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Scaling-Up the Impact of Good Practices in Rural Development

A working paper to support implementation of the World Bank's Rural Development Strategy

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Acronyms and Abbreviations

AIDS	acquired immunodeficiency syndrome
AIMS	Assessing the Impact of Microenterprise Services
APDC	No-Till Association of the Cerrados
ARD	Agriculture and Rural Development Group (World Bank)
ASA	Association for Social Advancement (Bangladesh)
ATSAF	Council for Tropical and Sub-Tropical Agricultural Research (Germany)
BOND	British Overseas NGOs for Development
BMZ	German Ministry of Economic Cooperation (Bundesministerium für Wirtschaftliche Zusammenarbeit)
BRAC	Bangladesh Rural Advancement Committee
CCAPT	Central Center for the Application of Prevention Technologies
CGIAR	Consultative Group on International Agricultural Research
CIAT	International Center for Tropical Agriculture (Centro Internacional de Agricultura Tropical)
CIDA	Canadian International Development Agency
CIP	Community Infrastructure Project,
CSGR	Centre for the Study of Globalisation and Regionalisation
DANIDA	Danish Agency for Development Assistance
DFID	U.K. Department for International Development
DFOs	development financing organizations
DSE	German Fund for International Development (Deutscher Stiftung für internationale Entwicklung)
FAO	U.N. Food and Agriculture Organization
EMBRAPA	Brazilian Agricultural Research Foundation (Embrapa Portal da Pesquisa Agropecuária)
EMPASC	State Research Station for Santa Catarina (Brazil)
ESRC	Economic and Social Research Council Research
FEBRADP	Federation of No-Till Farmers
GTZ	German Agency for Technical Cooperation [Gesellschaft für Technische Zusammenarbeit]
HIV	human immunodeficiency virus
IAPAR	Institute of Agronomy of Paraná (Instituto Agronômico do Paraná)
IDS	Institute of Development Studies
IFAD	U.N. International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
IIRR	International Institute of Rural Reconstruction
IISD	International Institute for Sustainable Development
INRM	integrated natural resource management
IPM	integrated pest management
IPMForum	Integrated Pest Management Forum
IUCN	World Conservation Union
KfW	German Development Bank
LEISA	low external input and sustainable agriculture
NABARD	National Bank for Agricultural and Rural Development (India)
NGOs	non-governmental organizations
NRI	Natural Resources Institute
NRSP	Natural Resources Systems Programme (United Kingdom)
OED	Operations Evaluation Department (World Bank)
OPCS	Operations Policy and Country Services (World Bank)
PAN	Pesticide Action Network
PKSF	Palli Karma Sahayak Foundation
PRA	participatory rural/rapid appraisal

SDC	Swiss Agency for Development and Cooperation
SDRC	Social Development Research Capacity-Building Project
SL	sustainable livelihoods
SUM	Special Unit for Microfinance
SWOT	strengths-weaknesses-opportunities-threats
UNCDF	U.N. Capital Development Fund
UNCHS	U.N. Habitat program
UNDP	U.N. Development Program
UNESCO	U.N. Scientific, Educational, and Cultural Organization
UNICEF	U.N. Children's Fund
WWF	World Wide Fund For Nature (formerly World Wildlife Fund)
WOTR	Watershed Organisation Trust

Executive Summary

> The World Bank's new rural development strategy calls for the "identification and scaling-up of good practice investments within a country, between countries, and between regions. There will also be... increased emphasis on piloting new and innovative approaches that reflect the dynamic economic, social, environmental, and institutional context of rural development, and the potential of heightening the impact of positive externalities for the rural poor."
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> ***—World Bank, Reaching the Rural Poor, 2002***

1. The vast majority of the world's poor people, about 70 percent, live in rural areas. In 2000, the World Bank revamped and intensified its rural development strategy to create an investment climate conducive to rural economic growth and to empower the poor to share in the benefits of that growth. The new strategy, articulated in *Reaching the Rural Poor: A Renewed Strategy for Rural Development*,[1] sets forth five strategic objectives: (1) fostering an enabling environment for broad-based rural growth; (2) enhancing agricultural productivity and competitiveness; (3) encouraging non-farm rural economic growth, (4) improving social well-being, managing risk, and reducing the vulnerability of the rural poor; and (5) enhancing the sustainable management of natural resources.

2. *Reaching the Rural Poor* includes several guidelines for maximizing the results of the Bank's support of clients' rural development efforts. A key thrust in the implementation of the Bank's new rural development strategy is identifying and "scaling-up good practice investments and innovations in rural development." Historically, successful World Bank projects have been one-time investments without strategies for leveraging projects to a larger scale or to broader coverage to increase efficiency and developmental impact in a country or region. The Bank believes that scaling-up good practices must become an integral part of national rural development strategies to reduce rural poverty and support broad-based rural development.

3. This working paper, written in support of the Bank's rural development strategy, is intended to contribute to the development of a framework for thinking about scaling-up. The paper begins with a review of the literature on scaling-up in rural development and other contexts to develop an understanding of basic concepts and terms. Drawing from the literature review and interviews, the authors develop a working definition of the term scaling-up and a provisional framework for analyzing experiences of scaling-up in rural development. Then, to evaluate the provisional framework, the authors apply it to a few well-documented case studies of rapid scaling-up. The final sections of the paper draw lessons from the application of the framework to the case studies and identify key areas for moving forward to support scaling-up impacts in rural development.

4. Although the focus of this paper is on scaling-up interventions in rural areas, the authors hope that the paper will be useful to a wider audience within the World Bank, other development support agencies, and governments. Increasing the coverage and socioeconomic impact of development interventions is central to achieving the U.N. Millennium Development Goals for 1990-2015. The World Bank and other

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[1] For more information on the World Bank's new strategy, *Reaching the Rural Poor: A Renewed Strategy for Rural Development*, visit the website at www.worldbank.org/ruralstrategy

institutions involved in development are committed to these goals, which include eradicating extreme poverty and hunger, achieving gender equity, ensuring environmental sustainability, and developing a global partnership for economic growth and development, especially in developing countries.[2]

5. In March 2002, at a conference in Monterrey, Mexico, officials from countries throughout the world and representatives of the World Bank and other international institutions pledged to work together in partnership to achieve these goals. In what has come to be called the "Monterrey Consensus," conference participants recognized the importance of partnerships between donor and developing countries in moving toward a more inclusive and equitable economic system.[3] A requirement of such partnerships is that when developing countries commit to reform and good policies, donors must intensify their support and commit to scaling-up.

A. METHOD OF THE STUDY

6. This paper was developed through several iterative stages. Initial ideas were presented and discussed with staff at the World Bank, U.N. Food and Agriculture Organization (FAO), and International Fund for Agricultural Development (IFAD). Key issues were identified, and the process of investigation was developed. In the second stage, the concepts, framework for analysis, and selection of case studies were discussed and refined with research institutions, international non-governmental organizations (NGOs) and institutions, and FAO staff. In the third stage, draft papers based in part on an Internet-based literature search and in part on interviews and written exchanges with key players were prepared by consultants/researchers and FAO staff. The provisional framework for analyzing activities related to scaling-up and results from the application of the framework to the case studies were validated and discussed at the World Bank and FAO. Follow-up meetings were held with World Bank regional and thematic task managers to examine the relevance, strengths, and usefulness of the analytical framework. The tools developed and presented in this paper will field-tested and undergo additional review and modification in the future.

B. DEVELOPING A FRAMEWORK FOR ANALYZING EXPERIENCES OF SCALING-UP

7. To develop a working definition of the term scaling-up and move toward the development of a provisional analytical framework for analyzing experiences related to scaling-up, the authors reviewed the literature on scaling-up and state of practice in development and other contexts. The findings from the literature review regarding definitions and concepts involved are presented below. The provisional framework for analyzing activities and experiences of scaling-up is outlined in the section below on "Lessons from Analyzing Case Study Experiences of Scaling-Up."

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[2] U.N. Millennium Development Goals. For more information on the U.N. Millennium Development Goals visit the website at http://www.developmentgoals.org

[3] For more information about the Monterrey Consensus, see "Monterrey Consensus Calls for Partnership for Development," March 22, 2002, at http://usinfo.state.gov/topical/global/develop/02032205.htm

Definition of Scaling-Up

8. A review of the literature suggests that definitional issues surround the term scaling-up and that more work needs to be done to further clarify the boundaries. The term scaling-up (or any of several alternatives) is used with reference to the replication, spread, or adaptation of techniques, ideas, approaches, and concepts (i.e., to *means*), as well as to increased scale of impact (i.e., to *ends*).

9. The one consistent understanding of the term in the literature and in interviews conducted by the authors of this paper—often implied even when the term scaling-up is applied to means—is going from a small to a large impact. The essence of this understanding is adopted for this paper as a working definition of the term:

Scaling-up: To efficiently increase the socioeconomic impact from a small to a large scale of coverage.

Measures of Success in Scaling-Up

10. Whether analyzing past attempts to scale-up impacts or planning strategies to scale-up impacts—whether by the transfer or expansion of experience—clarity in what is considered "successful" impact is critical. Desired outcomes and impacts can be quite different from one place to another, notwithstanding outward similarities. Furthermore, different stakeholders have different perspectives on what they consider success. Clearly, however, the outcomes, impacts, and costs of scaling-up activities are important to consider. Furthermore, the U.N. Millennium Development Goals provide a common reference point that can be used in identifying measures of success in achieving development outcomes. The Millennium Development Goals are as follows: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equity and empower women; (4) reduce child mortality; (5) improve maternal health; (6) combat HIV/AIDS, malaria, and other diseases; (7) ensure environmental sustainability; and (8) develop a global partnership for development.[4]

Organizational Approaches to Scaling-Up

11. The literature from a variety of contexts suggests that scaling-up can be achieved in either of two basic ways, although in practice, there may be some overlap between the two:

- **Expansion of experience—**i.e., scaling-up impact *within an area or country* on the basis of one or more existing useful, preferably successful, initiatives; or
- **Transfer of experience—**i.e., scaling-up impact in *new and unassociated areas* on the basis of one or more useful, preferably successful, initiatives.

Expanding or transferring experience requires changing human and institutional behavior. There are two general approaches to effecting such changes: (1) *organizational growth (or "horizontal") approaches* (i.e., expanding successful systems and/or implementing them relatively unchanged); or (2) *institutional and policy change (or "vertical") approaches* (i.e., using successful experiences as the basis for policy and/or institutional changes. In either instance, an organization may opt for either (1) *direct strategies* in which the organization is directly responsible for effecting change; or (2) *indirect strategies* in which the organization works through others or tries to influence others to change and adopt new practices or policy.

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[4] U.N. Millennium Development Goals. For more information on the U.N. Millennium Development Goals visit the website at http://www.developmentgoals.org

12. Finally, it should be noted that in deciding on how to scale-up, development agencies must consider whether to adopt a universalist or a contextualist approach, or some balance between the two:

- **Universalist approach to scaling-up.** In this approach, experience provides a set of universal generalizations that can be replicated, directly expanded, or adopted elsewhere with a simple set of rules.
- **Contextualist approach to scaling-up.** In this approach, practices to be scaled-up are tailor-made at the outset to address context-specific conditions. This approach to scaling-up would be expected to take more effort than the universalist approach, but it also might be better suited to a particular situation

Factors Relevant to Success in Scaling-Up

13. One of the challenges of scaling up to achieve greater impact is to identify whether, and to what extent, successful elements of activities can be distilled into a set of universal generalizations that can be replicated, directly expanded, or adopted elsewhere with a simple set of rules, or failing that, adapted to new contexts. Factors that affect the success of scaling-up efforts can broadly be classified as being of two types:

- **More internal success factors—**i.e., factors that are within the control of development change agents; or
- **More external success factors—**i.e., environmental or other contextual factors that are relevant to success in scaling-up but are not subject to the control of development change agents and must be considered externalities in planning or analyzing scaling-up activities.

Managing Information and Learning in Scaling-Up

14. Building-up the understanding needed to scale-up impact is greatly depends on the nature of the evidence pertaining to existing practices, how robust it is, and how it is used to move forward. The terms good, better, best, wise, and innovative are often applied to experiences in rural development, but these terms are rarely defined in terms of quantified success or a structured analysis of factors. To make such terms useful and valuable in assessing the state of practice, it is desirable that the terms be defined consistently with respect to the evidence that is available.

15. This paper presents a state-of-practice classification system for practices in the realm of rural development. Under this system, a given practice can be classified, based on the type and amount of evidence available, as one of the following: an *innovation* (minimal objective evidence); *a promising practice* (anecdotal reports, testimonials); a model (positive evidence in a few cases); a *good practice* (clear evidence from several settings/evaluations); a *best practice* (evidence of impact from multiple settings, meta-analyses, expert reviews; or a *policy principle* (proven in multiple settings; considered widely applicable "truism" essential for success).

16. Regardless of whether scaling-up takes the form of the internal expansion of experiences or the transfer of experiences to new settings, the ways in which information and learning are managed are critical to scaling-up efforts. Transferring relevant lessons to new efforts, and the expansion of existing efforts both require access to internal, as well as external, information processes, such as capture, sharing and analysis, and even influencing other individuals and agencies.

C. Lessons from Analyzing Case Study Experiences of Scaling-Up

17. Drawing from a review of the literature on scaling-up in development and other contexts, the authors of this paper developed a provisional framework for analyzing experiences of scaling-up in the context of rural development. The analytical framework has four key elements, identified below, and several questions are addressed under each element:

- Objectives/outcomes, impacts, and costs of scaling-up;
- Organizational approaches/sequencing of scaling-up;
- Factors relevant to success in scaling-up; and
- Information and learning processes in scaling-up

18. To evaluate the analytical framework and draw lessons from its application, the authors of this paper applied the provisional framework to three case studies of rapid scaling-up experiences in rural areas: (1) the Indo-German Watershed Development Programme (IGWDP) for participatory watershed planning and development in India; (2) the Association for Social Advancement's (ASA) microcredit service delivery program in Bangladesh; and (3) zero-tillage farming in Brazil and Paraguay. They also applied the framework to the scaling-up experiences of two sustainable agriculture networks: the Integrated Pest Management Forum (IPMForum) and the Pesticide Action Network (PAN). Key findings and lessons from applying the framework to the case studies are discussed below.

Objectives/Outcomes, Impacts, and Costs of Scaling-Up in the Case Studies

19. In terms of coverage in the three case studies, IGWDP's participatory watershed planning and development program and ASA's microcredit service delivery program, respectively, achieved coverage of 200,000 rural residents and more than 1 million rural residents. Coverage in the zero-tillage farming case study is usually expressed in terms of area and exceeded 10 million hectares of land.

20. With respect to impacts, IGWDP's watershed planning and development program had well-documented plot- and community-level benefits. In the case of the agriculture-based projects, there were also production and environmental benefits. In the instance of the ASA microcredit program, the impacts were subtler: household needs were addressed, but there were few indications of broader empowerment in communities. Achieving broad coverage and financial sustainability while reaching the very poorest population groups remained a continuing challenge in all of the case studies.

Organizational Approaches and Sequencing of Scaling-Up in the Case Studies

21. The institutional activities behind the initiatives in the three cases generally consisted of long lead-up stages (up to 10 to 15 years) in developing and refining technologies and processes, often with subsidized donor support. Following this, there were different institutional processes involved in bringing the small-scale successful experiences to scale over several years.

22. The ASA microcredit experience involved the considerable organizational growth of the former non-government organization and the development of very detailed organization-wide procedures. In contrast, the two other case studies (the IGWDP watershed program and zero-tillage farming in Brazil and Paraguay) involved a variety of smaller organizations and government entities supporting each other to implement parallel processes.

23. It is important to note that the local development of appropriate procedures that were adapted for large-scale implementation was important in all the experiences studied. Attempts to transfer key practices and principles from these case study experiences to other countries or states were at initial stages or had been constrained by various factors.

Factors Relevant to Success in Scaling-Up in the Case Studies

24. The evidence from interviews conducted by the authors of this paper, as well as from anecdotal reports, indicates that there were several common factors relevant to the success of scaling-up in the three main case studies, as well as in the two networks:

- **More internal success factors.** Among the internal success factors were strong individuals and leaders, who were involved over the long term and at many levels within countries and guided the adaptation of processes and bringing them to scale. Other internal success factors included addressing demand through clear financial benefits for the target groups and convincing officials and donors to support the program. Finally, building in self-selection by target population groups at scale addressed demand issues and helped contain costs. Findings with respect to the roles played by support institutions indicate the following: (a) NGOs played an important innovation role, especially in early stages; (b) government was important as enabler and partner in the development of practical and effective policy especially in the program stages; (c) donors supported trials and short-term subsidies helped, especially at the program development stage; and (d) farmers played a key role as peer-to-peer and advocacy influencers in the early adaptation and wider spread of ideas in the IGWDP watershed development and the zero-tillage farming case studies.
- **More external success factors**. Important external success factors in the case studies included specific conditions that provided triggers for efforts to begin scaling-up—e.g., the erosion crisis and commodity price changes driving the demand for zero-tillage agriculture in Brazil and Paraguay. They also included conditions that enabled scaling-up to occur. The availability of markets, or appropriate inputs such as credit or some security of tenure, or a strong civil society and a history of relevant experience in the country were important in enabling positive changes in the three cases. The absence or weakness of these external success factors has played a part in limiting transfer and adaptation of the experiences elsewhere or to specific target population groups.

Information and Learning Processes in Scaling-Up in the Case Studies

25. The evidence available for the three main case studies begins to give confidence in impacts and sustainability in terms of poverty alleviation. The practices in the case studies have been tested, evaluated, expanded, and adapted to some scale. Thus, these practices would be considered "good practices" under the state-of-practice classification system presented in this paper. Yet it is not entirely clear how generally applicable experiences are for transfer, even within their countries or states, and there are only initial indications that some elements and processes of these experiences may have been adapted elsewhere. Local networks and peer-to-peer exchanges of ideas were effective means for sharing and influencing practices between organizations. Hands-on, rapid internal learning and development of procedures and capacity were important in all of the case studies.

Conclusions from Analyzing the Case Studies

26. The application of the analytical framework to the case studies and networks yields evidence on scaling-up that allows for some confidence in the possibility of building on small successes in the rural development sphere to expand their coverage, as well as to transfer and adapt approaches used

successfully in one setting to other settings. It is important to bear in mind, however, that it takes considerable work and assessment to reach a state of "good practice," where development practitioners can be confident in achieving scale and impacts and can consider the lessons arising from experience robust enough for application elsewhere.

27. Furthermore the findings from the case studies suggest that donors, governments, and other development agencies should keep several points in mind when considering issues related to support for scaling-up the impact of interventions in rural development:

- *Importance of not losing sight of poor, marginalized populations.* When analyzing or planning initiatives to scale-up impacts in rural development, it is important not to lose sight of poor, marginalized populations. In the case studies, some important hard-to-reach groups were sometimes left out of participatory processes: very marginal farmers (in the zero-tillage farming case) or pastoral groups, women (in the IGWDP watershed development case), and landless people (in the ASA microcredit case). The balance between socioeconomic impacts, numbers of beneficiaries, and cost-effectiveness must be made explicit when scaling-up, and the nature of the target population will affect the calculations. It may be more costly and take longer to reach poor, marginalized populations than to reach other groups.

- *Importance of understanding contextual factors when scaling-up.* It is essential to consider the institutional context and the wider environment in which scaling-up occurs. External contextual factors such as intractable policy issues or cultural issues that are difficult to change may limit the potential scope and speed of scaling-up, especially given constraints on resources.

- *Need to draw universalist lessons when scaling-up.* The process of scaling-up should, at least internally, be driven by a universalist process of simplifying rules and procedures for use by many people on a larger scale. In all three of the case studies, for example, there were technically rigorous processes for developing and updating manuals and procedures. The analysis in this paper, as well as various other analyses, suggest that the following are relevant to success in scaling-up: (1) simple, low-cost but transparent interactions at the local level; (2) systems visibly responsive to local settings and demands of local groups; (3) ensuring that learning continues at scale; (4) conscious linking of issues of local concern with wider context; (5) availability of key inputs or markets; and (6) enabling environments for innovation and capacity to support efforts at scale.

- *Approaches to balancing "contextualist" and "universalist" approaches to scaling-up.* Given a strong framework for comparison and identifying broader approaches, there is considerable opportunity to learn from diverse experiences with scaling-up. Effective scaling-up requires a combination of "contextualist approaches" that are responsive to external context and new opportunities plus "universalist approaches" that draw out generalized procedures and rules that can be adapted to local conditions and continually adjusted. Careful sequencing of activities and the institutionalization of on-the-ground lessons are important means for balancing these approaches.

- *Potential value of applying lessons from a more comprehensive body of evidence on scaling-up.* The analysis of the case studies of scaling-up experiences in this paper suggests that it would be instructive to examine a broader set of case studies in the rural development sphere, as well as within and across various other sectors. To ensure that information derived from future analyses is used to improve practices in rural development, it will also be important to identify individuals, groups, and alliances that can use the information to influence change.

D. MOVING FORWARD TO SUPPORT SCALING-UP IMPACT

28. The application of the provisional framework and concepts to the cases, as well as subsequent discussions, led the authors to develop two new tools for rural development practitioners and their partners seeking to support scaling-up impact in rural development. One tool is an analytical checklist to help rural development practitioners and their partners think systematically about scaling-up impact. The other tool is a list of key considerations to guide scaling-up. It is expected that both instruments will be field-tested and subject to further evaluation and revision.

29. The paper concludes by providing guidance for donors, governments, and other development agencies on ways to support scaling-up at four specific levels at which these entities operate—sharing and developing concepts and methods, developing country strategies, developing projects and programs, and managing and assessing projects and programs.

1. Introduction

> The World Bank's new rural development strategy calls for the "identification and scaling-up of good practice investments within a country, between countries, and between regions. There will also be... increased emphasis on piloting new and innovative approaches that reflect the dynamic economic, social, environmental and institutional context of rural development, and the potential of heightening the impact of positive externalities for the rural poor."
>
> —World Bank, Reaching the Rural Poor, 2002

30. The vast majority of the world's poor people, about 70 percent, live in rural areas. In 2000, the World Bank revamped and intensified its rural development strategy to create an investment climate conducive to rural economic growth and to empower the poor to share in the benefits of that growth. The new strategy, articulated in the 2000 World Bank document *Reaching the Rural Poor*, sets forth five strategic objectives: (1) fostering an enabling environment for broad-based rural growth; (2) enhancing agricultural productivity and competitiveness; (3) encouraging non-farm rural economic growth, (4) improving social well-being, managing risk, and reducing the vulnerability of the rural poor; and (5) enhancing the sustainable management of natural resources (World Bank, 2002).

