KNOWLEDGE UTILIZATION AND THE PROCESS OF POLICY FORMATION

Toward a Framework for Africa

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Foreword

The HHRAA Project and its SARA component are charged with presenting Africa-relevant research findings and information to policy makers in a format and manner that will assist them in making “optimal strategy, policy or program choices.” Accordingly, we felt it was essential to analyze what is known about how information is used and how policy is formulated. This paper, prepared for SARA by Robert Porter, brought this knowledge together to refine our thinking on the relationship between the information generated by research and changes in policy and policy implementation. The paper's key conclusions:

- Changes in policy and policy implementation rarely result from a linear process of generating research, laying out policy options, choosing between alternatives, and evaluating the implementation of the selected option.
- Rather, changes come about through a process of iterative interactions among three "streams" of activity: defining the problem, suggesting solutions, and obtaining political consensus.
- Changes occur when these streams converge, presenting a "window of opportunity" that can be grasped by the vigilant proponent of reform.
- Advocacy plays an important role in these three streams. Indeed, policy champions are often necessary to put a problem on the agenda, bring a solution to the attention of decision makers, and galvanize political consensus. Advocacy implies a more dynamic approach to the presentation of information. In order to make a difference, not only does information need to be disseminated, but champions — using this information — must make the case for change with those who can actually influence policies and their implementation.
- Information is often more acceptable and, thus, more useful for advocacy when it is produced internally and not imported from the outside.

These findings have major implications for the way in which we plan and evaluate strategies to influence policies and programs. We now understand that policy changes occur within a web of interacting forces, and that specific activities can only have an indirect and incremental impact on decision making. We understand that, however excellent information is, the chances for change increase when people use this information to advocate for change.

The planning and evaluation of the impact of HHRAA or SARA activities should reflect this understanding. Intermediate indicators for each activity should identify effects on one or more streams, but we should expect that several activities will be required in the different streams before significant changes are produced in policy or policy implementation.

Finally, we appreciate better the role of advocacy in bringing the streams together. This means looking for opportunities to strengthen African groups that can play this essential role.

We hope that this paper will contribute to the dialogue among donors, practitioners and advocacy groups, as well as stimulate further exploration of the complex process of policy change and policy implementation.

Executive Summary

This paper reviews the published literature on the role of technical information in the making of public policy, examines more general models of the policy process, and outlines a framework for rethinking the relationship between policy research and advocacy.

Knowledge Utilization and Policy. Although the knowledge utilization literature says little about policy learning and decision processes in developing countries, there
Policy Making and Multiple Streams. We suggest (after Kingdon 1984) that on-the-ground realities of policy making are better captured by a model that focuses more on the flow and timing of policy action. In this model, streams of problems, solutions, and politics move independently through the policy system. Occasions arise (sometimes predictably, often not) where the three streams are joined. A compelling problem is linked to a plausible solution that meets the test of political feasibility. But this coupling or packaging (of problems, solutions, and politics) does not just happen; typically it is the result of a sustained effort by policy entrepreneurs—actors in and close to government willing to make long-term investments in issues advocacy.

This way of mapping the policy process differs from the stages model in two major respects. First, it does not view decision makers as solitary or insulated actors. Policy formation may proceed in stages, but the process can be derailed at any point. It is not as if policy were assembled on a production line (or could be "engineered"). The stages framework is also misleading as a model of actual decision processes. In this variant, technical experts offer fixed prescriptions to policy makers who arrive at a decision through a rational, stepped approach to problem solving (i.e., problem definition, the analysis of alternative solutions, the adoption of a solution, its testing and evaluation). But in situations where many players are involved, and where they drift in and out of the decision process, a very different sort of collective decision-making structure results.

Policy Communications—A Framework for Policy Analysis and Advocacy. This more interactive, process-oriented approach also clarifies the ways in which research/analytic work and policy advocacy can be brought together in programs of policy communications. Policy researchers and analysts influence policy through the ways in which they define problems, link them to solutions, and translate them into simplified images and understandings that speak to the interests and concerns of nonexpert publics (including decision makers). This is the essential work of agenda-setting. But to successfully mobilize the attention of policy makers, and sustain their interest in an issue or program over the longer run, means that agenda-setting activities need to be carried forward by broader advocacy coalitions. And where advocacy coalitions are nonexistent or weak they will need to be created and strengthened.

From Policy Analysis to Policy Learning—RAPID. A brief review of RAPID—one of USAID's longest-running policy projects—illustrates this paradigmatic shift away from decisionist or engineering models of policy and toward more interactive approaches to agenda setting and advocacy. RAPID in the early years employed a "black box" computer modeling and presentation technology to reach ruling elites—top-level decision makers—within government. Evaluations indicated, however, that RAPID's early approach to agenda setting and policy reform had only fleeting effects; there was little evidence of any specific policy changes attributable to RAPID's work with elite audiences. Successive RAPID projects, consequently, have focused increasingly on opening their "black boxes" and showing local policy analysts and advocates how to use them in their own policy communications work. (Advances in computer technology, of course, also made the local institutionalization of RAPID modeling and communications tools increasingly feasible.)

Conclusions. A variety of conclusions and recommendations follow. First, there is little empirical support for a model of knowledge utilization that sees policy decisions as discrete events, undertaken by isolated actors who make an authoritative decision based on a comprehensive analysis of policy options. Policy learning, according to this conception, occurs when decision makers are supplied with new, policy relevant information; but the available evidence suggests that this kind of learning rarely fits actual cases of policy formation or change. Rather, policy making and policy learning occur within a web of interacting forces, involving multiple sources of information, complex power relations, and changing institutional arrangements.

The knowledge utilization and policy formation literature broadly supports the argument that policy learning is best characterized as an ongoing, incremental process. Certainly this process is punctuated by discrete instances of decision making and policy change. But policy learning is not reducible to specific policy decisions; instead, it tends to be much more continuous and open-ended. And this means that members of the policy research and analysis communities who want their information to influence policy had better be committed to the long haul.

Introduction

This paper focuses on the process of policy formation. It begins with a review of the published literature on the role of technical information in the making of public policy. It then examines more general models of the policy process (again drawing from the current literature) in an effort to fashion a conceptual vocabulary that will help us to talk and think more clearly about the ways in which research and analysis contribute to policy making. Finally, it starts to outline a framework that we hope will prove useful in planning and evaluating project activities aimed at improving policy decision making.

HHRAA and SARA [1] are premised on the recognition that a lack of relevant technical information is a significant barrier to the formulation of sound health and human resource policy in sub-Saharan Africa. Yet lack of information is by no means the only constraint to improved policy; clearly there is very much more to the policy process than the simple provision of technical information and expert advice.
The idea for this paper originated in early team discussions on just this point. How is technical information actually used in policy decision making? And what, typically, is the role of research and analysis in the policy process? [2]

Questions such as these, however, are not really separable from the broader question of how policy is actually made-to answer one is tantamount to answering the others. This realization led us to more general models of the policy-making process.

For the most part this paper focuses on big policy decisions-government decisions that set broad direction for specific programs. Almost every big policy decision combines technical expertise and the play of power (or politics). Some things are settled by facts, analysis, and persuasion. Others are settled by vote, by bargaining, or by the decision of someone delegated to make authoritative choices. Politics, in this sense, refers to the (more or less) collective choices of people who disagree. And political decisions are authoritative in the sense that the coercive power of government stands behind them [3]. For this reason, the interplay of technical knowledge and politics in the policy process is a recurring theme in the discussion that follows.

Approach

We began our search of the literature by looking for studies, articles, and reports that dealt with the process of health policy making in Africa. Yet we quickly found that very little exists that directly deals with this topic in either the published or the "grey" literature. A great deal has been written on the content of health policy, but this work mostly consists of substantive policy recommendations and says very little about the process of policy reform. This literature would have been relevant to our purposes if it were addressed directly to African policy makers, or showed much sensitivity to local policy-making realities. Instead, it is produced by members of academic or policy research communities for the consumption of other members in the northern, industrialized countries. This is true even of the few published studies we located written by African social scientists.

Failing to find much that dealt specifically with the role of research and analysis in the policy process in Africa (particularly in the health sector), we shifted our search strategy. We decided to focus more on generic models of how technical information is used in policy making and thus upon more general models of the policy-making process. Our bias was toward studies, concepts, and theories that would be most useful in thinking about HHRAA and SARA's own involvement in policy reform.

This shift has resulted in a different paper from what was originally envisioned. Instead of a rather straightforward compilation of summarized studies and reports (few of which would have had anything directly to do with Africa), we have made a more analytic and interpretive assessment [4].

Knowledge Utilization in the Policy Process

The literature on how research and analysis enter into policy making is limited in two ways. First, it is almost entirely restricted to policy contexts in the United States and other advanced industrial countries-systematic research on the use of technical information by policy makers in developing countries has yet to be undertaken. A second drawback to the knowledge utilization literature, at least for our purposes, is that it is generally disconnected from work that focuses more directly on the social and political factors that shape policy agendas and decision processes (Sabatier and Jenkins-Smith 1993).

