World Health Organization

ExpandNet

Practical guidance for scaling up health service innovations

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EXPANDNET

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Foreword

Calls for scaling up successfully tested health service innovations have multiplied over the past several years. Many acknowledge that pilot or experimental projects are of limited value unless they have larger policy and programme impact. Moreover, there is increasing recognition that proven innovations cannot simply be handed over with the expectation that they will automatically become part of routine programme implementation. While there has been progress, there is still little practical guidance on how to proceed with scaling up. This document, *Practical guidance for scaling up health service innovations*, can begin to fill this gap.

One of the important contributions of the document is that it both identifies general principles and makes very specific, concrete suggestions. Guidance is organized around a framework that highlights the interrelationships among the central elements and strategic choices involved in scaling up. The following lessons stand out:

- Interventions that are backed by locally generated evidence of programmatic effectiveness and feasibility increase the likelihood of being successfully scaled up.
- Scaling up often involves an institution-building task that requires a variety of special technical, managerial, human resource, leadership and financial inputs as well as longer timeframes than typical project cycles.
- Scaling up must be concerned with sustainable policy and programme development, including both institutional capacity and availability of financial resources.
- When tested interventions involve a large degree of change in the institutions expected to adopt them, scaling up will require extensive technical support and time.
- Adapting health service innovations to changing sociocultural, economic and institutional contexts in the course of expansion is vital for success.
- Integrating considerations of gender and human rights into scaling-up initiatives is essential.
- Special attention to monitoring and evaluation is needed as scaling up proceeds to ensure that results inform strategic adjustments and adaptations.

The document grew out of a series of three meetings at the Rockefeller Foundation Bellagio Conference Center during the period 2001–2004. Led by Ruth Simmons from the University of Michigan School of Public Health and Peter Fajans from the Department of Reproductive Health and Research of the World Health Organization (WHO), these meetings brought together professionals who have been active participants in scaling-up initiatives in Africa, Asia, Eastern Europe and Latin America. Many participants had been involved in implementing the Strategic Approach to Strengthening Reproductive Health Policies and Programmes sponsored by WHO *(1–3)*. This approach devotes explicit attention to scaling up. The meetings included policy-makers, programme managers, applied researchers and trainers as well as experts in sexual and reproductive health policy and programming and in health sector reform. They sought to better understand the factors that facilitate and hinder scaling up through a process of extensive literature reviews, the development and refinement of a conceptual framework and critical analysis of their own experiences with scaling up.

The country case studies discussed at the Bellagio meetings now comprise the book entitled *Scaling up health service delivery: from pilot innovations to policies and programmes (4)*. The major practical scaling-up lessons emerging from these deliberations and from the literature review are presented here. The participants of the meetings also founded ExpandNet, an international network dedicated to advancing the practice and science of scaling up. Its web site (http://www.expandnet.net) contains the book, this guide and other materials related to scaling up.

The Department of Reproductive Health and Research of WHO and ExpandNet are pleased to present this guidance document to programme managers, policy-makers, donors and those who provide technical assistance with scaling-up initiatives. We hope that it will be a valuable tool and source of inspiration.

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Acknowledgements

According to a Romanian saying, "A beautiful child has many parents." The same is true for this guide. It is based on the valuable presentations and rich discussions that took place at three Bellagio meetings between 2001 and 2004. At these meetings participants presented scaling-up experiences from Bangladesh, China and Ghana and from implementing the Strategic Approach *(1–3)* in Bolivia, Brazil, Chile, Guatemala, Viet Nam and Zambia. The ExpandNet secretariat, consisting of Ruth Simmons and Laura Ghiron at the University of Michigan and Peter Fajans at the Department of Reproductive Health and Research at the World Health Organization (WHO), together with technical writer Nancy Newton, wrote this document. The authors gratefully acknowledge the contributions of Bellagio meeting participants and of the guide's many reviewers. Reviews were conducted by colleagues from international health and development agencies as well as by 2007 WHO/ExpandNet meeting participants from governmental, nongovernmental and international organizations working in Africa, the Americas, Asia and Europe. Amanda Abbott and Jill Boezwinkle provided valuable research assistance. The detailed country case studies are now available in the book entitled *Scaling up health service delivery: from pilot innovations to policies and programmes (4),* which can be downloaded at http://www.who.int/reproductive-health/strategic-approach or http://www.expandnet.net and which was published by WHO. None of this work would have been possible without the many collaborators who supported the scaling-up initiatives in each of the countries. Their perseverance and dedication deserve the deepest respect.

Financial support from the John D. and Catherine T. MacArthur Foundation's Program on Global Security and Sustainability, the Rockefeller Foundation, WHO, the University of Michigan and the Bill and Melinda Gates Foundation is gratefully acknowledged.

Acronyms and abbreviations

CHPS Community-based Health Planning and Services

ICPD International Conference on Population and Development

MDG Millennium Development Goal

MOH Ministry of Health

NGO nongovernmental organization

WHO World Health Organization

Introduction

Scaling up of health interventions—also referred to as going to scale, replication and expansion—has become a central theme in international public health agendas, including the Millennium Development Goals (MDGs) *(5, 6)*. Calls to scale up arise from a general sense that the benefits resulting from new technologies and innovations in health services should have greater and more rapid impact on improving health. Despite widespread agreement on the importance of scaling up, corresponding efforts to inform practice and share lessons learnt have been limited. While there is a growing body of literature, much of it is directed at the content of interventions. Far less has been written on the process of scaling up *(7)*. The purpose of this document is to help fill these gaps.

Scaling up: definition and underlying principles

In this guide, scaling up is defined as **deliberate efforts to increase the impact of health service innovations successfully tested in pilot or experimental projects so as to benefit more people and to foster policy and programme development on a lasting basis** *(7)*. Key lessons learnt about successful scaling up shape this definition, which differs from others that are often used. Distinctive features of this definition are *(8)*:

- "Innovations" has two aspects. First, it means health service components or practices that are new or perceived as new in a particular programme context. Existing or well-known technologies, procedures, service models or best practices that have not been used in a specific location are innovations, regardless of how widely available and applied elsewhere. Second, rather than a single medical therapy, clinical practice or programme component, health service innovations are a set of interventions, including the processes necessary to build sustainable implementation capacities. A technology in itself is rarely a simple solution to a complex problem, and as such, is alone not considered a health service innovation.
- "Successfully tested" highlights interventions that are backed by locally generated evidence of programmatic effectiveness and feasibility obtained through pilot demonstration or experimental projects. In this sense, scaling up is more focused than when the term is used to mean broadening the use and impact of existing or new practices from a small to a large scale of coverage, without local research or evaluation.
- "Deliberate efforts" mark scaling up as a guided process, in contrast to spontaneous diffusion of innovations, which is one type of scaling up.
- "Policy and programme development on a lasting basis" points to the importance of institutional capacity building and sustainability in scaling up: developing, establishing and sustaining the political support, managerial structures, human and budgetary resources and service components necessary for successful large-scale programmes and policies.

The approach to scaling up health service innovations presented here is also grounded in the principles of respect for, fulfilment of and promotion of human rights. This means integrating human rights norms into scaling-up initiatives, including human dignity, attention to the needs and rights of vulnerable groups and an emphasis on ensuring that quality health services are accessible to all. The principle of equality and freedom from discrimination is central, including discrimination on the

basis of sex and gender roles. Integrating human rights into scaling-up efforts also means empowering people and communities, ensuring their participation in decision-making processes and incorporating accountability mechanisms that they can access *(9)*. The experiences with family planning and related sexual and reproductive health services described in this guide exemplify a commitment to putting into practice the principles of the Programme of Action of the International Conference on Population and Development (ICPD) in Cairo, Egypt, in 1994. These call for increasing equitable access to good-quality reproductive health services that respect individual dignity and reproductive rights, ensure informed choice and are gender sensitive *(10)*. The recent addition of a target of universal access to reproductive health by 2015 to the MDGs reinforces its centrality in attaining international development goals *(11)*.

Why successfully tested innovations?

As defined above, scaling up pertains to the expansion of a package of interventions that has been tested in a pilot or experimental project and found to be successful. "Successful" means the innovation is realistic to carry out, relevant and worthwhile, and the interventions have real and beneficial impact on the health concern they are designed to address. Thus, in the context of scaling up, testing explores the feasibility of implementing an innovation on a large scale. This is in contrast to clinical trials, which address the safety and efficacy of specific medical therapies or clinical practices.

Pilot or experimental projects, conducted in a limited number of locations under real-life service delivery conditions, increase the likelihood of successful scaling up in several ways. First, testing generates an understanding of how (or if) an innovation is actually implemented in everyday practice. Preventable problems and unintended negative consequences arising from the introduction of an innovation can be identified and corrected prior to scaling up. Testing provides valuable information on what needs to be done to ensure that the innovation realizes its potential and how best to do it. Testing also allows programmes to try out alternative arrangements of service delivery in a relatively low-cost, small-scale way prior to investing in wide-scale implementation. Furthermore, testing serves as an "insurance policy". It defends against the major risk of wasting substantial time and resources on the widespread use of a well-intended innovation that produces limited or even undesirable outcomes. These could range from ineffective implementation to politically damaging repercussions *(12, 13)*. While it is possible to scale up innovations that have not been tested in the specific setting, without country-specific evidence, the chances of overall success are much lower.

A guided process from the outset

Often there is a presumption that once a pilot project demonstrates the effectiveness of an innovation, the new model will spread on its own accord. The countless pilot and experimental projects that have shown impressive success with little large-scale impact reveal the limitations of such thinking. Spontaneous and complete diffusion of health and development innovations is rare, although it can occur *(7)*.

A key lesson learnt about successful scaling up is the importance of designing and testing innovations with the implications for scaling up in mind, rather than leaving them as an afterthought once a pilot project is completed. Pilot or experimental projects that—from the outset—pay attention to how the innovation will be put to wider use are more likely to go to scale. The reason is simple and plausible: when consideration is given to the outcome of scaling up during the development of the interventions,

they tend to be attuned to a given policy, programmatic, economic and sociocultural context, and therefore are likely to be "doable" *(7)*.

Some methodologies of programme development anticipate scaling up. For example, the Strategic Approach to Strengthening Reproductive Health Policies and Programmes, sponsored by WHO, identifies scaling up as an explicit third stage of work. The first two stages—a strategic assessment to identify and prioritize needs, and action research to test the interventions designed to meet those needs—are phases along an intentional pathway leading to large-scale implementation *(1–3)*. Other approaches to developing nationwide programmes begin with policy dialogue and move through experimental and replication research phases, before scaling up is initiated *(14)*. Such approaches involve policy-makers, programme managers and other users of research in conscious deliberations of the financial and organizational requirements of scaling up an innovation from the outset.

The systematic use of evidence is another central characteristic of a guided process. Integrating research and evaluation into the scaling-up process facilitates large-scale impact. While a desired outcome of scaling up is the incorporation of the innovation into standard operations of a programme, **scaling up is not a matter of routine programme implementation**. Procedures are needed to monitor whether scaling up is actually occurring and how it is taking place *(7, 8)*.

Who should use this guide?

The key audiences for this guide are public health programme managers, donors and technical assistance providers who face the challenge of scaling up health service innovations. The guide is relevant to programmes in both the public and the private sectors. Much of the experience presented focuses on public sector programmes because these typically provide the majority of health services in a country. However, knowledge gained from public-private partnerships contributes substantially to this guide, and the information is also pertinent to programmes of nongovernmental organizations (NGOs). While the guide highlights experiences with family planning and primary health services, the applied framework and the principles presented are also relevant for other areas of health and development *(15)*.

The advice in this document aims to be of value in guiding scaling up at various stages—whether one is only beginning to think about it, has already selected a model for expansion or is in the midst of scaling up. While starting with the end in mind increases the likelihood of success, not all scenarios allow for anticipating scaling up during the design and testing of an innovation.

Content and structure of this guide

This guide draws on an analysis of the literature, including writings and case studies from the fields of family planning, health and nutrition as well as from rural development and natural resource management. Much of the wisdom relevant to scaling up does not use the language of scaling up nor does it come from the public health field. Areas of study such as the policy, organization and social sciences, technology transfer, diffusion of innovation and research utilization touch upon many issues central to scaling up *(7)*.

The experiences of members of ExpandNet—a global network of public health professionals with expertise in expanding the impact of pilot and experimental projects to large-scale regional or national

programmes—also contribute substantially to the guide *(16)*. Scaling up initiatives in Bangladesh, Bolivia, Brazil, Chile, China, Ghana, Romania, Viet Nam, Zambia and other countries offer considerable learning and evidence on what works in scaling up *(4)*.

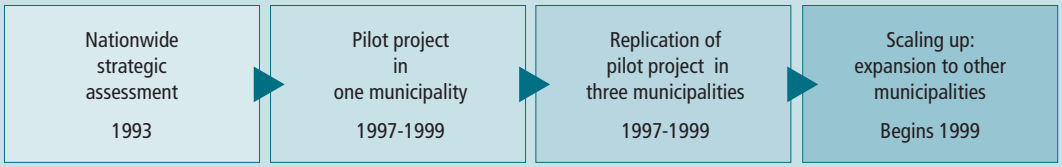
The next chapter introduces an applied framework, which conceptualizes scaling up as an open system with interrelated elements. The elements of the framework represent the building blocks for scaling up. Chapters 3–6 discuss the first four elements of the framework, highlighting key attributes and practices that have been found to facilitate success. Chapter 7 identifies strategic choices that have to be made. Chapter 8 discusses strategic planning and management of scaling up, focusing on efforts to ensure a balance among the elements of the framework, in light of the many tensions, ambiguities, setbacks and instances of luck that can (and will) arise. Chapter 9 provides concluding comments.

