders so that they can have more influence over policy and practice that affects them. Stakeholder participation helps ensure the relevance of questions and the appropriateness of answers and
the way those answers are delivered and it helps inform and mobilize public opinion, even if only at the village scale (see also Chapter 2).

These are lessons that can be applied even in a PhD research project. It is well worth the effort to meet officials and staff in relevant government departments and project personnel working in the area. In this way, you can learn about their objectives and activities and about baseline information that may be available. You can test the questions and methods with people who know the situation and who may be able to help in adjusting and focusing the work so that it will be relevant and useful. By sharing research progress and ideas as they take shape, one can prepare the ground for when the full results are ready. A key audience for the research will already be aware of the work and interested to know the results, and the results are likely to be more easily accepted because the research design has incorporated ideas from the intended clients.

Media reports and other popular summaries can give research outputs wider reach. Many more readers will see a reference to a scientific report in a newspaper or magazine than will ever read the article. The message will be shaped by the way the journalist portrays it. Still, it is worth investing effort to get popular messages out, especially as a way to influence and to provide information and analysis to be used by civil society organizations. A combination of media and non-governmental organization (NGO) interest can create attention for a research report. Local newspaper articles, newsletter pieces, email updates, meeting or conference reports, presentations to interested stakeholders, and informal communications can all be valuable methods of reaching your audience.

There is also an increasing number of digest services that provide synopses of scientific articles.¹

All of these kinds of communication help to convey your message and create awareness and interest in the research. All are part of the process of engagement. Not incidentally, they are all also part of the larger writing process. Each time you are forced to formulate and present ideas to an audience, in person or in print, you refines the message and develops the text that can be utilized later. It also creates opportunities for feedback that will help focus and increase the relevance of the message.

The scientific report

The peer-reviewed literature is important for communication within the scientific community and as a way to validate the scientific value of the research. The peer-review system helps assure the quality of scientific publications and, as discussed later, peer review is invaluable as a source of critique, new ideas and inspiration for authors. A journal article can influence
the way other scientists think and how they do their own research. And, as Park (2009) notes, peer-reviewed publications are deeply embedded in the academic reward system. Almost all universities use publication records as indicators of productivity, and citation records are increasingly used as indicators of scientific worth.

There is a standard organizational structure for scientific writing that has stood the test of time for good reasons. Whether it is a PhD thesis or a journal article, the classic organization provides a logical and compelling structure for reporting research. The various sections may be compressed or expanded to meet the needs of the particular document. A PhD thesis, for example, needs a comprehensive and elaborated literature review section because part of the purpose of the document is to demonstrate the student’s mastery of the field. A letter in the journal Nature must be far more concise; references are cited without any detail provided. Some journals want a separate background and rationale; others prefer to have that covered in the introduction. Some combine results and discussion while others separate them. The author needs to be familiar with the specific journal requirements and tailor the document accordingly, but the basics of building and presenting a good argument remain the same.

The report must be based on a clear, well-articulated research question. It should provide a strong rationale for investigating the research question and the policy relevance should be established early. The reader needs to understand and be convinced by the overall line of reasoning. References should be used to provide background information and evidence that will support the general and specific aspects of the argument. There should be a clear explanation regarding how data were gathered and how they were analysed. It is helpful to present results as simple informative graphics. Any assumptions and models need to be explained well. The goal is a clear, concise and well-argued paper with a self-contained summary, conclusions and explicit policy recommendations. Let us look at the elements in order:

**Title**

The title should be concise, catchy and informative. You want to attract the reader’s interest and create a positive impression. It should indicate the subject and scope of the paper. Including keywords, especially words that are topical in the field, will help attract attention and search engine hits. It is not always possible to meet all of these criteria. A common ploy is to use puns or references to popular song or movie titles, or to give a twist to a popular saying. A title can be both catchy and informative by using a subtitle to explain or provide context for a more imaginative main title.
Here is a sample titles taken from CIFOR’s POLEX list:

- ‘From Mao to markets in China’s forests’
- ‘Globalizing local communities’
- ‘The conservation of donors’
- ‘Disturb forests for their own good’
- ‘Certifying the little guys’
- ‘Chainsaws in the drugstore’
- ‘Will the eucalypts eat your children?’
- ‘Filipinos “think locally, act locally”’

Abstract (or summary)

Aside from the title, the abstract is the first and possibly the only part of your paper that will be read. Considering the quick and often cursory way that editors screen manuscript submissions, the quality of the abstract may even determine if other readers will have the opportunity to read your paper.

