Chapter 3

A framework for evidence-informed health policy-making
Key messages

- The evidence base concerning national capacity for evidence-informed policy processes is weak.

- The conceptual framework developed here proposes four main functions of evidence-informed policy-making: research priority-setting, knowledge generation and dissemination, filtering and amplification of evidence, and policy-making. This framework will help to develop and evaluate strategies for enhancing (or releasing) capacity.

- A systems approach to capacity and capacity strengthening is important. While existing capacity strengthening initiatives are increasingly recognizing the importance of institutional and systems approaches, these dimensions require even greater focus.

- Previous capacity development initiatives have also tended to focus largely on the production of evidence rather than on capacity to use evidence in policy processes; this latter dimension requires greater consideration.

- To-date there has been very limited evaluation of capacity development strategies and greater investment is needed in assessing whether the strategies employed are effective.

- There is a need for countries to analyse and understand the current status of national health policy-making systems and their use of evidence, and to develop and support strategies at the national and international level to strengthen capacity.
Background

Elaboration of a conceptual framework for evidence-informed national health policy-making was considered a crucial component to guide development of this Review. The present chapter sets out the core principles of such a framework, incorporating the three aspects of knowledge generation, health policy processes and capacity factors. A visual depiction is developed incrementally to guide the thought process; this, in turn, is accompanied by explanatory narrative. The ultimate aim of the framework is to help guide the process of drawing pragmatic lessons about what government, civil society, research institutions, donors and multi-lateral organizations can do to promote capacity development, seeking to be as operational and practical as possible.

In developing this framework, there were a few key considerations that were borne in mind. First of all, a tension clearly exists between a naive representation of a simple linear relationship between evidence and policy, and an overly complex depiction with a multitude of variables suggesting no real opportunity for a rational process. The framework developed in this chapter tries to achieve a balance between reflecting the messiness of reality and the imposition of some form of rational order, so that the relationship between knowledge generation and policy processes can be better depicted.

Second, it is inevitable that conceptual frameworks are, at least to some extent, selective in what and how they choose to present factors. The framework described below seeks to help organize thinking about constraints on capacity, but is clearly only a construct.

Finally, this narrative is built up incrementally with the final framework appearing as Figure 3.8 at the end. To assist in explanation, intermediary figures are presented to accompany the text. Therefore, instead of ‘unpacking’ a complex diagram, the goal was to attempt to ‘build it up’ for the reader, with the aim of rendering it easier to understand.

Prior to developing the framework, however, this chapter devotes the following section to ‘capacity’ and ‘capacity development’, and what is meant by the terms. This discussion sets the scene for the conceptual framework.

Capacity

What do we mean by capacity?

The term ‘capacity’ is widely used within the development lexicon. Yet its use is often unspecific and without definition. Where it is defined within the literature, it is usually with a degree of vagueness. For example, in a recent report on the challenge of capacity development by the Organization of Economic Cooperation and Development, Development Assistance Committee (OECD/DAC 2006), ‘capacity’ is understood:

“as the ability of people, organisations and society as a whole to manage their affairs successfully” (p. 8).

Their definition, they say, is deliberately simple, and seeks to avoid “any judgement on the objectives that people choose to pursue, or what should count as success in the management of their collective efforts” (ibid). Other definitions in the literature vary slightly, but

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1 To inform development of the conceptual framework described in this chapter, a literature review was conducted in July–August 2006 (see Beith (2006) and Beith and Bennett (2007)). While a number of frameworks identified described various aspects of health policy and research interaction, for a variety of reasons, none satisfactorily met the needs of this Review (key reasons included: frameworks were not specific to health policy and systems research, frameworks focused on the issue solely from the point of view of the researcher, frameworks were overly simplistic and/or static, etc.). The conceptual framework presented in this chapter therefore evolved from key themes identified during the literature review and subsequent presentation, discussion and feedback at several international venues (versions of the framework were presented to the Alliance Scientific and Technical Advisory Committee, the WHO Eastern Mediterranean Region Advisory Committee on Health Research and a session at the Global Forum in Cairo, Egypt).
not significantly from this one, and tend to highlight a
general ability to either perform functions or to carry out
objectives. The United Nations Development Programme
(UNDP) encompasses these elements in its definition of
capacity as “the ability of individuals, institutions and
societies to perform functions, solve problems, and set
and achieve objectives in a sustainable manner” (UNDP
2006, p. 3).

When we come to assess the extent of ‘capacity’ (or
lack of it) within any particular entity, these definitions
have limited use. As Potter and Brough (2004) point
out, it is as diagnostically useful to say ‘there is a lack of
capacity’ as to say ‘this patient is unwell’. While different
stakeholders may agree that there is a lack of ‘capac-
ity’, and that it should be addressed, they may have
entirely different understandings of what is meant by the
expression, about how lack of capacity manifests itself,
or its impact.