31. *Reaching the Rural Poor* includes several guidelines for maximizing the results of the Bank's support of clients' rural development efforts. A key thrust in the implementation of the Bank's new rural development strategy is identifying and "scaling-up good practice investments and innovations in rural development." Historically, successful World Bank projects have been one-time investments without strategies for leveraging projects to a larger scale or to broader coverage to increase efficiency and developmental impact in a country or region. The Bank believes that scaling-up good practices must become an integral part of national rural development strategies to reduce rural poverty and support broad-based rural development. *Reaching the Rural Poor* identified a wide range of possible areas for scaling-up and innovation in rural development (see Box 1.1)

32. This working paper, written in support of the Bank's rural development strategy, is intended to contribute to the development of a framework for thinking about scaling-up of good practices. The paper begins with a review of the literature on scaling-up in rural development and other contexts to develop an understanding of basic concepts and terms. Drawing from the literature review and interviews, the authors develop a working definition of the term scaling-up and a provisional framework for analyzing experiences of scaling-up. Then, to evaluate the provisional framework, the authors apply it to a few well-documented case studies of rapid scaling-up in rural contexts. The final sections of the paper draw lessons from the application of the framework to the case studies and identify key areas for moving forward to support scaling-up impacts in rural development

33. Although the focus of this paper is on scaling-up interventions in rural areas, it is hoped that the paper will be useful to a wider audience within the World Bank, other development support agencies, and governments. Increasing the coverage and socioeconomic impact of development interventions is central

to achieving the U.N. Millennium Development Goals,[5] which include eradicating poverty and achieving sustainable economic growth and development throughout the world, especially in developing countries. In March 2002, at a conference in Monterrey, Mexico, officials from countries throughout the world and representatives of the World Bank and other international institutions pledged to work together in partnership to achieve these goals. In what has come to be called the "Monterrey Consensus," participants recognized the importance of partnerships between donor and developing countries in moving toward a more inclusive and equitable economic system.[6] A requirement of such partnerships is that when developing countries commit to reform and good policies, donors must intensify their support and commit to scaling-up.

[5] U.N. Millennium Development Goals. For more information on the U.N. Millennium Development Goals visit the website at http://www.developmentgoals.org

[6] For more information about the Monterrey Consensus, see "Monterrey Consensus Calls for Partnership for Development," March 22, 2002, at http://usinfo.state.gov/topical/global/develop/02032205.htm

Box 1.1 Possible areas for scaling-up and innovation

Policy and institutions

- Agricultural policy reform
- Development of rural strategies
- Institutional reform and capacity building
- Participatory planning

Agricultural productivity and competitiveness

- Land reform and administration
- Research and extension
- Information technology—marketing and knowledge
- Irrigation and drainage
- Support for producer organizations and user groups
- Food safety and agribusiness

Nonfarm rural economy

- Rural finance, including microfinance
- Development of the rural nonfarm economy, including businesses
- Private sector role in service deliver
- Infrastructure and local economic redevelopment, including small towns

Strengthening social services and reducing risk and vulnerability

- Rural health and education service provisions
- Community-driven development and district programs
- Social inclusion with focus on women and girls
- Commodity, climate, and disaster risk management
- Emergency reconstruction

Sustainable natural resources management

- Soil fertility
- Watershed development
- Community natural resource management
- Community forests
- Fisheries

Source: World Bank, *Reaching the Rural Poor*, 2000.

1.1. METHOD OF THE STUDY

34. This paper was developed through several iterative stages. Initial ideas were presented and discussed with staff at the World Bank, U.N. Food and Agriculture Organization (FAO), and International Fund for Agricultural Development (IFAD). Key issues were identified, and the process of investigation was developed. In the second stage, the concepts, framework for analysis, and selection of case studies were discussed and refined with research institutions, international non-governmental organizations (NGOs) and institutions, and FAO staff. In the third stage, draft papers based in part on an Internet-based literature search and in part on interviews and written exchanges with key players were prepared by consultants/researchers and FAO staff. The provisional framework for analyzing activities related to scaling-up and results from the application of the framework to the case studies were validated and discussed at the World Bank and FAO. Follow-up meetings were held with World Bank regional and thematic task managers to examine the relevance, strengths, and usefulness of the analytical framework. The framework and other tools developed in this paper will be subjected to additional review and modification in the future.

1.2. ORGANIZATION OF THE PAPER

35. *Section 2 (Developing an Analytical Framework)* examines some of the available literature on scaling-up practices in a development context. Drawing from the literature, it provides a working definition for scaling-up and moves toward the development of a framework for analyzing experiences related to scaling-up in the context of rural development.

36. *Section 3 (Lessons from Case Studies)* presents a provisional analytical framework for analyzing activities related to scaling-up in the context of rural development. It also discusses the lessons learned from the application of the framework to the analysis of a few well-documented cases of rapid scaling-up in a rural context: (1) the Indo-German Watershed Develoment Programme (IGWDP) in India; (2) the Association for Social Advancement's (ASA) microcredit service delivery program in Bangladesh; (3) zero-tillage (no-tillage) farming in Brazil and Paraguay; and (4) two networks supporting greater use of sustainable agriculture practices. The conclusions were also based on a review of related work.

37. *Section 4 (Moving Forward)* identifies key areas for moving forward on the basis of the lessons learned from the application of the framework to the case studies. It presents two new tools to support scaling-up efforts: a provisional checklist to facilitate gathering and analyzing information related to scaling-up, and a provisional list of key considerations on what to look out for when thinking about scaling-up). It also provides guidance on activities that would support scaling-up at the different levels (entry points) at which donors, governments, and other development agencies operate: international and conceptual sharing; country strategies; developing projects and programs; and managing and assessing projects and programs.

38. Following the main text, several appendices provide supplementary material. Four appendices present details about the case studies of scaling-up experiences analyzed in Section 3 of the paper. The last appendix, Appendix 5, expands on the discussion of the provisional checklist for gathering information.

2. Developing A Framework for Analyzing Experiences of Scaling-Up

> The basic agenda of going to scale is to bring more benefits to more people more quickly. However, besides the quantity characteristics, quality benefits need to be emphasized as well as equity and sustainability concerns.
>
> —International Institute of Rural Reconstruction, 2001

39. To develop a working definition of the term scaling-up and move toward the development of a provisional analytical framework for analyzing experiences related to scaling-up, the authors reviewed the literature on scaling-up and state of practice in development and other contexts. The findings from the literature review regarding definitions and concepts involved are presented below. A provisional framework for analyzing activities and experiences of scaling-up is presented in Section 3 of this paper.

2.1. DEFINITION OF SCALING-UP

40. In reviewing the literature, the authors of this paper found that different sources use different terminology to describe activities related to the replication, spread, or adaptation of practices (see Table 2.1). Scaling-up and related terms—e.g., scaling-out, going to scale—are sometimes used with reference to replicating, spreading, or adapting systems, policies, and process (i.e., *means*). In addition, however, the terms are sometimes used with reference to increasing the scale of socioeconomic, human, environmental, or other impacts (i.e., *ends*). Furthermore, a recent major workshop on scaling-up refers to vertical and horizontal scaling-up (IIRR, 2001).

41. The one consistent understanding of the term scaling-up in interviews and literature—often implied even when the term is applied to means—is going from a small to a large impact. In a book on institutionalizing participation in development, for example, Blackburn and Holland (1998) use the term scaling-up in relation to the spread of ideas and concepts of participatory reflection and action. The emphasis on increased in impact was the preference of participants at an early non-governmental organization (NGO) workshop on scaling-up (Edward and Hulme, 1992; Uvin and Miller, 1994). It also resonates with the basic purpose for scaling-up expressed in recent workshops [IIRR, 2001, and Guendel, et al., 2001). The essence of this understanding is adopted for this paper as a working definition of the term:

> **Scaling-up** — To efficiently increase the socioeconomic impact from a small to a large scale of coverage

Table 2.1 Terminology related to scaling-up in the literature

Application and Term Used	*General Strategy*	*Activities*
Means—systems, policies, and processes		
▪ Scaling-out ▪ Horizontal scaling-up ▪ Scaling-up	▪ Expanding a practice on larger scale of coverage	▪ Dissemination ▪ Direct spread ▪ Replication ▪ Expansion of model, growth of organization

▪ Scaling-down	▪ Shift responsibilities to a lower level	▪ Deconcentrating ▪ Devolving
▪ Spontaneous scaling-up	▪ Transferring and applying practice in new places	▪ Spread ▪ Diffusion of ideas
▪ Scaling-out		▪ Replication between countries
▪ Scaling-up ▪ Vertical scaling-up	▪ The means for changing institutions	▪ Institutionalizing, mainstreaming new practices and ideas ▪ Policy change directly or through advocacy
Ends—socioeconomic, human, environmental impacts		
▪ Scaling-up	▪ Increase from small to large impact	

42. There are few examples of scaling-up with sustained, large-scale impact. Furthermore, analyses of scaling-up as an issue per se are relatively recent (Myers, 1983, being among the earlier ones), and many reports have depended on anecdotal and individual case studies. Oudehoven and Wazir (1998) emphasize that much could be learned about scaling-up by comparing scaling-up experiences in development with experiences in other sectors, including business, by comparing similar historical events, and by contrasting similar experiences from "developed" and "developing" countries. Overlaps with other fields are many, and the discussion here builds on a broad range of reviews of scaling-up in relation to NGO experiences (Edwards and Hulme, 1992), natural resources research (Guendel, et al., 2001), child health (Myers, 1983), education reform (Samoff et al., 2001), AIDS/HIV initiatives (de Jong, 2001) and in the context of rural decentralization (Esmail, 1998). Other work, for example, on agroforestry (Frenzel, et al., 2001), draws important lessons on the factors relevant to success in scaling-up for a specific sector but does not provide much structure regarding conceptual approaches to scaling-up. The adoption and lessons-learning literature, as well as concerns regarding the effectiveness of development aid in general, are also relevant to the discussion of scaling-up impact in development and have been considered in the development of this paper. This paper's consideration of overlaps with other fields is by no means exhaustive; it is only a beginning.

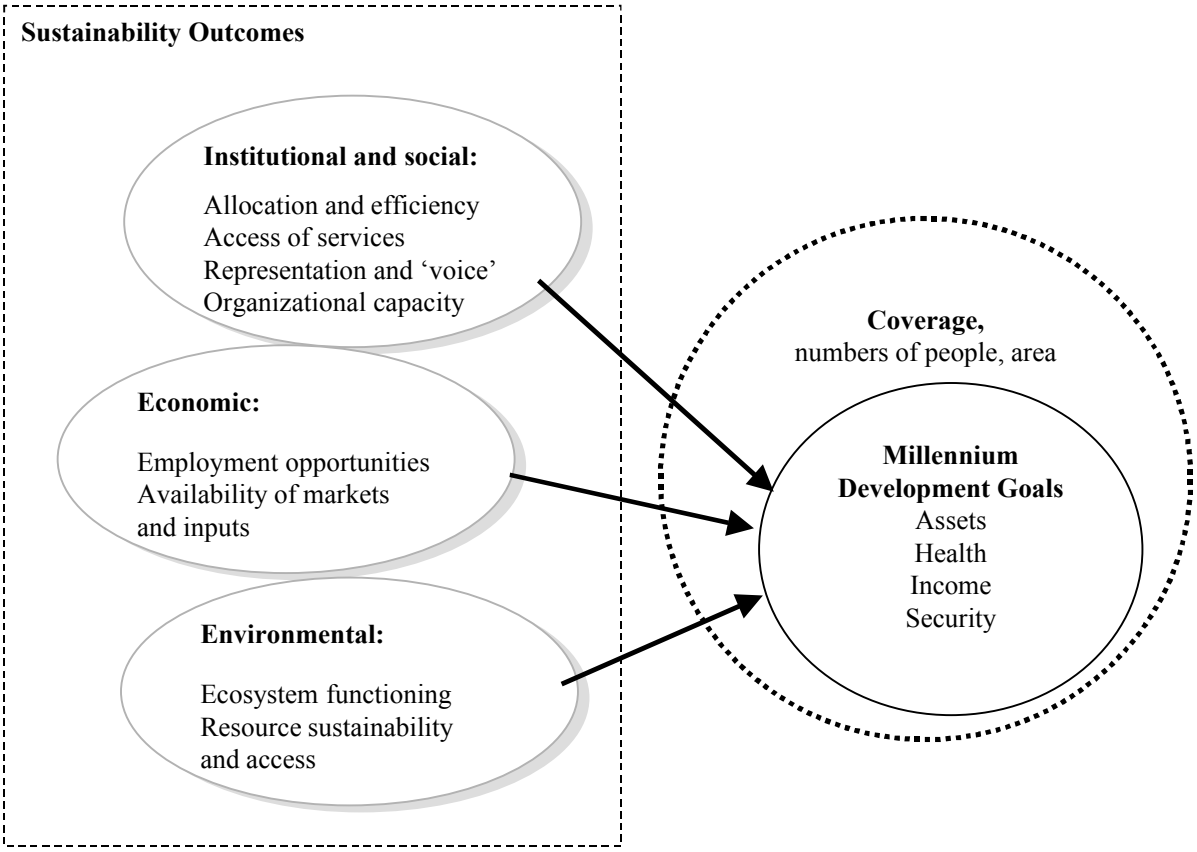
43. Recent workshops on scaling-up have used fairly open formats to compare case studies from natural resources research (Guendel and Hancock, 2001), sustainable agriculture development with NGOs (IIRR, 2001), and agroforestry (Cooper and Denning, 2001). With few exceptions, there have been few systematic comparisons of scaling-up experiences. The work of Uvin, et al. (2000) covering six NGOs in India, and the work of Guendel, Hancock, and Anderson (2001) examining agricultural and natural resources management research projects from Uganda, Bolivia, and Nepal are among the exceptions. These references provide much of the key background material for this paper with respect to increasing the rigor of analytical approaches to scaling-up.

2.2. MEASURES OF SUCCESS IN SCALING-UP

44. Whether analyzing past attempts to scale-up impacts or planning strategies to scale-up impacts—whether by the transfer or expansion of experience—clarity in what is considered "successful" impact is critical. Desired outcomes and impacts can be quite different from one place to another, notwithstanding outward similarities (Oudenhoven and Wazir, 1998; see Rose, n.d., for policy transfer literature). Furthermore, different stakeholders have different perspectives on what they consider success.

45. The U.N. Millennium Development Goals provide a common reference point that can be used in identifying measures of success in achieving development outcomes (see Figure 2.1). The Millennium Development Goals are as follows: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equity and empower women; (4) reduce child mortality; (5) improve maternal health; (6) combat HIV/AIDS, malaria, and other diseases; (7) ensure environmental sustainability; and (8) develop a global partnership for development.[7] These measures are composed of several elements—quantity (e.g., coverage in terms of numbers of people, area); quality (e.g., nature of target group, sustainability, and socioeconomic depth of impact); and cost (e.g., efficiency in terms of cost savings, which is relevant to sustainability).

Figure 2.1 Outcomes and goals relevant to scaling-up impact in the context of development



Source: Jim Hancock, World Bank consultant.

2.3. ORGANIZATIONAL APPROACHES TO SCALING-UP

46. The term scaling-up, though used only recently in the development literature, has broad use that overlaps with spread/diffusion of innovation and adoption literature (Rogers, 1995); policy transfer (Stone, 2000); and lesson-drawing and learning literature (Rose, 1993). These sources often refer to the

[7] For more information on the U.N. Millennium Development Goals visit the website at http://www.developmentgoals.org

processes involved in scaling-up. Thus, it is important—at least initially—to take a fairly broad approach in examining the relevant concepts.

47. As shown in Figure 2.2, the literature suggests that scaling-up can be achieved in either of two basic ways, although in practice, there may be some overlap between the two:

- **Expansion of experience—**i.e., scaling-up impact *within an area or country* on the basis of one or more existing useful, preferably successful, initiatives; or
- **Transfer of experience—**i.e., scaling-up impact in *new and unassociated areas* on the basis of one or more useful, preferably successful, initiatives.

48. Expanding or transferring experience requires changing human and institutional behavior. Furthermore, depending on an organization's capacity, mandate, or choice, it may opt for either (1) *direct strategies* for scaling-up—strategies in which the organization is directly responsible for effecting change; or (2) indirect strategies for scaling-up—strategies in which the organization works through others or tries to influence others to change and adopt new practices or policy.

49. This is the framework used by various NGO analyses, especially AIDS/HIV Alliance (2001), and Uvin, et al. (2001). The use of a framework of organizational change as the means for scaling-up is of course not just applicable to NGOs, but equally to donors, governments, community organizations and, even to some extent, individuals. There are two general approaches to effecting changes:

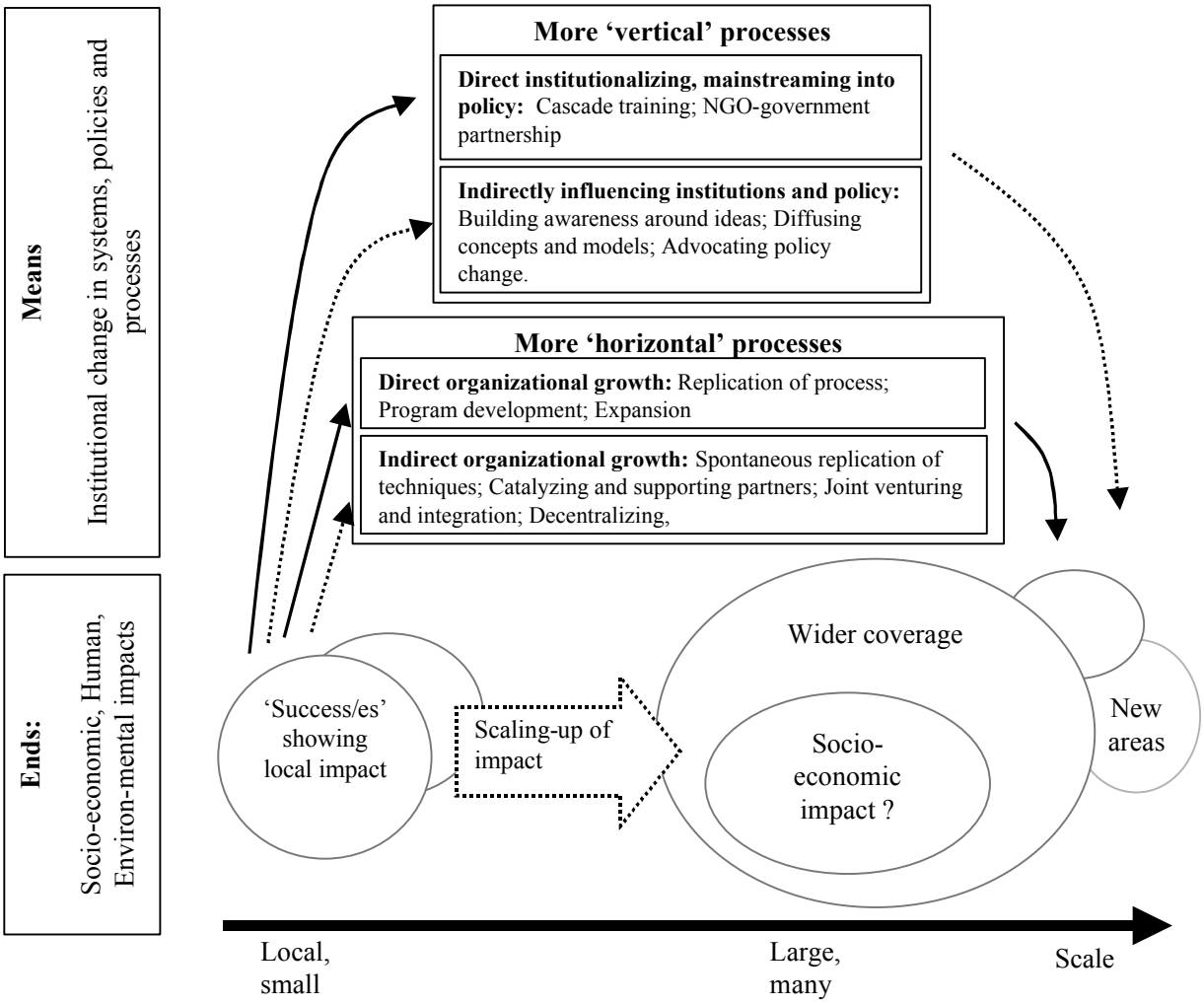
- **Organizational growth (or "horizontal") approaches**—i.e., expanding successful systems and/or implementing them relatively unchanged elsewhere. Horizontal strategies focus primarily on extending the coverage of direct service delivery to target population groups and maintain close contact with such groups.[8]
- **Institutional and policy change (or "vertical") approaches—**i.e., using successful experiences as the basis for policy and/or institutional changes. Such changes will then guide or influence the opportunities and constraints faced by the target groups, including how service delivery is provided.[9]

50. Regardless of which of these two approaches to effecting change an organization chooses—and depending on the organization's capacity, mandate, or choice—the organization may employ (1) *direct means*, in which case the organization is directly responsible for effecting change; or (2) *indirect means*, in which the organization works through others or tries to influence others to change and adopt new practices or policy.

[8] Roughly equivalent to Uvin and Millar's "quantitative" and "organizational" scaling-up (Uvin and Millar, 1994).

[9] Roughly equivalent to Uvin and Millar's "functional" and "political" scaling-up (Uvin and Millar, 1994).