These limitations notwithstanding, the literature suggests that there is widespread agreement on several important points. First, policy analyses seldom have an immediate or direct impact on government decisions.

Indeed, concern with the "utilization" issue-the use of (social) scientific information to guide policy making-originally grew out of frustration and disappointment resulting from attempts to apply social science to government. The expectation had been that if researchers had something relevant to say they would be listened to, and that their conclusions and recommendations would have a rather direct impact on policy. That kind of instrumental "utilisation" is what many observers have expected and looked for in vain" (Weiss and Bucuvalas 1980: 397).

Hoping to repair the situation, a number of early knowledge utilization studies focused on characteristics of policy research and the way it was conducted that made it less than useful. They found that substantial differences in professional cultures often impeded communication between researcher/analysts and government functionaries and politicians (Dunn 1980; Webber 1983). Research reports and policy analyses were not written with the right client in mind, were not timely, did not take into account political and administrative feasibility, and so forth. It followed, then, that the task was to change the way in which policy research is carried out and presented in order to make it more relevant and usable-these quite legitimate concerns continue to preoccupy many of those currently working on knowledge utilization issues.

These early utilization studies also led to a harder look at the very concept of "use," which has proven to be an "exceedingly ambiguous concept" (Weiss and Bucuvalas, 1980: 305). What do we hope for when research is done for policy makers? What do we mean when we say that certain findings are or are not used?

According to the widely shared "enlightenment" model of knowledge utilization, the information produced by analysts contributes to the policy process indirectly, and over time, by shaping more general interpretations and understandings of issues and gradually altering the working assumptions and concepts of policy makers. Research provides the background of data and empirical generalizations from which policy ideas and choices are derived, but only rarely does it supply an "answer" that policy actors use to solve a specific policy problem. Research and analysis does influence actors' conceptualization of the issues with which they deal; it affects the facets of the issue that they consider inevitable or unchangeable or amenable to policy action; it reduces the range of options which they consider; it challenges some taken-for-granted assumptions about appropriate goals and appropriate activities. Often it helps them make sense of what they have been doing after the fact, so that they come to understand which courses of action they have followed and which courses of action have gone by default. Sometimes it makes them aware of the over-optimistic grandiosity of their objectives in light of their meager program resources. At times it helps them reconsider ... entire strategies of action for achieving wanted ends... In sum, policy studies-and social science research more generally-have made highly significant contributions by altering the terms of policy discussions [our emphasis] (Weiss 1982:620).

In other words, technical analysis generally serves more of an enlightenment than an instrumental or engineering function (Caplan et al., 1975; Weiss 1977a, 1977b, Feldman 1989).

But the early empirical investigations of knowledge utilization also found that government agencies often fail to use research and analysis even when it is "policy relevant." Decision makers may ignore the information they have, ask for more information, and then ignore this information when it is available (Feldman and March 1981; Feldman 1989). Often policy analyses are used by policy makers to further a variety of nonsubstantive interests-for example, to delay undesirable decisions, to mark and occupy turf, to enhance organizational credibility (Rein and White 1977; Jenkins-Smith and Weimer 1985). And when experts disagree, decision makers seem to view the disagreement as justification for following whatever advice is most convenient. All of this suggests that the use of technical information and analysis in policy making is often uneven, and even arbitrary; that it is largely driven by extraneous organizational and political interests. It also suggests that constraints to more analytically driven decision making also lie on the side of the decision makers, and not just with the technical experts and policy analysts.

Yet Charles Lindblom, one of the most astute students of the policy process, argues that technical information and analysis is always only an input to political interaction and judgment, and never a substitute for it. As he explains, analysis is inevitably limited-and must allow room for politics-to the degree that:
All parties agree that research and analysis has a crucial role to play in the formulation of public policy. But the question of just what type of information is needed by decision makers is only now being addressed in ways that recognize that the makers of policy are also political actors and that politics itself is a creative, valuable, and necessary feature of policy making (i.e., Lindblom 1993, Dery 1990). A more explicitly political model of knowledge utilization has yet to be formalized, but we know something of the key premises upon which it will be built [5].

- Government organizations (indeed, all organizations) are also legitimate producers of usable knowledge, and from the organizational point of view, policy research is just another contender clamoring for the organization’s attention (Dery 1984:118). Other actors in other arenas-other government agencies, interest groups, activists, the media-may also be putting forward their interpretations of social conditions, their definitions of problems, and their claims for knowledge. And from the point of view of the organization, none of these contending claims may be self-evidently superior to any other.
- Though the products of scientific expertise-facts and findings, research and analysis—should always be subject to scientific standards of verifiability, these standards in and of themselves cannot guarantee policy relevance. For scientific information to be usable, it must also answer to the standards of contestability and justification employed by other organizational and political interests involved in policy making. And these are different standards and rules, different “rationalities.”
- One cannot hope to transfer knowledge across rationalities simply by bringing something that one considers knowledge to the attention of the other. If usable knowledge is the objective, an active process of claim making and persuasion needs to follow the production of scientifically defensible argumentation. And if the whole idea is to enrich policy discourse, to induce competing background assumptions and problem frames, the more arenas for persuasive argumentation the better.

To sum up: Although the literature on knowledge utilization is largely confined to policy making in the United States and Europe, and though it is disconnected, for the most part, from the larger body of work on the politics of policy formation, it does suggest several important things that bear on how we approach policy processes in Africa. (As we noted earlier, the systematic study of knowledge utilization in policy formation in developing countries, particularly in Africa, has hardly begun.)

First, technical expertise, and policy analysis in particular, seldom leads in any straightforward way to the adoption of specific policy prescriptions. Though this should come as no great surprise to either policy makers or practicing policy analysts, it should bring into question any overly optimistic assumption that the simple transfer of more or better technical information will lead, in and of itself, to better policies (however we define “better”). It is far more likely that the transfer of technical information will serve, cumulatively, over time, a rather diffuse enlightenment function. Research and analysis tends to “creep” into policy deliberations by setting the stage and providing a context for policy choice.

Second, the adoption and implementation of policy entails more than analysis. Policy making is also, and inescapably, an organizational and political process.

Third, there is widespread agreement that if researchers and analysts really want to have a direct impact on policy—one that goes beyond the diffuse enlightenment function—they will need to abandon the posture of the neutral technician and embrace the more actively committed role of the advocate (Meltsner 1976; Jenkins-Smith 1982; Nelson 1987; Lindblom 1990) [6]. At the very least, policy projects should recognize that much of what they are about is persuasion and argumentation, and not simply the kind of self-confined, academic research effort that has inspired the (self-centered) utilization question.

The Policy Process-Stage Models

If the knowledge utilization literature is not well linked to the literature of political science, political scientists on their part have not shown much interest in the role of technical information in policy formation, preferring to focus on such things as the individual interests and values of policy actors; the institutional rules and procedures that structure the policy process; the broader socioeconomic environments in which political institutions operate; and the tendency for people concerned with a specific policy issue (both inside and outside of government) to form relatively autonomous networks or “subsystems” (Sabatier and Jenkins-Smith 1993). When political scientists have looked at the role of information in the policy process, they have typically seen it simply as a resource to be used in advancing or justifying individual or factional interests (Margolis 1974; Wildavsky and Tenenbaum 1981). This tendency, a disciplinary bias perhaps, means that much of the literature passes over, or assumes away, many issues of central importance to us. Yet the political science literature does offer models of the policy process that we can put to our own uses.

The remainder of this paper focuses more directly on several of these broader models. Our approach is to briefly describe those which appear to best capture the dynamics of government decision making in developing countries, and then use them to identify those junctures or openings in the process where the use (partisan or otherwise) of technical information and analysis can potentially make a significant difference.

At the outset, however, we want to raise a more fundamental question. What are the grounds for looking at processes of policy formation in Africa through models used to explain the workings of policy systems in the Western, industrialized countries? Is this a reasonable exercise at all? Yes, on two counts. First, the study of public policy in the West offers a useful set of categories for thinking and talking about policy processes elsewhere. And second, as Donald Horowitz argues, the policy process in developing countries displays many of the same regularities that it does in the United States, regularities that transcend the structures of different state institutions (Horowitz 1989:197)—if only because decision makers everywhere are forced to make policy choices under conditions of extreme ambiguity and uncertainty.