In attempts to clarify the meaning of capacity, the
first key dimension relates to whose capacity (or the
capacity of what). Although terminology varies within
the literature, there is general recognition that capac-
ity (of a country, for instance) resides at three levels:
the individual, the organizational, and the enabling
environment. As UNDP states “the important point is to
recognise that the levels, regardless of terminology, form
a system in which they are interdependent” (2006, p. 5).
UNDP explains that at the individual level, capacities are
the skills and knowledge vested in people. Organizations
provide a framework for individual capacities to con-
nect and achieve collective goals. Capacity within
larger systems, or the enabling environment, includes
overall policies, rules and norms, values governing
the mandates, priorities, modes of operation, civic
engagement, etc., within and across the sectors. “These
factors determine the ‘rules of the game’ for interaction
between and among organisations” (p.5). Beyond the
more immediate enabling environment are global trends
and conditions which can either undercut/diminish or
foster/strengthen capacity.

The next key dimension lies in defining functional and
structural components of capacity – that is, defining what
capacity is important. By looking at the system
as a whole, Potter and Brough (2004) have developed
a hierarchy of capacity needs which relate broadly
to the different ‘levels’ within the system (individual,
organizational, enabling environment), but also to the
interactions between them. The four broad areas of
capacity need are: tools; skills; staff and infrastructure;
and structures, systems and roles (see Figure 3.1).

Potter and Brough’s capacity pyramid, a systemic
approach to understanding capacity, demonstrates the
interrelations between different elements of capacity.
For instance, if a research institute has IT equipment,
research software, money, and access to books and
journals it has a certain amount of infrastructural
capacity. But that performance capacity is of little use
without personnel capacity in terms of staff sufficiently
knowledgeable, skilled and confident to make effective
use of the tools available. Furthermore, there needs to
be enough staff, sufficiently skilled, to cope with the
type and amount of work required. A health policy and
systems research (HPSR) team, for instance, would need
to include a varied range of skills and experiences in
qualitative and quantitative research, and incorporate
different disciplines such as economics, social science,
medicine and epidemiology.

Assuming the team is optimal, in terms of personnel
capacity and its ‘fit’ with both the type of work and the
workload, there need to be clear processes whereby

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2 For instance, UNDP cites the migration of the highly skilled, or
the under-provision of global public goods (such as antiretroviral
drugs) as an example of global trends that undercut capacity.
Information and communication technologies (ICT) are an
element of global trends that have potential to foster capacity
(UNDP 2006).
the staff are supported, supervised and motivated, for the organization to make the most of the team’s performance and personnel capacities. The size and make-up of the team(s) need to be suitable; they need adequate facilities, for instance in terms of office space; they need to be supported, by administrative support when needed, by professional technicians when their IT equipment malfunctions, by building services who can maintain their facilities, and by supply organizations to meet their needs for electricity, water, transport, stationary, and so on.

In order to make best use of the staff team, the facilities and these support services, appropriate structures, systems and processes are required. For instance, roles and functions need to be clearly defined and differentiated; lines of communication and accountability should be untangled; decision-making procedures should be transparent and functional; when decisions are made, resources need to flow in a timely and effective manner; and information needs to be managed effectively and efficiently.

The capacity pyramid shows that different elements of capacity relate to each other like links in a chain – a weak link can undermine the capacity as a whole. In our HPSR team, the weak link might be that certain team members lack skills, experience or confidence to do the work – despite the fact that the structures, systems and processes are supportive and functioning well. Or it might be that a highly experienced and skilled team are held back by inadequate management, or by a lack of motivation and incentives to do the work they are equipped to do. A ‘weak link’ that challenges any HPSR team or organization is the existing (global) ‘technical capacity’ to conduct health systems research. For instance, including a combination of a wide range of disciplines poses significant methodological challenges. The breaking of new methodological ground is important, yet poses risks to researchers.

Some elements of capacity – such as material resources and skills – are more measurable, easily grasped and worked with, than others. Organizational structures, systems and processes are more difficult to assess and quantify. Even more ‘invisible’ elements of organizational life include what Kaplan calls organizational ‘attitude’ (2000). This refers to the organization’s sense of confidence to act in and on the world in a way that it believes can be effective. In a similar vein, Morgan refers to ‘empowerment and identity’ as one of five central characteristics of capacity that allow an organization (or system) to survive (particularly in times of extreme adversity), grow, diversify and become more complex (2006). These elements of capacity, like ‘vision’ and...
‘strategy’ are ephemeral, not easily assessed, and largely invisible – observable only through the effects they have – to the organization itself as well as to those practitioners who would intervene to develop organizational capacity (Kaplan 2000).