Figure 2.2 Pathways and processes for scaling-up impact

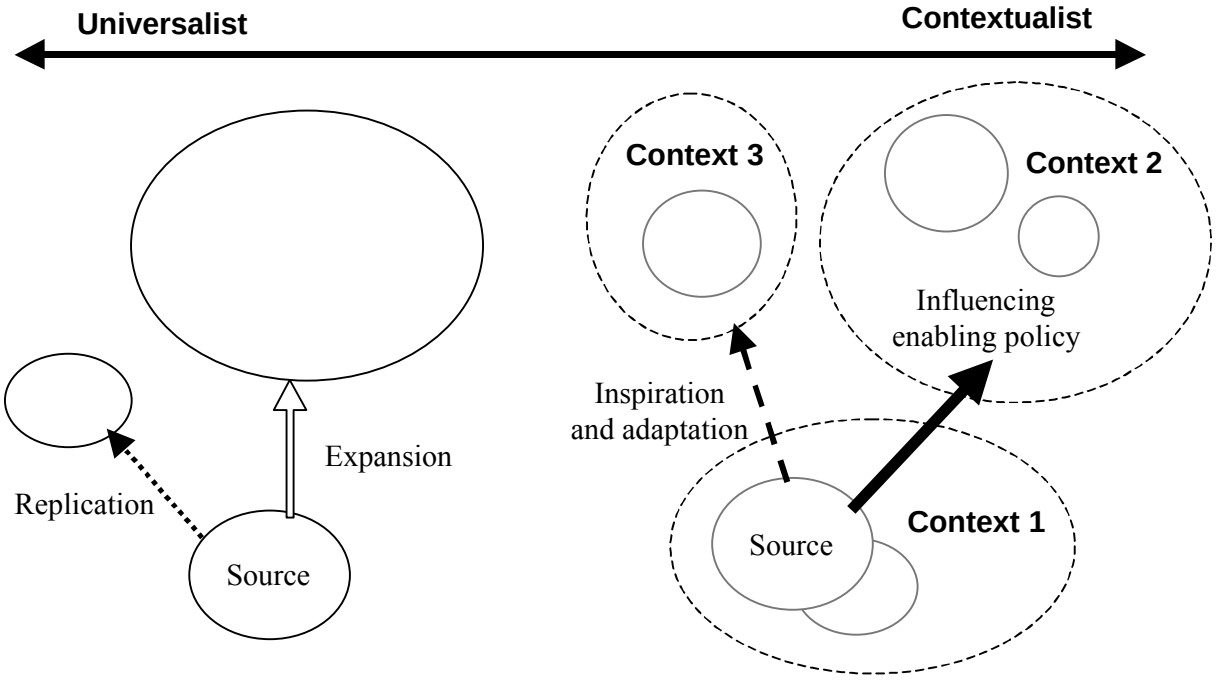


Source: Jim Hancock, World Bank consultant.

51. In deciding on how to scale-up, development agencies must consider whether to adopt a universalist or a contextualist approach, or some balance between the two (Oudenhoven and Wazir, 1998). The two extremes are illustrated in Figure 2.3:

- **Universalist approach to scaling-up.** In this approach, experience provides a set of universal generalizations that can be replicated, directly expanded, or adopted elsewhere with a simple set of rules. This approach does not require identifying and dealing with local variability. For that reason, it may take less time or effort than a contextualist approach to scaling-up.
- **Contextualist approach to scaling-up.** In this approach, practices to be scaled-up are tailor-made at the outset to address context-specific conditions. The contextualist approach to scaling-up would be expected to take more effort than the universalist approach, but it also might be better suited to a particular situation

Figure 2.3 Universalist vs. contextualist approaches to scaling-up



Source: Jim Hancock, World Bank consultant.

2.4. FACTORS RELEVANT TO SUCCESS IN SCALING-UP

52. One of the challenges to scaling-up to achieve greater impact is to identify whether, and to what extent, successful elements of activities can be distilled into a set of universal generalizations that can be replicated, directly expanded, or adopted elsewhere with a simple set of rules, or failing that, adapted to new contexts.

53. Best practice literature, as well as evaluations of projects and programs, generally describes lessons learned for future strategies and actions. These lessons are attempts to identify factors, or preconditions, which made an initiative successful or constrained its effectiveness.

54. Factors that affect the success of scaling-up efforts can roughly be classified more internal or more external:

- **More internal success factors.** These are factors relevant to success that are largely within the control of development change agents. They include organizational, procedural, and conceptual characteristics of a particular process or the individuals or groups directly involved.
- **More external success factors.** These are environmental or other contextual factors relevant to success that are not subject to the control of development change agents. They include environmental and cultural compatibility and, increasingly, "livelihood dynamics" that affect the likelihood that an

intervention will succeed (Harrington, et al., 2000). Whereas internal factors may be changed, external factors are externalities that must be taken into account in local and wider contexts. As emphasized in the broader literature on lesson-drawing (Rose, 2001), it is important to examine the nature of success and to carefully analyze the wider context in which success occurs. The policy transfer literature also emphasizes this point when examining the history and potential of replicating and adapting policy and practices across country boundaries (Stone, 2000).

2.5. MANAGING INFORMATION AND LEARNING IN SCALING-UP

55. One's ability to build up the understanding needed to achieve scaled-up impact is greatly depends on the nature of the evidence pertaining to existing practices and how this and other information is used. The discussion that follows turns to the topic of what people need to look for in identifying what works and how to classify the state of practice according to the level of evidence available. The concluding part of this section addresses other aspects of managing information and learning.

Assessing the State of Practice

56. In the child health sector and other contexts, terms used to describe the state of particular practices are defined with respect to the level of evidence available. That is not the case in the rural development sphere, where such terms are usually applied to practices for which there is more than one example considered in some way successful (e.g., UNESCO Clearinghouse on Best Practices) but are not defined according to a structured or quantitative analysis of the evidence.

57. To make terms used to describe the state of practice—for example, "good practice," "best practice," or "innovative practice—useful for application in the context of discussing initiatives in rural development, it is important to define the terms consistently with respect to the availability of evidence. Evidence-based state-of-practice classification systems are useful for two reasons. First, they require rigor in assessing the evidence available on outcomes or impact to assess the success of a particular initiative. Second, they allow a more objective assessment of whether and how far can findings be generalized if the information on a state of practice provides evidence from a number of settings, or there is a thorough analysis of the contexts in which it has been successful or failed.

58. Table 2.2 presents a state-of-practice classification system for practices in the realm of rural development based on the amount and type of evidence available. Under this system, a given practice can be classified, based on the type and amount of evidence available, as one of the following: an *innovation* (minimal objective evidence); *a promising practice* (anecdotal reports, testimonials); a model (positive evidence in a few cases); a *good practice* (clear evidence from several settings/evaluations); a *best practice* (evidence of impact from multiple settings, meta-analyses, expert reviews; or a *policy principle* (proven in multiple settings; considered widely applicable "truism" essential for success). The classification system could be used by development practitioners and supporters to provide a consistent terminology for the current state of practice for a wide range of development activities.

59. The state-of-practice classification system shown in the table was developed using two other classification systems. One is a system developed by the U.S. Center for Substance Abuse Prevention to classify "science-based practices" in substance abuse prevention on the basis of the reliability and applicability of evidence on their effectiveness (CCAPT, 2001-2003b). The other is a classification system proposed by Advance Africa that puts family planning and reproductive health services in categories such as innovation, state-of-the-art practice, lesson learned, or best practice (Advance Africa, 2001). Advance Africa, a consortium seeking to increase the availability and use of sustainable, quality family planning and reproductive health services in sub-Saharan Africa, places the development of states

of practice firmly within a lesson-learning process, reflecting progressive accumulation of knowledge shown in Figure 2.4 below. The organization hopes that its classification system will be useful to program managers seeking identify practices of interest.

Table 2.2 Proposed state-of-practice classification system

State of Practice (Science-Based Practices+)	***Level of Evidence***	***General Applicability***
Policy principle, principle* Policy+	Proven in multiple settings, replication studies, evidence quantitative, scientific	Consistently replicable, widely applicable "truism" essential for success
Best practice* Protocols, codes of practice+	Evidence of impact from multiple settings, meta-analyses, expert review	Demonstrated replicability, limited risk
Good practice, better practice* Exemplary+	Clear evidence from some settings, several evaluations	Promise of replicability, medium risk
Models+ Lessons learned*	Positive evidence in a few cases Program evaluations, conference workshops	Limited number of settings and experiences
Promising practices, state of the art*	Unproven in multiple settings, anecdotal evidence, testimonials articles, reports	High risk
Innovation	Minimal objective evidence, inferences from parallel experiences and contexts	New idea, no previous experience; highest risk

KEY: Sources of terminology shown in table:
[*] Advance Africa, 2001. Scaling-Up Family Planning and Reproductive Health Programs. http://www.advanceafrica.org/pages/scaleupaa.html
[+] CCAPT [Central Center for the Application of Prevention Technologies], 2001-2003a. Levels of Effectiveness Pyramid. Based on Research-Based Prevention: A Pyramid for Effectiveness, by Peter Mulhall and Carol Hays, Center for Prevention Research and Development, Institute of Government and Public Affairs, University of Illinois. U.S. Center for Substance Abuse Treatment's CCAPT, Minnesota Institute of Public Health, Mounds View, MN.
http://www.ccapt.org/levels.html

Processes for Analyzing and Using Information in Scaling-Up

60. The previous discussion on assessing states of practice reinforces the centrality of information, its quality, and applicability in efforts to scale-up development interventions. Regardless of whether scaling-up takes the form of the internal expansion of experiences or the transfer of experiences to new settings, the analysis and use of information is extremely important.

61. The challenge for development change agents is to identify relevant experiences that can be expanded to a larger scale or transferred into new settings or situations.

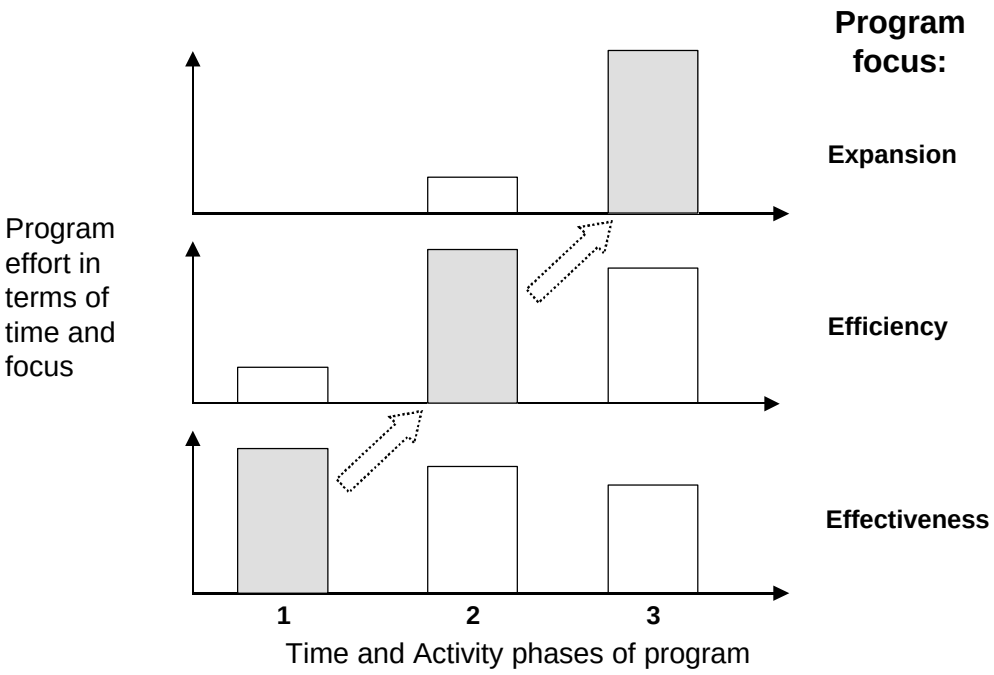
62. David Korten (1980) has suggested that there is a continuum of stages for achieving scaled-up impact of models and pilot initiatives (see Figure 2.4). In the first stage, efforts are made to show effectiveness and actual impact. In the next stage, efforts are made to improve efficiency and so open up the possibility

of replication. The demonstration of efficiency may provide the basis for moving to the next stage—of wider expansion (a form of scaling-up) to a larger target group.

63. Thus, change agents must bear in mind that the factors that make a practice or policy experience effective and efficient on a small scale are not necessarily the same on a larger scale. Both transferring lessons to new efforts and expanding existing efforts require access to internal, as well as external, information processes, such as capture, sharing and analysis, and even influencing other individuals and agencies. Figure 2.5 summarizes some of the information needs identified in this section.

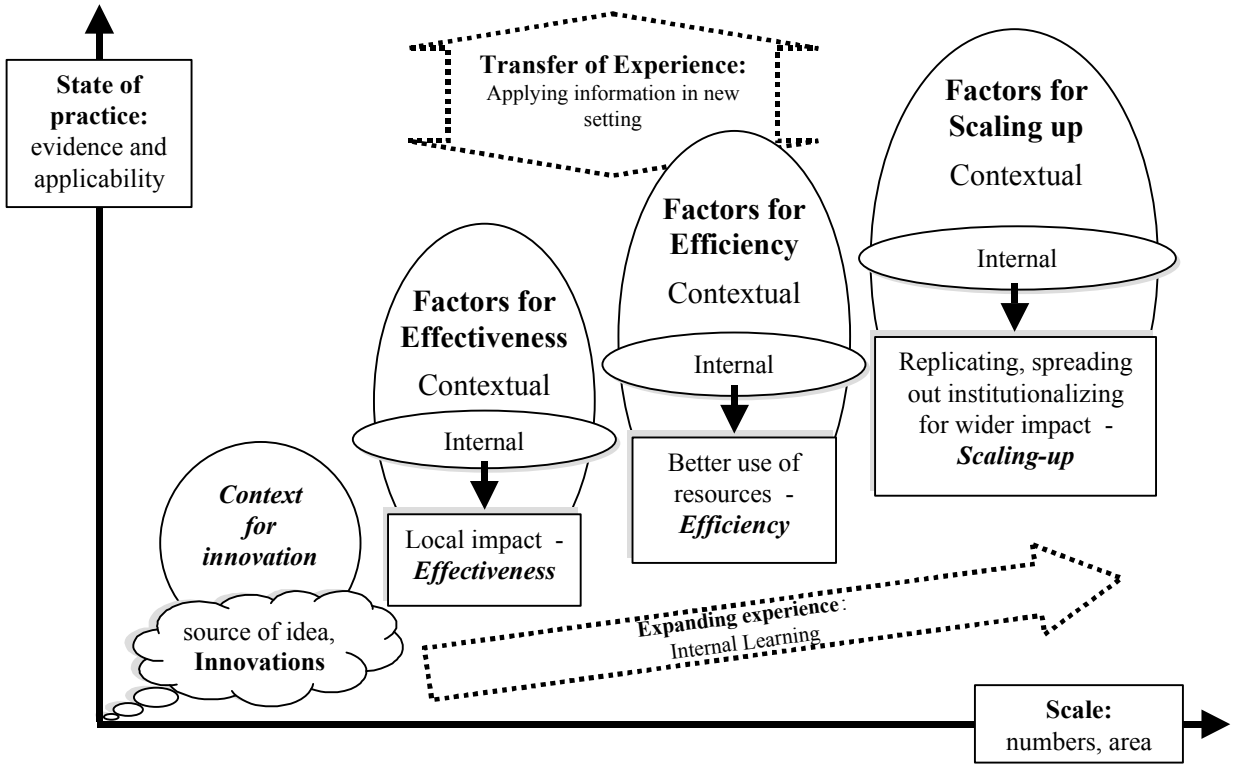
64. Whether acting in concert with other organizations or individually, development change agents have to make good use information of information in order to effect change. An important activity for those involved in scaling-up, therefore, is to assess the relative effectiveness of the information processes for different tasks and to identify ways in which specific processes might best be strengthened (CCAPT, 2001-2003a).

Figure 2.4 Focus of efforts in program learning over time. Shaded areas and arrows show progression in main emphasis



Source: Jim Hancock adapted from Korten, 1980.

Figure 2.5 Summary overview of issues for analyzing scaling-up



Source: Jim Hancock, World Bank consultant.

3. Lessons From Analyzing Case Study Experiences of Scaling-Up

65. Using concepts from the review of the literature on scaling-up in various contexts, the authors of this paper developed a provisional framework for analyzing experiences of scaling-up in the context of rural development. The elements of that analytical framework are presented in the discussion that follows. To assess the usefulness of this analytical framework and learn other lessons about scaling-up, the authors applied the framework to a small number of well-documented cases of scaling-up in rural contexts. As described below, the application of the framework to the case study experiences yielded a number of important lessons.

3.1. Overview of the Analytical Framework Used to Analyze the Case Studies

66. The analytical framework developed by the authors is shown box 3.1. The framework has four main elements: (1) objectives/outcomes, impacts, and costs of scaling-up; (2) organizational approaches/ sequencing of scaling-up; (3) factors relevant to success in scaling-up; and (4) information and learning processes in scaling-up. Under each element, several questions are asked.

3.2. Overview of the Case Studies

67. The three case studies that were used to evaluate the framework were chosen to provide a range of rural development issues to be addressed, intervention approaches, agencies, and points of involvement for donors, governments, and other development organizations. They were selected in part because of the availability of in-depth historical information and rigorous assessments of these experiences. This approach was used because of the importance of obtaining adequate information for testing the provisional analytic framework, even though it might bias the findings toward more successful experiences. Initial discussions with individuals familiar in the field and a brief review of relevant documents suggested that the experiences in the main case studies (1) had achieved considerable coverage in the rural sphere, within a relatively short space of time; (2) showed some evidence of having reached poorer population groups; and (3) had achieved cost reductions while maintaining effectiveness; and (4) further, that there had been some level of adaptation of the experience to other countries/states.

68. The three main case studies, along with a fourth case study on networks, to which the framework for analysing experiences of scaling-up was applied are briefly summarized below. Additional details about the application of the framework to the case studies are presented in Appendixes 1 through 4.

- *Scaling-up of the Indo-German Watershed Development Programme (IGWDP), a participatory watershed planning and development systems in India.* The IGWDP in India is a bilaterally assisted program funded by the Governments of Germany and India and implemented in a drought-prone region of the State of Maharashtra in India by village self-help groups organized and supported by non-governmental organizations (NGOs). Close non-governmental organization (NGO)-government collaboration enabled the IGWDP to develop participatory watershed planning and support systems, including a capacity-building mechanism for smaller NGOs to implement the system on a wider scale

(Farrington and Lobo, 1997). Elements of IGWDP's planning guidelines have been developed at the state level. (For details about the application of the framework to this case study, see Appendix 1.)

69. *Scaling-up of the Association for Social Advancement's (ASA) microcredit service delivery program in Bangladesh.* Beginning as a long-standing Bangladeshi social development NGO, ASA made a strategic decision in 1990 to focus solely on microcredit service delivery. By 1995, it was largely self-financing. Using a very cost-conscious and flat structure, ASA has implemented a largely self-financed expansion of its micro-credit service delivery program (Nimal and Meyer, 2002). ASA's microcredit program now serves over 1.4 million clients in Bangladesh, mostly poor, rural women. Furthermore, ASA has been involved in donor-funded adaptations of microcredit program to other countries. (For details about the application of the framework to this case study, see Appendix 2.)

Box 3.1 Framework for analyzing experiences of scaling-up

1. **Objectives/outcomes, impacts, and costs of scaling-up. To build on or compare experiences of scaling-up, the objectives, the following questions need to be addressed:**
   - What were the objectives? What were the outcomes?
   - What were the impacts (e.g., in terms of sustainability, the target group, deeper socioeconomic impact)? What was the scale of the impacts (e.g., coverage in numbers, area)?
   - At what relative overall costs and efficiency were the impacts achieved?
2. **Organizational approaches/sequencing of scaling-up. The broad means and patterns in support of scaling-up need to be identified:**
   - Which organizational approaches and strategies were used (e.g., organizational expansion, replication or influencing and building capacity externally, or combinations thereof)?
   - What were the specific costs?
   - Was there a pattern of progress, stages/phases, with associated time-scales?
   - Was there support to local scaling-up of an existing experience? Was there support for taking a successful experience into new areas and countries?
3. **Factors relevant to success in scaling-up. It is important to assess whether there are recurring factors such as the following that are important to make processes work or make them fail at a large scale or in many places:**
   - ***What are the more internal success factors***—i.e., factors within the control of development change agents (e.g., leadership, financial systems, type and level of capacity, processes)?
   - ***What are the more external success factors***—i.e., contextual factors that are basically not subject to the control of development change agents? Do they include local factors (e.g., local environmental, social, and economic conditions)? Do they include broader factors (e.g., macroeconomic policy, broad institutional or political factors)?
4. **Information and learning processes in scaling-up. Understanding information and learning processes is critical:**
   - What is the nature of the evidence (e.g., about the state of practice)?
   - To what extent does the evidence identify factors relevant to success?
   - What confidence does the evidence give in terms of applying the experience on a larger scale or in a new context?
   - What are useful mechanisms and processes for assessing, sharing, learning from and adapting, and influencing practice both within a development agency and externally?

Source: Jim Hancock, World Bank consultant.

- *Scaling-up of zero-tillage (no-tillage) farming and adaptation of the technology by small farmers in Brazil and Paraguay***.** Zero-tillage (or no-tillage) farming—an agricultural technology that consists of direct planting of seeds into unplowed soil and use of appropriate cover crops to minimize soil erosion—has been revived as a modern technology with the development of new types of herbicides. The benefits from this technology include reduced long-term costs and increased productivity for farmers, as well as wider environmental and social benefits. Trials of the technology were conducted among large farmers in the Brazilian state of Paraná in 1971 by a local research and extension agency with the support of the German Agency for Technical Cooperation (GTZ). With support from agribusiness but minimal public investment, the technology subsequently spread rapidly through Brazil and Paraguay in the 1980s and 1990s. Agribusiness and dynamic large-scale farmers actively tested ideas with research on equipment and herbicides. In the 1980s, promotion by farmers' associations and NGOs with better and cheaper inputs led to a rapid spread of the technology to other states covering several rain-fed crops, virtually without subsidies (Derpsch, 1998). In Brazil, zero-tillage farming is now practiced on over 10 million hectares of land; in Paraguay, it is practiced on over 50 percent of arable land. In Brazil, zero-tillage farming has spread to small farmers, assisted partly through adaptation and subsidies supported by foreign-funded programs; however, the technology has taken 5 to 7 years longer to be adopted and covers a much smaller area among small farmers. In Paraguay, zero-tillage farming among small farmers has barely even begun. (For details about the application of the framework to this case study, see Appendix 3.)
- *Scaling-up experiences of two sustainable agriculture networks*. The Pesticide Action Network (PAN) and the Integrated Pest Management Forum (IPMForum) were networks were established by NGO practitioners and researchers involved in *small*-scale successful experiences to reduce the farmers' dependence on costly and environmentally harmful chemicals. Their broad aims are to change policies and practice in many countries. (For further details about the application of the framework to these networks, see Appendix 4.)