Throughout the guide, case materials from public sector programmes are given as examples to illustrate key points. The box below introduces scaling-up experiences in Brazil, Ghana and Viet Nam, to which frequent reference will be made. Although each initiative followed a different progression, all three cases started with the explicit intention of eventually scaling up innovations that met health needs.

Beginning with the end in mind: three country experiences

Brazil: capacity-building to address the ICPD agenda

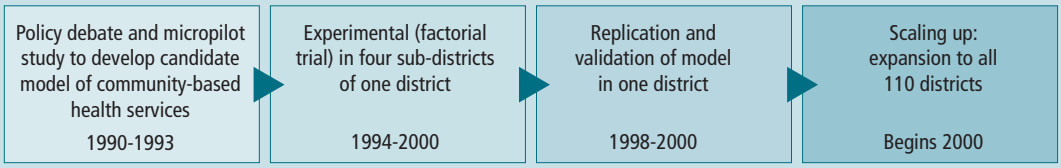
The 1988 Constitution of Brazil guarantees the right to family planning, and government policy statements prioritize integrated health care for women. However, a nationwide strategic assessment, conducted as the first stage in the Strategic Approach, showed that programme practice sharply contrasted with policy. Availability of and access to contraceptive services of adequate quality were extremely constrained in the highly decentralized public sector health system. These findings led to the development of an action research project in one municipality to demonstrate how to operationalize the mandate of the ICPD Programme of Action. Managers, health authorities, providers, researchers, trainers and representatives of a local women's group worked together to develop and test a service delivery model for family planning and related aspects of sexual and reproductive health. The results of this pilot project demonstrated that the tested model could achieve significant and sustainable improvements in availability, access and quality of care. This innovation was then adapted and successfully replicated in three more municipalities. An evaluation of this initial scaling-up process found increased use of services and sustained improvements in quality of care. The Reprolatina Project was initiated to further scale up the innovations. As scaling up progressed, the innovations were adapted and implemented in 39 municipalities *(17–19)*.



Ghana: Community-based Health Planning and Services initiative

A national programme known as Community-based Health Planning and Services (CHPS) began with national policy debate around the best way to deliver accessible and affordable community health and family planning services, in the context of health sector reform. A small-scale pilot trial to clarify practical strategies for implementing two different and completely new approaches to community health care followed. In the next phase, a four-cell experimental study answered questions about the relative merits of the two strategies implemented independently and jointly, as compared to the existing system of care. The findings suggested that the model most effective at reducing fertility and childhood mortality was one that combined the mobilization of the capabilities of traditional leaders, social networks and volunteers with the relocation of underutilized clinic-based nurses to community-constructed clinics where they live and work. Some health officials argued that the unique institutional resources accompanying the research were responsible for these results, which could not readily be replicated in rural settings that lacked such resources.

A two-community pilot project followed to adapt and validate the model to a different cultural and ecological zone of Ghana, using routinely available resources and mechanisms of the Ghana Health Service. This project demonstrated the feasibility of transferring a service model from a research project to a resource-constrained district health service setting and how to adapt and transfer it. The subsequent nationwide scaling-up process includes strategies for decentralized planning to ensure that operational details of the programme are adapted to local circumstances in this multi-ethnic, multilingual country. By 2006, 105 of the country's 110 districts had begun the process of reorienting primary health care from clinics to communities *(20)*.



Viet Nam: introducing injectable contraception and improving quality of care

In 1994 the Government of Viet Nam was committed to broadening the range of available contraceptives in its demographically oriented family planning programme. A strategic assessment pointed out that improving the quality of care in existing services was a higher priority than introducing new contraceptives. Nevertheless, the Government was eager to make the injectable contraceptive depot medroxyprogesterone acetate (DMPA) more widely available. Therefore, a package of service delivery interventions to support DMPA introduction while simultaneously strengthening the quality of care in family planning services was designed and tested. The pilot project demonstrated that the introduction of a new contraceptive and quality of care could enhance choice for women and increase contraceptive continuation rates. The innovations were then gradually scaled up in all districts of 21 provinces. After scaling up in 21 provinces, the Government continued to replicate and expand activities to all 64 provinces in the nation *(21)*.

ExpandNet/WHO products on the science and practice of scaling up

ExpandNet/WHO has developed tools and resources to support policy-makers, programme managers and those providing technical assistance with the scaling-up task. A book entitled *Scaling up health service delivery: from pilot innovations to policies and programmes*, published by WHO in 2007, presents the ExpandNet conceptual framework for scaling up and case studies that analyse the expansion of health service innovations in public sector programmes in Africa, Asia and Latin America *(4)*. A short guide entitled "Nine steps for developing a scaling-up strategy" can assist practitioners by providing a methodology for strategic planning. It complements the current, more comprehensive practical guidance document. These and other resources are available on the ExpandNet website http://www.expandnet.net.

2. An applied framework for scaling up

The scaling-up framework presented here is intended to facilitate **the strategic planning and management of the scaling-up process.** It is based on extensive international experience and relevant literature *(8)*. The framework:

- provides a way of thinking about scaling up;
- identifies conditions that lead to success;
- articulates strategic choices that have to be made;
- highlights actions that enhance the potential for success and sustainability.

Scaling up is portrayed as an open **system of five elements that interact with one another:** the innovation, the user organization, the environment, the resource team or organization and the scaling-up strategy (Figure 1). An open-systems perspective means that the task of scaling up is not exclusively a technical and managerial undertaking, unaffected by the outside world. It is heavily influenced by environmental factors, such as persistent gender inequalities, the extent of poverty in a country, the capacity of the national health system, its bureaucratic institutions and political forces *(15)*. Critical choices have to be made about the type of scaling up, dissemination and advocacy, the organization of the scaling-up process, costs and resource mobilization as well as monitoring and evaluation.

Key **attributes of success** derived from the diffusion of innovation literature *(22, 23)* and experience are highlighted for the innovation, the user organization and the resource team. These provide guidance in the design and implementation of the scaling-up strategy.

Striving for balance or congruence among the elements of the system is a major task in designing and implementing **a scaling-up strategy** *(8)*. The elements of the scaling-up system interact with each other, often in complex ways. Changes in the state of one element can affect the state of the others, with implications for the scaling-up process. An effective scaling-up strategy will maximize opportunities for success and minimize or bypass constraints.

The innovation (chapter 3)

The innovation refers to a set of health service interventions that is being scaled up. Once scuccessfully tested, the package of interventions serves as a model for how to improve health services, leading to reduced disease and improved health status. A set of interventions could include a combination of the following *(8)*:

- new technology;
- processes to enhance community participation and mobilization;
- information, education and communication or behaviour change communication materials and activities;
- operational procedures, such as service delivery protocols, guidelines and supervisory tools;
- training curricula and educational approaches;
- management, information and logistics systems;

- capacity-building mechanisms to strengthen the user organization;
- health-care financing approaches and organizational restructuring;
- new services to unserved populations (e.g. adolescents, men, migrants).

The human rights approach to scaling up signifies that an innovation embodies certain values. Principles such as community involvement in decision-making, gender sensitivity in services or elimination of discrimination against ethnic minorities, where relevant, are also essential components of an innovation.

The user organization (chapter 4)

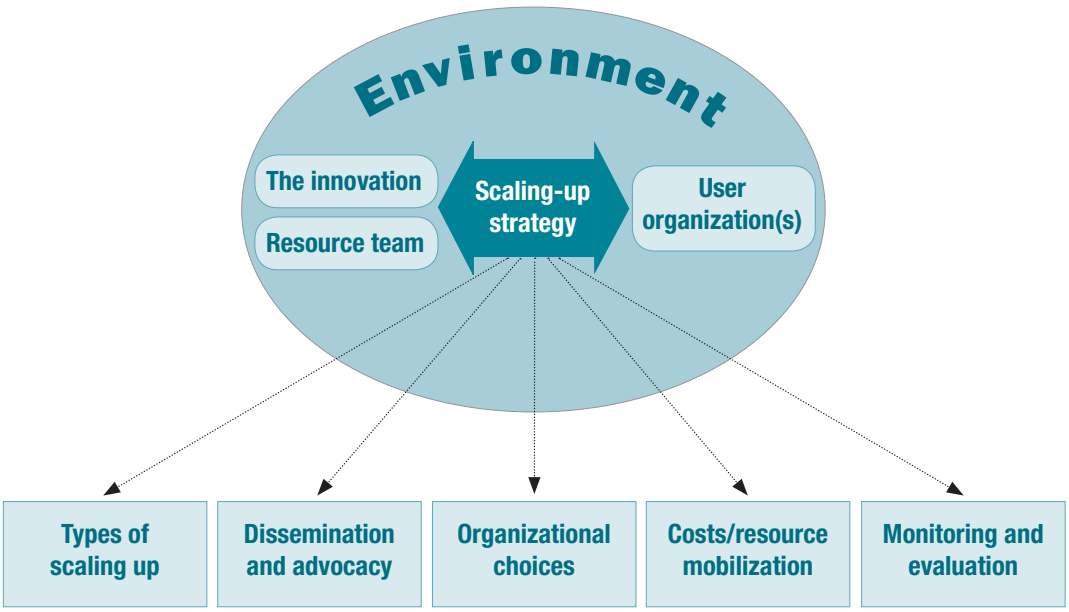
The user organization refers to the institutions or organizations that seek or are expected to adopt and implement the innovation on a large scale. The user organization may be a public sector health service system, an NGO, an alliance of NGOs, a network of private, commercial sector providers or a combination of such institutions *(8)*.

The user organization is not a passive recipient of the innovation. Its members are active participants in scaling up, and relationships between the user organization and the resource team are dynamic, changing over time and with varying circumstances *(24)*. Individuals working in the user organization may be members of the resource team from the beginning or may join it as they develop expertise and interest in supporting scaling up.

The environment (chapter 5)

Multiple conditions and institutions external to the user organization fundamentally affect the process and prospects for scaling up. The people who require health services are the environmental force that drives scaling up: the need to serve more people, more quickly and more equitably. Moreover, the

Figure 1. The ExpandNet framework for scaling up



social, cultural, political and economic context in which scaling up takes place has substantial impact on the other elements of the framework. The environment presents opportunities and obstacles; these need to be identified and addressed when deciding how to scale up *(8)*.

The resource team or organization (chapter 6)

The resource team or organization refers to the individuals and organizations that seek to promote and facilitate wider user of the innovation. The resource team serves as a catalyst for change and provides guidance and technical assistance to the deliberate efforts to utilize the innovation on a large scale.

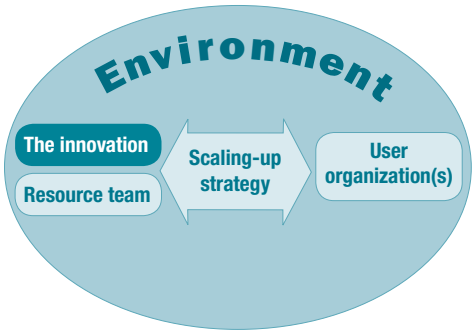
Researchers, programme managers, trainers, service providers, community representatives, reproductive health advocates and policy-makers are examples of people who may play this role. Representatives of various organizations—government, NGOs, research centres and technical assistance agencies—can make up the resource team. These organizations may be located in the country and outside of the country. The team typically includes staff from the organization that seeks to, or is expected to, adopt the innovation, such as the ministry of health (MOH). It may be formally designated or not and be situated in the same institution that will adopt the innovation, or it may be located outside it *(8)*.

Strategic choice areas (chapter 7)

The relative strengths and weaknesses of the innovation, the user organization, the environment and the resource team have many implications for the scaling-up strategy, which refers to the plans and actions necessary to establish the innovation in policies, programmes and service delivery. It includes both efforts used by the resource team as it seeks to establish the innovation within the larger health service system and approaches used by the user organization as it responds to these efforts. Designing and implementing a scaling-up strategy also involves making a number of strategic choices related to *(8)*:

- **The type of scaling up to pursue.** Different approaches to a guided process can be undertaken. Expansion or replication is the most frequently used type—extending the innovation to new geographical areas or to new client populations. Sometimes new activities are added to an existing innovation; the innovation is diversified. Efforts to institutionalize the innovation in the policy and legal framework are another type of scaling up.
- **The approaches to dissemination and advocacy.** This is the selection of the methods by which the innovation is communicated, transferred and otherwise promoted to the user organization, and other stakeholders. Approaches can include training, technical assistance, policy dialogues or peer exchanges; utilizing interpersonal, mass media and other channels.
- **Organization of the scaling-up process.** Critical choices for the scaling-up strategy include decisions about bringing new partners into the process, the pace at which expansion should occur and the degree of flexibility in implementation of scaling up.
- **Costs of scaling up and mobilization of resources to support it.** Ensuring adequate resources for scaling up involves identifying the costs of the scaling-up process, the possibilities of economies of scale and the actions needed to ensure that required resources are available.
- **Monitoring and evaluation.** This entails determining the kinds of information required to inform the process of scaling up and to assess outcomes and impacts.