It is still common to receive articles for review that have descriptive abstracts. Some even get published. A descriptive abstract outlines the topics covered in the article in a kind of elaborated table of contents, presumably so that the reader can decide whether or not to read the article. Such an abstract provides little information and suggests a lack of focus.

In comparison, an informative abstract provides details about the content of the article or report. A good abstract provides a condensed version of the main argument (usually 100–500 words), with an indication of the relevance and importance of the problem and the results, a clear problem statement, a brief description of the method and scope of the research and a summary of the results and the conclusions. The abstract alone should provide readers with a basic understanding of the research and its conclusions even if they choose not to read the article. It may also convince readers to read the rest of the article.

Introduction

The introduction should catch the reader’s interest and attention and set the stage for the rest of the report. Starting with a question, a quote, a startling fact or a contradiction immediately gets the reader engaged and interested. Journalists often use a particular perspective to introduce an issue, and that can also be effective in a scientific article.

Try to introduce the main idea in the first sentence or paragraph. This gives the reader a sense of the direction of the paper so they can more easily absorb the
background and context that follows. Sometime authors provide a great deal of background and build up to the main point, but readers (and editors) are impatient.

**Background and rationale/literature review**

Depending on the topic and the journal, the ‘background and rationale’ can be presented in a separate section or it can be provided in a condensed form in the introduction. This section draws on the literature to establish the relevance of the paper, to set the context and to provide support for the approach to be used. If another author has described the conditions or the policy environment or the culture in the study area, you can refer to that description to provide background and support for your own description of the context. If the research will engage in an ongoing debate, the paper should provide relevant references to introduce and delimit that debate and provide a foundation or a counterpoint for the current discussion. Every argument builds to some extent on previous work. By citing influential papers, you can efficiently convey well-supported ideas, while giving appropriate credit to the authors of those ideas and guiding the reader where to look for background. You can summarize the essence of the previous work without needing to present it in detail. Citations also help provide credibility for your work. By referring to other trustworthy sources, you reinforce the notion that the issue is important and that your work has a solid foundation. References are especially important to help frame a debate and the varying viewpoints in a discourse. By documenting the different perspectives and arguments you help the reader to understand your own arguments and conclusions. This is especially important when forming an opposing argument or attempting to disprove someone else’s conclusions.

It is not helpful to have a long list of references if many of the references in the list are not germane to the argument. The references used should provide relevant and useful descriptions of the context, of the theoretical or empirical foundation for the argument in the paper or a clear counterpoint. Avoid using references that do not make a genuine contribution. (See also the discussion in Chapter 3 on literature reviews in research proposals – most of the points made are also valid for scientific papers.)

**The problem statement**

The introduction provides the basis for the problem statement. The problem statement may be included within the introduction (common) or in a separate section; regardless, it is a fundamental and necessary part of any research report.
Weak or absent problem statements are a frequent cause for rejection of article submissions. The problem statement encapsulates the context for the research and serves as the basis for the questions the study aims to answer. The problem statement often consists of two parts: a knowledge-related problem originating in theory and a specific case of the problem manifested in a real situation. As discussed in Chapter 3, the researcher will invest considerable effort in defining the research idea (problem) as part of the research design. A clear and concise problem statement presents the focus and the boundaries of the research. It should identify the variables being investigated and the relationship between the variables being investigated and the target population, and it should be presented in its simplest form.

In a sense, research is like dealing with a set of propositions in a debate or an argument adhering to the principles of logic. The purpose is to persuade or gain acceptance of the conclusion. To do so, it is essential for others to accept the first and all subsequent propositions. The problem statement is the first proposition, and we need to accept it before considering the next proposition. (Hernon and Schwartz, 2007, p309)

**Purpose and objectives**

The purpose statement identifies how the research will contribute to solving the problem identified in the problem statement. It is a broad statement of desired outcomes or the general intentions of the research. It emphasizes what is to be accomplished, but not how it will be accomplished. The purpose statement is an aspirational goal that the research will contribute to, but that is outside the control of the research project.

The objectives define specifically what the research will achieve in a way that is realistic and measurable. It is common to indicate a general, overarching objective and a set of specific objectives. Each specific objective is an individual statement of intention, operationalized in the research matrix through specification of research questions, hypotheses, data needs and data analysis methods (Chapter 3). Reviewers and readers alike will expect these objectives to be satisfied by the research and explained in the article. Like the problem statement, purpose and objectives may be part of the introduction.