3.3. LESSONS EMERGING FROM THE CASE STUDIES

70. Lessons from the application of the provisional analytical framework to the three main case studies is summarized in Table 3.1 and discussed further below. Although the findings presented here are based on a small sample of experiences, the cases to which the framework was applied are definitely not boutique or small, star projects, either isolated or unrealistically overfunded as they have addressed issues of large scale; details in the appendices to this paper indicate that these cases parallel closely related cases within the same countries. Furthermore, the findings from the application of the analytical framework to the scaling-up experiences of sustainable agriculture networks, discussed in a separate subsection below, are generally consistent with the findings in the three main case studies.

Table 3.1 Findings from the application of the framework to the three main case studies

Framework Element	*Indo-German Watershed Development Program (IGWDP) in India*	*Association for Social Advancement's (ASA) Microcredit Program in Bangladesh*	*Zero-Tillage Farming in Brazil and Paraguay*
Objectives/outcomes, impacts, and costs of scaling-up			
Outcomes	▪ About 200,000 villagers directly involved in watershed planning and development activities, in 150,000 hectares	▪ Microcredit service delivery program expanded from 0 to more than 1 million clients, mainly women, since 1990	▪ Brazil: zero-tillage farming of more than 11 million hectares since 1974 ▪ Paraguay: zero-tillage farming of more than 50 percent of total arable land
Impacts	▪ Well-documented plot- and community-level benefits ▪ Landless livestock herders (often women) sometimes marginalized	▪ Loans meet a common household need and reduce vulnerability of poor women ▪ Less evidence for other impacts	▪ Considerable financial benefits for farmers ▪ 5- to 7-year time lag for the technology to be adapted for small farmers (small farmers undefined) ▪ In Paraguay, only a few small farmers adopting
Costs	▪ Costs not compiled, no easily accessible estimate ▪ Early development stages partly supported through grants to non-governmental organizations (NGOs) and institutes; later stages via soft loans through Development Banks and technical assistance grants	▪ ASA microcredit program now completely self-financing ▪ ASA strongly supported through various foreign NGO grants for many years before 1990; no easily accessible estimates of total grants	▪ Costs not compiled, no easily accessible estimates, as many actors involved ▪ Initial testing was through foreign Technical assistance grants ▪ Much initial spread was financed through private sector sponsorship ▪ Spread to small farmers supported by donor grants and soft loans
Organizational approaches/	▪ Long-term NGO efforts	▪ Many years of NGO social development work since 1970s.	▪ GTZ trials and farmer/agribusiness development since 1970s

Table 3.1 Findings from the application of the framework to the three main case studies

Framework Element	*Indo-German Watershed Development Program (IGWDP) in India*	*Association for Social Advancement's (ASA) Microcredit Program in Bangladesh*	*Zero-Tillage Farming in Brazil and Paraguay*
Sequencing in scaling-up	▪ Three villages successful with German Agency for Technical Cooperation (GTZ) program ▪ NGO-government collaboration with donor support to develop program at scale ▪ 4- to 5-year rehabilitation phase ▪ Adoption in other states ▪ Slow process of adoption in other states and in the Department of Forestry ▪ Renewed efforts required every few years with newly elected officials—is this sustainable?	▪ Rapid organizational growth purely as self-financing microfinance institution building on extensive experience of microcredit principles developed in Bangladesh over 1970s and 1980s ▪ "Franchising" approach to other countries through the U.N. Development Program's MicroStart program	▪ Farmer associations and national conferences helped in the spread of ideas ▪ Donor programs (especially GTZ and World Bank) were important for adaptation and subsidies to small farmers ▪ NGOs and extension spread
Factors relevant to success in scaling-up			
More internal success factors	▪ Basic demand-led process, but also focus on technical rigor and efficiency in participatory process ▪ Linkages with government bank and policy ▪ Locally respected capacity building institutions for NGOs ▪ Self-selection by communities has both positive and negative effects	▪ Driven by strong leader ▪ Fine-tuned and rigorous cost-conscious system	▪ Close-knit research-extension and farming-systems approaches ▪ Visible financial benefits demonstrated by farmers
More external success factors	▪ Process developed for specific agro-environment conditions	▪ Extensive microcredit history experience in Bangladesh	▪ Widespread and severe erosion crisis

Table 3.1 Findings from the application of the framework to the three main case studies

Framework Element	*Indo-German Watershed Development Program (IGWDP) in India*	*Association for Social Advancement's (ASA) Microcredit Program in Bangladesh*	*Zero-Tillage Farming in Brazil and Paraguay*
	▪ Program works best where there is community cohesion	▪ Apex national microfinance support institution well established	▪ Dynamic farmers, NGO communities ▪ Availability of inputs and security of tenure
Information and learning processes in scaling-up			
State of practice information on coverage, impacts, and sustainability*	▪ Recent comparative evaluation study of impacts on watershed development programs in India, with control areas ▪ Little accessible information (project documents) on cost comparisons	▪ Some evaluations, mainly internal ▪ Many booklets on procedures ▪ Few analyses of confirmed impact with controls and strict comparisons with other NGOs. ▪ Documents available from ASA	▪ Many evaluations of cost-effectiveness and reviews of technical considerations for large- farm and some small-farm practices ▪ Controls in evaluations not clear ▪ Many conferences in Brazil Manuals developed ▪ World Bank Land Management Program documents ▪ Many less-accessible documents
State of practice information success factors in scaling-up*	▪ Some papers indicating anecdotally the effectiveness of specific mechanisms ▪ Further details through confirmation in interviews ▪ Some less formal process and institutional analyses	▪ One good objective historical analysis of organization and country context. Only one source ▪ Approaches being applied in small donor funded pilots with good documentation in three countries ▪ Latest updates on transfer anecdotal, verbal	▪ Papers on actors involved, some more anecdotal historical papers ▪ Difficult to assess weight of key external triggers and factors; had to use interviews ▪ Workshops proceedings on Africa and application there
Other aspects of information and learning	▪ Locally relevant longer-term, larger scale testing	▪ Very rapid centrally controlled feedback system, regularly updated	▪ Farmer-to-farmer spread of ideas and advocacy

Table 3.1 Findings from the application of the framework to the three main case studies

Framework Element	*Indo-German Watershed Development Program (IGWDP) in India*	*Association for Social Advancement's (ASA) Microcredit Program in Bangladesh*	*Zero-Tillage Farming in Brazil and Paraguay*
processes	▪ Micro-macro vision from the start ▪ "Nodes" for sharing, demonstrations between farmers ▪ Follow-up system of monitoring	▪ Rigorously applied organization wide procedures	▪ Close collaborative research and extension activities

* The listing of sources of information here is not exhaustive. It is based on 3 months gathering of documents that are relatively available and evidence triangulated through interviews with key persons.

Objectives/Outcomes, Impacts, and Costs of Scaling-Up in the Case Studies

71. All three cases achieved significant coverage, whether measured in terms of numbers of people or land (see table 3.1 above). There were demonstrated benefits from scaling-up in all three cases, as well. Assessing overall investment costs of scaling-up is difficult in the three case studies, but especially difficult in the IGWDP watershed development program in India because it involved numerous actors operating over a long period of time.

72. **Coverage of Scaling-Up.** The watershed development program in India and ASA's microcredit program in Bangladesh reached rural coverage of 200,000 people (IGWDP's watershed planning and development systems) to over 1 million people (ASA's microcredit program). In the zero-tillage farming case study, coverage exceeded 10 million hectares of land in 15 years. One has to look to something like the Green Revolution (Smith and Urey, 2002) and other Bangladesh microcredit experiences for such documented achievements in rapid increase in coverage to the poor.

73. **Impacts of Scaling-Up.** In the IGWDP watershed development case study, scaling-up activities benefited households and reduced their vulnerabilities. There were also well-documented community-level benefits. In the microcredit program and the zero-tillage farming case studies, impact assessments were less straightforward, easy to perform, or unambiguous. The impacts of scaling-up ASA's microcredit program were subtle. Delivering small loans clearly served a deep-felt need and reduced the vulnerability of women in their households. Yet there was little evidence of broader economic and empowerment gains for the women and households, an observation that may limitthe implementation and assessment of microfinance interventions more widely.

74. Zero-tillage farming spread among farmers in Brazil and Paraguay because it benefited them financially, although assessing numbers of community participants or beneficiaries affected is difficult. Though zero-tillage farming has spread widely among large farmers, the technology seems to have taken 5 to 7 years longer to reach small farmers—and the evidence on the nature and coverage of small farmers is not very clear.[10] The spread of zero-tillage technology did yield wider production and environmental benefits, and these benefits helped convince government officials to support public research and extension in the field.

75. **Costs of Scaling-Up.** Donor grant and soft-loan funding were important in all three case studies, particularly in the long early stages. ASA's microcredit program is self-financing, but ASA had built-up considerable resources from its earlier social development period and also accesses a largely donor-funded apex national microfinance support institution. It is unclear in the other two cases to what extent continued donor funds remain important, especially in reaching more marginal groups.

76. The programs and delivery organizations put forward relatively demonstrable evidence for growth in scale and reductions in costs. A weakness of the evidence from the experiences was that it consistently lacked comprehensiveness in information on economic sustainability, as well as about whether the poorest target groups had been reached at scale while also achieving impact and institutional sustainability. Measuring impacts is very difficult because of both the broad range of perspectives and assumptions as well as the need for considerable time-scales to be visible.

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[10] Or even to what extent "small farmers" have been devined and identified. One quote suggested "small farmers" had less than 100 hectares, a considerable asset to truly marginal groups.

77. Quantifying the costs of at which impacts were achieved through scaling-up is often difficult. The evidence pertaining to impact and the various costs of scaling-up is seldom brought together—a problem encountered in nearly all of the case studies covered in the literature searches. A clear balance sheet covering unit costs, including negative impacts, as well as concerns for sustainability, is needed. A focus on outcomes and results may be useful. It is important to identify a common language and to enable rigorous comparability if the analyses are to be taken further and used with a greater range of agencies.

78. In all three case studies, there was a conscious process of transfer of approaches to other countries/states from experiences of success in the case study initiatives, through replicating and adapting ideas arising from successes in the case study experiences. At this point, however, there is little evidence to demonstrate achievement of impact and coverage in new countries. It is possibly too soon to assess impact in new countries in the case of ASA's microcredit program, though anecdotal evidence points to the usefulness of ASA's rapid branch testing approach to local partners in Philippines and Yemen. Although interest in zero-tillage farming has arisen in Africa through field work and workshops, there has been very little spread of this technology there.

Organizational Approaches and Sequencing of Scaling-Up in the Case Studies

79. As described below, the organizational approaches used to scale-up programs varied in the three case studies, at least following innovation and the achievement of successes on a small scale, varied (see Table 3.1 above). The sequencing of activities in the three cases was very important.

80. **Organizational Approaches to Scaling-Up.** The organizational approaches used to scale-up programs varied in the three case studies, at least following innovation and the achievement of successes on a small scale, varied. The ASA microcredit case study was marked by a large organizational expansion and the development of very detailed organization-wide procedures. Several Bangladeshi microfinance NGOs have used a similar approach, and BRAC (formerly known as the Bangladesh Rural Advancement Committee) has used a similar approach in the realm of women's poultry breeding (Saleque, 1999).[11] In the watershed development and zero-tillage farming programs, however, several smaller organizations were supported to implement parallel processes. Different types of institutions formed close linkages, at several levels, between NGOs, government, and grassroots organizations. Continuing adaptation and policy advocacy by smaller organizations also drove the processes forward.

81. What accounts for the different organizational approaches in the case studies—a single organization in the ASA microcredit case and the multiple organizations in the other case studies? The answer is not clear, and the issue warrants further investigation. Were costs a factor in the choice of organizational strategies? The main sources of information used provided no estimates of relative costs that would permit an assessment of whether costs were the main factors in the choice of strategies. Could the different approaches be a function of the fact that ASA's microcredit delivery program operates in the business realm, whereas the interventions in the watershed development and zero-tillage case studies are more oriented toward production and natural resource management? Oudenhoven and Wazir (1998) noted that there could be some major differences in scaling-up between the business and social spheres. For business, the goal is usually a very simple financial return on investment, and everything revolves around this: strategy, monitoring, and capacity building. The microfinance system as practiced by ASA is strongly focused on the financial bottom-line. In social development, however, purposes and goals arise

[11] The experience of six mainly rurally based NGOs trying to scale-up impact in India (Uvin, et al., 2000) showed substantial organizational changes and transitions over long time periods. Few of the organizations reached the expansion stage. Some NGOs consciously stayed small and pursued other more indirect strategies for influencing change. Businesses have to cope with similar strategic decisions for expansion.

from a more variable heterogeneous situation of many types of stakeholder groups and local environments. This is naturally applicable to pro-poor rural development and the agriculture-natural resource management experiences: the need for many players to adapt to this complexity.[12]

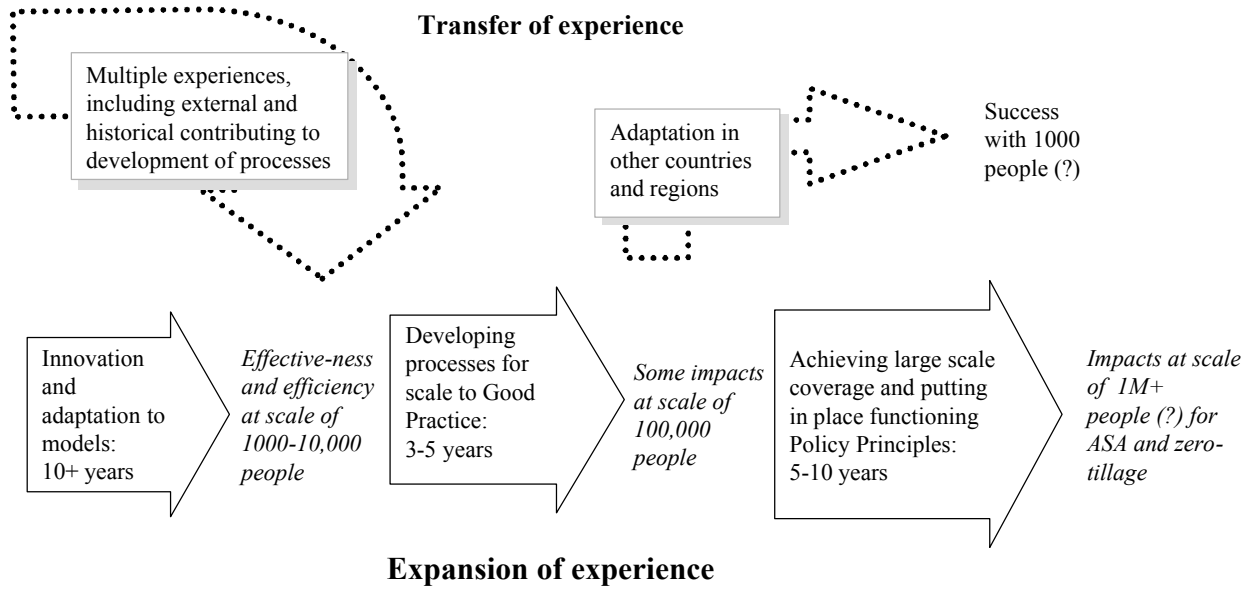
82. **Stages and Sequencing of Activities When Scaling-Up**. In terms of organizational processes supporting the scaling-up of small successes to scale, no simple patterns emerge from the cases. In all of the case studies, there was a long-term complex interaction of organizations and their context—which is also the general finding arising out of broader assessments of scaling-up (IIRR, 2002).

83. The case studies illustrated the importance, over the longer term, of considering stages and the sequencing of activities when scaling-up. The case study experiences generally started with 10- to 15-year lead-up times, during which locally effective and appropriate technologies and processes were refined, often with subsidized donor support. ASA, though relatively new on the microcredit scene, built heavily on effective and efficient microcredit models in Bangladesh, including that of the Grameen Bank. Many different approaches and strategies underlie these early activities: directly working at the community level, as well influencing policies in supporting institutions. Subsequent procedures to manage and support processes for greater uptake and scale were refined over several years of continuous development. In addition, external factors (e.g., commodity price changes) often helped trigger scaling-up. Some of the findings about the stages and sequencing of scaling-up activities from the case studies are shown in Figure 3.1.

84. **Strategies for Transfering or Adapting Experiences to New States or Countries.** The strategies used in the three case studies to transfer or adapt experiences to new states or countries were largely donor-supported. Such strategies came into play only after the experiences had matured to some scale. In new states or countries, the application of the experience was on a small scale using a few basic approaches, rather than a detailed replication of the original packages. In the case of ASA, this consisted of adapting one branch model and testing in the institutional setting of the local partners. Recommendations for the adaptation of the IGWDP experience included the approaches to capacity building and scaling-up rather than wholesale replication of participatory technical planning procedures.

[12] It is worth bearing in mind, however, that in other countries, "large" NGO microfinance institutions may only have coverage of tens of thousands, rather than the millions of clients. Bangladesh may have a relatively uniform social and environmental setting, compared to other countries, and it is important to explore whether other strategies with a multiplicity of smaller organizations may apply better elsewhere (Iqbal Sobhan, FAO, and Manohar Sharma, International Food Policy Research Institute, personal communication).

Figure 3.1 Findings about the stages and sequencing of scaling-up from the three case studies



Note: Time-scales and coverage are only in rough orders of magnitude

Source: Jim Hancock

Factors Relevant to Success in Scaling-Up in the Case Studies

85. As noted earlier, factors that affect the success of scaling-up efforts can roughly be classified as more internal success factors or more external success factors. The more internal factors may be changed by development change agents, but the more external factors are environmental or contextual factors that development change agents must take into account. Table 3.1 above identifies some of more internal and more external factors relevant to success in scaling-up that were identified in the three main case studies.

86. **More Internal Factors Relevant to Success in Scaling-Up**. More internal success factors in the case studies, discussed below, included demand-driven approaches to identify local priorities and approaches, as well as systems and procedures adapted to scale.

87. *Demand-driven and streamlined participatory approaches to identify local priorities and approaches*. In all three case studies, demonstrations of the effectiveness and efficiency of experiences on the ground were important motivating forces supporting scaling-up. Self-targeting—i.e., letting target communities themselves come forward to engage in particular development activities—helped reduce costs. Developing support options based on demand for services, rather than preset activities provided a strong local spread of new options.

88. Participatory processes were often used to identify local priorities and approaches. In the zero-tillage farming case study, for example, participatory processes underlay the technology development system. Unfortunately, however, some important hard-to-reach groups were sometimes left out of participatory processes: very marginal farmers (in the zero-tillage farming case) or pastoral groups, women (in the

IGWDP watershed development case), and landless people (in the ASA microcredit case) were much less involved in these processes than others.

89. There were strong moves to streamline transactions between communities and agencies in order to increase efficiency in the case studies. IGWDP achieved greater efficiency by simplifying community interactions in watershed development and planning; and ASA achieved greater efficiency by limiting interactions with communities to basic loan transactions (almost on a door-to-door basis) and to getting feedback on the efficiency of the microcredit system.[1] In Bangladesh, where there is increasing competition among microfinance providers, such demand-driven, fine-tuning in service delivery is becoming imperative. The interaction procedures with communities of ASA, and the organizations in the other cases, however, were worked out from previous experiences with more in-depth effective participation, rather than the other way around. Samoff and colleagues (2001) also urge more critical approaches to participation in enabling scaling-up.

90. *Support for developing sustainability*. In terms of support for sustainability, no single feature stood out in the case study experiences. Different types of support institutions played key roles in specific processes in scaling-up experiences, both in the learning processes and in increasing the institutional capacity and financial sustainability of processes that repeated themselves across the cases:

- NGOs played an important innovation role, especially in early stages. The private sector was important initially for supporting the technology development of zero-tillage farming among large farmers, but not so much among small farmers.[13]

- Government was an important partner in providing an effective mandate for policy implementation especially in the larger program stages (in overall support for zero-tillage framing, and guidelines for watershed development). Involvement of local agencies enabled the detailed development of practical measures. More indirectly but importantly through support of public finance institutions (Agricultural Bank for IGWDP and a national-level apex microfinance institution in Bangladesh, Palli Karma Sahayak Foundation, or PKSF) elements of financial sustainability considerations were being built in. In the case of ASA, government was more enabling, or at least did not undermine the processes.

- Donors supported trials and short-term subsidies and impact evaluations to address the needs of more marginal groups, especially at the program development and practical demonstration stage.

- In the watershed and zero-tillage experiences, farmers' organizations played a key role as peer-to-peer adapters and spreaders of the technology in the early innovation stages and as influencers of policy and advocacy of ideas at later stages. In the case of ASA's microcredit system, village women's groups were important for group collateral, typical of Grameen-style microfinance initiatives; as noted earlier, though, the role of community groups has been reduced by ASA to a bare minimum.

91. In interviews in preparation for the case studies, what emerged almost as significant as the institutions themselves, were the presence of strong individuals and leaders who were involved over the long-term and at many levels within the country, and guided the adaptation and bringing to-scale of processes. They were key in developing realistic approaches and integrating the grassroots' needs with the large-scale, institutional reality. Often, but not exclusively, these persons were from NGOs, or researcher-extensionists, with a broad perspective on local issues.

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[13] This need for an innovative-catalytic role tallies with the wider recommendations on NGO roles in scaling up (Uvin and Miller, 1994, Edwards and Hulme, 1992).

92. *Systems and procedures adapted to scale.* Systems for efficient capacity-building were addressed in all three of the case studies. In ASA's microcredit program, there was staff-funded on-the-job training. Iin the IGWDP watershed development program, a specific support institution was established. Furthermore, the IGWDP program in India and the zero-tillage farming programs in South America strengthened farmer-to-farmer support systems.

93. In all three case studies, very technically sophisticated and well-tested context-specific procedures, with underlying simple and transparent messages, were incorporated into manuals. The contents of these manuals were continuously updated according to circumstances, even when used for implementation at scale.

94. Furthermore, there was micro-to-macro strategic planning from an early stage in all three of the cases: assess costs and funding as well as institutional reality. This was important in mapping out what was achievable and needed. There was also a strategic integration of economic, social/outreach, and institutional concerns (e.g., the local adaptation of research-extension work in the IGDWP and zero-tillage experiences). The close integration of financial systems and social aspects of service delivery was all done largely internally by ASA and was driven by key management individuals with broad experience of the community reality and astute political knowledge and connections.

In the IGWDP watershed case study and the zero-tillage case study, processes supporting institutional capacity-building on a large scale were incorporated into specific training institutions. In the case of the ASA microcredit case study, however, formal training was kept to a few management staff to keep costs down; the staff paid for their own on-the-job training.