3. The innovation



The innovation refers to the health service interventions or other new practices that are being scaled up. The innovation consists of a package of interventions.

Some innovations are more readily scaled up than others. This chapter addresses the question, "What enhances the potential of an innovation for sustainable scaling up?" Although the discussion focuses on issues and actions that ideally are considered during the development and testing of the innovation, this chapter is also relevant to situations where an innovation is already in hand. A pilot project can be examined retrospectively to identify steps that could be taken to enhance the possibility of successful scaling up.

The box below illustrates the multifaceted nature of the innovations in Brazil, Ghana and Viet Nam.

Successfully tested innovations from three countries

Brazil *(17,18)*: capacity-building to address the Cairo agenda (Reprolatina Project)	Ghana *(20)*: introducing community-based care	Viet Nam *(21)*: introducing injectable contraception and improving quality of care
Interventions to improve access, use and quality of family planning services: ■ training and management for facility-based services; ■ new programmes (e.g. for men and adolescents); ■ community mobilization for sexual and reproductive rights; ■ participatory design and management.	New model of community-based primary health care: ■ community mobilization for labour and resources to construct health posts; ■ retraining and relocation of nurses to community-constructed rural health posts; ■ community participation in operational design and administration of service delivery; ■ mobile health service delivery at homes.	Interventions to improve quality of care in family planning: ■ injectable contraceptive to expand range of available methods; ■ training to increase technical competence and counselling skills for all contraceptive methods; ■ development of information, education and communication materials for all methods; ■ supportive supervision and client follow-up mechanisms.

Attributes of innovations that enhance the potential for scaling up

Innovations with the "CORRECT" features listed below are most likely to be successfully transferred to the user organization, as confirmed by decades of work on the diffusion of innovation and documentation of international experience with scaling up *(22)*.

- **C**redible, in that they are based on sound evidence or advocated by respected persons or institutions;
- **O**bservable, to ensure that potential users can see the results in practice;
- **R**elevant for addressing persistent or sharply felt problems;
- **R**elative advantage over existing practices so that potential users are convinced that the costs of implementation are counteracted by the benefits;
- **E**asy to install and understand, rather than complex and complicated;
- **C**ompatible with the potential users' established values, norms and facilities; fit well into the practices of the national programme;
- **T**estable without committing the potential user to complete adoption when results have not yet been seen.

How to enhance the attributes of success and the potential for sustainable scaling up

The seven recommendations described below help to maximize the attributes of successful innovations, thereby increasing the potential for sustainable scaling up. Ideally, they are applied during the development of an innovation or during a retrospective review.

1 Involve the user organization in a participatory process

Engaging members of the user organization—from top-level policy-makers to managers, service providers and community members—in a participatory process of developing and testing the innovation or in a retrospective review helps to ensure that the innovation is relevant to the needs and realities of these stakeholder groups. Because members of the user organization are familiar with programme aims and established practices, they are likely to propose an innovation that fits their health system and that they are willing to implement *(22)*. The involvement of well-regarded individuals from the user organization helps to build a convincing case for the innovation, especially when these persons then go on to promote it to sceptics. Participatory approaches foster ownership. Those who "own" the innovation are more likely to see it as advantageous and to support its scaling up than those who had little input into its design *(25)*.

2 Tailor the innovation to the context

Tailoring the innovation to the given context is essential *(26–29)*. Equally important is taking care not to sacrifice universal human rights principles for the sake of fitting the innovation to a context where these values are not widely held *(8)*.

Taking into account the factors below can increase the odds that the package of interventions will be relevant, perceived as advantageous, easy to install and compatible with the user organization.

- **Alignment with policy and programme priorities.** Innovations that correspond to national health sector goals are more likely to gain the political or administrative support necessary to go forward on a large scale. However, even if a supportive policy environment for an innovation does not exist, which may be the case with potentially sensitive issues such as adolescent sexual and reproductive health, the process of developing and testing an innovation can develop support and momentum toward policy change *(27)*.
- **Existing resources.** Working with locally available resources helps to avoid creating an innovation that is too costly or complex for the user organization to adopt. When an innovation requires many support structures, supplies or outside organizations to implement, it may be considered a "boutique" project—an intervention that provides high-quality services for a few communities, but is unable to achieve comprehensive geographical coverage or be sustained *(30, 31)*.
- **Congruency with local sociocultural patterns.** Innovations that build on existing patterns of social organization, values and traditions of language are more likely to be adopted. Maximizing sociocultural strengths also facilitates community contributions of available human, financial and material resources.

Ghana: an innovation shaped by sociocultural traditions

Two distinctive features of Ghanaian society influenced the design of the innovation: patterns of coherent community leadership and the existence of indigenous grass-roots political institutions. Ghana is a predominantly agrarian society, with a history of communal, egalitarian land tenure relationships. Strong social networks with well-defined traditional leadership govern social roles. Cultural values emphasize subordinating personal needs to community interests, consensus-building and group decision-making. These traditions foster active community participation and make volunteer service a national resource that is often mobilized in activities that reach rural communities. Thus, researchers and programme managers sought a model of primary health care that maximized community involvement in planning and implementation, included a mechanism for volunteer contributions and made use of decentralized resources. Although these broad sociocultural patterns guided the development of the innovation, fundamental differences in cultural and ecological settings throughout the country required that it be further adapted in the course of scaling up (*20*).

- **Receptivity and commitment of the user organization.** When user organizations endorse all facets of an innovation—the technologies as well as processes related to participation, training and management—scaling up is facilitated. When policy-makers or donors seek a quick-fix technological solution to a health problem and are interested only in some aspects of the innovation, scaling up becomes difficult *(32)*.
- **People's needs, rights and perspectives.** The knowledge, beliefs and experiences of users and potential users of health services as well as gender, age, class, ethnic or other social inequalities need to be considered in the design of the innovation.

3 Design research to test the innovation in light of the objectives of the project and decision-makers' expectations

Research protocols to test an innovation should be developed jointly by the user organization and the resource team, so that research is not isolated from the programme context.

The objectives of the pilot project also affect research design. Research to test an innovation typically aims to obtain evidence of the effectiveness and feasibility of implementing an innovation. Other research objectives may include determining the costs of implementing the innovation or building capacity for guiding the process *(13)*.

Decision-makers' expectations about what constitutes persuasive evidence is another factor to weigh in the research design. Senior officials may want population-based data on the number of births or on contraceptive prevalence for an innovation that seeks to affect fertility, or they may be satisfied with service statistics related to the provision of contraceptives. When the major purpose of an innovation is to bring about changes in programme implementation, baseline and outcome data related to service functioning are often sufficiently credible.

Using both quantitative and qualitative methodologies yields data that speak to the range of people who need to have confidence in the innovation—high-level public officials, managers, service providers and community members. Quantitative data are needed to test the innovation. They may also be more convincing to some people than qualitative data. However, other stakeholders may find case studies or other qualitative results more convincing than numbers.

Regardless of the research design, **agreement among stakeholders on the purpose of testing is essential**. The concerns of a research institution—whether governmental or nongovernmental—may not align with those of the user organization. Often, the interests of the former lie in generating scientific results, while the latter may view these as an impediment to their own goals. Failure to agree on the principal purpose of a pilot project and what its future will be may undermine scaling-up efforts *(29)*.

4 Test the innovation under real-life operating conditions

An innovation tested in the day-to-day operational realities and resource constraints of a health service system is likely to be compatible with user organization practices and facilities. Therefore, testing under realistic conditions is an important prerequisite for successful scaling up.

In some situations, complex research designs that demand special human and financial resources may be necessary to ensure that all elements of the innovation are in place and the impact of the whole package can be validly determined. For example, in an experiment to test an innovation involving the delivery of a new medical treatment such as antiretroviral therapy for HIV infection, trained providers and consistent supplies of the medications and ancillary materials must be guaranteed. However, such circumstances may not be representative of routine public sector operations and resource constraints, where supply shortages are chronic. When pilot or experimental projects take place in facilities and management contexts that differ greatly from the larger institutional setting into which they are to be transferred, the credibility of the evidence for scaling up may be questioned. A second research phase to validate the innovations in settings and under resource constraints that are as close as possible to those in which scaling up will occur may be necessary *(14, 20)*.

5 Identify the key features central to success so the innovation can be streamlined and more readily replicated during scaling up

Successful scaling up implies that key features of new interventions tested and proven to be effective remain intact during expansion, because otherwise pilot results cannot be replicated *(31)*. Therefore, the aspects of the innovation that were central in producing the desired results must be identified. Clear identification of the essential, non-negotiable features of an innovation allows for streamlining or simplification of the innovation so that it may be easier to understand and install.

Answering the following questions while reviewing the research results can help to identify the features central to the success of an innovation *(33)*:

- Is there anything special or unique about the context of testing that affected the project's success? (For example, cultural, ethnic or religious values; distribution of power; economic conditions.) Do these factors need to be present for successful replication of the innovation?
- Which key organizational or institutional features contributed to the outcomes and need to be retained and replicated? (For example, staffing, management styles, financial resources, training, supplies and logistics.)
- What values and underlying concepts are embodied in the innovation and are essential for its success? (For example, community involvement in decision-making or a commitment to reproductive choice and rights.)
- What are minimum quality standards for the innovation that must be applied uniformly while still permitting local adaptation of interventions?

An analysis of the innovation and the testing should also produce documentation of what has been done, how it has been done and why it has been done in this way *(34)*. Concise descriptions of the purpose of the innovation, the objectives of the research to test it and the results that were obtained are also a part of presenting credible evidence.

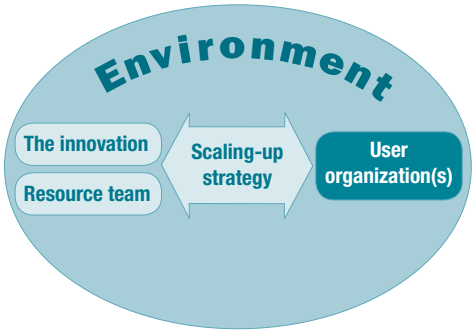
6 Reflect on the degree and nature of change that the innovation implies for the user organization

Innovations that aim to improve equitable access to good-quality health care often imply a great deal of change in the user organization: changes not only in technical and managerial procedures, but also in organizational culture, established norms and values and power dynamics. While modifying minor elements of health workers' routine practice can be relatively easy to bring about, larger changes that conflict with the philosophy of an organization or that disrupt longstanding relationships can be challenging to accomplish *(35)*. Innovations that put forward a social change agenda rarely have all the attributes that enhance successful scaling up. A realistic understanding of the quantum of change implied by the innovation is critical to setting expectations and planning for needed resources. The greater the degree of change implied by the innovation, the greater will be the efforts required for successful scaling up *(15, 17, 21)*.

7 Initiate scaling up after the effectiveness and feasibility of the innovation have been established

During the process of testing an innovation valuable lessons emerge about which attributes of success are most readily obtained and which ones are likely to present future challenges. Sharing such knowledge and experience through midterm dissemination workshops, conferences and publications extends the participatory process, giving a wider range of stakeholders the opportunity to contribute to shaping the innovation and how to best implement it on a larger scale. However, promising results or pressure to move quickly may lead to a decision to scale up the innovation before its effectiveness and feasibility have been fully established. Innovations that are scaled up prematurely are unlikely to yield their full benefits *(12)*.

4. The user organization(s)



The user organization(s) refers to the institutions or organizations that seek or are expected to adopt and implement the innovation on a large scale.

All user organizations present both strengths and weaknesses for scaling up. Successful scaling up requires realistic expectations and strategies that simultaneously expand an innovation and build institutional capacity.

User organizations can be of a variety of configurations—a public sector health system, an alliance of NGOs, a network of private providers or a combination of such institutions.

Attributes of user organization(s) that facilitate successful scaling up

Successful scaling up is facilitated when the user organization has the following characteristics *(22)*:

- The members of a user organization **perceive a need for the innovation;**
- The user organization has the appropriate **implementation capacity;**
- The **timing and circumstances are right;**
- The user organization possesses effective **leadership** and **internal advocacy;**
- The resource and user organizations are **compatible.**

How to enhance the capacity of the user organization(s) to ensure successful scaling up

Although the gap between the ideal characteristics listed above and the realities of the health service system may be large in many countries, the recommendations discussed below can foster an organizational context in which an innovation prospers and succeeds.

1 Recognize the value of policy entrepreneurs and champions

Identifying and benefiting from strengths in the user organization helps to counterbalance weaknesses. **Pockets of innovation** exist even in inefficient bureaucratic systems *(8)*. Some individuals within these systems may be highly motivated to move forward with an innovation and have the orientations and work styles required for its effective implementation. Such **champions** might be a director of a district hospital or a provincial health officer. Working with these innovators helps to advance scaling up. For

example, the Reprolatina Project in Brazil based the selection of scaling-up sites on the commitment of local leaders to the innovation, their willingness to engage in the process of organizational improvement implied by the innovation and their capacity for being innovators *(32)*. Other champions of an innovation may be found outside the service delivery system—a president of the local chapter of a health professional association, a respected religious leader or an activist in a women's empowerment network.

Policy entrepreneurs are also champions *(36, 37)*. They are advocates who can inspire others to believe that the time is right to try new ways of solving problems and that these solutions can succeed. These individuals are politically well connected and can be found at various levels of government, within and outside the health system.