**Methods**

With the research question and specific objectives established, you should then provide a description of how the data were collected and analysed. This is the
‘methods’ section of the paper. Many manuscripts are submitted with weak methods sections. The best test of a description of methods is whether the explanation is sufficient for another researcher ‘skilled in the art’ to be able to replicate the study. The study site, study population, data collection and analysis methods should be described. The ease of access to online references makes it possible to provide thorough supporting information, but the description in the article should be sufficient. This way the reader can appreciate and understand the results and this builds trust. If particular methods were applied for each of the specific objectives, they should be presented in order.

Results

The results are the new evidence that the researchers use to support their argument. The results section should present a summary of the relevant data and analyses, and here again it is important to tailor the presentation to the intended audience. Good analysis is often handicapped in its presentation because the authors have not taken the vital last step of thinking about what the audience cares about and expressing the results in those terms (Koomey, 2001). Some audiences (and some journals) will expect and appreciate having regression outputs presented in tables with coefficients, standard errors and marginal effects. Other audiences may find that level of detail distracting or difficult to understand. Graphical presentations that illustrate and highlight the key patterns or trends may be more accessible and effective.

There are three basic ways to present results: text, tables and figures. If there are few results to report, it is not necessary to use a table or a figure – simply report the results in the text. For example, to report average household forest dependency for two villages it may be tempting to provide a table such as Table 14.1.

The same information could be conveyed more efficiently in a sentence without breaking the flow of the narrative. However, if there are several variables to report for more than one of the units of analysis (villages), then a table or a figure can be very useful indeed (for a comprehensive discussion see Day and

<table>
<thead>
<tr>
<th>Village</th>
<th>Forest dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village A</td>
<td>20%</td>
</tr>
<tr>
<td>Village B</td>
<td>30%</td>
</tr>
</tbody>
</table>
Box 14.1 Resist the temptation of the pie chart

The pie chart (or circle graph) is commonly used to illustrate proportions. In technical terms, the arc length of each sector (and consequently its central angle and area), is proportional to the quantity it represents. But people are not good at judging angles: we underestimate acute angles (angles less than 90°) and overestimate obtuse angles (angles greater than 90°) (Robbins, 2005). They also use a lot of ink so they are expensive to print. To illustrate the weakness of pie charts, we present Figure 14.1, plotted from a fictional data set we put together for illustration purposes.

Figure 14.1 Average share of total household income: Pie chart
Source: Illustration data from authors

In looking at a chart such as this, one may want to know what categories have the largest and smallest shares, and also some sort of ranking. Given time, the reader would figure this out. However, if this figure were part of a presentation where the presenter spent the typical 1–2 minutes on a slide, there is a good chance the audience would have some difficulties quickly getting answers to those interesting questions. One could argue that the slices could be sorted, or labelled with percentages, or the most important sector could be ‘exploded’ from the main chart. Any of these actions would help the reader interpret the chart, but they will also add clutter, and clutter never aids understanding.
Contrast the pie chart with the two charts below:

**Agriculture**

**Business**

**Forestry**

**Wage**

22 24 26 28 Share (%)

**Figure 14.2** Average share of total household income: Dot plot chart  
*Source:* Illustration data from authors

**Figure 14.3** Average share of total household income: Bar chart  
*Source:* Illustration data from authors

It is likely that the audience will more immediately understand both charts. It is also likely that the bars do not need to be labelled for the audience to decode the approximate number of shares. Both graphs are easier to read because they provide information positioned on a common scale. For more on people’s ability to interpret graphs, see Robbins (2005).
Gastel, 2006). Deciding which format to use depends on what you want to illustrate. If it is important to appreciate the individual data points, then a table is best. If one wants to illustrate a trend, then a line graph will be best as it will convey the dynamic aspect of the data. If it is most important to illustrate relative differences, some form of chart (such as a bar graph) will be most appropriate. A combination of tables and figures selected by purpose will offer variety and complement each other to reinforce the study. You may want to emphasize key results in the narrative, but avoid repetitious descriptions of minor results that are already in tables and figures.