95. Finally, it should be mentioned that there were strong processes for learning from experience across all case studies, a factor repeatedly mentioned in other references. Because of their importance, information and learning processes are discussed in a separate section below.

96. **More External Factors Relevant to Success in Scaling-Up.** The more external success factors in the case studies, discussed below, included local social and agroeconomic conditions, an enabling environment for learning, and broader enabling contextual factors and triggers.

97. *Local social and agroeconomic conditions*. Location-specific external conditions were important, though generally documented more anecdotally. In Brazil, there was a rapid and severe erosion crisis, making the cost-benefits of zero-tillage farming visible and helped generate an immediate demand. However, it has been noted that lessons may not be directly applicable to chronic erosion situations in Africa. The watershed development experiences in India also seem to be adapted to specific micro-watershed conditions within a dry land rain-fed environment, making replication not necessarily applicable in neighboring villages.

98. IGWDP also had strict rules on which communities it would work with within watersheds. Based on past local experiences, lack of social cohesiveness was closely linked with failed sub-projects. Community organizing and social capital formation are frequently built in to projects to address such weakness. However such processes can be notoriously difficult and time consuming.

99. *Enabling environment for learning*. There were strong active associations, NGOs, and civil society networks in the initial areas where scaling-up took place. In Brazil, there was an entrepreneurial agricultural community that spurred experimentation and provided and mutual support links with agribusiness. This helped to provide a bridge between farmers and research, extension and government, and assisted in the spread of ideas. Related to this is a consideration of the wider history of testing and learning in the specific theme areas. For example, over 20 years of concerted donor, government, and

NGO watershed development in India, and microcredit experiences in Bangladesh provide a local tacit knowledge of practitioners and in the possibility of acceptance of new ideas.

100. *Broader enabling contextual factors and triggers*. Specific economic enabling factors in terms of inputs were important for success. New herbicides contributed to the early uptake of zero-tillage farming in Brazil and Paraguay. The lack of suitable credit seemed to have hindered further rapid spread of the zero-tillage technology, not just among small farmers in Paraguay, but also in Africa (in combination with secure land tenure). For zero-tillage farming, however, there is a strong indication that the actual trigger for rapid adoption on a large scale was the drop in pesticide prices in the early 1990s.

101. The importance of carefully examining contextual opportunities and constraints seem to hold even for innovations. Thus, for example, mobile phones have been suggested as a mechanism for strengthening rural communities under the Village Phone Programme in Bangladesh (Quadir, n.d.); however, evaluations point to the fact that the experiment is only likely to succeed due to the weak regulatory system, as well as riding on the outreach groups established through the Grameen Bank microfinance system (CIDA, 2000). The personal dedication of the initial innovator (Quadir, n.d) and a subsidy expected in the short term (from the closely connected urban Grameen Phone business) also point to the importance of internal opportunities. The relative importance of these types of contextual factors is likely to be time and sector specific. They are also hard to assess without sophisticated economic data.

Information and Learning Processes in Scaling-Up in the Case Studies

102. Information and learning processes are the processes by which higher states of practice can be reached, both internally, and with external groups and individuals. Though such processes are internal success factors (discussed above), they are addressed separately here because of their great importance as driving forces in successful scaling-up. Table 3.1 above summarizes some of the findings from the case studies with respect to information and learning processes.

103. **State of Practice.** The evidence available for the three main case studies begins to give confidence in impacts and sustainability in terms of poverty alleviation. The practices in the case studies have been tested, evaluated, expanded, and adapted to some scale (see Table 3.1 above). Thus, these practices would be considered "good practices" under the state-of-practice classification system presented in this paper (see Table 2.2 in Section 2 above). Yet it is not entirely clear how generally applicable experiences are for transfer, even within their countries or states, and there are only initial indications that some elements and processes of these experiences may have been adapted elsewhere.

104. Perhaps it is unlikely that any kind of rigid code of practice can arise from factors relevant to success or failure identified in the case studies. The sources of information for this are probably too anecdotal. Two of the cases—the IGWDP watershed planning and development case and the ASA microcredit case—have had some initial elements of a "franchising" approach, through developing guidelines for possible adoption elsewhere. In both cases, however, individuals closely involved in their development emphasized that the elements for transfer are essentially at the level of simple approaches rather than complete packages. At IGWDP, the idea was subsequently dropped.

105. Competing and alternative approaches and experiences—for example, the plethora of microfinance NGOs in Bangladesh and the numerous watershed development programs, not only within the state of Maharashtra but also in India as a whole— are present. (Farrington, et al., 1999) These have all developed some of their own basic principles. These experiences are also at the stage of defining and evaluating practices that either work at scale or provide robust arguments and processes for application elsewhere. One could argue that internationally developed practices developed for microcredit (CGAP,

2002) are reaching a "policy principle" level, but questions remain as to wider applicability to marginal groups and wider rural finance issues.

106. **Other Aspects of Information and Learning Processes**. Local networks and peer-to-peer exchanges of ideas were effective means for sharing and influencing practices between organizations. Interest in take-up of practices or services was generated in target groups through calculating and demonstrating potential financial benefits to them. This approach was important in generating demand for and a self-targeted spread of practices or services. Providing detailed information about local experience and demonstrating and documenting financial viability and cost-effectiveness of the practices also helped to convince public officials and the private sector of the value of larger scale applications.

107. Hands-on rapid internal learning by staff and key stakeholders was critical for the development of implementation capacity on larger scales in all cases. The feedback and learning mechanism contributed to processes for continuous rapid updating and transparent fine-tuning of procedures to new local conditions and to larger scales. The feedback and learning mechanism was focused primarily on efficiency rather than on impact but was very rigorous and institutionalized. Evaluating and learning with respect to issues of deeper socioeconomic and pro-poor impact was generally done under the auspices of donor support.

108. In the IGWDP watershed development case study and the zero-tillage farming case study, farmer-to-farmer exchange of information has had three effects of importance to scaling-up. First, the exchange of information among farmers helps demonstrate the effectiveness of a particular approach to farmers, because farmers tend to trust information they receive from other farmers. Second, it provides a means for local groups to adapt technologies to very specific environmental and socioeconomic conditions. And third, it has multiplier effects in building voice and local demand for other services (which is particularly useful when there is a diversity of local needs). Similar information processes have proved effective in the experiences of Integrated Pest Management (IPM) Farmer Field Schools (Dilts, 2001), rural producers' organizations (Collion and Rondot, 2001), and agricultural extension initiatives. .

109. In the ASA microcredit case study, managers did not encourage community peer-to-peer exchanges in transferring their own experiences with microcredit to other countries' microfinance institutions. The did, however, rely heavily on their own grassroots experience when exchanging ideas with their counterpart managers. The innovators and managers were important also because of their more political contacts, knowledge, and influence at higher levels.

110. As indicated previously, demonstrations of effective and efficient change were important for convincing government agencies and other support institutions to adapt elements of the successful processes used. Networks and peer-to-peer exchange of ideas at these levels were also important for sharing and influencing practices between organizations, and building a constituency to influence policy change. In Brazil, the exchange and dissemination of tangibly successful zero-tillage experiences among farmer associations and networks, through state and national level conferences, was considered important enough to be sponsored by agribusinesses. The experience of the PAN and IPM networks, and increasingly sophisticated microfinance networks, confirms the need for influence to be based on solid field experiences, preferably linked to tangible benefits. This aspect of political influence and generating demand for change among officials is probably the weakest part of documentation.

Findings from the Application of the Framework to the Sustainable Agriculture Networks

111. Table 3.2 summarizes the findings from the case study of the scaling-up experiences of the Integrated Pest Management Forum (IPMForum) and the Pesticide Action Network (PAN). These

findings, which suggest the importance of general approaches to scaling-up rather than specific technical issues, are generally consistent with the findings from the application of the analytical framework to the three main case studies and other references cited in the preceding discussion. The similarity in the findings for the case studies, the sustainable agriculture networks, and other references suggests that there is considerable scope in further comparing experiences between closely related rural themes in a structured manner, where these also include looking at a variety of means for achieving change at different levels.

Table 3.2 Findings from the application of the framework to the two sustainable agriculture networks

Framework Element	*Findings*
Objectives/outcomes, impacts, and costs of scaling-up	▪ Often clearly defined measurable objectives ▪ Tracing outcomes and impact important for continuity and support
Organizational approaches/sequencing of scaling-up	▪ Focus on concrete activities and experiences on the ground focused on cost benefits ▪ Need for long-term planning and vision for change
Factors relevant to success in scaling-up	
More internal success factors	▪ Transparency in activities ▪ Locally and regionally demand-driven networks worked best
More external success factors	▪ In the case of technical solutions, integration and real market links, and access to inputs such as seeds, was needed ▪ More successful cases dealt directly with the enabling environment at national and international level
Information and learning processes in scaling-up	
State of practice	▪ Few ongoing evaluations of change and impact ▪ Most evidence built on anecdotal information ▪ Interviews necessary for detailed assessment ▪ No systematic processes for collecting information about states of practice
Other aspects of information and learning processes	▪ Local projects, regional networks driven by local stakeholder NGOs ▪ Difficulty in monitoring institutional change in scaling-up ▪ Face-to-face communication provided

Note: The Integrated Pest Management Forum (IPMForum) and the Pesticide Action Network (PAN).

Conclusions from Analyzing the Case Studies and Networks

112. The application of the analytical framework to the case studies and networks yields evidence on scaling-up that allows for some confidence in the possibility of building on small successes in the rural development sphere to expand their coverage, as well as to transfer and adapt approaches used successfully in one setting to other settings. It is important to bear in mind, however, that it takes considerable work and assessment to reach a state of "good practice," where development practitioners can be confident in achieving scale and impacts and can consider the lessons arising from experience robust enough for application elsewhere.

113. Furthermore the findings from the case studies suggest that donors, governments, and other development agencies should keep several points in mind when considering issues related to support for scaling-up the impact of interventions in rural development:

- importance of not losing sight of poor, marginalized populations
- importance of understanding contextual factors when scaling-up.
- need to draw universalist lessons when scaling-up.
- approaches to balancing "contextualist" and "universalist" approaches to scaling-up.
- potential value of applying lessons from a more comprehensive body of evidence on scaling-up.

114. *Importance of Not Losing Sight of Poor, Marginalized Populations.* When analyzing or planning initiatives to scale-up impacts in rural development, it is important not to lose sight of poor, marginalized populations. In the case studies, some important hard-to-reach groups were sometimes left out of participatory processes: very marginal farmers (in the zero-tillage farming case) or pastoral groups, women (in the IGWDP watershed development case), and landless people (in the ASA microcredit case). These observations indicate the importance of considering the extra efforts and costs to reach isolated or fragmented areas where the very rural poor live when planning scaling-up initiatives. It should not be assumed that mechanisms designed for rapid scaling-up will produce trickle-down benefits to such groups.

115. What accounts for difficulties in reaching poor, marginalized populations with scaling-up initiatives? If there is an overly great focus on efficiency, the subtleties and needs of the target population group may be lost when processes are rationalized. Difficult policy issues such as land tenure or cultural issues that are intractable from a practical or political point of view may also come into play.

116. Similarly, power shifts arising from more participatory processes of decision-making encouraged by development agencies may be accepted on a small scale but hit stumbling blocks when these need to be linked to higher levels of government support. A slew of institutional forces, some purely bureaucratic, others political and or relating to organizational culture, come into play (see Bainbridge et al., 2002, for work on transforming bureaucracies). Navigating through these turbulent waters may take considerable understanding of institutional processes, as well as skills in development and management. Another important question is whether there is sufficient understanding of local dynamics and changes in resource use and livelihoods. In the past decade, analyses of dynamics in dryland Africa (Tiffen, et al., 1994[14]; Leach and Mearns, 1996) have overturned decades-old assumptions about local people's inabilities to manage land degradation. Considerable effort and resources may be required to effect further positive change or draw applicable lessons for elsewhere—and this requirement may itself mitigating against rapid scaling-up.

117. *Importance of Understanding Contextual Factors When Scaling-Up.* Clearly, considering the institutional context and changes in the wider environment is vital when analyzing or planning initiatives to scale-up impacts in rural development. It is essential to consider the institutional context and the wider environment in which scaling-up occurs, because such factors (e.g., external contextual factors such as

[14] It is interesting to note for the case of Machakos in Kenya, that the success of indigenous livelihoods may be particularly favored by proximity of markets in and remittances from Nairobi, and relatively secure land tenure, and thus may be favored by particular contextual factors.

land reform or other intractable policy issues) may restrict the potential scope and speed of scaling-up, especially given constraints on resources.

118. Thus, for example, a point may be reached where a local or wider market is saturated as a result of development efforts. This situation is beginning to occur in the case of provision of microcredit in some areas of Bangladesh. The existence of external context factors such as these, though not impossible to address, make the point that scaling-up is unlikely to be linear and straightforward in relation to rural poverty. In the case studies and networks, there was no simple blueprint or technical solution for scaling-up impact. These experiences suggest the importance of ensuring that systems are responsive to local settings and implementing institutions, even if experiences are learned from elsewhere. Various analyses of policy transfers from the South and North in various sectors: education reform (Samoff, et al., 2001), child health (Myers, 1983) and the social sector (Oudenhoven and Wazir, 1998) make this same point. An analysis of livelihood changes in three regions—unusual in that it looked at impacts many years after completion of sustainable agriculture projects—demonstrated that the process of innovation and experimentation by farmers with the capacity to adapt to new opportunities and ideas (i.e. new contexts) was what led to sustainability (Bunch and Lopez, 1994).

119. Need to Draw Universalist Lessons When Scaling-Up. The process of scaling-up should, at least internally, also be driven by a more universalist process of simplification of rules and procedures for use by many people on a larger scale. All three main case studies had technically rigorous processes for developing and updating manuals and procedures, which were adapted on a continuous basis.

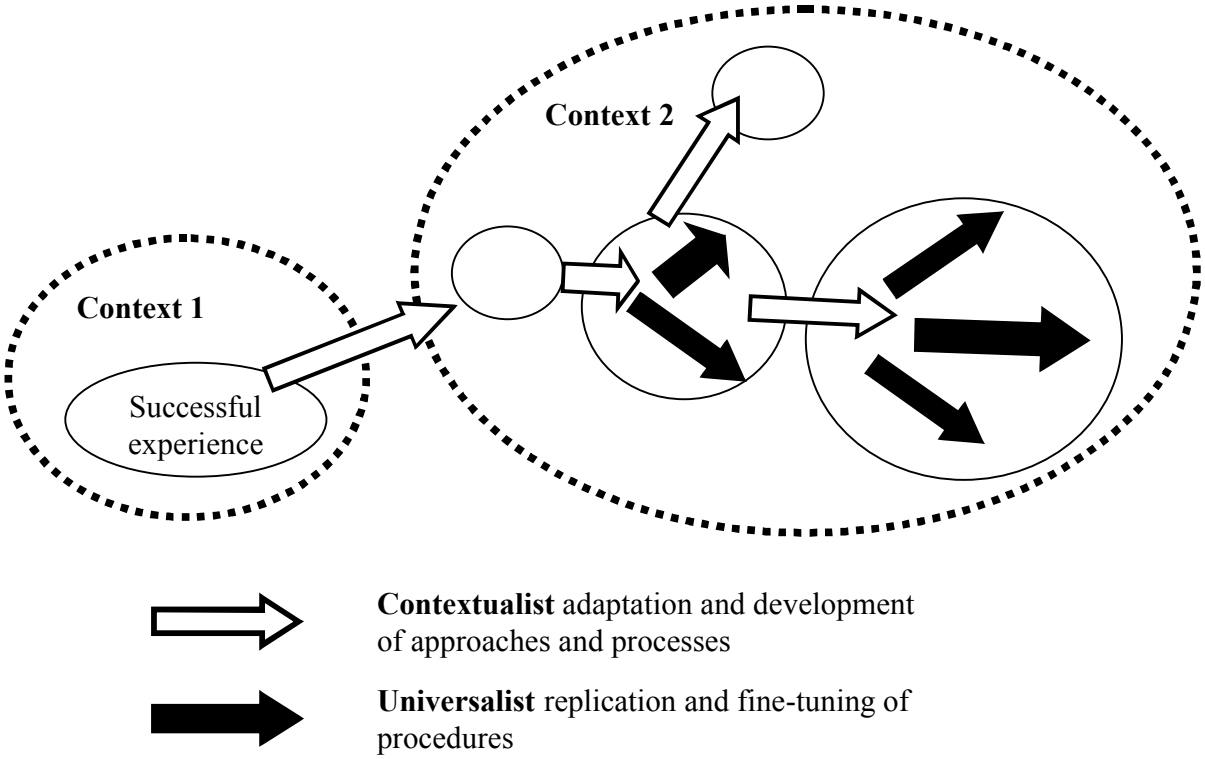
120. The findings from the case studies in terms of factors relevant to success in scaling-up strongly correlate with most of the basic principles at the level of processes and approaches identified through NGO-Consultative Group on International Agricultural Research (CGIAR) workshops on scaling up (IIRR, 2001), particularly for the Indian watershed and zero-tillage farming scaling-up case studies. These observations suggest a scope for sharing lessons across a wide sphere of interests on the broader approaches to looking at scaling-up—e.g., how to make choices around sequencing, target groups, or learning from experience.

121. The lessons from the IGWDP watershed management and zero-tillage case studies, as well as from the sustainable agriculture networks experiences, with respect to factors relevant to success are also supported by a variety of other studies—on watershed management (Hinchcliffe, et al., 1999), agroforestry research (Franzel, et al., 2001), drylands management and soil fertility (Hillhorst and Muchena, 1999), and irrigation (Korten and Siy, 1988). Factors linked to success in scaling-up in almost all of these sources are the following: (1) simple, low-cost but transparent interactions at the local level; (2) systems visibly responsive to local settings and demands of local groups; (3) ensuring that learning continues at scale; (4) conscious linking of issues of local concern with wider context; (5) availability of key inputs or markets; and (6) enabling environments for innovation and capacity to support efforts at scale. Many of these factors have to do with creating efficiencies at scale, while retaining effectiveness—an observation that reinforces previous observations about learning patterns in community organization and rural development (Korten, 1980) (see Figure 2.4 in Section 2 above).

122. *Approaches to Balancing Universalist and Contextualist Approaches to Scaling-Up***.** Given a strong framework for comparison and identifying broader approaches, there is considerable opportunity to learn from diverse experiences with scaling-up. Thus, what is needed for scaling-up efforts to be effective is a combination of "contextualist approaches" to scaling-up that are responsive to external context and new opportunities plus "universalist approaches" that draw out generalized procedures and rules that can be adapted to local conditions and continually adjusted (see Figure 3.2).

123. What are some possible means of combining contextualist and universalist approaches to scaling-up? One way to balance these approaches is careful sequencing of activities to support scaling-up of impact. Sequencing should provide the flexibility needed to draw on appropriate previous experiences and external knowledge, as well as to make adjustments that reflect changing circumstances and priorities. It may be desirable to incorporate "learning at scale" at intermediate levels where microconcerns (e.g., visible impact) and macroconcerns (e.g., policy, wider institutional capacity, markets) can both be readily assessed and to some extent managed.

Figure 3.2 Supporting scaling-up of impact using a combination of universalist and contextualist approaches



Source: Jim Hancock., World Bank consultant.

124. The case studies indicated considerable emphasis on scaling-up by institutionalizing and mainstreaming new processes and principles that have been developed. This is a more useful path to support scaling-up than just quickly expanding cases that are visibly successful because they emphasize coverage on the ground. The World Bank is now using Learning and Innovation Loans and the U.N. International Fund for Agricultural Development (IFAD) has a Flexible Loan Mechanism, but it remains to be seen how these tools can best support scaling-up in complex rural contexts.

125. The experiences of the sustainable agriculture networks illustrate the need to link into grassroots "reality" to achieve scaled-up impact. In order to achieve greater successes, network practitioners must understand the real contextual pressures at the same time as they present measurable evidence of change as a result of their efforts on the ground and use demand-driven procedures to do so. Anecdotal evidence from land policy development and the general policy transfer experience would indicate that change is

well nigh impossible without some form of "policy pilot," in which reforms are tested on the ground or at least closely monitored in carefully selected case areas.[15]

126. *Potential Value of Applying Lessons from a More Comprehensive Body of Evidence on Scaling-Up*. This paper has presented a structured analysis of scaling-up experiences in three detailed case studies and two networks. It has focused on successful and rapid instances of scaling-up both to emphasize key issues and to be able to tap into relatively well-documented cases. The findings in this paper in a general way support the findings from wider assessments of strengthening the effectiveness of development aid (Dollar and Pritchett, 1998; World Bank OPCS, 2002). Preparatory work, a supportive enabling environment, institutional capacity, and a focus on performance are all crucial to successful scaling-up of good and innovative practices to reduce rural poverty and achieve other rural development goals.

127. Some of the differences in the three main case studies—e.g., the different institutional approaches to support scaling-up in the ASA microcredit case and in the other two more land management-related cases (the IGWDP watershed development and zero-tillage farming case)—point to the need for an examination of a broader set of cases across many sectors. To broaden the findings with respect to scaling-up, it would be instructive to examine a broader set of case studies of scaling-up experiences in the rural development sphere, as well as within and across various other sectors. Comparisons could be drawn between scaling-up initiatives in rural sectors (e.g., land reform or rural non-farm employment), as well as between scaling-up initiatives in other sectors (e.g., the business sector, the health sector).

128. To compare experiences with several outcomes, however, an improved way of classifying comparable outcomes would have to be developed. When comparing experiences with several outcomes, identifying the effectiveness of different elements or components of an undertaking could increase the range of comparisons available across sectors and provide information for assessing risks in applying and adapting lessons to new situations. The reasons for success or failure would contribute to a better understanding of transfer and expansion, although the neither the scale of positive and negative impacts nor costs are often made explicit in the literature. Analyses of states of practice could begin to quantify the evidence and assess the risks.

129. Although better evidence is important, it is important to recognize that building a body of evidence and information alone does not make for better development practice, as has been shown by assessments of evaluation uptake (OECD, 2000) and the sometimes limited influence of research on policy (see SDRC, 2002, for a variety of papers on this issue). In the World Bank, it is estimated that 80 percent of knowledge used for decisions pertaining to development processes are based on the accumulated tacit (i.e. non-formal) knowledge of experienced practitioners.[16] An examination of research influence on policy would provide broader lessons on the influence of information on change processes applicable to scaling-up. It would be important to identify influential individuals, groups, and alliances that are likely to be instrumental to objectively process and spread such information.