Policy entrepreneurs and other champions should be identified and brought into the scaling-up process as early as possible, ideally during the design and testing of the innovation.

Zambia: maximizing strength and achieving economies of scale

The Pilots to Regional Programmes initiative in Zambia faced large disparities in implementation capacities among the eight participating districts. In response, mechanisms to support interdistrict collaboration, coordinated by the Provincial Health Office, were instituted. These allowed scaling up to maximize the points of strength in each district to the benefit of all districts and achieve economies of scale. One approach involved a cost-saving scheme that rewarded districts for contributing to the broader implementation of scaling up. Districts donated goods and services, such as food and refreshments during workshops, fuel and vehicle use for supervision or skilled personnel for training. In return, they received a credit, which they could then redeem for complementary resources from recipient districts. For example, as a result of these trades, periurban districts provided rural districts with mobile services for procedures that otherwise would not have been offered in the rural districts. In addition to the cost-saving scheme, districts also carried out collaborative activities: joint training, collective procurement of equipment and supplies, and staff exchange programmes. By pooling assets and exchanging resources, districts were able to tailor interventions according to their capacities, without jeopardizing the integrity or quality of the innovation *(38)*.

2 Assess strengths and weaknesses of the user organization and develop creative strategies to build capacity

An important step in building institutional capacity is gaining a thorough understanding of the strengths and weaknesses of the user organization in the following areas:

- **Resources:** supplies and equipment; transportation and communication infrastructure; funding for personnel, training, management and evaluation;
- **Staffing:** morale; compensation; policies and practices regarding assignment of personnel; incentive and reward systems; opportunities for continuing education and advancement;
- **Technical competency:** knowledge of and adherence to clinical guidelines and protocols; use of appropriate interpersonal skills;

- **Management and administration:** information, logistics, supervision and referral systems; degrees of financial, administrative and policy authority at different levels of a health system; the nature of decision-making processes;
- **Organizational culture:** assumptions, values and norms shaping the behaviours of members of the user organization (the emphasis placed on hierarchy, rules, control and order; incentives for innovation and initiative);
- **Policy and legal framework for service delivery:** enabling or constraining service improvements; relative priority of health concern;
- **Leadership:** skills, inspiration and enthusiasm; champions and opponents.

Although an assessment of the user organization may produce a list of difficult-to-solve obstacles, a solid understanding of how a health-care system works in practice can generate solutions to overcome constraints. Resources or incentives for health-care initiatives—from commodity procurement to staff training—may be tapped once they are identified and the mechanisms involved in obtaining them are known. Moreover, supportive laws and policies are often underutilized assets in scaling up. For example, in Brazil, the mayors and local health authorities of municipalities often cited the 1988 Constitution—which guarantees the right to family planning—in convincing municipal legislatures to allocate health funding for contraceptives and family planning services *(18)*.

3 Make use of existing processes and structures

Weaknesses in a health system may tempt the resource team and the user organization to establish temporary structures or processes, such as a parallel distribution system for commodities, so that the innovation can be tested in the pilot project. However, such supplementary systems are often not capable of being replicated on a larger scale. In contrast, taking the time and effort to address weaknesses in existing systems and institutions contributes to sustainability: the upgraded structures remain long after a project has ended. For example, in Viet Nam, the master trainers of the MOH family planning training institute had limited experience in quality-of-care approaches and were unfamiliar with participatory adult education techniques. Interventions to address these shortcomings were incorporated into national training curricula. This allowed these new approaches to be used throughout the programme on an ongoing basis *(21)*.

4 Acknowledge scaling up may be an institutional change task of major proportions

Even in the strongest user organizations, scaling up innovations that seek to increase equitable access to good-quality health services can be a major organization-change task, requiring multiple changes in management processes and organizational culture. Such changes can take a great deal of effort and attention on the part of both the resource team and the user organization. Furthermore, sustainable organizational improvement cannot be accomplished in a short period of time: a programme rather than a project perspective is necessary, requiring long-term technical and financial support *(15, 32)*.

Expectations for scaling up must be shaped in accordance with the realities of the user organizations. Where political leaders are committed to improvements in access to health services of high quality, national health systems are strong and health personnel have appropriate technical competencies, it may be possible to rapidly replicate the innovation on a large scale. When national leaders look unfavourably upon the innovation or give low priority to the health concern it is designed to address,

or health systems are weak, scaling up proponents may need to limit their replication goals *(8)*. User organizations that are composed of multiple institutions or are highly decentralized may demand sizable advocacy efforts, extending the time required for scaling up. For example, in Brazil, where the user organization consists of thousands of municipal health service systems, site-by-site advocacy for the innovation is necessary. Furthermore, training needs are greatly intensified, as family planning training institutions do not exist at higher levels of the administrative structure *(18)*. In other cases, an innovation may not have an obvious institutional home, such as when a coalition of organizations is expected to take up an innovation. Expectations about achieving long-term sustainability need to take into account the challenges entailed in tailoring the innovation to many different systems and structures and the complexities of negotiating policy changes with multiple sectors.

5. The environment

The environment refers to conditions and institutions that are external to the user organization but fundamentally affect the prospects for scaling up.

Multiple and interacting components of the environment influence the elements, the process and the prospects of scaling up. An understanding of the environment within which scaling up occurs permits realistic expectations about the extent to which change is possible and facilitates the development and management of scaling-up strategies that can balance the many (and sometimes conflicting) interests and influences that come into play during the process.

Determining how the environment affects scaling up is not a matter of a one-time exercise. Rather, it is a mindset that both the user organization and the resource team must adopt throughout the process. New opportunities and challenges are likely to arise in the environment as scaling up progresses; many aspects of the broader context are likely to vary from setting to setting within a country or change over time. Time should be set aside to thoroughly consider the enabling factors and possible obstacles presented by the environment as part of the process of developing a scaling-up strategy. Such an analysis draws on multiple sources of evidence: assessments conducted prior to designing and testing the innovation; the results of the research to test the innovation; relevant studies and documentation; monitoring and evaluation data; and dialogue with stakeholders.

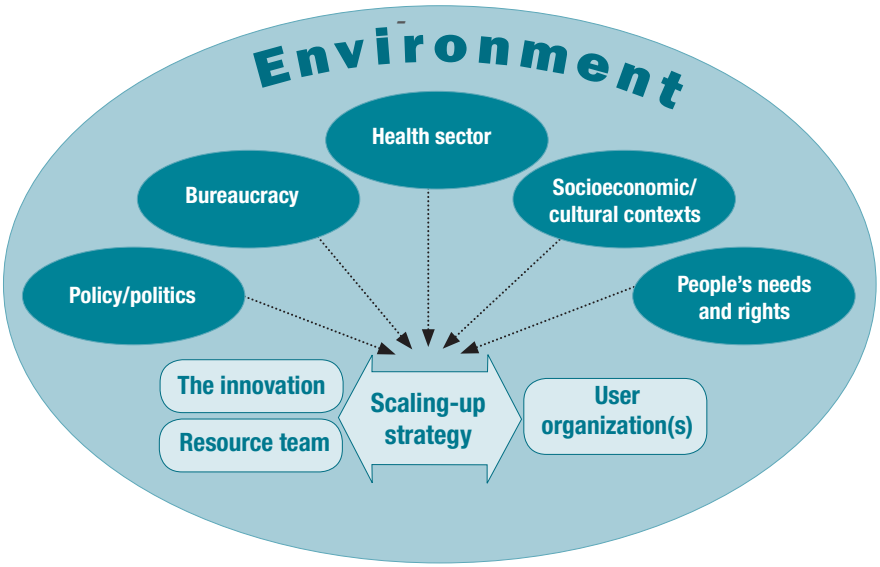
How to maximize the opportunities for sustainable scaling up inherent in the environment

Three recommendations, described below, will enhance the potential for harnessing the opportunities available in the various environmental sectors and ensure that constraints are minimized.

1 Identify the environmental factors influencing scaling up and understand how they affect the process

While the various components of the environment (Figure 2) interact and overlap, it is useful to consider them individually *(8)*.

Figure 2. Environmental influences on scaling up



- **Policy setting and political contexts.** Health issues compete with each other as well as with other sectors for priority in policy and resources at the national and international level. The extent to which an innovation is in line with the political mood of the country affects the time, effort and resources needed to scale it up. Political leaders who champion the innovation may accelerate its institutionalization. The national political structure affects the ability to mobilize actors who can influence policy and support for scaling up. The structure may encourage the engagement of many—from parliamentarians to NGOs involved in programmes and advocacy. Or, it may curtail the power of such actors. Elections and other changes in leadership may open or close windows of opportunity. Overarching national policy and programme frameworks for medium- and long-range budgetary and operational planning, such as Poverty Reduction Strategy Papers *(39)*, shape public expenditure on health relative to other sectors and thereby influence opportunities for scaling up.

  International trends originating in global summits and resulting resolutions, such as the MDGs, influence the public issues that national political systems prioritize and thereby affect scaling up. Similarly, the priorities of major donors can have considerable consequences for the fate of successful innovations, because donors influence national policy and programme directions.

- **Bureaucracy.** Bureaucratic institutions responsible for health service delivery vary considerably in their effectiveness, efficiency and the extent to which they exercise authority and engage with various social sectors *(8, 40)*. Openness to change, willingness to engage in participatory decision-making, stability of the workforce and degree of accountability are aspects of bureaucratic culture that affect the scaling-up process.

- **The health sector.** The way that a health system organizes key functions—service delivery, generating human and material resources, financing, management and oversight *(41)*—affects how fairly and efficiently improvements in access to good-quality health services can be accomplished. Other health sector factors to consider in understanding the potential for scaling up include the political prominence of the MOH relative to other ministries; the percentage of the national budget accorded to health; as well as health sector reform and related decentralization. Sector

reform generally entails major shifts in structure, authority, functions and key personnel in a public sector programme. With decentralization, the number of user organizations can increase considerably, which calls for greater efforts to generate consensus for nationwide scaling up. The tasks of strengthening local leaders' skills in management, logistics, training, clinical services and other areas may increase *(18, 20)*.

Ghana: scaling up as an instrument of health sector reform

Deliberations on health sector reform began in the early 1980s, when "Health for All" became a central pillar of policy. Yet, the specific means of achieving this goal remained the subject of discussion and debate for a decade. In the early 1990s, the MOH decided to carry out research to determine the community health strategies most likely to contribute to feasible and sustainable sector reform. This government commitment to evidence-based decision-making for health-care reform represented the opportunity that led to the CHPS initiative. From the onset of planning, the initiative was seen as an instrument of the health sector reform process. Through the course of more than 15 years, the initiative has served as a blueprint for decentralization of planning and management, fostering partnerships between providers and communities, and expanding health-care resources nationwide *(20)*. Today, the CHPS initiative is part of the Poverty Reduction Strategy Paper of Ghana.

- **Socioeconomic and cultural context.** Multiple social and cultural forces shape the need and demand for health service innovations as well as the possibilities for scaling up. These include individual household resources and capacities to afford services (poverty); the priority accorded to health, especially preventative health care; the power of women vis-à-vis other members of the household, the community and society; local leadership and social network structures; the range of linguistic and ethnic groups within a country or region; and the receptivity of local and national religious leaders to the innovation. Furthermore, social, cultural and economic contexts often vary across a nation: innovations and strategies for expanding them need to adjust accordingly.
- **Health status of the population, and people's rights and perspectives**. The health status, perspectives and rights of the population as well as critical issues influencing equitable access to quality services, such as disrespectful treatment by providers, should be considered in the design and testing of the innovation. However, because these factors vary by locality, they are in need of continued assessment as scaling up proceeds. Women's organizations and other advocacy groups whose mission is to speak on behalf of the rights and needs of underserved populations can be an important resource in this process.

2 Make timely use of opportunities arising in the environment to enhance positive supports for scaling up

Identifying opportunities in the environment to advance scaling up is a first step. However, opportunities are rarely permanent. Timing is critical to ensure that they can be used wisely and to full advantage. The resource team and the user organization also need to consider early on how to sustain actions once windows of opportunity close *(8)*.

Politically opportune moments, also called policy windows, allow the resource team to draw attention to the value of innovations and the usefulness of their broader application. The election of officials committed to improving public health services is an example of a policy window. However, electoral cycles sometimes lead to the replacement of supportive politicians, and initiatives may be discontinued. Where policy windows are created by the electoral cycle, it may be wise to initiate scaling up at the beginning rather than at the end of such cycles. This can maximize the time period in which sustainable innovations can be implemented. Windows may open when new policy priorities arise. New transnational agendas can also present opportunities to mobilize support for an innovation and concurrent health system improvements *(8)*. For instance, the child survival movement of the 1980s opened the door for much progress in health sector capacities in many countries.

China: changes in the environment produce opportunity for programme improvements

Innovative family planning programme leaders in China made the most of overlapping favourable environmental contexts to introduce quality-of-care improvements. In the 1990s, China began to undergo major economic reform, creating a national environment that emphasized individual responsibility in the economic arena. The 1994 ICPD in Cairo brought global attention to the reproductive health approach to family planning. Members of the State Family Planning Commission attended the Cairo conference, learnt of the new reproductive health paradigm and convinced the Commission's Minister to explore the feasibility of implementing the approach in the Chinese context. The Government initiated a pilot project in six counties. A year later, the leaders sought and received donor funding to evaluate the impact of their effort to improve the quality of services. The following year, provincial and county family planning directors and local authorities used the data to convince the Minister that the programme of reorientation should continue and expand. The juxtaposition of the changing national economy, a new global agenda for reproductive health and the availability of donor funding offered an opportunity to introduce into the family planning programme innovations focused on client needs, informed choice of contraceptives and better technical services *(42)*.