Policy in Stages

The traditional textbook approach to the study of public policy separates policy making into its component steps and analyzes each in turn. Though the basic concepts and metaphors of this stages model are now widely diffused throughout the policy literature, they derive originally from the early work of Harold Lasswell (1951). In both the original and the various modified versions of the stages model, the policy process is broken down into analytic units—activities—that are treated as temporally and functionally distinct [7]. These include:

- The identification of policy problems, through demands for government action;
- Agenda setting, or focusing the attention of public officials on specific public problems;
- The formulation of policy proposals, their initiation and development, by policy-planning organizations, interest groups, the executive or legislative branches of government;
- The adoption and legitimation of policies through the political actions of government, interest groups, political parties;
- The implementation of policies through bureaucracies, public expenditures, and the activities of executive agencies; and,
- The evaluation of a policy’s programmatic implementation and impact.
If we think in terms of policy cycles, then the last stage, "evaluation," overlaps with the first, "problem identification." In any case, these stages in the policy process are generally conceptualized within a broader environment governed by constitutional rules, political institutions, political culture, public opinion, and other constraints and resources. These broader environments may differ significantly. Yet the policy process follows a fairly regular pattern: as a social issue or problem is taken up by the policy system it follows a trajectory that can be divided into discrete stages each involving distinct periods of time, different institutions, and a shifting set of policy actors.

The stages model has a number of conceptual strengths. First, it emphasizes a process of policy making that cuts across and bridges various institutions of government. It thereby offers a valuable alternative to the older institutional approach to policy studies that focused on specific analyses of particular institutions (the executive, the legislature, the courts, etc.). The stages model, by shifting attention to the process stream, transcends the boundaries of specific institutions and points to the ways in which individuals and groups interact across them. In its more complete version, the stages model also takes policy outcomes (intended and unintended) into account, examining how the real-world consequences of specific policy decisions shape subsequent rounds of the policy process. Finally, the stages model, by reducing the intricacies of policy making to manageable analytic units, has led to some very useful stage-focused research on agenda setting and policy implementation (e.g. Pressman and Wildavsky 1973, Kingdon 1984, Craig 1990).

The basic criticism of the stages framework is that too often it is represented as a model of actual decision processes (Lasswell actually saw it as a model of decision making). It does parallel, in a formal sense, the cognitive steps of the rational approach to problem solving: problem definition, the analysis of alternative solutions, the adoption of a solution, its testing and evaluation. But in the real world, events seldom unfold in this neat, ordered fashion, and policy decision making only rarely follows this pattern.

Critiques of overly rational and comprehensive models of decision making in the policy process are longstanding and widespread. Rational models simply do not describe policy making realities very well-at least in the United States. Policy actors seldom evaluate very many alternatives for action or compare them systematically. Often it is counterproductive to clarify goals, because building a political coalition involves persuading people to accept a proposal when they might disagree on the goals to be achieved. Many times proponents of specific policy options are not solving problems at all, but are pushing a proposed solution and picking up information about the problems they claim to be solving along the way—but only to better justify their original position (Kingdon 1984).

Decision making in stages (Lasswell's original sequence) may accurately reflect the decision procedures followed by some individual actors. But when many players are involved and when they drift in and out of the process, a different sort of collective decision-making structure results. The stages model, then, is most useful as a heuristic for identifying times and places in the policy process where different tactics for shaping policy come into play.

Dividing the policy process into discrete steps is also the analytic point of departure for much of the more recent work on policy formation in non-Western settings. For example, in a recent collection of essays on policy reform and the "new" political economy in developing countries, Gerald Meier notes that the "usual approach" (Figure 1) is to view policy formation as a

linear process that goes from predictions and prescriptions given by economists [or other technical advisers] to the policy maker, to policy choice by the policy maker, to implementation, and finally to the policy outcome (1993:9-10).

Merilee Grindle and John Thomas also observe that a "roughly linear model" of the policy process underlies many analyses of reform in developing countries: "... a proposed reform gets on the agenda for government action, a decision is made on the proposal, and the new policy or institutional arrangement is implemented, either successfully or unsuccessfully" (1991:121). They map this linear model as a decision tree (Figure 2).
These authors all incorporate the terms and concepts of the stages model into their own conceptual frameworks. At the same time they attempt to expand and revise it by focusing on the contextual factors that influence the behavior of policy actors at different moments of the policy process. [8]

Grindle and Thomas's primary criticism of the stages model (or "linear" model, in their terms) is that it tends to be front-loaded (although they do not use this expression). That is, international donors tend to pay more attention to policy analysis than to policy implementation. "This linear model has encouraged international agencies to ... strengthen policy analysis in developing countries in the expectation that good analysis will translate into good decision making and thus into good policy" (124). While noting that better in-country policy analysis is desirable, they observe that the links between the identification of appropriate policy options and their subsequent adoption cannot be assumed. And because the work of turning policies into programs begins largely after a policy decision has been reached, Grindle and Thomas worry that the preoccupation of donors with policy analysis comes at the expense of subsequent support for policy implementation. Lacking this support, many policy reforms are not implemented at all, or if they are implemented, lead to quite unintended and often unsatisfactory outcomes.

These concerns may be justified, but attributing failures in policy implementation to donors' over-reliance, tacit or otherwise, on a linear model of policy is surely something of a simplification (and certainly grants too much power to models). The important thing, once again, is that we should not assume that policy making is a highly coherent and rational process, with a beginning, a middle, and an end-that each part leads logically and inexorably to each succeeding part. Policy is not produced as if it moved along a conveyer belt. It can be very useful to think of agenda setting, decision making, and implementation as distinct phases in the policy cycle, often (but not always) involving distinct participants and processes. But they do not necessarily follow each other through time in any regular or consistent pattern.

Grindle and Thomas offer a more interactive version of the stages model. Their central insight is that "a policy reform initiative may be altered or reversed at any stage ... by the pressures and reactions of those who oppose it" (1991:126). In this revised model (see Figure 3), however, conflict over policy tends to center at that point in the process where a reform initiative has been agreed to in principle by decision makers somewhere in government and is moving on for further ratification and eventual implementation. Most of the heavy policy action comes after these early decision stages. But it is often difficult to know just when an authoritative decision-that is, a decision that will actually be implemented and enforced-has been made. Grindle and Thomas warn that what seems to be an authoritative policy decision may not in the end be so authoritative after all.

Now, all of this may simply be a roundabout way of saying that the intent to implement a policy is not the same thing as a real policy (Anderson 1977), and that policy reformers need to know the difference between the two. Given the opacity and uncertainty of decision-making processes within institutions, our advice to would-be reformers is to keep on pushing for implementation even after government support for a policy initiative appears to have been won.

Failure to implement or enforce an authoritative government decision is, of course, a problem of governance, which itself can become a focus for subsequent policy reform initiatives. We might call this an instance of "policy without programs." [9]
In any event, as a policy initiative moves through government many decision makers at various levels become involved; and they will collectively determine whether a policy is to be implemented (as a program) in whole, or in part, or not at all. For the sake of clarity then, we can say that a policy initiative is no longer on the government agenda if it has been rejected by those responsible for its implementation, and no one in or close to government wants to raise the issue again; but it is still an agenda item as long as it is lurching toward implementation, picking up or losing bureaucratic (or popular) support as it goes.

Grindle and Thomas also argue persuasively that the characteristics of the proposed initiative have a considerable bearing upon where and how supporters and opponents will contest it. The technical and administrative complexity of the proposal, the distribution and timing (short-term versus long-term) of its costs and benefits, the extent to which it encourages or limits broad participation, among other variables, all determine whether the policy debate spills into more public arenas, or whether it remains restricted to bureaucratic and political circles within government.

In other words, the eventual fate of a policy proposal is also a function of how it is formulated in the first place—how it defines the problems to be attacked and what it offers in the way of policy solutions. The lesson here is that those involved in problem definition and the search for policy solutions need to pay more attention to the midlevel technocrats and bureaucrats responsible for translating polices into programs. Efforts should be made to involve them in the policy process earlier rather than
In addition, the kinds of advocacy tactics employed by policy entrepreneurs in setting agendas and generating support for their proposals may often need to be carried on into the stages of policy adoption and implementation, for they too can easily become arenas for policy conflict and competition. In other words, the tactics we typically associate with agenda setting may have other important uses further along in the policy process.

This brings us back to Grindle and Thomas's concern that the preoccupation of international donors with policy analysis comes at the expense of their support for policy implementation. We are now in a position to argue that this concern is half right and half wrong. In the United States, of course, policy analysts do not always work directly for people who will be making decisions. But even when they do, most analysis is not used for answering immediate policy questions. Instead it goes into a stock of knowledge that is stored against the contingency of future questions.

In Africa, analytic work feeds into the policy process along a number of different pathways or vectors. Figure 4 attempts to summarize these flows of information and influence. The thicker lines (in Figure 4) describe the primary pathways. Note that analytic work is more likely to have an influence on defining the policies of donor groups and less likely to have a direct impact on national policy and policy makers. Of course, other factors may intervene, but typically technical information has a relatively greater impact on donor decision making than on the decision making of national governments. Donors may, of course, seek to influence the policy implementation process directly—for example, by tying development aid to various side agreements (conditionalities) that specify how implementation is to proceed. Or they may try to influence the thinking of policy makers through policy dialogue—reasoned argumentation and persuasion.

The thinner arrow leading from analytic work to policy makers represents the weaker link of "knowledge creep." Analysis here is less likely to lead directly to policy change. Yet over time the accumulation of evidence and arguments in support of certain policy initiatives has an influence on policy decision making. The arrow connecting analytic work and advocacy groups indicates how research and analysis could inform the policy process through groups or actors who stand outside of the formal, government apparatus of policy formation.