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[15] In India, a sophisticated geographical information system is used to carefully monitor watershed policy, program, and project implementation on a very large, but also detailed, scale by independent national coordinators.

[16] Catherine Gwin, World Bank, Operations Evaluation Department (OED), personal communication.

4. Moving Forward to Support Scaling-Up Impact

130. The provisional analytical framework and concepts developed in this paper proved useful in comparing experiences of rapid scaling-up in the case studies. Drawing from the application of the framework to the case studies, the authors of this paper developed two new tools that are described in the discussion that follows. It is hoped that these tools will be useful for rural development practitioners and their partners to support scaling-up the impact of innovations and good practices in rural development.

131. The concluding section of this paper describes activities that would support scaling-up good practices and innovations at the different levels at which donors, governments, and other development agencies operate (entry points): (1) sharing and developing concepts and methods, (2) developing country strategies, developing new projects and programs, and (4) managing and assessing projects and programs.

4.1. NEW TOOLS TO SUPPORT SCALING-UP IMPACT

132. The two instruments developed by the authors of this paper to support the scaling-up agenda are (1) an analytical checklist to help rural development practitioners and their partners think systematically about scaling-up impact (see Table 4.1); and (2) a list of key considerations to guide scaling-up (see Table 4.2). Each of these tools is discussed further below.

Checklist for Thinking Systematically About Scaling-Up Impact

133. The checklist shown in Table 4.1 is intended to help development practitioners and their partners think through key points related to scaling-up impact. The checklist should not be applied rigidly. The authors expect that different parts of the checklist will be used in different combinations and emphasis depending on the task., whether the task is (1) assessing the state of practice of scaling-up experiences to lay the ground for country strategies, for instance; (2) developing a project, program, or policy; or (3) evaluating a project, program, or policy. As can be seen, the checklist includes seven major items:

1. country demand;
2. nature of the approach or element of good practice/outcome;
3. information about impact;
4. strategy options used;
5. review of factors that have enabled or hindered success;
6. assessment of current state of practice; and
7. information and learning processes.

Table 4.1 Checklist for thinking systematically about scaling-up impact

More information about collecting perspectives on each of the seven items is presented in Appendix 5.

Checklist Item	***Task To Be Accomplished***		
	Assessment of the state of practice of experiences	***Design of a project, program, or policy***	***Evaluation of a project, program, or policy***
1. Country demand for scaling-up	Useful for identifying relative priority of different experiences	Useful to identify intervention within country priorities	Useful to identify intervention within country priorities
2. Nature of scaling-up task and outcomes	Needed for comparing like for like elements across disparate experiences	Assessing what can be realistically achieved against other experiences and map out strategies	Relevance, balanced assessment of quantity and quality aspects of outcomes
3. Information about impacts	Rigorous assessment needed for comparison	Assessing what can be achieved against other experiences, balance between socioeconomic impact, sustainability, and coverage	Clear identification of what actual coverage and different aspects of impacts, both positive and negative
4. Strategy options used	To help assess relative costs and useful processes	To assess main options for inputs and outputs	Particular strategies used, time-scales and combinations. Assessment in relation to overall resources used (costs)
5. Review of factors that have enabled or hindered success	Important in identifying applicable contexts and frequently occurring strong internal processes	Helps map out strengths, weaknesses, opportunities, and threats, and also some attempt at quantifying	Detailed quantified and objective assessment of factors of success and failure
6. Assessment of current state of practice	For summing up, including summing up of cases that have not worked well or failed and quantifying lessons and applicability on a wider scale	Assists in relating the intervention to what is known and the risk quantification of strengths, weaknesses, opportunities, and threats	Overall assessment of application to other areas and for development to larger scale strengthened by comparisons to other relevant cases
7. Information and learning processes*	Secondary but useful; hints at means of taking information findings forward	Helps strengthen design of management strategies, in particular those to do with communication and stakeholder engagement.	Can help strengthen recommendations and use of evaluation results

* Item 7 is applicable to state-of-practice assessments and evaluations but is most applicable to design activities.

List of Key Considerations to Guide Scaling-Up

134. A few reference sources provide direct guidance (sometimes described as a "framework") for designing projects and programs to improve the chances for successful scaling-up (see Gündel, et al., 2001, for natural resources and agriculture research; Advance Africa, 2001, and AIDS/HIV Alliance, 2001, for health). In general terms, these sources suggest strengthening different entry points in the

project cycle—in particular, modifying the preparation stage to take into account scaling-up from the start, either with a sectoral or intervention-specific focus. These references also address organizational choices for NGOs (AIDS/HIV Alliance, 2001) and research project cycle design (Gündel, et al., 2002).

135. Building on these useful but more sectoral and project-level recommendations, the authors of this paper identified a set of key considerations to guide scaling-up that can be used by rural development practitioners and their partners to support scaling-up impact. The items in the list, which is shown in Table 4.2, pertain to broad aspects of scaling-up: (1) identifying measures of success; (2) mapping out approaches and strategies: (3) building on key success factors; (4) and strengthening states of practice, etc. One of the reasons for focusing on broad approaches is that the evidence from the cases indicates that there is still room for a wider analysis and perhaps different types of lessons. A second reason is that the evidence from the case studies indicates the need for balancing contextualist approaches to scaling-up with universalist approaches.

Table 4.2 List of key considerations to guide scaling-up

Area of Interest	*Key Considerations To Guide Scaling-Up*
Identification of measures of success	▪ Should examine where experience fits in with wider needs and demand at an early stage. It is important to develop clarity on quantitative and qualitative aspects of success (expected and actual) as it relates to target populations. These should be accompanied by realistic estimates of costs, resources needed, and sustainability issues at large scale. ▪ Should do broad strategic mapping with respect to results and activities over the long term: coverage, pro-poor impacts, and possible interactions between outcomes. Such mapping is useful for two reasons: to develop common understanding of desired qualities of success and to set realistic expectations, thereby avoiding pressure to immediately scale-up beyond capacities.
Mapping out of approaches and strategies	▪ Should provide guidance in the choice of organizational approaches to scaling-up—e.g., the mix of strategies and approaches and how different support institutions enter and exit the process over time, with an aim of local institutional sustainability. The choice of approach will depend on the mix of partners and context. Time-scales and mix of processes are likely to be greater with increased number and variability of aims ▪ Should map institutional capacity and resources, constraints and opportunities, political support, to address success factors at different scales and stages. Such mapping calls for further development of methodologies to perform strengths-weaknesses-opportunities-threats (SWOT) analyses for scaling-up. Objective and quantified guidance on risks assumptions arising again from state of practice assessments. ▪ Should develop sequence of stages with intermediate outcomes towards impact, each with locally demanded and visible outcomes. ▪ Should consider systems for financial sustainability from the start. Such systems may include self-financing or longer term public financing for programs considered "socially viable" and efficient.
Building on key success factors	▪ Should identify and support dynamic individuals and groups who can be "champions." These individuals should have drive and commitment for long-term involvement and politically influential channels of support; however, they should not be overburdened with a constant stream of visitors or new projects. ▪ Should ensure appropriate interactions between people involved at a local level and those who have influence on a larger scale. ▪ Should develop procedures for management, monitoring, and evaluation that address scaling-up issues (see below) at an early stage. Such procedures include self-selecting

Table 4.2 List of key considerations to guide scaling-up

Area of Interest	*Key Considerations To Guide Scaling-Up*
	procedures that can reduce the effort of outreach. There should be simple and transparent interactions with the target groups at the local level; hands-on capacity- building processes and continuous feedback systems for updating procedures. Local procedures should take into account larger scale institutional issues as well as the systems of the local implementing institutions and setting (micro-macro linkage). ▪ Should incorporate testing of the effectiveness and efficiency of interventions at some scale. Such testing could possibly be done at the district/provincial level; this is where realistic issues of scaling-up are acute: such as logistics and political dynamics, urban and rural interactions with markets, etc. ▪ Should monitor and adjust to the wider context of triggers and opportunities (e.g., commodity price changes, new institutions).
Strengthening states of practice; improvements in information and learning, monitoring and evaluation	▪ Should identify clearly the sources and types of evidence, especially relevant outcomes and impact, if possible, for transfer or expansion of experience ▪ Should use peer-to-peer influence for sharing information, both at the local level and also between practitioners; this should be a principle of networks too. ▪ Should ensure that learning and adaptation continues at scale, for example in the continuous updating of manuals.

Source: Jim Hancock, consultant.

4.2. ENTRY POINTS FOR DONORS, GOVERNMENTS, AND OTHER DEVELOPMENT AGENCIES TO SUPPORT SCALING-UP IMPACT

136. This paper has highlighted a wide variety of definitions and concepts in the realm of scaling-up in various sectors and development fields, as well as parallels in these fields. It has also illustrated the importance of understanding contextual factors when scaling-up and the need for learning processes to draw lessons from various activities. As discussed below, it is also important to describe activities that would support scaling-up good practices and innovations at the different levels at which donors, governments, and other development agencies operate (entry points):

- **Sharing and developing concepts and methods.** The discussion of concepts and methods pertaining to strengthening states of practice and scaling-up impact needs to be shared more widely. There are many opportunities to draw out lessons pertaining to specific themes and contexts and to develop improved networking mechanisms.

- **Developing country strategies.** Country strategies should incorporate lessons learned about states of practice and scaling-up impact. It is important to identify institutional opportunities and constraints, as well as to examine the means of influencing policy, in such strategies.

- **Developing new projects and programs.** Donors, governments, and other development agencies should support the design of new projects and programs that are flexible, address local variability and change, and take into account the multiplicity of forces (different donors, agencies and contextual factors) that support scaling-up. It is also important to ensure that the processes and stakeholders behind such designs bring practical and context-relevant lessons to bear.

- **Managing and assessing projects and programs**. It would be useful to improve the management of projects and programs—and especially to evaluate projects and programs during implementation—to address key issues that that bear upon scaling-up through the expansion and transfer of experiences. Mechanisms for rapid learning and impact assessment are particularly important.

Sharing and Developing Concepts and Methods

137. Donors, governments, development agencies, and other parties involved in development efforts should share the discussion of scaling-up more widely and thoroughly. The discussion should be organized to deepen the various parties' understanding of different perspectives on what is understood by states of practice and successful scaling-up. To further develop the terminology and concepts used in the provisional analytical framework presented in this paper, these parties should take advantage of opportunities to link to, and build on, related analyses and terms (see box 4.1). Using the frameworks developed, issues of scaling-up common to, or divergent among, rural themes and sectors can be further systematized and quantified, both to draw generic lessons and to deepen sector-specific analyses regarding the applicability of the expansion or transfer of experiences.

Box 4.1 Analyses that may offer valuable perspectives on scaling-up

- Effectiveness of aid, examining the relationship between aid use under different governance conditions, and pointing out the added value of careful assessment of local conditions prior to investment (Dollar and Pritchett, 1998)
- The relationship between research outputs and their influence on policy (e.g., work done under the Research and Policy Network [RAPNet, n.d.])
- The dynamics and effectiveness of policy transfer from one country to another. For example, the experience in Scandinavia of rural development policy transfer, even between closely historically related countries, is difficult and has had different unpredicted outcomes (Anderson, 2001)
- The complexity of policy implementation; for example, in dealing with country specific issues in pilot land reform processes after the establishment of otherwise progressive tenure policy
- Organizational and administrative changes involved in institutionalizing participation (Transforming Bureaucracies projec; see Bainbridge, et al., 2000 for references)
- Economic analyses to understand the factors underlying economies and diseconomies of scale facing organizations
- Literature on technology adoption, diffusion of innovation, and technology transfer (Rogers, 1995; Douthwaite, 2002)

138. There exist many opportunities to assess states of practice across countries and regions. Examples include the following:

- Comparisons of the means of support at scale for watershed development and management experiences from India and other countries like Brazil or the United States, which have well-tested polices and guidelines.
- Examination of microcredit principles and limits to their incorporation within rural development programs or the identification of particularly supportive country contexts, and comparison of applicable strategies for developing scale. It would be useful to consider the reasons for the divergence of organizational strategies for scaling-up (e.g., using a few large organizations vs. several smaller ones—a difference noted in the case studies).
- Comparison of a range of participatory rural extension and extension approaches to identify cost-effective means at scale, perhaps drawing on successful elements of more traditional top-down experiences that have been discredited. This effort should be undertaken in conjunction with existing efforts, such as those of the

International Center for Tropical Agriculture (CIAT) pertaining to the institutionalization of participation (CIAT, 2002).

139. Much of the literature on scaling-up that was reviewed at the beginning of this paper was descriptive literature spanning a variety of sectors other than rural development. Structured comparisons using a common framework for cross-sectoral analyses of scaling-up experiences could yield additional lessons. Similarities and differences in processes, as well as in terms of strategic outcomes in reaching rural poor, could be derived from comparisons such as the following:

- Comparisons of scaling-up experiences in the rural and urban spheres and in a variety of sectors (e.g., educational, social, and infrastructure sectors);
- Comparisons of scaling-up experiences between North and South—for example, for health policy transfer prospects (see Nedley, n.d., for a discussion on elements for transfer from Tanzania to the United Kingdom; see Schreiner and Morduch, 2001, for a discussion of the transfer of Grameen-type microcredit experiences to the United States);
- Comparisons from the business world—for example, market research processes to assess suitability of new products in new contexts and potential groups of customers;
- Comparisons from the realm of public administration—for example, benchmarking, identifying standards of practice, effective and efficient implementation of government institutions (U.K. Government, n.d.).

140. It is important to approach cross-sectoral comparisons with considerable caution. There must be realistic comparability in outcomes. Perhaps classifying experiences in terms of technical, spatial, and institutional themes would facilitate the identification of comparable approaches. Furthermore, it is important to recognize that dealing with marginal groups, especially landless groups, and dealing with common property resources require very different approaches to financial sustainability and also require investment approaches different from those used in, for example, the business world.

141. In sectoral and cross-sectoral analyses of scaling-up experiences, the basis for "principles" arising from failed experiences such as those generally incorporated into many projects (community participation, coordination, etc.) can be compiled in states of practice. In addition to costs and factors relevant to impeding success, any negative impacts should be identified and even roughly quantified. There would be considerable value in concentrating on a limited number of cases that have been clearly successful, or on small-scale experiences (effective and even efficient) where attempts at a larger scale or in new areas have failed. They would provide valuable lessons in terms of the factors and constraints for expansion and transfer. Such lessons could be relatively easily drawn out using the checklist and state of practice classification.

142. Ways of developing and sharing the aforementioned information must be carefully considered. The networking mechanisms would have to be carefully designed to maximize the drawing out of lessons as quickly as possible. Developing even internal networking mechanisms has sometimes been a challenge for the World Bank.[17]

143. It is important to recognize that individual countries, sectors, and groups may have very different understanding and use of words, especially between languages, beyond the acceptance and experience of concepts. Such differences could also be viewed positively in terms of enriching debate, without any

[17] Catherine Gwin, World Bank, Operations Evaluation Department (OED), personal communication.

party dominating or excluding differing viewpoints. The Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP) is an example of a network that developed among several donors and NGOs from different sectors involved in humanitarian action (ALNAP, n.d.). It has systems for in-depth analysis and sharing of information and practices. This provides a clear case for independent and open networking.

Developing Country Strategies

144. What can donors, governments, and other development agencies do at the country level to strengthen national, long-term, pro-poor strategies in terms of implementation, and how can this be made more supportive of experiences for scaling-up impact?

145. The processes for developing Poverty Reduction Strategy Papers,[18] which provide the basis for assistance from the World Bank and the International Monetary Fund, or country-assistance strategies for different countries could be compared rigorously between countries for effectiveness under specific contexts. The extent to which strategy development practices at the country level are based on successful existing experience in high-level planning and consultation mechanisms could also be examined. The point would be to assess comparable states of practice to identify factors and contextual opportunities that are important to scaling-up with a view toward supporting the strengthening of the effectiveness of country-level rural strategies and sector-related strategies. Efforts could be made to identify ways to strengthen policy reform and scale-up policy implementation pilot projects for specific sectors, as well as for wider governance.

146. In developing country strategies, donors, governments, and other development agencies should do the following:

- Identify institutional settings supportive to the development of improved practices, for example the scope for civil society experimentation and advocacy, and what support there is to innovators and spread of well-assessed ideas.
- Identify the strength of evidence through assessments of states of practice, and the implications to risk and applicability in changing polices that they indicate, as well as highlight practical means for scaling-up.
- Map out indicators of opportunities and desired outcomes, as well as limitations, at different scales (e.g., local, provincial, national).
- Map out different types organizational strategies and investments for different levels of practice: grants where more experimentation is needed, based on the evidence from states of practice, for example, or leverage and incentives to reallocate existing disbursements.
- Specify the relative advantages of different stakeholders, including individual donors, based on states of practice n terms of reach, effectiveness in sustainability, long-term commitment and efficiency for scaling-up.
- Identify the main timing and entry points for supporting scaling-up based on aforementioned considerations.

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[18] For more information on Poverty Reduction Strategies, see the World Bank website http://www.worldbank.org/poverty/strategies/define.htm#prsp

147. The aforementioned concerns relate, in large measure, to the use and sharing of information. To address the means for supporting the exchange of ideas and interaction between stakeholders, it is important that donors, governments, and other development agencies consider several important issues:

- Various means and actors for capturing and analyzing policy knowledge (including nonstate actors such as transfer networks, think tanks, consultants, foundations, and academics[19]) should be considered, along with the pros and cons of each option.
- Power relations and multiple perspectives must be recognized and respected in regional, national, and local networks.
- Different mechanisms for spreading best practices based on effectiveness must be selected. Though no hard and fast rules, emerging trends include information exchange built on trust, face-to-face encounters, and practice-related networks as appropriate to theme and audience (see U.K. Government, 2000, for a listing of means).
- The fact that networking takes considerable money and effort must be recognized. New technology does not replace the effectiveness of personal interaction.

Developing New Projects and Programs

148. Donors, governments, and other development agencies are involved in developing new projects and programs. By reviewing states of practice with relevant outcomes and choosing information from comparable contexts, such institutions could more clearly identify what is useful in terms of specific aims and target area. What has to be done on the basis of present internal and external knowledge of scaling-up with respect to developing recommendations and developing strategies and activities for moving forward? An important consideration is the sequencing of activities in scaling-up (see Figure 4.1). What sequence of outcomes, impacts, and coverage can be realistically achieved through which appropriate information, organizations strategies, and investments?

149. The types and combinations of funding mechanisms and instruments that donors, governments, and other development agencies might contribute to and apply to particular opportunities for scaling-up should be carefully considered. It is important that institutions have a commitment to long-term involvement and build in flexibility in sequencing of activities. If individual donors cannot accomplish specific activities, the following an be accomplished by combinations of partner activities:

- Carefully select and combine finance instruments. Loans, grants, private equity, and policy effects on prices were all important in the zero-tillage farming case study. Since no single agency covers all of these, coordination between donor partners will be necessary.
- Map out roles between different institutions, and clarify expectations of performance. Outcome mapping (Earl, et al., 2001) may help define the respective responsibilities of different partners in the intermediate steps towards long-term impact.
- Ensure that the financial incentives of donors and governments are to support scaling-up impacts and improving quality of practice rather than simply to disburse funds and increase expenditures.

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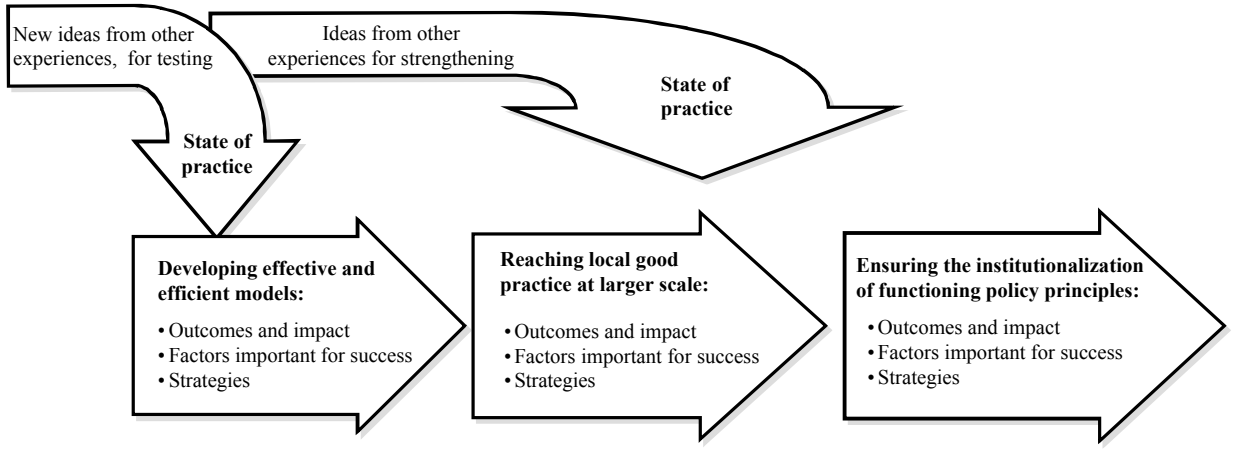
[19] Stone (2000) warns that although independent thought and analysis is vital to drawing out what is really successful, it also not necessarily objective or apolitical.

- Design systems for monitoring and evaluation that capture important indicators of scaling-up (Guendel, et al. 2002), and carefully measure the balance between coverage and impact, and target groups. Unit costs and institutional sustainability are also critical to assess. In addition, the measures of adaptation (essentially indicators of capacity) and more process-oriented aspects of scaling-up need to be incorporated.

Figure 4.1 Management Processes and Entry Points, and Sequencing



Source: Jim Hancock. Consultant.

150. Of course, the process of designing projects and programs is also important. The findings of this paper underscore the importance of open and ongoing consultations with key stakeholders during project or program development, as well as the importance of streamlining participation to reduce its costs to communities as well as funders. These findings also suggest that the particularly useful insights with regard to scaling-up and issues of practice may come from the following individuals:

- Well-chosen representatives of partner communities and end-users who understand local circumstances.
- Local and regional stakeholders who have an appreciation of, and can identify, alternative practices and broader institutional issues. Peer-to-peer exchanges of information can give managers deeper insights into matters related to the context and practical implementation matters than information from consultants who may have less knowledge or preconceived ideas about such matters.
- Critics of "successful" projects and initiatives. Many projects and policies are established on the basis of "successful" cases that are reported to have worked favorably in another setting. Critics of such cases may offer viewpoints that permit a more objective evaluation of whether the cases are deemed successes because of selective ideological choices, or such cases, in reality, have ambiguous results (Rose, 2001).