Scaling-up initiatives can offer possibilities for synergies with national health sector reform processes. In some cases, they may even give rise to them, as was the case with the CHPS initiative in Ghana *(20)*. Decentralization may bring opportunities. Local autonomy in the design and delivery of health services may allow major improvements to be initiated. When local authorities are supportive, it is often possible to identify necessary local resources to improve facilities, ensure supplies or sometimes even to recruit additional staff *(18)*.

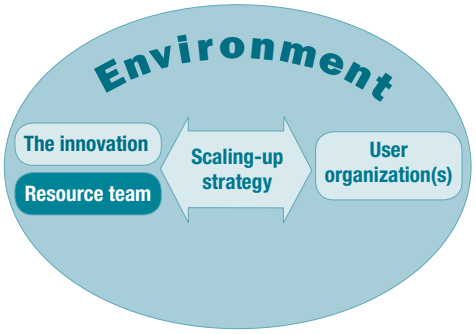
Other opportunities for scaling up may emerge from the grass-roots level. Local groups that advocate for women's issues may become stronger or form networks as scaling up proceeds. Mass organizations may integrate issues related to the innovation into their scope of action. Such groups have the potential to be strong allies in scaling-up efforts, if they are brought into the process as partners.

3 Continue to assess changes in the environment as the process of scaling up evolves

The contextual factors shaping scaling up will change, often unpredictably, as the process advances. Even the most effective and widely embraced innovations are subject to the impact of changing environmental conditions. For instance, solid evidence may back the importance of introducing an innovation; politicians and programme managers endorse it; and the key stakeholder group is actively involved in the process. However, in the course of expanding the innovation, the major donor alters its priorities and the values underlying them, and withdraws funding. While not insurmountable, obstacles such as these require the resource team and the user organization to divert their attention to identifying new resources.

Constant vigilance with regard to the environment helps the resource team and the user organization to anticipate changes, withstand bad times, reconfigure strategies and move forward as new policy windows open and organizational obstacles are resolved. Nevertheless, there may be times when the complexity, diversity and unpredictability of the environment affecting scaling up are so great that there is need to pause or slow down.

6. The resource team or organization



The resource team or organization refers to the individuals and organizations that seek to promote and facilitate wider use of the innovation.

Scaling up is not the same as routine programme implementation; on the contrary, ensuring the integration of an innovation into programme structures and budgets is anything but an ordinary process. Multiple technical, managerial, leadership and financial inputs are needed to support it *(34, 35, 43)*. This is a key task of the resource team or organization.

A resource team may be formally charged with promoting the wider utilization of innovations—that is, it may be officially recognized as an institution or group that is facilitating scaling up. Or, it may act informally, almost invisibly in this role, by virtue of the consistent support offered to scaling-up efforts.

Overall, the resource team advances change and promotes ongoing learning, problem-solving, collaboration and resource development.

Attributes of a successful resource team

Resource teams are more likely to be successful in attaining scaling-up goals if they possess the following features *(8)*:

- effective and motivated leaders who command authority and have credibility with the user organization;
- a unifying vision;
- understanding of the political, social and cultural environments within which scaling up takes place;
- the ability to generate financial and technical resources;
- in-depth understanding of the user organization's capacities and limitations;
- relevant technical skills, including research and evaluation skills;
- capacity to train members of the user organization;
- capacity to assist the user organization with management interventions needed to implement the innovation;
- skills and experience with scaling up;
- compatibility with the user organization.

How to ensure that the resource team can maximize the potential for sustainable scaling up

The recommendations described below can strengthen the capacity of the resource team to promote sustainable scaling up of the innovation.

1 Include individuals who have been part of the design and testing of the innovation

A resource team that originates in the people and institutions that have guided the experimental or pilot project testing the innovation brings an in-depth understanding of the strengths and weaknesses in the interventions and the possible challenges in taking them to scale. The time and effort spent working together in the pilot project is also likely to have produced strong team relationships and a common vision of the innovation.

2 Involve members of the user organization

Ideally, members of the user organization are a part of the resource team from the time that the innovation is designed and tested. Certainly they should become part of the resource team when scaling up is initiated. Representatives of the user organization contribute their solid knowledge of the capacities of the user organization, its decision-making processes and key players, and of the broader context. They may hold senior-level positions in the user organization, allowing them to authoritatively oversee the process. With dual roles as members of both the resource team and the user organization, they can facilitate the process of engaging the user organization in planning and implementing scaling up.

Ghana: a changing resource team

The resource team guiding the CHPS initiative has been a user organization-directed group from its onset. The first small-scale trial to explore possible ways to implement community health care was a project of the Navrongo Health Research Centre, a research unit of the Ghana Health Service, the MOH division responsible for health service delivery. Staff of an international NGO joined colleagues at Navrongo in providing technical support to the experimental study to determine the relative merits of different strategies and the subsequent validation study. Once the best model for the innovation was identified, this group of MOH and international organization staff became the resource team supporting expansion of the model to MOH districts. As scaling up advanced, the district management teams at demonstration sites, established as part of the process, also became members of the resource team. Responsibility for guiding and monitoring the scaling-up process shifted to the Policy Planning Monitoring and Evaluation Division of the Ghana Health Service. Today, international partners still play a role on the resource team, but much more as advocates for the model than as technical assistance providers *(20)*.

3 Locate the resource team as closely to the user organization as possible to promote effective communication

The more the resource team and the user organization(s) have in common—similar values and interests and comparable professional experiences, for example—the easier it is to establish a unifying vision for scaling up. Regardless of the similarities between the two, candid dialogue and participatory decision-making should be promoted at all times. Locate the resource team as closely as possible to the user organization to promote effective communication and reduce the possibility of misunderstandings. Proximity also fosters a longer-term institutional memory *(43, 44)*.

4 Ensure the team has necessary skills and capacities

The specific skills needed on the resource team depend on the nature of the innovation, the amount of advocacy needed to build consensus for its widespread replication and the capacities of the user organization to incorporate, manage and sustain the innovation. The weaker the user organization is, the greater the capacities needed on the resource team. Some or all of the skills below are likely to be required:

- health programme and policy analysis
- research, monitoring and evaluation
- management and organization development
- human resource development, training and curriculum development
- participatory approaches
- clinical skills
- supervision
- health economics and costing
- resource mobilization and fund-raising
- advocacy and social communication
- writing and editorial skills
- fluency in the local, regional and national language(s).

In addition to technical and managerial skills, resource team members need strong interpersonal communication and group facilitation skills and an entrepreneurial spirit. Team leaders must be able to inspire team members to embrace and pursue well-defined goals and to generate commitment to the innovation by appealing to social values *(8)*.

5 Anticipate the need to augment and adapt the resource team as scaling up proceeds

Scaling up cannot be accomplished without growth or change in the resource team. As the innovation is expanded to more places, the focus of research shifts to monitoring, evaluation and applied studies. The demand for continued or repeated training of a greater number of people increases *(26, 34, 35)*. Instituting management practices that support the innovation requires more attention. Resource mobilization and advocacy take on greater importance to securely embed the innovation in both programme and larger structures.

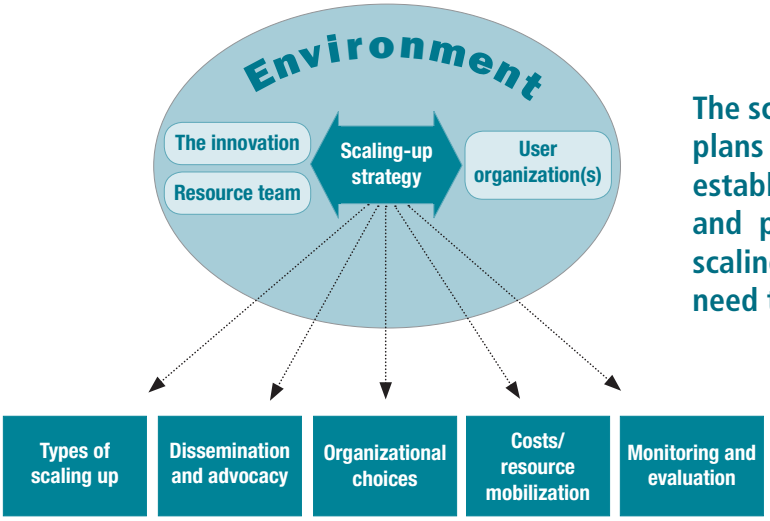
The need for a broader range of skills, more personnel and changing functions typically requires organizational restructuring and internal cultural change *(45)*. Forethought as to how these changes will be accommodated is critical, if the stresses they often entail are to be avoided or minimized. To assess the potential impact that scaling up can have on the resource team and identify strategies to manage internal changes, the team can ask questions such as *(46)*:

- Will the team seek additional skills and resource persons from within the country, or will it go to outside agencies, or both?
- What are the implications of bringing new partners into the process?
- How will this affect the unifying vision of scaling up?
- If expanding the resource team is desirable (or inevitable), how will the participatory, non-hierarchical relationships that often characterize its beginnings be maintained as it grows?
- How will the resource team mobilize resources to maintain momentum? Does it have the skills, networks and connections to mobilize internal and external resources?

6 Support user organization ownership of the innovation and process

Above all, ownership of the innovation and the scaling-up process must lie with the user organization at all times. While the resource team may have to ensure programme survival when scaling up encounters major obstacles, it must also be willing to accept that the user organization may at times reject its methods, approaches or vision.

7. Strategic choices for scaling up



The scaling-up strategy refers to the plans and actions necessary to fully establish the innovation in policies and programmes. In developing a scaling-up strategy critical choices need to be made.

The first steps in formulating a scaling-up strategy were discussed in chapters 3–6. They showed what actions could be taken to ensure that the innovation, the user organization and the resource team have the attributes with the greatest potential for ensuring successful scaling up and demonstrated how opportunities in the environment could be maximized for success. Designing and implementing a scaling-up strategy also involves making strategic choices, to which the current chapter now turns.

Taking into account the characteristics of the innovation, the user organization, the environment and the resource team, strategic choices have to be made in the following five areas:

- the type of scaling up
- dissemination and advocacy
- the ways to organize the process
- assessing costs and mobilizing resources
- monitoring and evaluation.

The advantages and potential disadvantages of the options encompassed in each of the five strategic choice areas are discussed below, including recommendations for action.

Strategic choice area: type(s) of scaling up

There are four types of scaling up *(8, 46–48)*:

- **Spontaneous diffusion** of innovations from individual to individual and from innovative programme settings to other environments is one type of scaling up. It is most likely to occur when the innovation addresses a clearly felt need within the programme or when a key event draws attention to a need *(49)*. However, successful scaling up rarely happens spontaneously. It almost always requires purposeful attention *(8)*.

The three different types of deliberate, **guided scaling up** are defined below.

- **Expansion or replication** (also referred to as **horizontal scaling up**) is when innovations are replicated in different geographical sites or are extended to serve larger or new categories of populations. At this stage, efficiency in implementation, as opposed to the innovation's effectiveness, becomes a major focus. Although expansion and replication are used synonymously, successful scaling up rarely involves a mechanical duplication of innovations in the manner of a franchise operation. Rather, it requires adapting the innovation to the different environmental contexts throughout a country or subregion *(8)*.
- **Policy/political/legal/institutional scaling up** (also called **vertical scaling up**) *(50)* takes place when formal government decisions are made to adopt the innovation on a national or subnational level and it is institutionalized through national planning mechanisms, policy changes or legal action. Systems and structures are adapted and resources redistributed to build the institutional mechanisms that can ensure sustainability.
- **Diversification** (also called **functional scaling up**) or grafting, consists of testing and adding interventions to an existing package *(27, 48)*. An example is adding services for adolescents or men to a reproductive health programme for women.

1 Address both horizontal expansion of the innovation and vertical scaling up to ensure sustainability

Typically, expansion is insufficient to ensure that an innovation is fully integrated into the user organization. To be sustainable, scaling up needs to address both the horizontal and vertical dimensions of diffusion *(15, 26, 46, 47, 50)*, as illustrated in Figure 3.

Vertical scaling up calls for strong advocacy to build legitimacy for the innovation and the need for change. Legitimizing change is essential for getting policies approved, budgetary priorities adopted, and for developing the support needed for implementation of the innovation *(33)*. It also requires an understanding of health system planning cycles and undertaking corresponding efforts to incorporate the innovation and its associated requirements—financing, human resources, logistics and supply needs—into health policy and budgets. For example, the reformulation of the national nurse training policy and programme was a focus of vertical scaling up in the CHPS initiative in Ghana. The shift from a centralized approach that did not fit well with the community-based innovation to a more decentralized, socially relevant one facilitated sustainable expansion of the innovation *(20)*.