Finally, the clockwise arrows linking the work of analysis and implementation (at the top and bottom of Figure 4) represent the possibility (the ideal?) of a more direct relationship between research and action—via, for example, an approach to implementation that treats projects more as policy experiments than as the realization of predetermined models or blueprints (Rondinelli 1993).

The issue of how we inject, or transmit, the results of research and analysis into the policy process is typically defined as one of dissemination, or the brokering of...
research. Much of the recent knowledge utilization literature goes further and suggests that if researchers and analysts really want to influence policy, they cannot simply hand the dissemination of their research off to someone else, but must themselves begin to act more like advocates.

The stage-based models we have just reviewed also urge policy analysts to be more sensitive to the complexities of decision making within government institutions and to the political realities of translating policy into programs. They do not, however, tell us how to turn policy proposals into policy. The agenda-setting literature brings us much closer.

**The Policy Process-Agendas and Multiple Streams**

The "agenda" is the list of subjects or problems to which government officials, and people outside of government closely associated with those officials, are paying serious attention at some given time. Out of all the issues to which officials could be paying attention they in fact attend to some rather than others. The agenda-setting process narrows the set of all possible issues to the set that actually becomes the focus of attention. Peoples' rather limited capacity to seriously attend to very many things at once is also a characteristic of political systems, where agenda setting is the bottleneck.

The key question here is, why do some issues or problems become prominent in the policy agenda while others do not? Answers to this question are generally framed in terms of problem recognition and definition, the formulation of solutions, and politics. Following John Kingdon (1984), these can be conceived as three process streams-processes through which participants affect agendas. People recognize problems, generate proposals for policy change, and engage in such political activities as pressure group lobbying and election campaigns. The model makes analytic distinctions between people and processes or activities. Therefore, each participant can influence policy by being involved in problem recognition, proposal formulation, and politics, though in practice participants usually specialize to some degree in one or another of the three processes. Academics, for example, tend to be more involved in formulating proposals than are politicians, who seldom draft detailed policy documents.

**Problems.** Social conditions that are not defined as problems, and for which alternatives are never proposed, never become policy issues. They never make it on to the agenda of decision makers. Government does nothing. For a social condition to be a problem, people must first recognize it as such and become convinced that something should be done to change it. Arguments must be made and accepted that a bad condition is attributable to causes within human control (and not simply a matter of fate or a fact of nature) and amenable to government solution-only then can it become a problem for public policy.

So before a problem is likely to attract the attention of government officials there must be an understanding or image that links it to a possible government solution. HIV/AIDS, for example, is a fact of human physiology that evidently has been with us for some time prior to its recognition as a distinct disease. But only as we have come to understand the etiology of HIV, the virus's mode of transmission, and its social and economic consequences has it become a problem for public policy. And we now understand that government can take action to limit the spread of the pandemic (by protecting blood supplies, promoting safer sexual behaviors, etc.).

Many problems can also be seen either as private misfortunes for those who experience them or as public policy failures that government should address. But private problems need to be linked to public causes to attract government attention. When a young woman drops out of secondary school because of an unplanned pregnancy, for example, that may be a private misfortune. But only when women's organizations and educators complain that adolescent pregnancy threatens the growth of a skilled work force, and thus undermines economic development, does adolescent pregnancy become a problem for government that calls for a government response. Only when a private misfortune is translated into a problem of educational attainment and economic growth, does it become something that must concern policy makers. Argumentation and the construction of policy images plays an important role in this process.

Since a given problem typically has many different implications it can potentially be linked to different images, and policy actors attempt to manipulate them to suit their interests. Indeed this manipulation is a central feature of politics: "Problem definition is the active manipulation of images of conditions by competing political actors. Conditions come to be defined as problems through the strategic portrayal of causal stories" (Stone 1989). How it is that a whole community of experts comes to accept one causal story over another is a complex process. Suffice it to say that no single actor is in a position to determine which policy image or understanding will come to dominate; rather, dominating definitions and understandings are determined through a process of dialogue and debate carried out within and across policy coalitions and networks.

Sometimes problems come to the attention of government decision makers because some systematic indicator simply shows that there is a problem out there. Disease rates, immunization rates, child mortality rates, all are common examples of systematic indicators. Indicators are used by decision makers and those close to them to assess the magnitude of a problem and determine whether it is changing (for better or worse). But indicators, and the studies that generate them, do not always lead straightforwardly to the definition of a problem for public policy. Indicators are not simply transparent recognition of the facts. There may be highly charged debates about the methodology underlying the collection of data. Even when methodological issues are settled, data still require active interpretation: they do not speak for themselves.

Often some focusing event like a disaster or a crisis is required to call attention to the problem. Or perhaps a powerful symbol catches on, or an influential decision maker has a personal experience that brings the problem to his attention. Biomedical research, for example, can have this advantage. Because important people (like ordinary people) experience health disorders, either directly or through family and friends, this personal experience may serve to focus their attention on a specific disease and its amelioration. Symbols also often act as reinforcements (like personal experience) for something already taking place, though they usually are not themselves prime movers in setting agendas. But symbols can catch on and have important focusing effects.

**Solutions.** It has been argued that in the industrialized countries elected officials and their appointees are more important in setting agendas than are career civil servants or activists outside of government. Career civil servants, technocrats, academics, and policy advocates with nongovernmental organizations all play more of a role in framing and proposing policy alternatives and solutions. In other words, the agenda proper tends to be set by political forces and actors located outside of the researcher/analyst community. Then politicians turn to that community for proposals that are relevant to their concerns and that might constitute solutions to their problems.

This same general division of labor appears to hold for Africa, except that policy communities tend to be more closely associated with government, and are more clearly anchored in the public sector. In many (probably most) African nations, public officials play a central and highly visible role in setting agendas. Indeed, Grindle and Thomas (1991) argue that in developing countries generally public officials are much more important in more aspects of policy formulation than are their counterparts in Western industrialized nations. Governments tend to be more highly centralized, they tend to be more insulated, and they play a more central and intrusive role in managing the economy. One consequence is that relevant policy information and expertise tends to be contained within governmental circles, meaning that policy communities (or subsystems) are largely made up of government technocrats together with researchers based in other public sector institutions (universities, training institutions, schools of public health, etc.). So in Africa, policy solutions and alternatives are largely proposed by actors embedded within or intimately tied to government, albeit with technical input from international donors.

However, the options open to these "policy elites" are not fully determined by class interests, organized groups, international actors or conditions, or historical and cultural constraints (Grindle and Thomas 1991). These contextual factors may define the outer boundaries of policy choice but they still leave elites room to maneuver. Increasingly, policy elites in developing countries are guided by a substantive problem-solving orientation and many are also sensitive to the strategic dimensions of policy entrepreneurship. In Grindle and Thomas's case studies, policy elites appeared to have had considerable capacity to think strategically about managing opposition, taking advantage of opportune moments, and putting together supportive coalitions for reform. They often had detailed knowledge of power relationships...
and bureaucratic interactions that could help or hinder efforts at reform... [T]hey not only had preferred solutions to policy and institutional problems, they also had the capacity for generating strategies to encourage the adoption and pursuit of preferred solutions. In many cases, this involved careful and sensitive crafting of the content, timing, and sequence of reform, as well as efforts to mobilize support and manage opposition (1991:9).

In Africa, nongovernmental organizations or private sector interest groups with a stake in a particular policy area are generally more limited in their ability to engage and influence government decision makers than are (Grindle and Thomas's) policy elites, if only because they tend to be less organized, have fewer resources, and may be less familiar with or more reluctant to engage in policy advocacy.

Two fairly obvious implications follow. First, if policy practitioners and reformers want to promote a specific change in sectoral policy, they will need to focus their attention on policy elites within government, as well as on midlevel managers responsible for translating policy directives into programs. But second, if reformers also want to promote more fundamental changes in the policy process—with the aim of broadening participation in policy making, for example—then they will also need to support the more active engagement of nongovernmental organizations and interest groups.

Of course, agenda setting and the framing of policy alternatives in Africa is further complicated by the presence of international donors, who may not share the same priorities or interests and who often do not speak with one voice. (In Uganda, to cite just one example, over thirty multilateral and bilateral donors and international NGOs support health and population activities.) Only some donors, however, have the political (i.e., financial) resources to directly influence governmental agendas. The World Bank, of course, is one: Bank lending policies and practices clearly enter into politicians' calculations of political benefits and costs and thus influence the prominence of specific issues and problems on the government agenda. At the same time, of course, Bank technical staff are deeply involved in the policy stream, identifying problems, specifying solutions, and drafting proposals for policy reform. But with the exception of international donors, such as The World Bank, whose resources give it fairly direct access to government agendas, donors tend to play more of a role in developing and promoting policy alternatives or solutions.