Making figures that convey your results clearly and compellingly is essential in scientific communication. The classic texts on graphs are Cleveland (1994) and Tufte (2001); we recommend them for their many instructive examples. There are many software applications available to generate figures, cartoons or schematics. However, the temptation to display graphical data in three dimensions is often best avoided – just because you have sophisticated software, does not mean that three dimensions are more easily understood and legible than two dimensions.

Presenting results is about communication, and clarity always wins. Keep it simple and let the data stand out. Make sure that the chart/table is self-explanatory so that the reader does not have to read a long description to understand it. Make titles, legends, captions, footnotes and other identifying information clear, relevant and informative. Be sure that the data are relevant. Any study will likely generate some data that are not particularly germane or instructive, and one may run many different kinds of analysis with some dead ends and results that are not revealing. Do present everything that is germane to meeting the objectives and answering the research question, including results that may seem contradictory (you will have the opportunity to discuss these later). Do not present anything that is not pertinent.

Discussion

The discussion may be combined with the results section or with the conclusions, or it may be presented in its own section. Wherever it is placed, its purpose is to elaborate the argument and draw out the key messages. Sometimes inexperienced researchers get themselves trapped reiterating the results in terms of the empirical facts. The discussion needs to lift the argument to the next level with interpretation and exploration of what the results mean in the context of the research question and the overall research problem. It should also inform the reader of the study’s scope and limitations – identifying issues that were not investigated and problems that were encountered – and indicate how far the findings can be generalized.
Conclusions and recommendations

This is where the argument is concluded. It should be a concise and clearly focused section that draws on the discussion to present answers to the questions that were asked. If those conclusions indicate recommendations for changes (or continuation) of policy or practice, this is the place to make those recommendations. Be sure that whatever conclusions and recommendations are offered are sound and well-supported. As Samet (1999, p435) advised:

[Do not] write a weak last paragraph. This is where authors often lose control, offering sometimes naïve policy recommendations or generic calls for more research (possibly in support of their next grant). Manuscripts need an ending, but must go out with restraint.

Acknowledgements

It is good practice to acknowledge individuals, groups and organizations that contributed to the research in the form of ideas, information, advice, or technical or financial support. Be sure to specifically acknowledge each person or organization (they will probably look). However, recognize that not everyone will want to be mentioned. They may disagree with something or for some other reason they might prefer not to be associated with the report, so you should seek permission. Acknowledging financial support gives due recognition to the funders and it provides credibility by association for the research.

The writing process

As already emphasized, scientific writing, like science itself, is an iterative, incremental process. In some ways, the researcher starts writing the paper the day the idea is born (Bourne, 2005). The research proposal identifies and articulates a research goal and a policy angle. The details will be tested, re-evaluated and refined as the researcher gains knowledge and experience of the situation. Keep asking questions in policy-relevant terms. This thinking, and the writing that goes with it, all contribute to the final products.

It is normally very helpful to start the writing with an annotated outline early in the process and then build on it incrementally as the research and analysis progresses. Include key arguments, results, interpretations and references. This outline can be a valuable tool in the writing process. It is also handy to share and build an annotated outline with co-authors, or with your supervisor, as a way to ensure that everyone is ‘on the same page’.
Another helpful step is to draft sections as you go. Some are easy and natural, such as descriptions of the background and rationale, methods and site. It is never too early to begin notes and draft sections of the discussion, as ideas arise.

As discussed above, engaging with stakeholders, and publishing interim reports and synopses will help your research to have impact. Aim for different outputs: local newspaper article; newsletters of relevant NGOs; email updates to key clients of research; synopses presented in terms that are locally relevant. All of this helps to anticipate the final outputs. It also provides a solid foundation of writing that can be drawn upon for the more formal academic outputs.

**Getting published and getting through**

The work is not over when you complete your manuscript draft. Next comes the submission, and you need to pay careful attention to the key elements that will get your article past the first hurdle. The editor of a premier international development journal highlighted this when he reported that he personally reviews every submission to decide whether or not to send it for review. He spends three to five minutes making that decision and he rejects 90 per cent of submissions at that stage. Like most readers, he focuses on the abstract, introduction and conclusion to judge whether the subject is relevant and sufficiently novel, whether the argument is cogent and well-supported, and whether the presentation is interesting. Unlike readers, the editor will also see your cover letter, which should be informative but not too long. The cover letter gives you the opportunity to communicate the relevance and importance of your research in a way that reinforces the abstract and introduction. Editors are also keenly aware of page length limitations. If your article can make the same point in less space, it will have a better chance of being published.