2 Ensure scaling up is proceeding smoothly before adding new innovations

Diversification may be pursued when an innovation has attained a sufficient degree of coverage and support to indicate that it is likely to continue expanding and the programme could benefit from new interventions. Diversification also allows the scaling-up process to adjust to new national policy or changing donor priorities. However, diversification carries some risks when undertaken simultaneously with expansion. It should only be undertaken when the user organization has the capacity to implement additional interventions and the resource team is able to provide the necessary support.

Strategic choice area: dissemination and advocacy

Dissemination and advocacy involves choosing the **combination of methods and approaches used to communicate and promote the innovation** to the user organization and other relevant stakeholders. Ideally, dissemination and advocacy approaches link the resource team, the user organization and the communities and people for whose benefit innovations have been designed in a three-way process *(51)*.

3 Use multiple channels to tell a compelling story

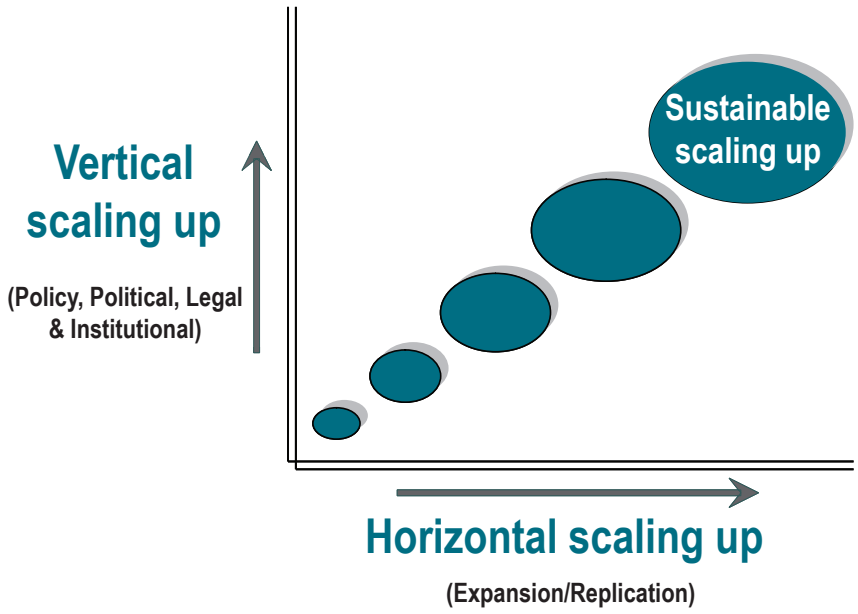
Publications alone do not lead to sustainable scaling up. Regular face-to-face contacts, reinforced by a variety of impersonal channels, are critical elements in dissemination *(44, 52)*. This is particularly the case when the innovation implies extensive change, the user organization has limited institutional capacity or there is limited policy support.

Different types of scaling up call for different dissemination channels. Expansion typically makes considerable use of training, technical assistance, supervision and other hands-on support for local-level managers, providers and community members. Vertical scaling up focuses more on policy dialogue, advocacy and networking with policy-makers, potential allies and higher-level programme managers.

General guidelines for developing approaches for a dissemination and advocacy include *(44, 52)*:

- identifying key audiences (policy-makers, managers, providers, community members, professional groups, donors and others) and learning about their different informational needs;
- tailoring messages and format to each audience;
- presenting data clearly, concisely and in a timely manner, so that they are relevant and usable;

Figure 3. Horizontal and vertical scaling up for sustainability



- integrating repeated messages into the established internal communication networks of the user organization(s);
- recognizing that barriers to effective communication exist both on the side of the resource team and on the side of the user organization; if necessary make use of the skills of communication specialists who can mediate the information flow between the resource team and the user organization.

To win over the range of stakeholders relevant for scaling up, sound evidence must tell a compelling story. Mechanisms that help community members, providers, managers, researchers, policy-makers and donors to see and feel the benefits of change, especially where there is doubt about or resistance to the innovation, are essential components of dissemination and advocacy. Personal contacts—through meetings, conferences and site visits—are very persuasive in building the credibility of the innovation, catalysing political action and maintaining support for scaling up *(44, 52)*.

Viet Nam: multiple channels build implementation capacity and policy support

A modular toolkit, jointly developed by the resource team and the user organization, was the centrepiece of the dissemination approach. By outlining the 14 essential steps in the process of adapting and implementing the innovation—along with their rationale—the toolkit facilitated installation and understanding of the innovation at the service delivery level and contributed to policy support.

Modules in the toolkit for scaling up

1. Establishing task force
2. Informing stakeholders
3. Situational analysis and action plan
4. Action plans for quality of care
5. Plan for training
6. Information, education and communication for quality of care
7. Logistics for quality of care
8. Management information systems
9. Supportive supervision
10. Community support for quality of care
11. Facility requirements for quality of care
12. Accreditation process
13. Monitoring for quality of care
14. Continual quality improvement

Each module contained information on:

- rationale
- methodology
- illustrations of previous experience in Viet Nam
- examples of materials, tools and activities
- advice on adapting the materials to local conditions.

A cascade approach to dissemination was used: the central level introduced and trained provincial-level staff in use of the toolkit through workshops and other meetings; provincial-level staff in turn trained district staff, who trained commune-level staff *(21)*.

4 Build coalitions and network

Sustainable scaling up generally calls for broad-based support—often in the form of coalitions or networks that can advocate for the changes in policy, law or programmes required for vertical scaling up. However, such participatory, inter-institutional collaboration can be labour intensive and time consuming.

Ideally, such coalitions should cut across political party lines *(29)*, so that backing for the initiative is able to withstand changes in government. Furthermore, they should incorporate actors outside the government health sector to generate political priority for scaling up and bolster mechanisms to institutionalize the innovation. Finance ministry officials, multilateral lending institutions, bilateral donors, international NGOs and prominent social actors, such as professional associations or religious bodies, may play this role. The structure of a network depends on local political realities, established practices and opportunities for change *(53)*.

While such coalitions sometimes exist, more often they need to be created or expanded and nurtured from the time the innovation is designed and tested. In decentralized health systems or those that entail multiple levels of decision-making, local- or regional-level steering committees, working groups or coalitions may be needed to advise on scaling up and give voice to local interests *(8)*. Communities also have an important role to play in policy and programme advocacy.

5 Organize training strategies to address both content and process in scaling up

Developing and upgrading human resources are the backbone of organizational capacity-building and one of the primary challenges of scaling up. The content, frequency and structure of any training programme depend on the user organization's implementation capacities and existing structures as well as the characteristics of the innovation. Training should prepare managers, providers and communities for a range of competencies that build implementation capacity. It should generate a vision of what is possible, create commitment to achieving it and empower teams to move forward together *(18)*.

6 Make the most of demonstration sites

Demonstration sites—locations where the innovation has been in place over time—serve multiple purposes. They present a motivating model that continues for years while scaling up is ongoing. Exposure to successful pilots makes change come alive for community members, providers, managers and policy-makers. Sites can also be used for dissemination, training, advocacy and testing additional innovations.

Plans for scaling up should include provisions to sustain the initial pilot or experimental sites, so that the wisdom, commitment and capabilities of its experienced implementation team are not lost *(14, 20)*.

7 Create opportunities for ongoing learning

Successful scaling up also requires continuous training and ongoing learning. In resource-constrained environments, the direct and indirect costs of training workshops may limit the frequency with which this approach can be used. Alternative learning and dissemination methods are needed to encourage participants and keep their knowledge and skills up to date. For example, in Brazil, which

has a well-developed electronic information infrastructure, an electronic network was created to link municipal partners with one another and with the resource team *(17)*. In Ghana, a regular newsletter communicates to all district teams the practical lessons and experience of the CHPS programme—from the strictly technical to the personal experiences of those involved in implementation. Supervision that focuses on mentoring, role modelling and problem-solving offers additional opportunities for mutual learning *(20)*.

Brazil: training as a process of social and organizational change

The Reprolatina Project training strategy has broad social change aspirations—transforming the social and gender inequalities and the imbalanced power relations that prevent people from realizing their rights and responsibilities as citizens. An educational philosophy rooted in the concept of "education as emancipation" shaped the training programme. Objectives of the training programme are listed below.

Personal and professional empowerment:

- relating personal life experience to the content of work;
- creating a sense of autonomy and self-esteem;
- dealing with feelings mobilized during training and during work;
- active participation in problem-solving.

Acquisition of knowledge and technical skills:

- knowledge about the human body, sexuality and gender issues;
- accurate technical information;
- technical abilities;
- counselling and communication skills.

Organization development:

- diagnosing how present practices facilitate or hinder meeting people's needs;
- identifying opportunities for intervention;
- designing and evaluating proposed solutions to problems;
- problem-solving skills.

A process of social transformation:

- a vision of larger social change in the culture of care-giving;
- engaging in critical analysis;
- developing an understanding of gender, class and ethnic inequalities in health and how these can be addressed.

Providers who received the training said that it increased their morale and motivation. They felt they gained a sense of their own power to change the poor quality of services by working together with health authorities and the community *(17)*.

Strategic choice area: **organizing the scaling-up process**

Organizing the scaling-up process involves decisions about the overall implementation. Different organizational approaches, described below, may be used at different points in time, or a combination of approaches may be used at any one time.

- **Additive or multiplicative approaches** is a matter of deciding which institutions and individuals will be involved in supporting and implementing scaling up. A strategy is additive when the original sponsor or sponsors of the innovation (the resource team) continue to work with the same user organization to plan and implement the scaling-up effort. When new partners that were not part of the initial development and testing of the innovation join in the expansion and promotion of the innovation, the strategy is multiplicative *(46)*. For example, in Brazil, the creation of municipal-level training centres, which could support the expansion of the innovation within their own and other neighbouring municipalities, is a multiplicative approach *(17)*.
- **Centralized, top-down or decentralized, bottom-up approaches** is a choice strongly influenced by the nature of the health and political system in a country. In a centralized setting, a high-level, central authority, such as the MOH, directs scaling up from above. In decentralized systems, local entities (e.g. districts or municipalities) have much greater autonomy in making decisions about how to scale up.
- **Flexible, adaptive approaches or standardized implementation** considers the degree of uniformity required in both the package of interventions and the way in which it is introduced in various locations. Flexible, adaptive approaches adjust the scaling-up strategy to the specific context, according to the opportunities and constraints presented. Standard implementation involves adherence to a set of prescribed guidelines, wherein a uniform package of interventions is introduced in all locations in the same manner.
- **Phased, gradual or rapid implementation** concerns the pace of scaling up—the number of locations where the innovation will be introduced within what period of time.
- **Participatory or expert-, donor- or management-dominated approaches** address where control over the content of innovations and implementation processes lies. In an expert-led approach, control rests in the hands of high-level professionals. Participatory approaches are those that strive to engage a wide range of stakeholders in decision-making about the innovation, its adaptation and its expansion.

8 Weigh the advantages and disadvantages of bringing in new partners to promote, support and implement scaling up; to the extent possible, involve potential partners early in the process

An additive approach may allow greater control over the scaling-up process, thereby increasing the likelihood that the innovation will be fully implemented as intended. However, a purely additive approach has limits in terms of its potential overall impact, because it may overwhelm the capacity of a resource team and the user organization *(8)*.

In contrast, a multiplicative approach distributes the tasks of implementing and supporting scaling up across several organizations, enlarging the network of people and institutions available to sustain current and future scaling-up initiatives. But, there are often drawbacks to involving multiple partners.

Creating the necessary shared vision of the innovation and the scaling-up process among partners can be time consuming. Building technical capacities in partner organizations may require additional resources. The determination of who to involve and train needs to be made carefully with the intention of ensuring sustainability. Potential partners in multiplicative approaches should be identified and involved as early as possible *(8)*.

Creating municipal health training teams in Brazil enhanced the capacity for expansion while simultaneously reducing the training burden on the original resource team. It was also motivational for new partners because they gained greater purpose and esteem in their work and thus themselves became stronger advocates for expansion. At the same time, the training and technical assistance demands of preparing municipal partners to become trainers were substantial, which meant that expansion occurred slowly *(17, 32)*.

9 Involve the central level to ensure that an innovation is integrated into systems, structure, budgets and practices of a health system, while using a decentralized approach to implement the innovation

Decentralized approaches have the advantage of encouraging local initiative, spontaneity, mutual learning and problem-solving. They are more likely to ensure that innovations are adapted to local contexts *(28, 54)*. However, a decentralized approach can greatly increase the tasks of the resource team because of the large number of user organizations. Furthermore, officials in a decentralized environment do not have the reach of central authorities. They cannot mandate large-scale replication and rarely command sufficient influence or resources to ensure needed policy reform.

Central-level involvement is usually required to integrate an innovation into structures, budgets and practices of a health system. Even in the most decentralized systems, national bodies often have influence over health-care financing, resource allocation, and establishing and overseeing adherence to guidelines and standards *(8)*.

Although the structure of the health system may offer little latitude in the choice between a centralized and a decentralized approach, the advantages and disadvantages of each suggest that ideally both should be combined.

10 Adapt the innovation while working to ensure that essential features are maintained

Adaptive strategies and flexibility are important elements of success in scaling up *(26, 27)*. Learning organizations are more likely to succeed in whatever they choose to do than organizations that are rigidly rule bound and emphasize standardization *(31, 55, 56)*. Flexibility allows a resource team to refocus energies on policy scaling up when policy windows arise. It may make it possible to simplify intervention approaches and thereby shorten the time required for implementation.