Politics. The third family of explanations for how a subject or a problem rises or falls on a government agenda has to do with politics. Independent of problem recognition or the formulation of policy proposals, political events move along at their own pace, and according to their own dynamics and rules. Developments in the political sphere can be powerful agenda setters—for instance, a change in government, a change of government ministers, a significant swing in national mood (particularly if expressed in public protests), can all move a subject onto or off of a government agenda.

Consensus in the political stream is generally built more by bargaining than by persuasion. Politicians typically employ a calculus of "political feasibility" to determine whether a problem should be granted a high place on the policy agenda. Often their agenda-setting decisions result more from an analysis of the political costs and benefits of attending to a problem or seriously considering a proposed policy, than from the analytic or technical importance of an issue or a proposal alone. In addition, the institutional and political venues in which policy problems and solutions come to be defined and debated are crucial to agenda setting, and figure heavily in the strategies of policy actors.

Multiple Streams and Policy Entrepreneurs

In this multiple streams model, three process streams flow through the system—streams of problems, policies, and politics. The problem stream encompasses the ways in which social conditions come to be defined as problems and are brought to the attention of people in and around government. Generally this is accomplished through systematic indicators, by focusing events such as disasters and crises, by the strategic use of images and symbols, and by feedback from the operation of current programs. The policy stream is where policy alternatives and proposals, options for choice, are generated—generally within communities of specialists. The political stream is composed of such events as changes of regime, administrative or legislative turnover, as well as the concerted activities of interest groups.

![Figure 5](image)

Multiple Streams and Policy Change

The separate streams of problems, policies, and politics each have lives of their own.

- Problems are recognized and defined according to processes that are different from the ways in which policies are formulated and political events unfold.
● Policy alternatives are developed according to their own criteria of selection, whether or not they are solutions to recognized problems or sensitive to political considerations.

● Political events flow along on their own often unpredictable schedule, whether or not they are related to problems or policy proposals.

There come times, however, when these three streams are joined. An event in the political stream, such as a change in administration, calls for different policy directions. At that point, proposals that fit the political event come to the fore and are coupled to the prevailing political climate. Or a pressing problem demands attention and a policy proposal is coupled to that problem as its solution (Kingdon 1984).

A complete linkage combines all three streams—problems, policies, and politics—into a single package (see Figure 5). Political actors concerned with a problem search for solutions in the policy stream to couple to their problem, then try to take advantage of political receptivity to push the package of problem and solution. Advocates of a new policy initiative take advantage of politically propitious moments but also claim that their proposal is a solution to a previous problem.

At points along the way there may be partial couplings:

● Solutions to problems, but without a receptive political climate.

● Politics to proposals, but without a sense that an important problem is being solved.

● Politics and problems, but without a clear policy alternative to advocate.

But the complete joining of all three streams makes it much more likely that an item will become fixed on a government's decision agenda, and increases the odds that an authoritative choice will be made and implemented.

If one of the three elements is missing—a solution is not ready and available, a solution is ready but it is not attached to a problem of any prominence, or support is not forthcoming from the political stream—then the issue's presence on the agenda is fleeting.

The window may open for a short time, but if the coupling is not made quickly, the window closes. A subject can rise on the agenda and be there for a short time. A president can place a high priority on it, for instance, or a focusing event [such as an epidemic] can open a window. But the item is likely to fade from view quickly without the joining of the three streams (Kingdon 1984).

How are these couplings made? Kingdon argues that policy "entrepreneurs"—brokers or middlemen—play a key role in connecting the three streams. Most case studies of policy formation pinpoint someone or a small set of people who were central in moving a subject up on the agenda. They are advocates who are willing to invest their resources in return for some anticipated future benefits. They are found in many locations in and around government, but they have no formal job description.

Policy entrepreneurs push for one kind of problem definition over another, highlighting indicators that dramatize their concerns. They seize on the opportunities offered by focusing events. They try to create personal viewings of problems by policy makers. They look for compelling symbols that capture their problem in a nutshell. They also prompt the kind of feedback on current government performance that affects agendas—press conferences, letters, government report cards, visits to important officials, etc. [10]

As to policy solutions or proposals, entrepreneurs are also key to the long softening-up process that generally precedes and contributes to the creation of widespread support for an idea ("whose time has come"). They write papers, hold hearings, get press coverage, and meet endlessly with anyone even vaguely positioned to further their cause.

The role of the policy entrepreneur has several implications for our understanding of the policy process. First, social scientists often look to changes in social or political structures to explain policy change while journalists (and policy actors, to some extent) are inclined to emphasize the right person at the right place at the right time. We can see that windows open because of factors and events beyond the control of the policy entrepreneur, but the successful entrepreneur is ready to seize the opportunity when it comes. So policy windows are a function of broader, environing conditions; couplings are more a matter individual entrepreneurial activity.

Successful entrepreneurship, according to Kingdon, also does not require extraordinary insight or sensitivity. But it does require persistence. Policy entrepreneurs push their proposals all the time, whether a window is open or not. They try to make linkages among problems, solutions, and politics long before a window opens so they are ready with a prepackaged policy initiative when it does—an initiative that has already gained some measure of consensus, support, and momentum.

**Multiple Streams and African Policy Realities**

This is a very different model of the policy process than the stages model. Here, the events and actions that determine policy do not proceed in discrete steps or phases. Instead, independent streams of activity flow through the system all at once. Each is driven by its own dynamic. No single stream is decisive in the policy process, rather they become coupled when a window opens. In this model participants do not first identify problems and then seek solutions for them. Often enough they are advocating solutions long before their proposal becomes attached to a significant problem. Agendas are not set and then policy alternatives systematically examined—generally a policy alternative is ready in advance, waiting for an opportunity to be presented.

We find this kind of process model appealing for several reasons. It recognizes that the policy process is fluid, even messy, but still largely understandable. And it helps to explain how individual entrepreneurs or entrepreneurial organizations influence policy by making connections across streams. It gives credit to the role of ideas—knowledge and information—in policy change, without assuming that governments always take a comprehensively rational approach to decision making.

This model is based on empirical studies of what happens in the making of federal policy here in the United States. Because it captures much of the apparently confusing nature of politics and collective decision making, we believe that it is a model that will travel fairly well; for policy making everywhere entails collective decisions under conditions of ambiguity and uncertainty.

To sum up: The multiple-streams model brings order to the confusion of policy making through the idea of temporal sorting. Many things seem to be happening at once. Technologies are changing and poorly understood. Alliances, preferences, and perceptions are changing also. Solutions, problems, ideas, people, and choices are mixed together in ways that make interpretation unclear and connections uncertain. Order, under these conditions, comes from the simultaneous availability of different problems, solutions, participants, and choice opportunities. Decision making involves a complex mosaic of attention. And the allocation of attention, through the mobilization of interests and the setting of agendas, holds the system together.

**The Policy Process-Advocacy Coalitions and Policy Learning**

The mobilization of attention is what policy advocacy is primarily about. And the systematic mobilization of attention is best achieved through broad-based advocacy coalitions.

 Becoming more involved in supporting advocacy coalitions is clearly a logical move if the aim is to translate policy knowledge more directly into policy action. By "coalitions" we mean alliances involving participants located (ideally) in a variety of positions in and around government, the academic community, the media, the private voluntary sector, interest groups, and business. But two institutions, the media and the interest or advocacy group, are especially important. Here we look only
at how the media and lobbyists use research and analysis and transform it, in the process, into working knowledge.

Media. Media are important to agenda setting in two general ways: first by constructing and conveying simplified, and often symbolic understandings of policy issues; and second as gatekeepers.

When policy specialists try to explain their policy preferences to broader publics or to elites with only a passing interest in the issues, they must find intelligible and simplified ways of doing so. This means, however, that policy problems inevitably come to be understood in simplified and symbolic terms, even by the politically sophisticated. We have referred to the ways in which a policy is understood and discussed in this broader political discourse as its policy image. Policy images are crucial to generating wider support for an issue among the previously uninterested and apathetic.

Media can play the key role in conveying simplified policy understandings and images to nonexpert publics. Policy images, particularly as worked up in the media, are always a mixture of empirical information and emotive appeals. These appeals can be subtle or strong, but they are always persistent. The emotive or valuable components of policy images (their tone) are critical to mobilizing support for (or against) a policy. As the tone of stories in the mass media changes, say from negative to positive, so too do opportunities for policy advocates to mobilize support for change.

Yet media, when left to their own devices, tend to have a difficult time reporting on complicated policy issues. They often prefer to take one side or another, framing the issues in terms of a struggle or competition. Or they tend to focus only on one aspect of a multidimensional issue. And again, which aspect of a policy issue becomes the focus of media attention has significant implications for the mobilization of policy support. In sum, the importance of media in defining simplified understandings of policy problems, in creating policy images, and in setting the tone of policy debate makes them important allies in mobilizing support for new policy initiatives.