Managing and Assessing Projects and Programs During Scaling-Up

151. Efficient means of gathering and using information, not only for upward accountability, but also for adapting and learning at all levels, are also important. Monitoring and evaluation systems are fundamental here in underpinning information gathering and sharing. Many of the points on the design of better interventions are for ongoing consideration during project implementation: day-to-day management to deal with new situations and information, as well as regular re-planning.

152. To be useful in support of scaling up, evaluations must help in defining a common understanding of outcomes and impact, and to capture the qualitative experiences of the implementers, in addition to ensuring accountability to funders. Specifically, they are necessary to refine exit and mainstreaming strategies, expand the experiences locally and into new areas. They can only do so if they assist in better defining the context in which the interventions take place.

153. While evaluations can be strengthened by independent and objective viewpoints, it is clear from the case studies, that they need to be also integral parts of the project implementation and learning processes. For example, lack of continuity of practitioner involvement on large donor funded projects, often means there is often a large gulf between who are the evaluators (usually external consultants) and the planners (often other consultants) of new projects.

154. Often major evaluations take place at the end of implementation as a precondition for moving to larger-scale of a program. Such exercises are important for drawing wider lessons for scaling-up. The continuous learning stressed in the conclusion so this paper would indicate that significant evaluations should take place in some form during implementation (e.g., enhanced mid-term reviews) and monitoring. In the context of scaling-up, monitoring and evaluation and management systems could be enhanced through the following steps:

- *Incorporating participatory monitoring and evaluation.* The importance of engaging key stakeholders cannot be stressed enough: for innovating and adapting interventions to local demands, identifying needs, understanding local context and strengthening local communities to drive the processes forward themselves. Means of doing so through participatory learning and action, participatory action research, and participatory monitoring and evaluation has been reviewed in considerable detail elsewhere (Estrella and Gaventa, 1998; Pretty, et al., 1995). A caveat in relation to scaling-up is that Participatory Rural Appraisal (PRA) can be time-consuming for communities and practitioners; to be an efficient mechanism in support of scaling-up processes, therefore, it must be rationalized. Participatory processes were nearly dispensed with in the ASA microcredit case study.

- *Developing rapid impact assessment and organizational learning*. Insights from successful mid-term reviews by larger bilateral and multilateral donors and government processes would be useful. Various NGOs are examining the possibilities of combining impact assessment and on-going learning processes, to make them more efficient and responsive (e.g., the Accountability, Learning and Planning System ActionAid).

- *Improving financial analysis***.** Schreiner (2001) recommends cost-effectiveness analysis as the key level to monitor for microfinance institutions. This focuses on unit costs (capturing all aspects, including subsidies) versus outcomes. Outcomes, rather than wider benefits and impacts, may need to be focused on because the latter may be too diffuse or take a long time to emerge. Another suggestion is that a portion of funds for participatory and community-driven projects be devoted to building-up detailed knowledge on cost-effectiveness. Such detailed knowledge would provide baselines for comparing long-term investments and their returns in social development interventions, which are notoriously difficult to quantify. Schreiner (1999) suggests donor-subsidy measures in microfinance to go some way in addressing this issue. It would be important to address these types of assessments early in the process of supporting scaling-up, for example, when there have been several small-scale successes. It should be a necessity when expanding the experiences to a large scale.

- *Using process monitoring as an integral part of monitoring and evaluation to understand social and institutional changes and the support they need***.** Process monitoring systems and indicators have been key tools to analyze and track institutional dynamics such as organizational effectiveness and participation (Hosain, et al., 1999).

- *Examining the features and processes of monitoring and evaluation in project types that allow for learning*, to identify workable and efficient processes which work at larger scale. Examples are the World Bank's Learning and Innovation Loans and IFAD's Flexible Loan Mechanism.

155. Donors, with their commonly stated commitments to contributing to knowledge as a global good, need to make sure that evaluation lessons are objectively and openly compared and also internalized. Here, government and donors have a large responsibility in identifying pro-poor impact, sustainability and efficiency. In a quantified assessment of factors and context which led to success, evaluations may be the only chance of gathering information that freshly remembered and still relevant.[20] Pooling or at least providing the means for comparative evaluations of long-term impacts, sustainability and historical analyses, and providing the funding needed for them, is another clear role for donors. In support of this, evaluations would be strengthened by the following:

- *Better balancing of qualitative and quantitative methodologies and participatory information* (Marsland, et al., 2000). What may be particularly useful is triangulating more quantitative, qualitative at the community level and institutional assessments to create a more holistic dynamics taking place in a particular situation.

- *Deeper analyses of contextual factors need to take place consistently within evaluations*. More in-depth re-examination of past project assumptions and institutional analyses would be useful in this regard. More systematic and use of force-field and strengths-weaknesses-opportunities-threats (SWOT) analyses,[21] and institutional analyses and stakeholder assessments would provide a better basis drawing out success factors for scaling-up. A greater emphasis on quantifying relative importance of these factors would be important too.[22]

156. It is unlikely that more project resources will be devoted to learning and monitoring and evaluation unless the value of doing so is clearly demonstrated. On one level, it is difficult to see how there can ever be a positive assessment of use of government or donor resource if there is not objective or in-depth information about outcomes or impacts. On another level the accumulated knowledge of past experiences can provide the basis for pinpointing where resources can be saved without risk of becoming less efficient. On a practical level, this also demonstrated process monitoring was introduced for a small-scale participatory infrastructure project was adopted, not just because it has provided useful qualitative information, but especially because it was also a useful management tool (Viloria and Hosain, n.d.).

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[20] Bohringer (2001) presents the idea of pilot development projects as laboratories to understand impact under real world conditions.

[21] Matrices of strengths, weaknesses (internal factors), opportunities and threats (external context factors).

[22] Cain (2002) describes methodologies using Bayesian networks to analyze quantitatively the relative importance of different factors, using data gathered through stakeholder workshops.

Appendix 1 Scaling-Up Participatory Watershed Planning and Development Systems in India

157. A provisional framework for analyzing experiences of scaling-up was developed by the authors of this paper (see Box 3.1 in Section 3).[23] This case study applies the framework to the experiences of the Indo-German Watershed Development Programme (IGWDP) (Farrington and Lobo, 1997), which operates in a large drought-prone region of the Indian state of Maharashtra. With support from the German government, IGWDP developed participatory watershed planning and support systems that were implemented by village self-help groups organized and supported by non-governmental organizations (NGOs). The program also developed a capacity-building institution for smaller NGOs to implement watershed planning and support systems on a wider scale (Farrington and Lobo, 1997). Elements of IGWDP's planning guidelines have been developed and adopted at the state level.

A1.1 OBJECTIVES/OUTCOMES, IMPACTS, AND COSTS OF SCALING-UP

158. In the late 1980s, the Social Centre in Maharashtra and IGWDP performed watershed development work in Pimpalgaon Wagha and other villages to address the complex livelihoods and natural resource issues of water and watershed management. By 1994, the collaborative efforts of these groups in three villages had shown a wide range of local economic gains (i.e., doubling of crop production, creation of employment opportunities, restoration of ground water resources) and social gains (i.e., setting up of village watershed committee, involvement of marginal groups, accumulation of a locally owned development fund, and reduced outmigration). As result of success in community mobilization in Pimpalgaon Wagha and two other villages, the project was able to reduce time necessary for motivation and organizing by more than a half, from 1 year to 6 months.

159. These successes, along with some administrative and political support from the government of Maharashtra, allowed the extension of IGWDP's participatory watershed planning and development programs to 146 watersheds involving 78 NGOs in over 20 districts. By 2002, more than 200 villages and over 200,000 villagers had been directly involved in IGWDP's programs. In total, some 150,000 hectares of land were being rehabilitated. The area being rehabilitated is only a fraction of the area covered by national watershed rehabilitation programs, but the social, economic, and environmental sustainability of work led by IGWDP is widely recognized to be far superior to that of other programs (in Farrington, et al., 1999). A comprehensive evaluation of several projects undertaken in the mid-1990s supports this conclusion (Kerr, et al., 1998). One of the strengths of IGWDP is that it explicitly addresses deep-rooted issues—for example, restrictions on open grazing, the sinking of deep tubewells, and the cultivation of water-demanding crops by wealthier farmers—even though the tensions surrounding these issues are sometimes difficult to resolve.

[23] John Farrington, of the Overseas Development Institute, cowrote this case study, and Crispino Lobo, formerly of the Indo-German Watershed Development Programme (IGWDP), provided valuable further insights.

A1.2 ORGANIZATIONAL APPROACHES/SEQUENCING OF SCALING-UP

160. From the pilot experiments in Pimpalgaon Wagha and other villages in the state of Maharashtra, there emerged a set of "local-level ingredients for success" in the IGWDP program, with specific recommendations pertaining to the social, technical, and institutional sustainability elements of watershed development programs. The local-level ingredients for success provided specific mechanisms for building ownership, control, and motivation in communities, linking government, communities and NGOs, defining exit strategies and developing mechanisms for continued local funding. Although similar mechanisms (e.g., the use of matching funding and mechanisms for control of funds by village committee) contribute to success in other natural resources management projects, IGWDP mechanisms put a special emphasis on sustainability issues.

161. The support IGWDP gained from its early successes and building linkages led to a more regularized full-implementation phase of the program at the state level in the state of Maharashtra. The full-implementation phase took roughly 3 to 4 years and was designed to be consistent with national watershed rehabilitation guidelines. The fact that this built on 25 years of previous NGO and government experience in the area, however, underscores the value of long-term engagement and experience in allowing a lead agency to deal with various opportunities and constraints.

162. An important factor in contributing to the further effective expansion of the IGWDP program is that the program had a broad (macro) and longer term perspective from the start. IGWDP dealt with the complex institutional and governance issues around watershed management, such as managing conflict and engaging government. These efforts resulted in cross-ministerial promotion of a Cabinet resolution in 1992 in support of the program.

163. Experience with the workings of government procedures and funding arrangements generated further refinements. Despite the refinements, some issues—for example, modalities for collaboration with the Forest Department—remain difficult to handle. There are some agreements "in principle" with the Forest Department at the state level, but many agreements are made at the district level and have to be remade as staff rotate every 2 to 3 years. Elections every few years have also meant regularly renewing efforts to maintain political support for the IGWDP program.

164. The IGWDP model for participatory watershed development and planning is held in high esteem within and beyond the state of Maharashtra, but its uptake outside the state of Maharashtra has been relatively slow. The problem is not a shortage of funds; total national public sector funding for watershed development in India amounts to some $500 million a year. One difficulty has been developing enough NGOs of high enough caliber to ensure that the complex social, institutional, and technical prerequisites are in place. A further source of difficulty is that each program (whether government or donor-supported) is highly conscious of its own identity and reluctant to admit to having learned much from others.

165. IGWDP's Maharashtra model generated experience with appropriate state government directives, agency working arrangements, and community technical planning and institutional development, and "franchising" of the model to other Indian states was considered. For a variety of reasons, such franchising was not aggressively pursued. Nevertheless, practitioners in both the public and civil society sectors in various Indian states, as well as at the national level, have adopted elements of the model in varying degrees.

A1.3 FACTORS RELEVANT TO SUCCESS IN SCALING-UP

166. IGWDP is a long-term partnership between the Government of Germany and its developmental institutions the German Agency for Technical Cooperation (GTZ) and the German Development Bank (KfW); the Government of India and its developmental financial institution the National Bank for Agricultural and Rural Development (NABARD); and voluntary agencies and self-help groups.

167. IGWDP has several elements in common with other intensive NGO "empowerment approaches"—e.g., strengthening of village organizations, focus on environmental sustainability, focus on marginal groups. One thing that distinguishes IGWDP from other such programs, however, is that IGWDP considered factors that would allow it to work on a larger scale and with several institutions at a very early stage.

168. From the outset, IGWDP sought elements of efficiency, more technical rigor, and greater engagement with government processes as channels for wider scale change. An example of such an element is the "participatory net planning" approach developed by the Watershed Organisation Trust (WOTR), a voluntary agency that served as the support and coordinating body for IGWDP and was established in 1993. The participatory net planning approach abandons existing (often inaccurate) maps and takes on-the-ground reality as its starting point. This approach, which requires computerization and civil engineering support, allows funds to be spread further (e.g., because funds do not have to be allocated to fields already leveled) and facilitates the incorporation of villagers' viewpoints.

169. ***More Internal Success Factors.*** More internal success factors are factors relevant to the success of scaling-up that are within the control of development change agents. Among the important internal factors for success for IGWDP's participatory watershed planning and development program to work at scale were the following:

- *Rationalization and structuring of the participatory process.* The program has two phases: (1) a capacity-building phase; and (2) a full-implementation phase. The capacity-building phase, which is funded by the German Agency for Technical Cooperation (GTZ) and administered by WOTR, is intended for NGOs that would like to undertake watershed projects but lack the necessary skills and capabilities. Participation in this phase enables NGOs to qualify for inclusion in the full-implementation phase. The Participatory Operational Pedagogy and the Gender-Oriented Participatory Operational Pedagogy developed by WOTR are at the core of the capacity-building phase, and WOTR serves as the coordinating and support institution of IGWDP's capacity-building program. The full-implementation phase is meant for NGOs with experience and demonstrated capabilities in the area of watershed development. This phase is funded by the German Development Bank (KfW) and administered by India's National Bank for Agricultural and Rural Development (NABARD.
- *Careful selection of villages to participate***.** The second is that the program selected villages carefully to exclude those (many, in the Indian context) riven by factionalism. This can also be seen as a weakness in that it limits the applicability and overall impact of the program.
- *Use of a cluster approach in the selection of new watersheds***.** When moving to new watersheds, a cluster approach was used. This had the prime advantage of allowing a continued presence in the area, so as to monitor post-rehabilitation developments and be on call to assist in conflict resolution.

170. Institutionally, IGWDP has the following features:

- WOTR, a voluntary agency based in Ahmednagar, was established in 1993, and its status in IGWDP is equal status to that of the government. WOTR commands high respect for its vision. With its longstanding knowledge of local social, institutional, and technical issues, WOTR has also a high capacity for training, both on-the-job training and training in more formal contexts. The common approach guiding the national program has referred to and recommended the capacity-building phase of IGWDP managed by WOTR.
- It has marshaled political support, based on a "know-thy-government" approach to understanding how norms, guidelines, and working practices can be managed, so government staff are keen to engage in a bureaucratic environment where they would otherwise be indifferent to engagement.
- India's National Bank for Agricultural and Rural Development (NABARD) has played an important role as a stakeholder and investor. NABARD, which does not invest its own funds in IGWDP but administers German funds, has been important in harnessing a development bank to ensure compatibility between government norms and ground realities and to enhance the prospects of technical sustainability.
- The German Agency for Technical Cooperation (GTZ) and the German Development Bank (KfW), respectively, funded the capacity-building and funding mechanisms of IGWDP.

171. ***More External Success Factors.*** More external success factors are environmental or other contextual factors that are relevant to success in scaling-up but are not subject to the control of development change agents. In the IGWDP participatory watershed development and planning case study, one has to dig deeply to identify such factors, but several points are worth noting:

- A high proportion of project villages had had some earlier investment in soil and water conservation through Government of Maharashtra programs, and although these projects were not generally sustainable, they at least left some structures on the ground that could be incorporated into the IGWDP program, thereby saving costs.
- Some limitations on agro-environmental applicability are indicated in the criteria for selection of watersheds and future areas. There would have to be considerable modifications to develop workable processes for pastoral systems in drier areas, if at all possible**.**
- In a wider context, India has a healthy civil society, and the government, though often bureaucratic, is relatively responsive (with some variation by state) to new ideas.

A1.4 INFORMATION AND LEARNING PROCESSES IN SCALING-UP

172. The following are the key learning and adaptation processes for scaling-up IGWDP's participatory watershed planning and development programs:[24]

- Many key activities of IGWDP have been important: promoting new ideas, setting up and testing large-scale mechanisms, and refining program design. These activities have been reinforced by IGWDP's status as a well-respected, locally knowledgeable, and long-term committed organization.

[24] Information in this section is based in large part on Crispino Lobo, formerly of the Indo-German Watershed Development Programme (IGWDP), personal communication, 2002.

- The people involved in the program are well respected, locally knowledgeable, and committed. Often it is thought that if one devise "good systems" and "institutions," everything should be fine. These mechanisms are only as good as the people involved in them.
- Also very important was the incorporation of strategic thinking from the start (the perspective on "macro" with "micro" responsiveness); this meant purposeful processes for engaging government, NGOs, etc, in the learning process at all stages.
- Having a system for capacity-building through WOTR (e.g., learning projects in small micro-watersheds of 100 hectares or more at the village level). These activities serve as a means for both sides (IGWDP and villagers) to establish whether they wish to continue on a larger scale.
- WOTR has a training center, from which over 42,000 trainees had graduated as of April 2002. This center specifically addresses NGOs' capacity needs to support the implementation of the program.
- Nodes for sharing between farmers creates local demand to which agencies have to respond.
- Networking between IGWDP and other programs was done by the program coordinator from 1989 to 2001. This networking enhanced awareness and the spread of program ideas. Following the termination of the office in April 2001, the level of interaction has declined. This observation suggests that networking requires ongoing resources.

A1.5 CONCLUDING POINTS

173. The findings of the analysis of IGWDP's participatory watershed planning and development programs presented in this case study largely correspond to the findings of several investigators who have examined the evolution of scaling-up of watershed management projects in South Asia (Esmail, 1998; Farrington, et al., 1999; Turton, et al., 1998). Although watershed development can undoubtedly generate substantial benefits and represents perhaps the only option in many areas to sustain a growing population on the land, it is feasible only under certain topographical land and hydrological conditions and is socially and institutionally complex. In several Indian watershed management development programs, greater resource management control has resulted in the further marginalization of landless livestock herders (Kerr, 2000).

174. IGWDP has tried to make its job of local engagement easier by selecting socially harmonious villages (these are called "self-selecting conditionalities"). The 100-hectare pilot phase provides a further selection screen. IGWDP has a well-developed participatory process to ensure that the wishes of the people with land do not override the wishes of the landless; even so, the ban on open grazing damages the livelihoods of many of the poorest people, and it is not yet clear whether they are able to reassert grazing rights within a controlled, rotational system, or be compensated by the availability of local casual labor during the rehabilitation phase. The fact that IGWDP's program does not reach marginal population groups and the self-selection process suggest that there may be limits to scaling-up the program in particular areas.

175. IGWDP has excelled in identifying the conditions that must be in place to engage government in successfully funding 4- to 5-year rehabilitation phases. No additional external funding is generally needed. Agreements with government at all levels are high maintenance however, and institutional sustainability is not guaranteed. Government staff turnover is high, and agreements quickly fall by the wayside.

176. Following rehabilitation of local areas, IGWDP shows strong commitment, visiting "graduate" villages regularly and being on call to help in dispute resolution. Preventing better-off individuals from gaining the lion's share of resources—whether by sinking tubewells or growing water-demanding crops—requires constant vigilance.

177. IGWDP takes a functional view of NGOs, even encouraging local people from one successfully rehabilitated area to set up an NGO capable of providing its services to neighboring watersheds on a financially viable basis (viable in the sense that they prepare a proposal for project funding). This "spread by osmosis" undoubtedly brings relevant local knowledge to bear, and represents a substantive confidence in local capacity, but requires time and effort.

178. Donors are best equipped to support long-term experimentation with new institutional arrangements. Total donor funding for development efforts in India amounts to well below the equivalent of 1 percent of gross domestic product in India, so volumes of money may not be the problem with respect to supporting development changes. The capacity to institutionalize new ideas is. How money is used is an issue, because government funds are not readily available to NGOs. Donors are also well equipped to spread new ideas, though they are often limited here by excessive tendencies to act in a proprietary manner—i.e., to be reluctant to disseminate the ideas developed by an agency funded by another donor. Furthermore, there may be considerable discrepancy between the evidence presented and actual action.[25]

[25] Even after presentation of evidence from a major evaluation (Kerr, 1998) indicating limits to scaling-up, both the World Bank and the Government of India went ahead with very large programs (J. Kerr, University of Michigan, personal communication, March 2003).

Appendix 2 Scaling-Up a Microcredit Service Delivery Program in Bangladesh

179. This case study applies the provisional framework for analyzing experiences of scaling-up (see Box 3.1 in Section 3 of this working paper) to the experiences of the Association for Social Advancement (ASA) in scaling-up its microcredit service delivery program.[26] ASA began as a Bangladeshi social development non-governmental organization (NGO). In the last 10 years, ASA has undergone a largely self-financed expansion of its microcredit program (see Jain, 2000; Fernando and Meyer, 2002; and Rutherford, 1995) and now focuses exclusively on microcredit service delivery. ASA's microcredit program now directly serves over 1.4 million clients, mostly poor, rural women, in Bangladesh. Recently, ASA has been involved in donor-funded adaptations of its microcredit service delivery system to other countries, including the Philippines.

A2.1 OBJECTIVES/OUTCOMES, IMPACTS, AND COSTS OF SCALING-UP

180. Since the beginning of 1990s, when ASA first decided to fully dedicate itself to microcredit service delivery with only minimal previous involvement, ASA has chalked up a truly impressive record in terms of providing services to clients in Bangladesh and in terms of achieving a self-sustaining expansion in coverage:

> ASA has experienced rapid growth without a decline of quality of services. As of end of April 2002, it had 1,121 branches with over 4,000 credit officers serving over 1.68 million clients with outstanding loans. About 96 percent of its clients are women. The average of over 400 clients per credit officer is one of the highest in the region and the average outstanding loan portfolio per credit officer has surpassed Tk1.6 million. ASA had Tk6.7 billion (approximately $118.0 million) in outstanding loans and savings deposits totaled roughly Tk1.85 billion (about $32.5 million). On-time loan recovery rates have been impressive exceeding 98 percent during the last 5 years. The ratio of average loan balance to GNP per capita has been about 18-20 percent for the past several years suggesting that it serves clients who are quite poor. ASA has been a financially self-sufficient MFI [microfinance institution] since the mid 1990s. (Fernando and Meyer, 2002).