Innovations often need to be reinvented for different contexts within a country *(23)*. For example, the wide variety of cultural and ecological settings in Ghana means the innovation has to be locally tailored as expansion proceeds. These adaptations have been critical to the success of the CHPS initiative *(20)*. Ensuring that the innovation fits the local context requires a learning process, so that key practices and concepts can be made locally meaningful. Diagnostic assessments undertaken in sites that are representative of differing contexts provide the information that helps determine whether and what adaptations are needed. A focus on local needs and realities is also essential for health

authorities and political leaders who want to ensure that new initiatives fit their policy agendas and requirements *(32)*.

Flexibility also has its drawbacks. It often requires greater skills and resources for the resource team. An approach that adapts as situations and contexts change may also take longer to implement. A major challenge in flexible, adaptive approaches lies in recognizing when flexibility and adaptation have exceeded their limits. For this reason, as mentioned in the chapter on the innovation, it is essential to identify the features of the innovation that are central to success so they can be maintained sufficiently intact during scaling up *(31)*.

11 Learn about other tested innovations that address the same challenge

Sometimes other tested models that successfully address the same health problem exist. The resource team should explore these innovations and consider if they present any relative advantages over the innovation proposed for scaling up. It is possible that all or part of a comparable innovation has more of the attributes that enhance the potential for successful scaling up. If this is the case, collaborative efforts to develop, test and expand a mixed or linked innovation should be pursued. Although such approaches may bring the same challenges entailed in any partnership, they have the advantages of a potentially more effective innovation and a broader base of support.

12 Expand the innovation gradually, in phases; resist pressure for "explosive" scaling up

Gradual, phased expansion of the innovation is often needed for successful scaling up *(35, 57–59)*. The principle advantage to gradual scaling up is the availability of more time to undertake the many actions needed to establish lasting institutional capacities at all levels and to ensure that the innovation is sustainable.

On the other hand, a faster implementation approach reaches more people more quickly and may be favoured by donors or government *(21)*. A risk of what some have called "explosive" scaling up *(58)* is that the essential characteristics of interventions can be lost as they are expanded to new areas, and as a result the same benefits found in the pilot project are not obtained.

It may be possible to achieve a more rapid pace of scaling up, if sufficient human and financial resources are available or if the innovation entails few changes in organizational practices and culture for the user organization *(21)*.

Although rapid horizontal scaling up can be problematic, rapid institutionalization and other forms of vertical scaling up rarely present obstacles to sustainability.

Romania: vertical scaling up prepares the ground for expansion of the innovation

The MOH undertook a strategic assessment to determine the best ways to improve the quality of pregnancy termination and contraceptive services, in order to decrease the need for abortion. Several priorities for action were identified, including testing a comprehensive abortion care service-delivery model. However, carrying out such a pilot project required that key policy framework and programmatic structures be in place. Several subsequent government actions—also identified as priorities by the assessment—laid the foundation that could facilitate successful expansion of the innovation. Family planning services within primary health care were strengthened and extended to the majority of rural areas, where they previously had been unavailable. The government allocated funds to purchase contraceptives to be provided free of charge to eligible women. A consultative process produced comprehensive clinical guidelines for elective termination of pregnancy. By the time the results of the pilot project demonstrated that the new abortion care service-delivery model increased the levels of modern contraceptive use as well as satisfaction among clients and providers, much of the work of vertical scaling up was already accomplished. The Romanian experience is another example of the many different pathways that scaling up can take: in this case, policy and institutional scaling up preceded horizontal scaling up *(63)*.

13 Start with points of strength

Sometimes, it is more appropriate to work initially in areas where there are points of strength—pockets of innovation or other sites where scaling up is most likely to succeed. Although stronger health services are often found in wealthier regions or urban areas, committed, capable sites also exist in resource-poor regions. Working with points of strength may contribute to hastening the pace of expansion over the long term. Once multiple examples are available to demonstrate how innovations succeed within a programme, they can serve as models for policy-makers and programme managers and build support, motivation and momentum for further expansion to other regions of a country *(32)*.

14 Use organization development approaches to foster genuine participation in scaling up

Participation in scaling up should extend to all levels of the health system: from processes within the community, to the clinic, to dialogue with decision-makers. Engaging stakeholders outside the health system is also critical. Participatory approaches mobilize a broader range of support for the scaling-up process, increase the likelihood that local needs are reflected and addressed, contribute to community empowerment and foster ownership of the innovation *(2, 26–28, 31, 34, 51)*. However, participatory approaches can be time consuming and may entail considerable human and financial resources to ensure that they work well on a large scale *(58)*. This is particularly true when unequal power relationships between stakeholder groups characterize social interactions. Substantial guidance and support may be needed so that community members become aware of their right to accessible, good-quality health care and are able to contribute effectively to the scaling-up process.

The nature and depth of participation in scaling up are shaped by environmental factors. In practice, scaling-up initiatives draw upon a range of participatory approaches, ranging from those driven by a

rejection of existing social conditions and the need to transform society to those that seek to ensure that all potential stakeholders have a voice in the process *(60)*.

Organization development is a technique that has been valuable in promoting participation in scaling up. Organization development is a long-term effort to improve an organization's visioning, empowerment, learning and problem-solving processes, through ongoing collaborative management *(61)*. In participatory organization development, managers, providers and community members are engaged in a cycle of diagnosis, intervention and evaluation, with ongoing feedback to policy-makers *(32)*.

Brazil: activities of participatory organization development

Each participating municipality in the Reprolatina Project engaged in the activities listed below. Most resources needed to undertake these changes were generated from within the local health systems:

- baseline diagnostic assessment of local health service needs;
- establishment of an executive committee to guide decision-making about implementation of the innovation; members included providers, health authorities, representatives of local women's groups and members of the resource team;
- local adaptation of the innovation;
- training in sexual and reproductive health for all members of the health system, including receptionists, and for community members;
- restructuring services to allow greater attention to family planning and related aspects of reproductive health;
- improvements in supervision, supply, management and information systems;
- repeat of diagnostic assessment to evaluate progress *(17, 32)*.

Strategic choice area: costs of scaling up and resource mobilization

Scaling up does not necessarily require the infusion of massive external funding. User organizations sometimes take on the innovation using resources generated mainly from within the health system *(18, 42)*. In fact, some pilot projects seek to establish the feasibility of implementing improvements using existing user organization resources *(42)*.

Nevertheless, because scaling up is not a routine process, dedicated resources or donor support are necessary during scaling up, until implementation of the innovation becomes a standard practice and its costs are absorbed in national and local budgets.

15 Assess the costs of the scaling-up process and identify possibilities for economies of scale

An understanding of the costs of scaling up clarifies the nature and extent of resources needed to support the process until scale is achieved. Costs arise for all three types of deliberate scaling up: (a) for expanding the innovation to new geographical sites or population groups; (b) for the often considerable time and effort needed to obtain political support for scaling up and for institutionalizing the innovation into routine programme operations; and (c) for diversifying the innovation through the additional testing of new components.

Specifically, the following cost dimensions need to be assessed:

- adding the innovation to the user organization in terms of personnel, training, facilities, drugs, materials and supplies, communication, transport and special meetings;
- resources needed for advocacy, coalition-building, donor round tables, budget hearings *(33)*;
- testing additional interventions (where relevant);
- receiving support from a resource team;
- undertaking the special monitoring and evaluation activities that need to be conducted to assess progress and identify obstacles in the course of scaling up.

Cost savings may be gained through economies of scale, for example through bulk purchases of supplies and sharing of personnel for supervision; identifying and collaborating with similar initiatives; or sharing resources across local jurisdictions *(38)*. These efforts may entail greater short-term organizational costs, but are likely to reduce costs in the long run.

16 Mobilize resources from within and outside the health system to promote sustainability

The scaling-up process typically calls for external or donor resources, particularly because national funds are rarely set aside for such purposes, and redistribution of human and financial resources to new priorities on short notice is unlikely *(33)*. Identifying external resources—ideally within a timeframe that can maintain momentum and reduce possibilities of lengthy gaps in action—is a key task of the resource team.

However, sustainability of the innovation—its continued operation once it has become a regular element of service delivery—cannot be achieved without identifying and accessing national and local sources of support to ensure that it is incorporated into health policy and budgets. For example, national, provincial or district health funds for training and human resource development may be available; pharmaceuticals may be incorporated into centralized procurement mechanisms such as essential drug lists. In addition, linking the innovation to large-scale, comprehensive planning and financing mechanisms, including Poverty Reduction Strategy Papers and Sector-Wide Approaches *(39, 62)*, increases the likelihood that the innovation will be institutionalized. Maximizing existing resources for the benefit of more people and stronger institutions requires considerable time and effort—not only for advocacy but, equally importantly, for building user organization capacities for resource mobilization.

Strategic choice area: monitoring and evaluation

Monitoring and evaluation are needed to assess the process, outcomes and impact of moving to scale. The following types of questions should be answered:

- What are the pace and coverage of scaling up?
- What are barriers to expansion and how can these be addressed?
- Is the innovation being institutionalized at local, regional or national levels? (Is vertical scaling up occurring?)
- What are the barriers to vertical scaling up and how can these be addressed?
- Are the essential features of the innovation intact as scaling up proceeds?
- If essential features are not consistently implemented, what remedial action can or should be taken?
- Is the innovation still producing the same results, especially in those regions of the country where it is being adapted to suit local environmental conditions?
- Is the innovation being appropriately adapted to new conditions resulting from changes over time, or from regional differences?
- Is scaling up becoming swifter and more efficient over time? Are economies of scale being reached?
- Does scaling up produce the anticipated impacts?

Existing systems for monitoring and evaluation of service delivery are rarely capable of providing the information necessary to answer these questions. Special procedures are required to answer them and to take relevant action to address problems *(8)*. Evidence that demonstrates the value of new approaches can motivate communities, providers and managers to implement innovations. Research on the process of scaling up also contributes to greater scientific understanding of the determinants of successful scaling up.

17 Start with a joint vision of successful scaling up and include plans to use the data to adjust the scaling-up strategy

Together, the resource team and members of the user organization should envision the nature and outcomes of successful scaling up *(33)*. This means arriving at a mutual understanding of what reaching more people, more quickly and more equitably means in the particular context. It also requires agreement on the essential features of a scaled-up innovation and what sustainable institutional capacity comprises.

This stage of planning should also consider the need for bottom-up as well as top-down communication so that evidence from monitoring and evaluation can be incorporated into scaling up on an ongoing basis *(20)*. Planning for how to disseminate findings as widely as possible is also critical. Sharing the triumphs and day-to-day lessons of communities, providers and managers plays an important role in motivating others to implement the innovation.

18 Develop appropriate indicators for process, outputs/outcomes and results/impacts

There are few universal indicators for assessing the process, outputs and impacts of scaling up. Each scaling-up strategy needs to include its own indicators, based on the innovation and the mutually agreed upon objectives and goals of scaling up.

Examples of indicators for monitoring the scaling-up **process** include:

- extent to which essential features of the innovation (e.g. training, management, facility construction) are being implemented;
- extent of community participation in and support for the innovation;
- extent that management tools and procedures are used to address constraints;
- appropriate adaptation of innovation;
- adjustment of scaling-up strategy based on findings of monitoring and evaluation.

Monitoring and evaluation should also be able to capture the **outputs/outcomes** of scaling up. Examples of indicators of outputs/outcomes of scaling up include:

- number of sites implementing the innovation;
- number of sites implementing it over the expected period of time;
- statements of political support;
- use of local and national resources to support expansion.
- client and community satisfaction with services that include the innovation;
- provider respect for human rights and dignity.

Monitoring and evaluation also needs to examine the overall results/impacts of scaling up and its sustainability. Examples of indicators of the **results/impacts** are:

- number of people with access to quality services over time has increased;
- number of previously underserved persons using improved health services has increased;
- the innovation is incorporated into the programmatic and technical standards, norms and practices of government and other relevant systems;
- the innovation is incorporated into national health policy;
- the innovation is funded through national and local budgets;
- health status has improved.

Ghana: milestones to measure the scaling-up process

The CHPS initiative identified six major sequential milestones in the process of changing operations from clinic-focused to community-based services over time. Each district and each zone within the district are expected to achieve these milestones. Districts complete a quarterly implementation checklist, recording the coverage, content and pace of programme expansion. These reports are managed by the central monitoring and evaluation office, which shares the data with district, regional and national health officials. Independent monitoring teams also visit districts to verify the milestones *(20)*.

Milestone in establishing community-based services	**Implementation tasks**
Planning	■ community mapping and enumeration ■ outreach to traditional leaders
Community entry	■ community awareness building ■ liaison with leaders ■ community health committee selection ■ training of community nurse for community entry ■ community leadership training
Community health compound	■ community mobilization for facility development ■ community support for maintenance
Essential equipment	■ procurement of bicycles, motorbikes and basic clinical equipment
Nurse posting	■ supervisory provision of fuel for household visitation activities and supplies for clinical work ■ supervisory community backstopping of nursing operations ■ community support for operations ■ in-service training for nurses ■ motorbike rider training and maintenance capacity-building
Volunteer deployment	■ train community leaders in volunteer recruitment and management ■ train community health committees to select and supervise volunteers ■ train volunteers

19 Use appropriate methodologies, but keep them simple

The procedures and methodologies used to monitor and evaluate scaling up should fit well with the programme and be easy to install and understand. Simple, user-friendly instruments that are **compatible with existing systems** are more likely to be used than complex ones. Whenever possible, existing service delivery data collection forms should be adapted to include the information needed, rather than creating a separate, research-driven information system. While local adaptation of data collection systems can be accommodated, sufficient consistency needs to be maintained for cross-site and national comparisons.