But media are also important as gatekeepers. Public attention is a scarce resource, and the gatekeeping functions of media are a key determinant of which issues will receive public attention and which will not. Media are a potentially privileged means of communication in three ways: they help to coordinate and link policy relevant activity across a variety of institutional venues; they assist disjointed actors in keeping track of each other; and they monitor national or international trends in public opinion. However, the bottleneck of attention that characterizes the ways in which individuals process information is also a characteristic of the media-rarely do media focus for very long on a particular policy issue. Helping them to stay focused on the essential aspects of a policy problem is one of the essential tasks of an advocacy program.

Research, Analysis, and Advocacy-A Conceptual Framework

A review of strategies for building advocacy coalitions through social marketing or social mobilization is beyond the scope of this paper. But we have pinpointed some of the ways in which research and analysis figure in policy advocacy.

We began with the question of how information enters into the policy process. We found that the short-term impact of policy relevant research on decision making is typically difficult to discern, and that limiting the assessment of impact to relatively restricted time frames will generally underestimate its influence. Knowledge may gradually creep into policy making, or it may be stockpiled for future use, but in either event it tends to influence policy only over the longer run. So it seems reasonable to expect that this general pattern will hold for Africa as well.

There is no question, however, that increasing the pace at which technical knowledge is used by policy makers in Africa means improving the speed with which it gets into their hands (or heads). But simply getting it there (dissemination) may not be enough. For even in the information-rich policy world of the United States the relationship between knowledge and policy (and between the research/analytic community and policy decision makers) still remains problematic. Does this mean that analysts should become activists?

Maybe. Short of this, one option is to work through other institutions that are already active in the political stream. Media can play this kind of linking role. So can the interest group or the lobby. Each has a special handicap, however. Media are tempted to sensationalism. Advocacy groups seek to advance a special cause. Yet they do bring analytic findings into the policy arena, and in the process often manage to translate technical information into politically usable knowledge. And together they can lead to the kind of open discussions and debates-open in that they are carried on in venues that encourage broader participation-that can accelerate processes of policy learning.

Bringing policy analysis and policy advocacy together within a single conceptual framework is only a first step in developing a comprehensive strategy for promoting a more informed or enlightened policy process. We can make a first cut at such a framework by identifying the strategic elements and activities that would make up a program in "policy communications" (for lack of a better term). The framework (outlined below) is organized around agenda setting and advocacy coalitions. Agenda setting involves processes and activities through which policy researchers and analysts can exert the greatest influence on decision making. (Some would argue more generally that agenda setting is the most important phase of the policy process.) The advocacy coalition, as we define it, is the network of individuals and organizations concerned with a specific set of policy issues. We can think of it as the infrastructure underlying the flow of policy communications.

Agenda Setting

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<th>Focal Areas</th>
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1. **Focal Areas**: These are the specific policy issues or areas that are the focus of the policy process.

2. **Activities, Tactics, Questions**: These are the strategies and methods used to influence policy makers and the public.
Working from the technical, scientific base, subject problem definitions to legitimate transformations rooted in (country specific) organizational and political interpretation and judgment. Recognize that every issue and problem has an interpretive, emotive element. Understand that the emotional “tone” of a policy problem largely determines how people will respond to it. Remember that decision makers are complex people too, and that attracting them to an issue may involve much more rhetorical or emotional work than is captured by the cognitive model of rational problem solving.

Two important questions: Is a policy problem amenable to clear-cut solutions, or is it highly intractable? Do our definitions of problems (child mortality, nonliteracy, malnutrition, etc.) make them immediately relevant to a variety of publics or stakeholders?

Policy alternatives or solutions need to be clearly linked to a compelling problem if they are to rise on the agenda. A tactical question here is whether the problem-set (which a proposed solution attacks) should be narrowed or widened. Often, the more links that can be plausibly built between a solution and a set of problems the better. At the same time, however, explanations of proposed solutions (particularly to nonexpert publics) will need to be clear, straightforward, and not terribly complex. They must be technically and scientifically accurate, of course, but remember that decision makers (politicians) must be able to translate policy solutions into explanations, accounts, and arguments that make sense to their own constituents.

The image or simplified understanding of a problem is crucial in generating support for it. It is also crucial to plausibly making the link between a problem and a proposed solution. Typically, however, policy problems and proposals have a number of faces. The aim is to select the image or face that is most relevant to the interests of the particular audience and venue. Managers in the finance ministry will be more concerned with the cost implications of a policy proposal, who will pay for it, and who will control the flow of funds. Leaders of national medical associations will be more concerned with the technical soundness of the proposal and its acceptance by recognized medical authorities, but they may also be mindful of the proposal’s financial impact on their members’ practices. Managers in the ministry of health may be more concerned with the organizational and administrative implications of a proposal—will it change the way front-line health workers do their jobs, will they be asked to do more than they are already doing? Finally, top-level decision makers in the MOH will also be concerned with the broader political appeal of a proposal, how it is viewed by outside agencies and publics.

The more venues or arenas for policy discussion, the greater the chance for policy learning, as well, of course, as for wider participation in policy making. At the same time, expanding a policy issue beyond a limited set of venues creates greater problems for issue management. Widening the policy debate, bringing other participants to it, is a good strategy for undermining policy monopolies. It is also a good strategy for building new advocacy coalitions. [11]

Reverse the knowledge utilization question. Don't ask, "why are they not using our technical analyses and recommendations?" but instead, "how do organizations, and their members, learn?" Reframing the question in these terms brings us closer to the organization's (or client's) view of our research/analytic products. And it is their perception that really counts.

A general strategy for promoting policy learning includes three elements: (1) spread technical data and analyses around; (2) help experts understand (this is probably the greatest challenge) that how they translate technical or scientific facts into political and social facts is the key to generating wider understanding of and potential support for policy reforms; and (3), build local capabilities for informed policy debate and advocacy.

Map the various political and policy communities working on or interested in the issue. Locate the relevant policy expertise, find out who is most knowledgeable and influential. Determine who talks to whom and in what settings.
In this final section we hope to flesh out our framework by looking at one of A.I.D.’s longest running policy projects—RAPID (Resources for the Awareness of Population Impacts on Development).[12] RAPID is widely known within the population sciences and family planning communities as a pioneer in developing analytic, computer-based presentations, designed to influence the ways in which nonexpert policy elites think about population issues and problems. In the sixteen years since RAPID I was first initiated, a variety of other policy projects have developed similar computer-based modeling and presentation packages (some built on RAPID’s own software platforms) designed to influence policy decision making in other sectors (nutrition, health, and education). Here we will look at RAPID as a kind of prototype—an exemplar of this broader family of policy tools.

**RAPID as a Black Box**

RAPID staff are the first to observe that there is a great deal more to policy reform—and to RAPID—than the RAPID presentations per se. Computer-based presentations are simply tools, powerful tools to be sure, but seldom able in and of themselves to effect a significant shift in policy. Yet these presentations remain at RAPID’s core. Why? We suggest that the answer lies in RAPID’s transit from a project narrowly focused on directly influencing key decision makers, to a project that is more broadly focused on supporting a more continuous, organizationally based process of policy learning. RAPID presentations were originally expected to have a direct impact on policy decisions. Now, RAPID models have come to be seen more as pedagogical and policy learning tools. By transferring RAPID technology to developing country organizations, RAPID is not just trying to influence decision makers but helping to build policy advocacy communities.

RAPID’s policy models and presentations are built upon country-specific analyses of the effects of population growth on socioeconomic development. They are designed to show the consequences of various demographic scenarios in ways that can be readily understood by nonexperts—policy makers with no formal training in population or economic science. The translation of technical data and analysis into terms and arguments that make sense to nonexperts continues to be RAPID’s central focus. Most of this interpretive work is still carried out, or better, filtered through RAPID models. But now there is more of an emphasis on teaching people how to use them. To better understand how RAPID has evolved over the years, it is useful to think of everything that goes into these presentations—the data collection and analytic work, the software design and programming, the computer and video hardware, even the written reports and other spin-off products—as a kind of black box. A “black box” in cybernetics is a piece of machinery or a set of commands that is too difficult or complex, and thus too costly in time and energy, to take apart and examine. With black boxes what’s inside doesn’t really matter, at least for the immediate purpose at hand; it is only the inputs and outputs that count.

RAPID presentations, in the early years, were very much like black boxes. The only people who knew what went on inside them were RAPID’s technical staff. They assumed, probably quite correctly, that policy elites, the primary targets for RAPID’s national policy presentations, were not very interested in RAPID’s inner workings. The model’s ability to interactively generate diverse demographic futures did offer policy makers a glimpse of the technical concepts and calculations underlying arguments for policy action. But RAPID was never intended to be a short course in demographics or economics (at least initially). The working assumption, rather, was that presentations that combined (1) country-specific analysis, with (2) attractive computer-generated displays, and (3) the knowledgeable commentary of skilled presenters/operators would produce data-driven, yet still accessible, arguments that any reasonable policy maker could hardly ignore. The hope was that these presentations would in themselves lead to significant shifts in policy.