Capacity development

With greater conceptual clarity of the term capacity, we turn to the idea of capacity development. In the field of development, this term is relatively new, emerging in the 1980s (Lusthaus et al. 1999). Despite its newness, its prominence is clear. Indeed, UNDP says that “Capacity development is vital to development effectiveness and the achievement of the Millennium Development Goals” (UNDP 2006, p. 4).

There are inevitably trends in ideas that dominate development thinking. Capacity development is complementary to other concepts which emerged over the past four decades, including institution building, institutional development, human resource development, development management or administration and institutional strengthening (Lusthaus et al. 1999). Morgan (1998) considers community development an umbrella concept that links previously isolated approaches. However, there is a danger that in taking on so many meanings, it has become jargon, being used as a slogan with little thought to its meaning.

There are many different definitions of capacity development. Differing perspectives emerge depending on which aspect of capacity (e.g. individual or organizational) is being prioritized (either consciously or subconsciously), as well as on ideology, or philosophical approach. For instance, more recent interpretations of capacity development reflect a shift towards a participatory-process approach through enhancement and strengthening of existing capacities (rather than previous ‘institution building’ approaches). Where an approach that focuses on individuals and skills might see ‘capacity building’ used as a synonym for training, a ‘systems’ approach sees capacity development as a dynamic process, involving intricate networks of actors, and requiring attention not only to skills, but also to organizational procedures and the enabling environment.

It is important that a systems approach to capacity development features in practice as well as in rhetoric. However, attempts to develop capacity in structures and systems are more difficult, and take longer, than attempts to develop skills or tools (Potter and Brough 2004). There are various reasons for this, including:

- Social structures and systems are abstract and elusive, while skills and tools are more tangible.
- In examining processes and explaining events, there is a tendency towards reductionism (and, often, a focus on the individual or the organizational) at the expense of more holistic analyses.
- Recognition of the importance of social-structural factors in constraining capacity can lead to a sense of powerlessness. Locating explanations for lack of capacity at individual or institutional failures, on the other hand, leads to more manageable action, if less effective, plans.

Experiences over the previous two decades reiterate the importance of a systems approach. Four ‘lessons’ drawn from a review of experiences by OECD/DAC (2006) are:

- Capacity development goes well beyond the technical cooperation and training approaches that have been associated with ‘capacity building’ in the past.
- Capacity building would be ineffective so long as it was not part of an endogenous process of change, getting its main impulse from within.
- The new emphasis on local ownership recognizes the importance of political leadership, and the prevailing political and governance system, in creating opportunities and setting limits for capacity development efforts.
- The factors favouring or blocking capacity development are related to the system – meaning that
attention needs to be focused on the relationships between the enabling environment and other levels. Drawing on this, OECD/DAC defines capacity development as “the process whereby people, organisations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time” (ibid, p. 9).

The OECD/DAC definition reflects four key trends in the interpretation of capacity development found within the literature. The first is a shift away from the phrase capacity building, since the ‘building’ metaphor suggests a process starting with a plain surface and involving the step-by-step erection of a new structure, based on a pre-conceived design. The second is that the present focus, both within and beyond the health sector, is on capacity development or strengthening of individuals, organizations, and the wider environment (or society) and not, as often occurred in the past, solely on individuals.

The third trend is an increasing distinction between functional capacity and performance capacity and emphasis on the importance of taking the latter into account when developing strategies to improve capacity. Functional capacity refers to the capacity specific to undertaking particular tasks, while performance capacity, by contrast, refers to more generic capacities that need to be present within a given organization, in addition to an enabling environment, in order for it to be able to perform optimally.

The final trend is that capacity development is increasingly viewed as a process and not a one-off intervention. As indicated in the OECD/DAC definition, capacity not only needs to be created, but also strengthened, adapted, maintained, and ‘unleashed’. There is a range then, from capacity building on the one hand, to capacity releasing (or unleashing) on the other, which sits alongside the range in perspectives from an individual/organizational focus to a context focus. The notion of ‘releasing’ or ‘unleashing’ capacity is rarely discussed in the literature, though is analogous to Sen’s (1999) concept of ‘development as freedom’. It implies both the reduction of organizational or sociostructural impediments to existing capacity, as well as the provision of incentives to allow capacity to flourish – “a country’s ability to use skilled personnel to good effect depends on the incentives generated by organisations and the overall environment” (OECD/DAC 2006, p. 14).

The framework described in the rest of this chapter draws on the systems approach to capacity and capacity development described above.