Just as pilot testing an innovation makes use of both **quantitative and qualitative methodologies**, so should monitoring and evaluation. Qualitative methods, such as focus groups, gauge the perceptions of progress and problems at each level of service delivery *(20)*. Observation of client-provider interactions points to strengths and weaknesses in provider behaviours. The ongoing environmental analysis—often a largely qualitative exercise—detects contextual factors that can hasten the process or call for slowing down. Important intangible results, such as how the introduction of an innovation can be a catalyst for broader changes affecting many more people, are sometimes only captured by qualitative data. Together, quantitative and qualitative data can tell the compelling stories that numbers alone may not.

Sometimes, special studies are needed if data from routine monitoring systems cannot capture essential aspects of scaling up. For example, to measure changes in health status, population-based surveys are usually needed.

8. Strategic planning and management of scaling up are a balancing act

Strategic planning and management of scaling up require consistent attention to creating and maintaining an appropriate balance among the elements of the scaling-up system. No single element or strategic choice succeeds by itself. Effective and lasting scaling up is a function of the successful orchestration of multiple factors so that they support expansion of the innovation to as many people, sites and regions as possible and anchor it within institutions, programmes and policies. Attention to such balance is required at the initial design stage of a scaling-up strategy and needs to be continued throughout the implementation process *(15)*. This balancing act is the essence of the strategic planning and management of scaling up.

When the elements of the scaling-up system get out of balance, obstacles increase and even the most well-designed strategy runs the risk of going awry. Scaling-up strategies are implemented in ever-changing environments, and multiple processes come into play. Some are strictly technical; others are political, managerial, organizational or social. Some are predictable; others are completely unexpected. In many cases, they are almost impossible to control. Nonetheless there are ways to continue to work towards balance, thereby maintaining the chances of sustainable scaling up.

How to create and maintain balance in scaling up

The following recommendations provide guidance for the strategic planning and management of the scaling-up process.

1 Watch for and correct imbalances as elements of the scaling-up system interact

Imbalances that arise in the course of scaling up can be corrected—through actions ranging from dialogue to fund raising. But, if they are not recognized, problems arise. Monitoring and evaluation, accompanied by ongoing environmental awareness, are necessary to discern imbalances and make corresponding adjustments in the scaling-up strategy.

Although imbalance between available resources and the requirements of implementing an innovation is the most obvious source of discrepancies, it is by no means the only one. Even with sufficient resources, the managerial or policy environment can shift from favourable to unfavourable—and the scaling-up strategy may be out of line with the changed context. The need for vertical scaling-up efforts is often underestimated, which could lead expansion to fail *(33)*.

As innovations obtain broader coverage, a frequently encountered imbalance is the disparity between what the innovation becomes in practice and what it was during the pilot phase *(31, 35, 58, 64)*. A related balancing act is required when determining to what extent local adaptation of key rights-based concepts is appropriate or constitutes a significant loss. One must determine what is universal and what is appropriately local *(54)*.

Ghana: new nurse training approaches resolve limitation in scaling-up strategy

The placement of nurses in community-based facilities where they live and work is one of the key components of the innovation in the CHPS initiative. In the early stages of scaling up, trained community health nurses were deployed to subdistricts by central order. As scaling up advanced, evidence suggested that nurses feared community deployment, because they were not from the communities where they would be placed, often did not speak the local language and had to live separately from families and kin. To address these problems, a community-engaged approach to decentralized training was launched. Now, communities select nurse trainees, who are sent to a local training centre where fees are paid by the districts and communities to be served by the trainees. Upon graduation, nurses return home, rather than to a post in a distant location. This adjustment of the scaling-up strategy generated new policies for the national nurse training programme—vertical scaling up—and yielded an innovation more in tune with the social dynamics of the nation *(20)*.

Another form of imbalance may arise from the spontaneous diffusion of the innovation. For example, officials may visit pilot or demonstration sites and return to their own jurisdictions to begin some level of similar activities *(32)*. Spontaneous diffusion has advantages: it reduces the effort and cost involved in organizing and guiding scaling up. However, spontaneous diffusion frequently leads to incomplete or superficial implementation of the innovation, and consequently the desired results are not obtained. Scaling-up initiatives need to be watchful of the partial and haphazard spread of the innovation, while at the same time encouraging its diffusion *(8, 32)*.

2 Recognize that trade-offs are often necessary

Tensions can arise between several principles of scaling up, for example between the need for gradual, phased implementation and taking advantage of policy windows. Resolving these tensions calls for weighing the possible gains and losses resulting from one choice or the other. Sometimes, a decision is made to trade off one benefit or advantage in return for gaining another. Such compromises are often inevitable. Planners and implementers need to carefully consider the implications of trade-offs, as they can have a profound impact on both the process and the outcomes of scaling up *(15)*.

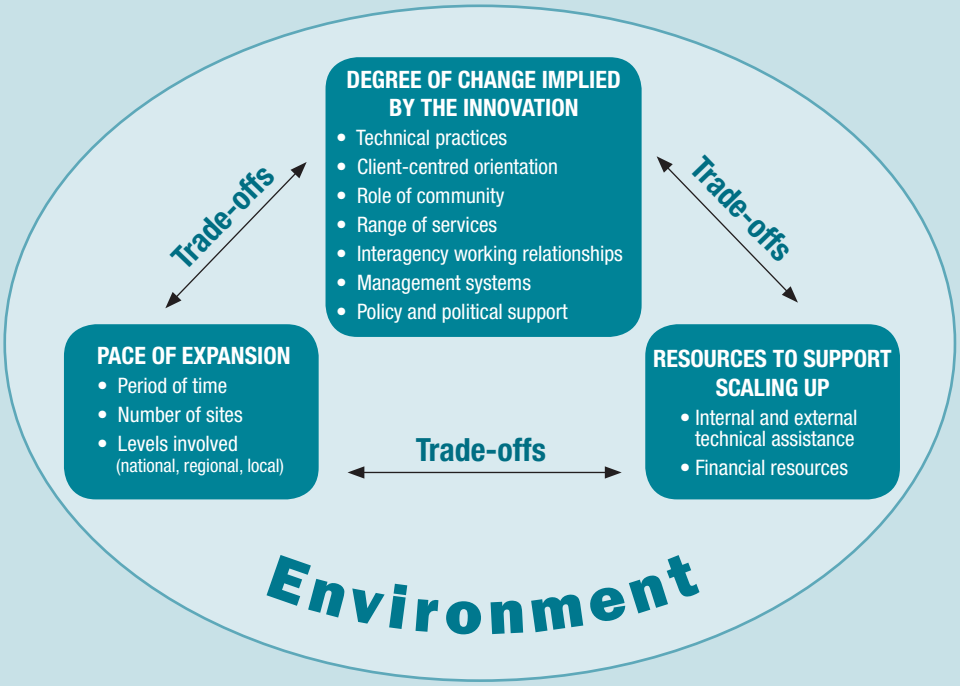
3 Commit to upholding the participation of a broad range of stakeholders

The different perspectives of stakeholders are another possible source of imbalance in scaling up. Each group is likely to have different (and changing) views about the rationale for change, what the innovation should be and how it should be implemented. It may be tempting to circumvent such conflicts by avoiding input from multiple groups with an interest in scaling up. The voices of the disenfranchised and the vulnerable—the very people who should benefit from scaling up—are often the first to be excluded. Participatory processes should be maintained throughout expansion to ensure that the interests of one group are not favoured over another *(7)*.

Viet Nam: strategic choices produce trade-offs

During the course of scaling up in Viet Nam, the strategic choices made regarding the pace of expansion and the resources to support scaling up interacted with the complexity of the innovation. These choices, which were a response to tensions shaped by environmental factors, resulted in a trade-off: the technology of an injectable contraceptive was made more widely available in a short period of time, but without all of the improvements in quality of care encompassed in the innovation.

Strategic choices and trade-offs in Viet Nam



The resource team realized that given the large changes implied by the innovation—a systemwide reorientation toward a more client-centred approach—scaling up would ideally proceed gradually. Nevertheless, policy-makers, programme authorities and members of the donor community were eager to scale up the innovation as rapidly as possible. This window of opportunity led to the decision to pursue a relatively rapid pace of expansion in order to remain engaged in the policy and programme strengthening process. At the same time, the government considered large-scale integration of the innovation into programme operations to be a straightforward process. A decision was made to depend primarily on the five-person national-level resource team for provision of technical assistance.

In opting for ownership and opportunity, the relatively rapid pace of expansion brought some benefit to more women than could have been reached with a slower pace. However, a slower pace could have brought greater benefit to fewer people. Alternatively, the rapid pace of expansion could have been balanced by a larger resource team.

When the divergence between the quantum of change implied by the innovation and the characteristics and prevailing practices of the user organization is great, full implementation of the innovation necessitates either a slow pace or substantial resources to facilitate its integration into everyday service delivery practice *(21)*.

4 Protect the elements of the innovation that differ most widely from the culture of the user organization because they are easily lost during scaling up

Sacrificing quality (the processes and values integral to a human rights-based approach to health care) for quantity (expansion) should be avoided in scaling up. Because the humanistic, participatory and gender-sensitive components of an innovation are often the most difficult to replicate on a large scale, they are often the first to be sacrificed *(7)*. Preserving these essential elements calls for dedicated efforts to highlighting their importance, making their benefits felt by all stakeholders and monitoring how they are expressed in health services.

5 Maintain the staying power of the resource team

A strong resource team, which has forged close ties with communities and with the user organization, provides the greatest assurance that scaling-up initiatives can stay on course. A dedicated and competent resource team with staying power can withstand environmental turbulence, readjust strategies and work with the user organization to sustain scaling up *(15)*.

6 Be vigilant: expect the unexpected and be prepared to act quickly, or to pause momentarily

The conditions shaping the elements of scaling up and the relationships among them shift in the course of scaling up—sometimes dramatically. The multidimensional, non-linear and context-dependent nature of the scaling-up process means that there are no simple rules or clear-cut sequential steps to achieving full scale *(52)*. Tensions among the elements will arise, decisions made about how to address such tensions often result in trade-offs and the balancing act will be ongoing.

Brazil: sustainability gained, expansion slowed down

The political administrative environment of health sector institutions in Brazil presented the small resource team with both opportunities for and major constraints to balancing the demand for expansion with the need for sustainability. The municipal autonomy characteristic of the decentralized health system offered some advantages for scaling up—the team was able to enhance the likelihood of successful implementation of the innovation by tapping into pockets of innovation. At the same time, frequent turnover in leadership and personnel due to elections impeded the sustainability of innovations. When new political parties came into power, even innovations fully integrated into the service system were perceived as products of the previous administration, and new leaders often ordered them to be abandoned.

When more municipalities requested support in replicating the innovation, a tension arose between the demand for expansion and the need to sustain innovations in municipalities already embarked on scaling up. Rather than focus on further expansion, the resource team chose to put energy into sustaining innovations in municipalities where changes in leadership and personnel threatened continuity. In most cases sustainability could be ensured, but it required dedicating substantial time to advocacy and extensive efforts in training new personnel and supporting the implementation of the innovation.

A focus on sustainability may slow down the pace and scope of expansion. But, in the long run, fewer, but sustainable, sites of intervention stand a greater chance of serving as models that can inspire others and generate broader reform than a larger number of sites where the innovation does not survive *(17,18,32)*.

9. Conclusion

"Scaling up is a never-ending relationship building and partnership development activity. The roles, rules and institutions evolve in the process, and assumptions for determining them change" *(50)*.

Scaling up is both an art and a science; it involves the heart as well as the mind. Fostering lasting change is not solely a rational process of looking at evidence and acting accordingly; the ingenuity, passions and commitment of those who support and implement the process play a key role in success.

For a given health concern, there is no single package of interventions and set of scaling-up strategies that are likely to work in all situations. Expecting to discover innovations that are easily replicated and readily disseminated is unrealistic. Most health service innovations are complex, and the strategies to introduce them must be multifaceted and adapted to the specific context. Furthermore, scaling up is seldom a linear process of research leading to advice and then action *(35)*.

Scaling up is a social, political and institutional process that engages multiple actors, interest groups and organizations. It often involves struggles for influence and conflicting interests, and therefore is not neutral *(50)*. The real world is disorderly. Scaling up innovations to ensure equitable access to quality health services will require that advocates appreciate this disorder and decipher how to navigate it *(8)*.

The means and resources required for successful scaling up are at odds with a project perspective *(15, 32)*. As an institution-building task, scaling up requires longer time horizons than those frequently mandated by donor agencies and expected by policy-makers keen to show results. Patience, persistence, flexibility and a sense of humour are essential in negotiating complex bureaucratic systems.

Although the ideal conditions for successful scaling up do not exist anywhere, most environments offer some opportunities *(15)*. If the targets of the MDGs are to be achieved, scaling up must ensure that health service innovations are effective in the national programme context and that they facilitate the major institutional changes needed to guarantee equitable access to good-quality care.

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