**Evaluating RAPID**

This may be exaggerating A.I.D.’s early expectations for RAPID somewhat. But clearly the Agency did want to know whether RAPID presentations led directly to policy change. The early answer was no. The RAPID I evaluation team found no direct evidence that RAPID presentations led—in themselves—to any specific policy reforms: “In the countries which the team visited, no specific changes in either policies or programs can be attributed directly to the RAPID presentations” (American Public Health Association 1982: 25). The evaluators did believe, however, that they showed considerable promise as an advocacy tool to be used by host-country organizations in their own policy work.

Three years later (1985), with the midterm evaluation of the follow-on RAPID project, the picture had changed. In general terms the RAPID II evaluators saw considerable improvement in the sub-Saharan policy environment. But again they could not (would not!) attribute any of this change to RAPID. They claimed that “population policy development is an inherently fuzzy field of activity...” Consequently, “it has not been possible to draw clear lines between specific
policy-development activities and policy change in particular countries.” Noting that there has been an “undoubted improvement” in the policy environment for population programs, the evaluators still did “not consider it necessary to ascribe this change to specific projects such as RAPID II.” Instead, they assumed “that the project could have contributed to this process if it was well managed, if it was present in at least some of the environments which changed, and if it prosecuted its tasks with efficiency and effectiveness (McGreevey, Bergman, Godwin, and Sanderson 1985: 24).”

The evaluators for RAPID I and RAPID II found that establishing any direct link between RAPID presentations and a specific change in policy was highly problematic, if not impossible. Both evaluations also argued that policy development is inherently a long, drawn out process. Close collaboration with host-country counterparts in preparing presentations and the provision of continued support afterwards were essential. RAPID assistance to local organizations was to be both more intensive and extend over longer periods of time. Greater emphasis was to be placed on developing local modeling and presentation capabilities.

RAPID was to focus on opening up its black boxes, showing members of local policy communities how to operate them, and then offering follow-up support for their own policy work.

Four early assessments of RAPID’s country-specific experience in Africa illustrate why this strategy made good sense.

Early Misses

Two early cases, Sudan (1980-1981) and Tanzania (1979-1980), where RAPID failed to make any headway (according to outside evaluators), underscore two important things about the policy process. First, if decision makers are to give serious consideration to policy presentations (or policy proposals), they must be clearly linked to problems that they perceive to be important and compelling. In neither of these cases was this linkage effectively established, largely because no local counterparts were involved in developing RAPID models and presentations.

In Sudan, fertility and fertility control were not felt to be salient issues, either by the USAID mission or the Sudanese policy community. Both were much more preoccupied with migration and maternal and child health. The final model developed by RAPID for the Sudan did in fact address both of these topics, at least to some extent, but the project was never able to shake the perception that it was fundamentally about population growth (as a problem) and family planning (as the solution).

In Tanzania, there was considerably more interest within the local policy community in population issues, but considerable skepticism about family planning as the policy solution. Tanzanian participants interviewed by the RAPID I evaluation team felt that the model had missed the point: Tanzanian population policy concerns centered on responsible parenting and birth spacing, but the RAPID presentations focused on reductions in family size through the limiting of fertility as the best policy solution.

These cases also illustrate a second point. Typically a long period of incubation is necessary before a policy issue ripens. During this time, advocates may seek to soften up the system by presenting their ideas in whatever venues are available—academic conferences, personal audiences with policy makers, special hearings, etc. This allows for the testing and modification of ideas. It also leads, over time, to an increasing familiarity with proposals that at first might have been seen as foreign or outridish. By virtue of simple repetition an idea becomes more plausible. The more often problems and proposals are discussed the more seriously they are taken.

This softening-up process requires concerted effort, often over considerable periods of time. As the RAPID I evaluation team put it, “No one is likely to change his mind because he has seen a RAPID presentation.” But they felt that RAPID could, over the longer term, play an important role in softening up the policy system. Here, then, was a new role for RAPID—a learning tool to be used by local analysts and advocates in their own policy work. “It strengthens their convictions and supports their positions; it offers new arguments, evidence to convince the skeptical; it provides...supporters with a new tool with which to communicate with other national constituencies...” (American Public Health Association 1982: 25).

If RAPID's role was to support more sustained analytic and advocacy efforts, then, clearly, local individuals and organizations had to take the lead. For reasons of cost and credibility, reliance on flying teams of U.S.-based RAPID technicians at every step of the way made little sense. Local analysts and advocates had to be able to use RAPID on their own—RAPID had to become their tool.

Early Hits

In the two African countries, Cameroon and Liberia, where early RAPID activities were judged a success (by RAPID II evaluators) just this kind of local ownership was evident.

In Cameroon (in the early 1980s), the political leadership and their senior technical advisors are credited with discovering the significance of unrestrained population growth as a development issue on their own, prior to RAPID's arrival. However, RAPID brought the issue and its policy implications "into better focus." RAPID presentations were primarily aimed at senior and midlevel technocrats in the bureaucracy who played an important role in framing policy alternatives and providing technical information to the political leadership. A number of high-level ministers also participated in RAPID presentations, but, according to the evaluation, the "eyes-on involvement" of these politicians was not critical to RAPID's success. "In fact the government's population advisor resents what he considers RAPID's fixating on playing to that audience. He recommends a concentration on the technocracy, who are best positioned to assimilate [RAPID] information and utilize it to advise their principals" (McGreevey, Bergman, Godwin, and Sanderson 1985: 51).

In this assessment, RAPID no longer needed to seek out "blue-ribbon" political audiences. "The show-and-tell phase of RAPID is over. The awareness phase can now be succeeded by the utilization phase" (ibid.). The recommendation, consequently, was to bring information on population/socioeconomic linkages to wider audiences (beyond government), and to train more people to "develop and pass along that information," giving them the skills and resources to do so.

In Liberia, RAPID was credited with helping to facilitate the creation of a population committee (which served as a clearinghouse for population research activities), the launching of a variety of research projects, and the installation of two computers (one in the Ministry of Planning the other at the university). The ingredients that made this possible—in an environment of considerable economic distress and political instability—were the interest of people in key positions within the Liberian bureaucracy and the research community, strong USAID mission support, and active monitoring and backstopping by RAPID staff.

In Liberia, however, top political leadership was not involved. "Whatever their understanding of population issues, the Liberian leaders are currently preoccupied with matters more critical to them, not the least of which is their own survival" (ibid: 54).

Both these country assessments assumed that RAPID presentations were primarily designed to serve a rather narrow "awareness-raising" or information dissemination function. Once this basic awareness-building objective had been achieved, the policy learning process entered the "utilization" phase; and, RAPID, or some other follow-on project, could begin spreading the black box technology around.

In the intervening years, this is just what RAPID has done. By 1992, eighteen countries or organizations were able to organize and implement their own RAPID-based policy presentations (Stover and Goliber,1992); six of these were in Africa (Botswana, CERPOD, Ghana, Nigeria, Uganda, and Zambia).
So over time RAPID has moved well beyond presentations to national policy makers. The project now offers a wider variety of presentations to a wider variety of decision makers at different levels in the policy system (technocrats, regional leaders, program managers). It also places a greater emphasis on training local counterparts in population modeling and presentation technologies. [13]

We have used the metaphor of the black box to characterize the use of the RAPID model in the early years of the project because it captures the key premise (and expectation) underlying the whole concept of using computer-based modeling technologies to influence the decisions of high-level policy makers. The premise, again, was that the model, if successfully presented, would speak for itself, that policy makers would be swayed by its sheer technical force, and that "good" policy decisions would result-more or less automatically. However, the project, at least in the early years, proved much more successful in creating a demand for the RAPID modeling technology itself than in changing population policy.

Subsequently, RAPID began to adopt a more explicitly pedagogical approach, training local teams so that they in turn could use the technology to reach much more diverse audiences-technocrats, university researchers, NGO staff, family planning managers, and so forth. By "opening the box" we do not mean that RAPID began to produce more population scientists or policy analysts. Rather, learning how to operate the RAPID model (also) meant learning something of the conceptual and rhetorical apparatus that goes into the making of a technically sound and persuasive policy argument. At the core of this apparatus are the bridging concepts-and also, in this case, the computational and presentational technologies-that together create plausible linkages between problem definitions and policy solutions. Opening the RAPID box meant: first, showing how one translates a social condition (population growth) into a problem that government should address (through new policies and expanded programs); and second, how one then works up problem-and-solution sets into effective arguments for policy action.

Recommendations and Conclusions

What broader lessons can we draw from the RAPID experience and our review of the policy formation literature more generally?

- Once again, we find little support for the linear (or engineering) model of knowledge utilization in policy making. In this model, decision making is understood as a discrete event, undertaken by a discrete set of actors, who make an authoritative decision based on a comprehensive analysis of the policy options. Policy learning, according to this model, occurs when decision makers are supplied with new, policy relevant information-which then figures directly in their decision to take some policy action. That the RAPID I and RAPID II evaluations could not identify any particular policy decisions or policy changes that could be attributed to a discrete, self-contained source of information-even as they judged RAPID, overall, to be a successful project-offers additional evidence that the linear, engineering model rarely fits actual cases of policy formation or change. [14]

- Policy making and policy learning occur within a web of interacting forces, involving multiple sources of information, complex power relations, and changing institutional arrangements. Starting from these premises, we would expect that RAPID, more often than not, would have only an indirect and incremental impact on decision making-and this is just what the early RAPID evaluations found.