**Overview of the framework**

The overall focus of the framework is on the process of evidence-informed national health policy-making. This includes the elements that make this up and on which capacity-strengthening strategies should focus. It is composed of three main levels (Figure 3.2). The interaction between health policy processes and research is broken down into different functional processes (of which there are four, described in the following section), which occur either explicitly or implicitly. The next level concerns the organizations (and their interrelationships) involved in carrying out these functions, and whose capacity is the prime focus of the framework. In order for these organizations to function

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3 See, for example, Cohen 1993.

4 See, for example: Sauerborn et al. 1999; Stone et al. 2001; and ODI 2004.

5 We acknowledge the source of the idea for the concept of capacity releasing as Professor Jennie Popay.

6 The majority of frameworks identified in the literature break down capacity into three levels (individual, organizational and system – or variations thereof) and which, in most cases provide little specific details on the dimensions of capacity required at different levels. The framework shown in Figure 3.2 emphasizes the functional processes carried out by a variety of organizations and the organizational attributes and resources that can hinder or facilitate capacity development and informed policy-making.
optimally they need certain organizational capacities, which compose the final level of the framework.

What follows is a step-by-step construction of the framework, using figure 3.2 as the basic ‘skeleton’.

**The functional level**

Figure 3.3 portrays a simplified version of the interaction between research and health policy as we might have considered it a number of years ago.

This figure shows universities conducting research, which generates new knowledge, which is fed into health policy-making processes led by ministries of health. Traditionally, academics saw their research outputs in the form of peer-reviewed journal articles and books, and paid little attention to whether this was an appropriate form of output for policy-making processes to draw on. Effectively, their responsibility was seen to end with the generation of evidence. This is, of course, a gross oversimplification of even the pattern twenty years ago, but can be argued to reflect the general assumptions and approaches of researchers.

However, this relationship between knowledge generation and policy-making has been the subject of increasing scrutiny, largely due to an improved understanding of the complexity of policy-making processes. A number of projects have sought to improve the use of research and evidence in policy and practice. These projects draw on a range of theories and frameworks of policy processes (described in Chapter 2). The interaction between researchers and policy-makers is no longer conceived of as a one-way flow of information as researchers disseminate their findings, but rather as “an interactive process in which communication includes feedback and an understanding of the research needs of research users” (Stone et al. 2001, p. 17).

In view of this complexity, there is also a shift in understanding about the role of evidence in policy and practice. Evidence-based policy and practice is essentially about distilling and propagating ‘what works’. But

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7 Policy-making is seen here to include all the elements of the policy cycle from agenda setting through to policy implementation and evaluation.

8 Initiatives include: GRIPP (getting research into policy and practice), a programme led by the Global Health Council which aimed to promote better understanding of evidence-based approaches to health care and facilitate dialogue between researchers, policy-makers and practitioners; the Joint Health Systems Research Project (see Varkevisser et al. 2001); the Canadian Health Services Research Foundation (see http://www.chsrf.ca/home_e.php); the WHO Health Evidence Network (http://www.euro.who.int/HEN), and ODI’s RAPID programme (ODI 2004), among others.
what works is not all that matters. What policy-makers and practitioners really need to know is what works for whom, and in what circumstances. To answer these questions requires research that is not only evaluative, but also descriptive, analytical, diagnostic, theoretical and prescriptive. Evidence, then, needs to influence all stages of the policy cycle — the shaping of agendas, the defining of issues, identification of options, the making of choices for action and the delivery of them, and the monitoring of their impact and outcomes (Solesbury 2001).

Also, in recognition of the fact that the policy-making context is highly political, and depends on a variety of factors and inputs (including personal histories and experiences), there has been a shift in terminology from evidence-based to evidence-informed (or evidence-influenced) policy and practice. As Levačič and Glatter (2001) point out, the shift also concerns the nature of professionalism and policy-making. Central to both is the exercise of judgement, which is necessary for the application of a knowledge base to particular circumstances.

Returning to the framework, Figure 3.4 introduces into the process a number of these other influences that affect the policy-making processes, alongside evidence. The ideology and values of policy-makers themselves are a critical, and entirely legitimate, input into policy formation. Such ideologies may be held either at the individual (policy-maker) level or expressed through particular organizations that exert influence. The interests of various groups (both within the country and externally) and individuals (often known as stakeholders) will also play a significant role. Frequently a decision, particularly a high-level one, will involve multiple policy-makers such as civil servants, legislatures, and/or the executive arm of government. Different policy-makers will be influenced by different forms of communication and different arguments. The quality and nature of interactions between the multiple stakeholders involved in generating and synthesizing knowledge, and applying it to policy-making and implementation is critical (Furman et al. 2002). Closely related are the personal experiences, habits, political judgement and intuition of policy-makers and the relative importance given to these alongside scientific evidence.
At a technical level, the influences of evidence on policy-making processes are also affected by the actual technical ability of policy-makers and their staff to interpret and use evidence. Additionally, scientific knowledge, especially with respect to HPSR is rarely absolute in nature but rather requires subtlety in interpretation and an understanding of how valid conclusions are under different circumstances. Even a study that has very strong conclusions will need to be interpreted in the light of existing formal and tacit knowledge, as well as social values.