If the editor thinks the article has potential, it will be sent to peer reviewers who will assess its relevance and quality. The feedback can be devastating; reviewers are not always kind or constructive, but all feedback is useful. Good reviewers may provide critiques of the underlying assumptions, the problem definition, the methods, arguments, organization or any other aspect of the paper. They may provide helpful suggestions to improve the paper and they may suggest alternate ways of analysing the data or other references that would inform the argument. This feedback is a great gift and all comments and suggestions should be carefully considered. Some reviewers may make comments that seem to misunderstand the paper completely and they might be rude or mean. These reviews can be useful as well, so try to avoid defensiveness and consider why the reviewer responded that way. Presumably, the editor selected smart and experienced scholars as reviewers. If they misunderstood something in the paper,
Box 14.2 Writing resources

Writing

- ‘Writing for change’, www.idrc.ca/IMAGES/books/WFC_English/WFC_English/sitemap.html. This excellent resource provides opportunities to learn how to write effectively, as well as how to write for scientific publications and for advocacy.

University websites regarding academic writing: These university websites all provide a wealth of information on a wide range of writing topics.

- OWL at Purdue: http://owl.english.purdue.edu/owl.
- University of Toronto Writing Centre: ‘Advice on academic writing’: www.writing.utoronto.ca/advice.

Editing

- ‘How to prevent and fix problems in papers’ section in ‘How to get published’: www.law.upenn.edu/cpp/alumni/jobseekers/GetPublishedSpecialReportACADEMICWORD.pdf. Provides advice on how to address common publishing issues, including recommendations for how to choose an editor.
- ‘Effective editing’ section of ‘Writing for change’: www.idrc.ca/IMAGES/books/WFC_English/WFC_English/effedi1.html. Provides a step-by-step approach to editing, including exercises to develop editing skills.

Journalistic writing for scientists


Presentations

then other readers might also misunderstand. If they found the paper irritating, other readers might also be irritated. Reconsider the paper from that perspective and assess whether an idea could be communicated more clearly or if the presentation could be more convincing or engaging.

You can now revise and improve the paper based on feedback from the editor and the reviewers. If the paper was rejected outright, you can reformat it for another journal as part of the revision process. If, however, the paper was accepted ‘with revisions’, you will need to respond to all of the major comments. You do not have to agree with them all but you must demonstrate why your approach is correct. When you resubmit, provide a cover letter that itemizes reviewers’ suggestions and indicates how you have responded to them. Some journals send resubmitted papers back to the original reviewers; others send to fresh reviewers. In either case, an itemized list of main comments and responses demonstrates your seriousness and professionalism and makes the subsequent review easier.

Conclusions

Research communication is an iterative process. Engaging with stakeholders early in the process helps to focus and refine the research question(s) to ensure relevance. It also helps to create and prepare an audience for the research results and recommendations. The audience for international conservation-oriented and development-oriented research is broad and messages may need to be targeted specifically for different sub-sectors. An individual research project may yield practical recommendations that are useful at the local level, policy guidance for
local or national government, feedback or advice that will support project implementation, and/or confirmation or contradiction of international policy or programme directions. A solid argument based on novel results and tailored for the appropriate audience can have a powerful influence. Time-tested presentation styles and organizational structures provide a good foundation for research publishing but other kinds of communications will both complement the traditional outputs and facilitate their preparation. By making writing and other research communications an integral part of the research process, it is possible to increase the effectiveness of the research and the efficiency of the writing.

Key messages

- Successful research communication must be targeted to address the interests and needs of the intended audience.
- The writing process is iterative and integral to the research process itself – start early and build your messages as you work.
- A good presentation is about developing and defending an argument, with a clear concise illustration of your data and analyses.

Notes

1 Some relevant digests for research on international conservation and development issues include Eldis (www.eldis.org), Mongabay (www.mongabay.com), Community Forestry e-news (www.recoftc.org/site/) and CIFOR’s POLEX listserv (www.cifor.cgiar.org/Knowledge/POLEX/).
2 The table also lacks the obvious and yet often omitted piece of information: the sample size. Now, it is possible that this would be included in the text but this is a problem. A good table should have all the information needed for a reader to understand it.

References

ResourceCentre/Documents/Research_And_Development/wp173%5B1%5D.pdf, last accessed 5 February 2011