- Other lessons, both from RAPID and the literature broadly, have more to do with the preconditions for policy learning. RAPID's increasing emphasis on building-in-country modeling and presentation capabilities was motivated in part by the realization that organizations often are more receptive to new information if it is produced internally rather than imported from the outside. RAPID was judged a success in Cameroon and Liberia because the project created a local organizational demand for RAPID technology. Not that RAPID had necessarily effected any specific policy changes in these two countries; rather, local institutions were now committed to policy analysis and advocacy and wanted further assistance in learning to use RAPID models in their own policy work. Consequently, RAPID was urged (by outside evaluators) to place greater emphasis on developing a more user-friendly RAPID technology, and to hold off developing more sophisticated models until the issue of local institutionalization and ownership had been more clearly addressed.

- A related precondition for policy learning is that new information, particularly if it comes into an organization from the outside, needs a legitimate inside sponsor if it is to be accepted and acted upon. Lacking this inside support, the chances of new information influencing decision making are very low indeed.

- It is not entirely clear, from the literature reviewed here, how organizations respond to the various vehicles through which policy relevant information may be communicated. Does information conveyed through face-to-face presentations have a different or more immediate impact than written reports, press coverage, and so forth? RAPID has shown that one can gain the attention of policy actors with computer-based presentations-certainly having a black box helps to obtain a hearing. But we also are left with the impression that because so much emphasis (in the early years of the project) was placed on face-to-face presentations, opportunities for using RAPID models to reach broader audiences through print and broadcast media may have been missed. Of course, recent advances in desktop publishing, graphics software, and communications technologies now make it possible to repackage the products of computer modeling in a wider variety of innovative formats, greatly expanding the potential uses and reach of computer-generated materials.

- Again and again the RAPID evaluations stress the importance of closer collaboration with local organizations, both in preparing presentations and in follow-on activities. Showing people a black box is one thing, showing them how to build and operate their own black boxes is another. The latter approach establishes broader channels of communication and can often create the kind of contact and trust that positively influence the acceptance of new information, and thus increase the likelihood of more sustained policy learning.

In our reading, the knowledge utilization and policy formation literature broadly supports the argument that policy learning is best characterized as an ongoing, incremental process. Certainly this process is punctuated by discrete instances of decision making and policy change. But policy learning is not reducible to specific policy decisions. And the successive RAPID projects-in spite of their longstanding emphasis on reaching key decision makers-have, in the end, come to recognize this basic fact.

Policy learning tends to be open ended and, perhaps, never ending. The context continually changes, policy actors come and go, information that was crucial and topical at one time may not be at another, new information needs to be generated. Perhaps RAPID's final and most important lesson-after sixteen years-is that members of the policy research and analysis communities who want their information to influence policy had better be committed to the long haul.

Notes

1. The overall purpose of the HHRAA and SARA projects is to increase the utilization of research, analysis, and information in the policy process and thus improve health and human resource policies in sub-Saharan Africa. In addition to providing substantive guidance on the direction and content of policies in Africa, HHRAA and SARA are broadly charged with helping donors and African decision makers work together to improve the process of policy formation (AFR/ARTS/HHR 1992). HHRAA and SARA are providing research and technical support to a variety of governmental and nongovernmental organizations, including public and private institutions in Africa, USAID missions and REDSOs, the Africa Bureau of USAID, and other international donors. HHRAA/SARA projects are also regional in scope-it is anticipated that over the next two years, project "clients" will have used project-generated research, analysis, and technical information to develop health and human resource policies and programs in more than fifteen African countries.

2. The writing of this paper, and the literature search on which it is based, followed an iterative process. A first draft was circulated in March of 1994, the section on RAPID was added in May, and subsequent discussions with HHRAA's educational policy group (Joe DeStefano, Karen Tietjen, and Ash Hartwell) led to
3. And as Merilee Grindle observes, a better understanding of the policy process "can provide insights into how problems become policy issues; what circumstances surround efforts to change policy; what role policy elites, technocrats, advisers, and others play in defining alternatives; how choices are determined; and what factors influence the implementation and sustainability of new policy initiatives. Without such insights, the effort to change bad policy into better policy is a directionless enterprise" (Grindle 1991).

4. "A solution reached wholly by inquiry and persuasion and without any exercise of power (of the other forms) is by implication one in which people have thought their way through to a voluntary agreement, all convinced of its merits. For short of such voluntary agreement, some exercise of power will always be required in order to proceed over objections from those who do not agree" (Lindblom 1990).

5. The following suggestions are drawn primarily from David Dery's Data and Policy Change: The Fragility of Data in the Policy Process (1990), but they reflect much broader postpositivist trends in the policy sciences.

6. There are a number of difficult issues here, all centering around where we draw the line between policy analysis and policy advocacy and knowing what we are doing when we decide to cross it. But it is also worth noting that an increasingly influential body of literature treats policy analysis (and the policy process more generally) as inherently forensic and argumentative. Social scientists too often forget that argument is central in all stages of the policy process (Majone 1989:1). See also The Argumentative Turn in Policy Analysis and Planning, edited by Fischer and Forester (1993).

7. Lasswell originally outlined seven stages or phases, with associated issues or questions for research:
   - The intelligence function—the gathering of information that suggests a problem for policy makers' attention or information for the formulation of alternative courses of action. The key research question here concerns the ways in which policy-relevant information is gathered and processed.
   - A recommendation of one or more possible policy alternatives: how are recommendations or policy alternatives for dealing with a given problem made and promoted?
   - The prescription or enactment of one among several policy alternatives: how are policy proposals adopted and by whom?
   - The invocation of the adopted alternative: who determines whether programs or institutions are behaving in ways that are consistent with adopted policies?
   - The application of policy in specific situations by executive or enforcement officers: how is a policy actually implemented (if at all)?
   - The evaluation or appraisal of the prescribed policy alternative: how is it judged to be a success or failure?
   - The reform or termination of the original policy: how are original rules or laws set by policy terminated or revised?

   The most common versions of contemporary stage models collapse Lasswell's seven phases into five, distinguishing among (1) problem identification, (2) agenda setting, (3) adoption, (4) implementation, and (5) evaluation/reformulation. Our interest is less in arguing about which is the right number of stages, and more in seeing how useful each really is as a category for analysis and action.

8. Actually, the volume of papers edited by Gerald Meier is mainly devoted to showing how politics and politicians undermine rational macroeconomic policy making, Merilee Grindle's contribution being the most notable exception.

9. There is, for example, the case of Côte d'Ivoire's official (and fairly supportive) policy on population: it has been on the books for many years but has yet to translate into the actual provision of family planning services.

10. Jim Grant of UNICEF is perhaps the most visible of policy entrepreneurs—or better, "champions"—in international public health, and a glance through nearly any of UNICEF's recent The State of the World's Children reports will offer many good examples of the rhetorical use of statistical indicators and compelling policy images and symbols. But many less visible entrepreneurs can be found at work in every policy field.

11. Narrowing the policy debate to a single or a more limited number of venues generally supports policy monopolies. The more that policy discussions can be kept to insiders, the more quickly—at least in many cases—a proposal will move on to a decision agenda and become subject to an authoritative choice. The trade-off, however, is that limited participation in up-front policy negotiation may simply postpone policy conflict to the implementation phase, turning midlevel administrative contexts into arenas for policy conflict or exposing the reform to more subtle forms of sabotage, thus undermining its chances for implementation as originally intended.

12. The following assessment is based on conversations with John Stover of The Futures Group International; Tom Goliber, RAPID IV Project Director; and John May, Senior Program Officer. We also relied heavily on formal evaluations of RAPID I and RAPID II. There was no formal end-of-project evaluation of RAPID III. An evaluation of RAPID IV is just being completed, but was not available to us at the time of this writing. In its absence we have had to focus on RAPID's early experience, as filtered through the two early evaluations. Consequently, some of our generalizations, based as they are on RAPID's early work, must be considered provisional.

13. As RAPID IV's promotional materials put it, RAPID aims to:
   - Raise awareness among national leaders about the relationships between population growth and development and about fundamental demographic and family planning trends.
   - Strengthen the commitment of national leaders and managers to implement voluntary family planning programs and to allocate public and private resources to increase access to services.
   - Develop a consensus for policies and programs at different management and technical levels of government and in the private sector.
   - Institutionalize developing country capability to conceive, plan, and implement population and development policies.
   - Raising awareness, strengthening commitment, developing consensus, institutionalizing capabilities...this is a broad list of objectives indeed.

14. RAPID, to the best of our knowledge, has not attempted to set out an explicit model of the policy process. Staff of The Futures Group, however, report that some of their best thinking in this regard is contained in their proprietary contract proposals.