Recent changes in the global health architecture have both increased the availability of funds and the diversity of donors. But it is unclear how these developments have affected HPSR priority-setting. It could be argued that the increased involvement of foundations in a field dominated by governments and markets might increase the potential for innovation and institutional diversity. However, it is also arguable that the new models of aid architecture and the growth of global public-private partnerships brings with it questions of accountability to national health systems. Two challenges in priority-setting remain: the first, to shift the balance of investment towards relevant research that contributes significantly to easing the burden of ill-health in lower-income countries (still, at the moment, suffering from major gaps in investment) – including of course addressing the imbalance between biomedical research and HPSR; the second, to fund research in these areas that is more than simply evaluative, but is analytical, diagnostic, theoretical and prescriptive as well.

Figure 3.5 introduces two other components of the functional level of HPSR and policy-making. Firstly, the framework recognizes an important activity, which is often implicit rather than explicit. This is the element of *priority-setting for research* – decisions as to the focus of research. Such decisions are made by various organizations including the research organizations themselves, funding bodies (both national and international) and potentially by policy-making bodies.
The other new component we have called evidence filtering and amplification. This recognizes the fact that research outputs are increasingly used by a variety of organizations in an attempt to directly or indirectly influence policy-making. In this process, organizations (such as advocacy groups or knowledge brokers) can have a direct goal of influencing policy or instead (in the case of the media, for example) amplify research findings without having a specific policy end in mind. These organizations pick out or filter particular research outputs and translate them into policy messages, and in some cases amplify them to try and influence policy-makers. This function is one that has often been ignored and yet, in many societies and policy communities, is a critical reality. In the health policy and systems sphere, groups that play this filtering and amplification role frequently have much more direct and stronger links to policy-makers than researchers.\(^9\)

It should be noted that the various influences discussed in relation to the policy-making processes can be seen to affect the other three functional processes as well. The arrows linking influences to the four functional processes remind us of the social and political nature of each of these processes. Also, the four functional processes are linked together, as indicated by the arrows in the framework. This reflects the interaction of experts, intermediaries and policy-makers within and between the processes of knowledge creation, dissemination, absorption and application in policy-making.

### The organizational level

We turn now to the organizations involved in the carrying out of the above four functions. Figure 3.6 introduces this level.

A number of points need to be made. Firstly, the diagram deliberately does not draw any connections between particular organizations and specific functions

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\(^9\) For a specific example of the complexity of knowledge flows and the critical nature of amplifiers and filters in influencing decision-making see Sauerborn et al. (1999), which provides an analysis of communication channels between actors involved in the process of influencing tobacco legislation in Thailand.
as it recognizes that in practice organizations often carry out more than one function. However, organizations are placed underneath the function with which they are most obviously associated.

Secondly, it will be noted that the figure has widened from the earlier term of universities into a broader set of research institutions (including, of course, universities) in recognition that research is increasingly conducted by a variety of organizations – including policy bodies themselves. Similarly, the ministries of health, as organizations, have been replaced by the more generic term of ‘government’, in recognition of the important role of a variety of government bodies, such as cabinet, parliament, central ministries and decentralized bodies.

All these organizations work within a set of relationships and these are denoted by the dotted lines in the diagram, which link both similar and different types of organization. Taschereau and Bolger (2007) describe a continuum of ‘formality’ in relationships, from ‘networking’ (loose ties of information exchange and reciprocity, fuelled by trust), through informal networks (self-govern-
researchers and policy-makers; and in bringing resources and expertise to policy-making (Perkin and Court 2005; Mendizabal 2006). Some writers emphasize the socially-embedded nature of knowledge production and use. The knowledge value theory (Bozeman and Rogers 2002) talks about ‘knowledge value collectives’ which are networks of actors, and the capacity of such collectives is determined by the nature of interactions between the individual members, and their combined capacity to transform new information into new knowledge. The ‘advocacy coalition framework’ for examining the link between research and policy takes into account the importance of various coalitions between policy-makers, influential actors and pressure groups who share a similar perspective and forge relationships with each other. These coalitions, and the competition between them, will shape the policy environment and the health research system (Sabatier and Jenkins-Smith 1999).

In their working paper for the ODI, Perkin and Court review the literature to look at the ways in which networks can provide links among research, policy and practice, with a principal interest in lower-income countries. They conclude that, when working well, networks can be good at fulfilling some key functions (Perkin and Court 2005):

- communication – across both horizontal and vertical dimensions;
- creativity – owing to free and interactive communication among diverse actors; and
- consensus – like-minded actors identifying each other and rallying around a common issue.

An important aspect of our framework is the recognition of the importance of such relationships – especially the more informal ones – within policy communities and networks.

Organizational capacity

The third level of the diagram refers to the particular requirements for each of the organizations involved in undertaking the four functions to perform optimally. Drawing on our theoretical understanding of capacity described at the start of this chapter, we suggest that there are three broad areas in capacity-strengthening that need to be considered for each of the organizations: governance and leadership; resources; and communication and networks. This is shown in Figure 3.7.

One important aspect of this framework is a desire to shift attention in capacity development away from what has been a focus in the past on training of individuals towards a more organizational concept of capacity. The importance of ‘leadership and governance’ of organizations may have been previously insufficiently recognized. Governance broadly refers to the ways in which the organization is governed – in terms of both internal management systems (financing, personnel management, information management, etc.), as well as its management of external accountability through mechanisms such as boards. Both governance and leadership will influence the extent to which, and how, capacity within the organization is developed, maintained, or unleashed – but perhaps in different ways. For instance, good governance might ensure that structural capacity is developed through the existence of decision-making fora, or that role capacity is maintained through individuals, teams, etc., having the authority and responsibility to make decisions essential to effective performance. Leadership might help to unleash capacity through motivating and inspiring people, through empowering people, and through stimulating extra effort. There is an attempt within the framework to recognize the importance of less tangible elements of an organization’s capacity – beyond what can be seen or counted. Capacity for leadership and governance within an organization, then, encompasses many elements of organizational life that were described at the beginning.
of this chapter as ‘invisible’, including a clear and shared vision, and an organizational ‘attitude’ and identity, which are important for the ways in which the organization sees itself, and how it is seen by others in the world.

The importance of adequate and sustainable resources within an organization cannot, of course, be ignored. Organizations need sufficient numbers of staff who are appropriately trained, motivated and supported – although it should be emphasized that this needs to be seen from the perspective of the particular organization rather than the needs of the individual. Organizations require financial resources that are available and reliable. And they need other resources, such as physical resources – including, for instance, not just buildings, computers and communication equipment, but also access to people who can fix them when they break.

Within research and policy organizations, resources to access, manage and store information will be particularly important.

The third area given prominence in the framework is communication and networks. This includes the capacity of organizations to communicate the work that they do, and to develop and maintain appropriate relationships with other organizations. It also includes an organization’s ability to work within and/or develop networks – including those that are physical or virtual, local or global.
The national context and wider environment

All the above occurs in a wider context – both national and international. Within the framework (see Figure 3.8) a number of particular aspects of this context are of importance to HPSR and policy-making processes. First of all, there is within any system a culture related to how policies are made, and indeed the degree to which there is a culture about the production and use of research. There is also a framework of legislation and regulation which operates either to the benefit or to the detriment of this health policy and research interaction. There are a number of particular aspects to this national context:

- political and governance system
- economic and social conditions
- education levels and supply of graduates
- basic research infrastructure.

At the organizational level, this context is often manifested through particular external organizations and we draw attention to the roles and influences of external funders (e.g. the Global Fund to Fight AIDS, Tuberculosis and Malaria), external research institutions (e.g. universities in developed countries), and external advocacy organizations (such as nongovernmental organizations). These can have both negative and positive effects on the capacity of national organizations to carry out their functions.

Further, the framework recognizes that the successful performance of each function requires a certain level of technical capacity, which can be accessed by the
relevant organizations. This is most easily understood in connection with the knowledge-generation function. For this function to occur well, appropriate research methods need to exist. Yet there is clearly potential for methodological development in policy and systems research. This is particularly the case when we recognize that for research to influence the entire policy process, it must include not just evaluative work, but also more analytical and theoretical work. In these areas, technical capacity tends to be particularly weak. Analogous strengthening of technical methods is therefore needed in all of the functions.

These elements complete the conceptual framework and are shown in Figure 3.8.

Capacity strengthening and releasing strategies

The following four chapters of this Review consider each of the four functions discussed above in turn, and consider the primary capacity constraints typically faced by low- and middle-income countries in each of these areas, and what might be done to address these. But what types of capacity strengthening and releasing strategies have previously been employed? And what is the evidence regarding their success? The final section of this chapter provides a brief review of approaches to capacity development for research and policy, particularly within global health research. This section draws primarily upon a background paper (Beith and Bennett 2007) that included a document review of key capacity development initiatives in global health research and in-depth interviews with representatives of selected initiatives.¹⁰

Common wisdom about capacity development suggests that to be successful a capacity development strategy must have strong local ownership and commitment. While this is likely to be the case, very few countries have developed explicit strategies for capacity development in health research, let alone health policy and systems research. Even in the cases of Mexico and Thailand, countries which are often seen to have been very successful in strengthening capacity for health research, there does not appear to have been a clearly articulated plan or strategy — although there was clear leadership commitment to creating such capacity (see Appendix). Consequently much of this section examines capacity development strategies which have been pursued by external, international organizations. This set of strategies is unlikely to coincide exactly with the type of strategies that an individual organization within a country, or a country government might pursue in order to promote capacity development.

Many agencies and initiatives have invested in capacity development for health research: for example, this has been a major focus of the work conducted by the Special Programme for Research and Training in Tropical Diseases (TDR), and by the Council on Health Research for Development (COHRED). Some bilateral agencies, such as the Swedish Agency for Research Cooperation with Developing Countries (Sida/SAREC) and the Canadian International Development and Research Centre (IDRC) have also made significant, long-term investments in capacity development. Relatively few of these initiatives have focused on the field of health policy and systems research, with the work of the International Health Policy Programme (IHPP), the Health Systems Research Project of WHO in Africa, and the work of the Alliance HPSR itself, being the notable exceptions. The various initiatives have differed not only in the focus of their capacity development efforts, but also in the range of capacity-strengthening strategies employed.

Over the years, capacity development strategies have evolved in-line both with practical experience of what

¹⁰ A fuller account of the methods used in the review can be found in Beith and Bennett (2007).
worked, and with thinking on best practice in capacity development. For example, the evolution in thinking at Sida/SAREC with regard to its broad portfolio of research capacity development activities (not just health) was described as:

The first 10 years of the support are characterized by support to national research councils. An evaluation of this period showed that, in most cases, these bodies lacked the capability to prioritize research based on scientific criteria. A countermeasure during the next period was to strengthen research capacity through research training.... Over time, it became obvious that training of researchers had to be supplemented with investments in research infrastructures and scientific equipment.... Through these additions, the support gradually became more institutional than individual. In the beginning of the 1990s, a further shift was made to favour more comprehensive support with the aim of inculcating research cultures at national public universities. (Boeren et al. 2006, p.3 )

TDR followed a somewhat similar path during its thirty-year history, focusing initially on individual-level capacity (through supporting the education of students at the graduate and post-graduate level), but over time placing increased emphasis on institutional-level capacity (through both financial support and development activities) and most recently working more at the environment-level (through training in critical disciplines, promoting journals, etc). As such, TDR now targets individuals, institutions and enabling environments as part of a continuum of capacity development activities.

Mapping capacity-development strategies

Table 3.1 illustrates the major capacity development strategies employed by initiatives in the health field. Some strategies have been particularly commonly deployed including:

- individual support (mainly through the provision of scholarships, or post-doctorate fellowships);
- support for institutional development (which varies widely, but has included, for example, long-term institutional development grants (as provided by Sida/ SAREC and TDR), and support to financial management within institutions); and
- networking and partnerships.

All the initiatives have used networks and partnerships in one form or another to help develop capacity. Sometimes investment in this area represents support to the establishment of formal networks, on other occasions it represents support to less formal opportunities for networking. Partnership opportunities are typically among fewer players and less formal. Support to networking has usually been given between different research organizations, rather than between research organizations and policy-makers or civil society.

Relatively little of the investment in capacity development to-date has been in the higher level environment and system issues. While COHRED has always had a strong focus on helping establish health research systems within countries, and TDR is now investing in specific elements of the health research system (such as ethics review committees), this area has been relatively neglected. The conceptual framework identified three major elements of organizational capacity: governance and leadership; resources; and communication and networks (Figure 3.8). From this rapid review of the type of capacity development strategies commonly employed it seems that most of the focus to-date has been upon staffing and finances, with relatively less focus on the other elements of organizational capacity identified.

An alternative way of understanding the patterns of investment in capacity development is to look at the extent to which different capacity development initiatives have addressed different functions. Table 3.2 attempts to capture this, identifying whether a particular function in
the health research/policy relationship is a major focus of the programme (1), a minor one (4), or something in between. Somewhat predictably, the primary focus in terms of capacity development appears to have been on knowledge generation, with virtually all the initiatives pursuing strategies in this area. Research priority-setting has also been subject to a number of externally supported, capacity development initiatives. Considerably less effort appears to have been targeted at developing capacity for the use of information in policy, or for enhancing capacity among civil society and the media to filter and amplify research evidence.

Lessons emerging from capacity-development initiatives

Unfortunately, very few of the initiatives reviewed here have been subject to rigorous evaluation of their effects. World Wide Web searches and interviews with representatives yielded just one independent, publicly available evaluation of a strategy or initiative for capacity development for global health research, although some agencies such as Sida/SAREC and IDRC have conducted broader evaluation of their research capacity development efforts. Hence it is difficult to know which of the strategies are effective and under what conditions. More evaluations of the effects of alternative approaches to capacity development are sorely needed. In the absence of such objective evaluations, evidence about what works can be based only upon the opinions of those who have been involved in the initiatives.

Experience from the review of initiatives reinforces some of the common wisdom: that local ownership of the initiative is critical and that longer-term initiatives are likely to be more successful than shorter-term ones, although one evaluation also noted that longer-term funding can occasionally contribute to a dependency upon the external funds (Boeren et al. 2006).

In terms of general trends it seems that most initiatives have recognized the inter-linked nature of individual, organizational and system levels of capacity and increasingly, when resources allow, work across these three different levels of capacity. Over time there appears to have been a broadening of capacity development strategies employed, with packages of different interventions being pursued. Some initiatives, such as IDRC, typically conduct an organizational assessment to determine what kind of capacity development support it should provide, and in particular whether they should look at core funding for the organization versus project-based funding. For example, IDRC capacity-development strategies aim to look holistically at what the organization needs to function — not just focusing on specific research capacities alone.

However while initiatives have expanded in terms of the levels of capacity they address, they remain relatively focused in terms of the functions: much greater investment is being made in developing capacity for priority-setting and knowledge generation than in working with policy-makers and civil society organizations to increase the use of research findings in policy-making. Moreover capacity development initiatives focusing on organizations have primarily addressed financial sustainability and developing staff skills, and done much less on enhancing communication capacity, leadership or governance.

Finally, while there are isolated attempts by initiatives to release capacities, through for example, advocacy efforts aimed at giving countries greater control over their own research priority-setting processes, only limited efforts have been made in this sphere. There is a need to understand better the extent to which capacity may grow organically if particular impediments were removed in the environment, versus there being a need for concerted capacity development efforts.
### Table 3.1 Capacity development strategies pursued by major health initiatives

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Individual support</th>
<th>Learning by doing</th>
<th>Curriculum Development</th>
<th>Conducting training courses</th>
<th>Mentoring</th>
<th>Group support</th>
<th>Institutional Development</th>
<th>Project management training</th>
<th>Network/ networking</th>
<th>Formal Institutional training</th>
<th>Partnerships</th>
<th>System development</th>
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<td>Alliance HPSR</td>
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■ A square indicates that the initiative is active in capacity development for this function.

**Acronyms:**
- **Alliance HPSR**: Alliance for Health Policy and Systems Research
- **CGHRI**: Canadian Global Health Research Initiative
- **COHRED**: Council on Health Research for Development
- **EU INCODEV**: European Union Programme for International Cooperation in Development
- **GDN**: Global Development Network
- **GFHR**: Global Forum for Health Research
- **HSR Project**: Joint WHO/DGJS/KIT Health Systems Research Project
- **IDRC**: International Development Research Centre
- **INDEPTH**: International Network of Demographic Surveillance Sites
- **IHPP**: International Health Policy Programme
- **INCLEN**: International Clinical Epidemiology Network
- **SIDA/SAREC**: Department for Research Cooperation, with the Swedish International Development Agency
- **TDR**: Special Programme for Research and Training in Tropical Diseases.
Conclusions

This chapter has focused on two main areas. Firstly, it has introduced a new conceptual framework to help analyse the capacity dimensions for evidence-informed national health policy-making, based on four main functions: research priority-setting; knowledge generation and dissemination; filtering and amplification; and policy-making. Each of these functions will form the focus of the following four chapters. It is hoped however that the framework will have wider application than just structuring this Review. It could, we believe, be seen as a valuable tool to analyse and understand the current status both of national health policy-making systems and their use of evidence, and to inform strategies both at the national and international level to develop or release capacity. The second part of this chapter has given an overview of such strategies as pursued at the international level and drawn a number of conclusions about them. In particular it has suggested that while increasingly such strategies are recognizing the importance of institutional and systems (rather than, as previously, more individualistic) approaches there has been an imbalance in attention to some of the functions. Furthermore, there would appear to be a need for rigorous evaluations of capacity strategies.

In the following chapter we examine the first of the functions, research priority-setting.

### Table 3.2 Foci of initiative according to function

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Research priority-setting</th>
<th>Knowledge generation</th>
<th>Evidence filtering and amplification</th>
<th>Policy-making</th>
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**Key:** 1= highest focus, 4= Minor focus. A blank indicates that the initiative is not active in capacity development for this function.