181. More detailed studies of ASA's impact (externally Rutherford, 1995, Bruntrupp, et al., 1997, and internally Kamal, 2001) indicate that although ASA is largely focused on poor people, this being the major group in the target areas, it also includes middle-class people (useful for mobilizing the community) and some from of the poorest groups. The population served by ASA represents something close to a village cross-section, with some bias against the wealthiest, because bigger loans are considered risky in the event of default. ASA's program operates under a largely self-targeting process, as this

[26] Md. Shafiqual Haque Choudhury, Founder and Managing Director of the Association for Social Advancement (ASA), kindly and enthusiastically gave time for this interview at his spartan offices in Dhaka, Bangladesh. Iqbal Sobhan and Michael Marx of the U.N. Food and Agriculture Organization's (FAO) Investment Centre provided valuable insights regarding the issues of scaling-up microfinance.

strengthens the self-sustaining mechanism. The program operates in all types of regions, though like most microcredit NGOs in Bangladesh, it avoids subareas that are harder to reach to keep a lid on its operating costs (da Costa 1997).

182. Analyses of ASA's program indicate that at the household level, the program improves households' economic situation, increasing financial assets. The ASA system's strength is in channeling funds to the household, often for use by the husbands, thereby reducing the vulnerability of women in the household—a finding in common with studies on microfinance institutions (e.g., a study of BRAC by Hassan, 1999).

183. On the other hand, the microcredit program has had little, if any, impact in terms of women's participation and empowerment in terms of social standing (Brunntrupp, et al., 1997)—and possibly may have even resulted in a loss in other assets (Kamal, 2001). Generally, there are also weaknesses in productive credit and relative inflexibility in addressing broader financial needs (such as savings deposits). On the capacity-building front, however, the ASA program's limited capability in terms of raising social awareness does not seem to be much worse than that of NGOs specialized in grant-based social development.

A2.2 ORGANIZATIONAL APPROACHES/SEQUENCING OF SCALING-UP

184. ASA started off as a social development organization covering various areas of work. Frustration with the lack of progress and direction drove ASA, not without internal conflicts, to focus on one service alone. The experience of repayments by flood victims after the 1987 cyclone convinced staff on a more immediate level that microcredit schemes were realistic; reinforced by the swelling microcredit movement among NGOs in Bangladesh.

185. In the early 1990s, ASA spent several years refining and developing its processes, initially funded by donors such as the Danish Agency for Development Assistance (DANIDA). Although ASA had begun branching out into savings and insurance, as have other microcredit organizations in Bangladesh. More recently, however ASA has largely reverted to its main credit function (Wright, et al., 2001) because of the extremely heavy demands on staff (and the cost implications). In 1995, ASA achieved self-financing by taking out loans of its own at near commercial rates, mainly from a special Bangladesh apex microfinance fund, the Palli Karma Sahayak Foundation (World Bank, n.d.).

186. Currently, ASA's microcredit service delivery program covers 1.5 million members in Bangladesh. ASA is now involved in replicating its experience in other countries, such as the Philippines, primarily through the U.N. Development Program's (UNDP) MicroStart program (Rhyne, 1999). The development of the Grameen system is being similarly replicated through the Grameen Foundation, though this has a much higher profile and operates through a large network.

A2.3 FACTORS RELEVANT TO SUCCESS IN SCALING-UP

187. Both internal success factors and external success factors were relevant to success in the scaling-up experiences of ASA's microcredit program.

188. ***More Internal Success Factors.*** More internal success factors are factors relevant to the success of scaling-up that are within the control of development change agents. There is no doubt that the refined self-financing system and the harnessing of internal domestic funds in Bangladesh is a major driving force in achieving the large-scale coverage of the target group by ASA.

189. The codification of procedures is important by ASA has also been important. To achieve sustainability while maintaining services for the target population, ASA has adopted a set of procedures that are codified in a manual in a set of very clear, strict, and easily disseminated rules.[27] This codification reduces the costs of staff training (staff pay for their own training and learn on the job) and management overhead. ASA operates with an extremely flat and decentralized structure. Effective financial penalties are imposed on ASA staff for not following procedures or not reaching targets. The financial monitoring of ASA's credit system is very detailed and up to date. Furthermore, it is under the direct control of the top leadership, especially the founder. Nearly all Bangladesh microcredit NGOs, with the exception of BRAC, still depend on charismatic and dynamic founder-leaders.

190. The codification of procedures is important for internal and external transparency and is common to many of the microfinance institutions in Bangladesh, several of which have a set of "principles" or "steps" that they communicate and follow closely, at least in theory. This uniform application of rules has also been the difference between microcredit NGOs in India that have been able to expand in self-sustaining manner with ones that have allowed flexibility that have not been sustained financially.

191. ***More External Success Factors.*** More external success factors are environmental or other contextual factors that are relevant to success in scaling-up but are not subject to the control of development change agents. The Grameen Bank and the many other Bangladeshi NGOs following its lead provided the inspiration, testing ground, and even a wider institutional framework for ASA. Rutherford (1995) provides a detailed description of NGOs' experimentation with microcredit development and its historical context in Bangladesh. The microfinance experiences and activities in Bangladesh led to the setting up of an apex funding institution, Palli Karma Sahayak Foundation (PKSF), now replicated elsewhere, with donor support and pressure on the government.

192. ASA's difficulties in branching out into savings deposits probably stemmed from issues pertaining to the viability of branching out into savings deposits in terms of increased costs. Many NGOs also experiment with savings deposits and other financial services to the poor, and savings mobilization always forms a basic component of initial loan conditions; however banking regulations are issues in this area. ASA's difficulties in branching out into savings probably did not have very much to do with a lack of a regulatory system for NGOs to engage in savings mobilization.

193. Providing microfinancing services at scale has both negative and positive effects. In some areas of Bangladesh, competition and some overlap between microcredit deliverers is emerging. On the other hand, such competition might be healthy in developing more refined and responsive products for target population groups.

A2.4 INFORMATION AND LEARNING PROCESSES IN SCALING-UP

194. At ASA, personal, nonroutine monitoring visits are made on a sample basis, and sophisticated feedback mechanisms are used to rapidly translate what is learned into new organization-wide directives, which in turn are incorporated into "The Manual" on an annual basis. These processes allow ASA to maintain a responsiveness to the needs of the target population group, the operating needs of staff, and to overall cost-efficiency measures.

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[27] Md. Shafiqual Haque Choudhury, Association for Social Advancement (ASA), Dhaka, Bangladesh, personal communication, 2002.

195. ASA pilots and tests the self-sustainability of new procedures on one branch structure for 1 year before translating its processes into new areas. In other countries where ASA helps others to adapt and develop procedural systems similar to ASA's (Yemen, Philippines, and Nigeria under the U.N. Development Program's Micro-Start program), ASA has "successfully" used this approach with a local partner; the close personal involvement of ASA's managing director has been important in these situations. After the testing in one branch structure, adjustments are made and the structure is replicated, with further ongoing rigorous monitoring. In the Philippines, this approach has worked particularly well, perhaps because it introduced a certain rigor into what was otherwise an active NGO microcredit environment (Rhyne, 1999).

A2.5 CONCLUDING POINTS

196. There is a considerable debate as to what extent the microcredit system should be subsidized to support the specific target groups. This is a long and ongoing debate, and a healthy one. Answering the question of whether microcredit merely provides a banking service to the rural poor (with strict cost recovery, a "minimalist" approach) or should also serve to help alleviate poverty especially among the poorest (a "maximalist" approach) is not straightforward. Various initiatives on impact assessment of microcredit examine this question (Imp-Act, n.d.; AIMS, n.d.). Nevertheless, indications so far indicate that to reach the very poorest, some level of subsidy is needed, though this should be small and diminishing. There is no doubt that to achieve scale, over 500,000 members, financial self-sufficiency is needed (Gibbons and Meehan, 2000). Gibbons and Meehan suggest a "franchising" to other clients who deal with microfinance, other suggestions are complementary partnerships with other NGOs who reach specifically out to the poorest, and credit unions.

197. Impact assessment is relatively low on the priority list of ASA (Rutherford, 1995), though it can be administered on a large scale (Kamal, 2000). Mosley (2000), in analyzing the role of microcredit networks, indicates that the costs of a thorough impact assessment maybe beyond that of individual microcredit organizations, but an ideal role for donor-funded networks in sharing ways of reaching the poorest. He recommends that microcredit networks should narrow down their focus to a few topics, and spread their reach from national to regional.

198. It seems that ASA has so far successfully managed its expansion and support to replication, and has avoided the pitfalls of blueprinting the expansion and replication of microcredit successes elsewhere (Rhyne, 1999; compared to Wright, n.d., quote below). The considerable difficulties and dangers in taking shortcuts, even in bringing microcredit concepts to the United States from Bangladesh, are worth noting. ASA has managed via self-driven motivation and continually developing and adhering to the provision of a narrow range of services that ASA is good at providing and tailoring to its target group.

> Increasing numbers of organizations are "replicating" the programs of successful micro finance institutions.… This approach allows rapid start-up using tested models and systems. These strengths are also weaknesses, since the models being replicated usually require substantial modification to make them appropriate for local conditions. Furthermore, close adherence to "blueprints" is likely to substitute for careful research into the needs and opportunities for the provision of financial services for the poor—and thus the design of appropriate systems. Replication also risks the suppression of innovative ways of providing still better financial services—particularly when promoted by powerful apex funding organizations as is currently in vogue amongst donor agencies. Perhaps the most dangerous form of "replication" is that driven by consultants, leaders, or donors designing or recommending systems they only partly understand, and thus giving incomplete or blurred blueprints. Credit is also used as a way of attracting clients

to meetings (where they can be required to participate in other activities—such as family planning etc.). This "part-time banking" is dangerous both as a result of the complexity of providing financial services and because the clients come to rely on permanent access to financial services.

Appendix 3 Scaling-Up Zero-Tillage Farming in Brazil and Paraguay

199. This case study applies the provisional framework for analyzing experiences of scaling-up (see Box 3.1 in Section 3 of this working paper) to zero-tillage (or no-tillage) farming in Brazil and Paraguay. Zero tillage technology, which has been revived as a modern technology with the development of new herbicides, consists of direct planting into unplowed soil and use of appropriate cover crops minimizing soil erosion. The benefits from this technology include reduced long-term costs and increased productivity for farmers, as well as wider environmental and social benefits. Trials of the technology were conducted among large farmers in the Brazilian state of Paraná in 1971. With support from agribusiness but minimal public investment, the technology subsequently spread rapidly through Brazil and Paraguay in the 1980s and 1990s. In Brazil, zero-tillage now reaches many small farmers; although the spread of the technology to small farmers in Paraguay has been much slower.

A3.1 Objectives/Outcomes, Impacts, and Costs of Scaling-Up

200. The rapid spread of zero-tillage farming has been extraordinary. In Brazil, the coverage was 1,000 hectares in 1973-74; the coverage increased to 400,000 hectares in 1983-84; and coverage is now estimated at approximately 11.2 million hectares. Soybeans, maize, wheat barley and several other important traditional and nontraditional crops are grown under the zero-tillage system, and worldwide coverage is about 40 million hectares, much of it in the United States (Derpsh, 2001). Several sources quoted reports that zero-tillage has been the fastest spreading and most convincing new agricultural technology they have observed (Derpsch, 2001, Landers, n.d.)

201. The benefits of zero-tillage to farmers are considerable. There are considerable short- and long-term financial benefits accruing to small farmers who have converted to the technology in Paraguay; these benefits stem from efficiency and ecological gains (Sorrenson, et al., 1998). There have been similar benefits to farmers in Brazil:

> The effectiveness of no-tillage in limiting soil erosion in the humid tropics is well known. Besides substantially reducing soil erosion losses, improving soil chemical, physical and biological properties, raising organic matter content, with consequent beneficial impacts on crop productivity, the cropping season is considerably extended…. The benefits of introducing green manure crops are also quite well known. Soil erosion losses are further reduced by maintaining soil cover and mulch throughout the year, nutrient recycling and water infiltration are increased, weeds are suppressed, and pest and disease cycles are broken lowering the use of pesticides. (Sorrensen, et al., 1998)

202. In addition, zero-tillage farming has brought several wider environmental benefits, such as less silt in dams and hydroelectric works and reduced flooding risks in Brazil (Derpsch, 2001). In Paraguay, part of the argument helping to convince officials to look at the potential of zero-tillage, was the assessment of the wider economic gains of zero-tillage farming, including keeping farmers on the land and not adding to urban development pressures.

203. Nevertheless, the spread has been considerably slower among small farmers, especially in Paraguay. In Paraguay, where 50 percent of arable land is now under zero-tillage, small farmers, 80 percent of whom below the poverty line, have barely started adopting this method. Landers (1999) estimates a lag of 7 to 10 years in its adoption by small farmers in Brazil at every stage.

204. Elsewhere, in places such as Africa, Asia and Europe, despite a considerable history and body of work on the potential of zero-tillage farming, especially the technical aspects, the spread of this technology has been limited. In other words, the potential for the usefulness of the innovation has been felt to be there, but perhaps a wider examination of factors that have enabled or hindered success would be needed to understand its limitations for uptake.

A3.2 ORGANIZATIONAL APPROACHES/SEQUENCING OF SCALING-UP

205. One can argue that zero-tillage farming was the original planting technology—a sharp stick to provide holes for seeds. The more modern development of zero-tillage technology emerged in the United States and Europe. The development of more effective herbicides from the 1950s onwards drove agrochemical companies to identify low-tillage technologies. This large-farmer/business-driven innovation continued into the 1980s. For many years, there was not much spread of zero-tillage farming; most farmers continued to use conventional methods of tilling.

206. The pioneering phase in the development of zero-tillage farming in Latin America occurred in the early 1980s. Box A-3.1 shows phases in the development of zero-tillage farming in Brazil. Small trial projects in Brazil were supported by the German Agency for Technical Cooperation (GTZ) (Derpsch, 2001; Landers, n.d.). Zero-tillage technology then took off among large farmers, largely supported by agribusiness, especially ICI and Monsanto, and Brazilian equipment manufacturers.

207. Ongoing support of zero-tillage farming by Brazilian agricultural research and extension agencies—especially state and federal agriculture research agencies located nearby, the Brazilian Corporation for Agricultural Research (EMBRAPA) and Institute of Agronomy of Paraná (IAPAR), and later the State Research Station for Santa Catarina (EMPASC)—were key in supporting the adaptation of technologies by small-scale farmers. For spread among smaller farms it took considerable adaptation to develop both the approaches and technology to the finely variable and particular set of local and regional circumstances (Sorrenson, et al., 1998; Landers, 1999).

Box A3.1 Phases in the development of zero-tillage farming in Brazil

I. Pioneering phase (1981 to 1986): Isolated pioneer farmers testing new ideas; insignificant government research; only adapted for planters with wavy- disc coulters; very high cost of contact and dessicant herbicide and poorly defined application rates; ineligibility for credit; no teaching of zero-tillage farming in university or college curricula; no adoption of zero-tillage by extension agencies (no official recommendation).

II. Consolidation phase (1986 to 1992): Private sector research and development programs; resolution of basic agronomic problems of second-cropping; dessicant application rates, crop rotations, improved planters; herbicide costs falling and machinery and credit costs rising; introduction of eccentric double-disc coulters (openers); commercial fertilizer and herbicide firms beginning to stimulate development of zero-tillage technology in various ways; beginning of dissemination of early positive research and development results through field days, short courses and individual contacts; pilot Bank of Brazil credit program for second-crop zero-tillage farming.

III. Mass action phase (1992 to 1997): Wide range of agronomic solutions available for sustainable systems in the humid and wet/dry tropics; direct costs of zero-tillage farming equal or lower than conventional tillage; very rapid expansion of zero-tillage farming from under 200,000 hectares in 1992 to an estimated 3 million hectares in 1997/98 crop season; founding of the Associação de Plantio Direto no Cerrado (APDC), a farmer/technician nongovernmental organization (NGO); much-improved planters, with introduction of the guillotine-knife coulter;

Box A3.1 Phases in the development of zero-tillage farming in Brazil

widespread adoption of zero-tillage technology by private technical assistance organizations and cooperatives; direct support from private sector for farmers associations, field days, seminars, technical publications; little formal inclusion of zero-tillage technology in university and college curricula.

IV. Dominant phase (1998 to 2100): Zero-tillage farming as a research priority, with focus on solving zero-tillage's second-generation plant pathology, soil fertility/physical machinery and variety selection needs; incentives for adoption of zero-tillage farming; adoption by extension services; zero-tillage technology included in university and college curricula.

Source: Landers, n.d.

208. In Paraguay, the initial entrepreneurial stage of zero-tillage started with immigrant farmers and Japanese donor support. The techniques were slowly adapted and adopted. Widespread use among large farmers occurred when the Paraguay Government and the German Agency for Technical Cooperation (GTZ) provided support. But zero-tillage technology was widely adopted by large farmers in Paraguay only after considerable effort and time to overcome institutional barriers that defended conventional tillage and contouring as erosion control. The spread of zero-tillage technology among small farmers in Paraguay has been much slower, despite the proven financial benefits for small farmers.

209. Zero-tillage technology spread further within new states in Brazil in the wake of national workshops in the 1980s, as well as advocacy by the Federation of No-Till Farmers (FEBRADP). The most rapid spread, in the Cerrados, was supported by the No-Till Association of the Cerrados (APDC) and their Friends of Land Clubs, farmer-based non-governmental organizations (NGOs) (Landers, 1998).

210. Donor programs, especially the World Bank Land Management Projects in Brazil, took up some of these of these ideas and provided short-term soil conservation subsidies, especially for small farmers. Such programs also put these ideas in the context of micro-watershed development (Microbacias) (Dauphin, 2001).

211. In both Brazil and Paraguay a considerable and sophisticated body of knowledge on the locally relevant technology, ecology, and financial implications of zero-tillage farming has been developed. Furthermore, there is ongoing research to explore the further adaptation and spread of the technology in Brazil. A consistent pattern throughout the process of adaptation, especially in Brazil, has been the development of farming systems packages, and testing their acceptability and refinement through more formal research and education systems.

212. In Brazil, the scale of the zero-tillage movement and farmers' demands has also led to changes at the national level support institutions. The changes have occurred in research prioritization and in addressing specific constraints in the zero-tillage production chain in Brazil, as well as in a refocusing of higher level education programs.

A3.3 FACTORS RELEVANT TO SUCCESS IN SCALING-UP

213. Both internal factors subject to the control of development change agents and external contextual factors were relevant to success in the scaling-up experiences of zero-tillage farming program in Brazil and Paraguay, but distinguishing which success factors are more internal and which are more external is difficult, because a wide variety of process and agencies were at work.

214. ***More Internal Success Factors.*** More internal success factors are factors relevant to the success of scaling-up that are within the control of development change agents. Zero-tillage farming yielded very

clear financial benefits to large farmers and small farmers, but small farmers had to clearly see these benefits in advance and be covered for the risks. Very sound technical analyses and refinements on crop rotation, mechanics, as well as financial arguments were convincing to farmers and the private sector.

215. In addition, clear cost-benefits arising from zero-tillage farming made it easier to convince officials at the state level of the worthiness of supporting further interventions. Intensive data gathering provided information for extensive cost-benefit analyses as a result of extensive ongoing research. In the Cerrado region of Brazil, the private sector formed a pool to support the spread of zero-tillage farming.

216. Trying to untangle factors is difficult when considering the differences between small- and large-scale farmers. Small-scale farmers certainly seemed to have benefited from the long innovation and private services support that developed for large farmers—in particular, in changing the mindsets regarding feasibility of zero-tillage farming among mainstream researchers and agricultural extensionists. The support for large farmers alone, however, could not guarantee that the technology would reach small farmers.

217. Support for adaptation to marginal and variable conditions of small farmers took considerable research and extension support. The lack of this support in Paraguay was a major hindrance in the spread of zero-tillage technology.

218. In Brazil, technical and organizational support for the introduction and adoption of zero-tillage technology were prerequisites for the spread of the technology among small farmers. This support was provided to enable small farmers to organize themselves to capitalize on new technologies, especially through farmer-NGO-extension-research linkage (Sorrensen, et al., 1998). These were weak in Paraguay.

219. There was considerable emphasis in Brazil on initial investment to cover risks and inputs for small farmers (5- to 7-year loans needed). However these were relatively small amounts, including those in Santa Catarina for small farm subsidies toward collective machine acquisition. In Pakistan, a pilot project exponentially increased the adoption of zero-tillage farming by making simple and locally manufactured relatively cheap soil drills available commercially (Gill, n.d.).

220. In Brazil, there was considerable fostering of farmer-to-farmer sharing, public and donor-funded farming systems and farmer-centered research. The German Agency for Technical Cooperation (GTZ) supported a shift in farm management approach, which assisted in dealing with very diversified small farms—essentially a much more demand-based process. The World Bank Land Management Program II fused research and extension in Santa Catarina.

221. According to Landers, "The principle of farmer-led demand has been the most efficient route to workable and profitable farming practices in zero-tillage" (Landers, n.d.). There are many farmers' organizations at all levels in Brazil, from the micro-catchment level to the national level, that provide the flexibility and leadership for demand-driven on-farm research in that country (Landers, 1998). These organizations include networks for farmer research and seed foundations and sustainable agriculture NGOs. Although many of these rose out of the zero-tillage movement, they are also a sign of a generally healthy civil society environment:

222. ***More External Success Factors.*** More external success factors are environmental or other contextual factors that are relevant to success in scaling-up but are not subject to the control of development change agents. In the zero-tillage case study, there were open and dynamic farmer from specific cohesive immigrant groups in the area where zero-tillage started. There was also an openness to new ideas. An important external factor that enabled success was a previously established network of NGOs and local research institutions, which in turn helped to foster new networks.

223. Pieri, et al. (2002) indicate that technical feasibility is much greater under certain rainfall and low cover-crop use for fodder. In Brazil and Paraguay, a crisis situation of very rapid soil erosion had arisen, making the demand for solutions acute and providing a clear cost-benefit once solutions were identified (Landers, 1999).[28] More, better, and cheaper herbicides became available in 1990s. In Brazil, but not in Paraguay, there was also an established agricultural credit system that could support the new technologies. Landers (1999) warns that in Brazil farmers may revert to conventional tillage with an increase in prices of high tech inputs and instability in future returns to export products.

224. Constraints to the spread of zero-tillage technology in Africa include land tenure and politically motivated resettlements, which make it less likely that farmers will adopt potentially financially beneficial methods because of the 5- to 7-year time span for cost recovery.

A3.4 INFORMATION AND LEARNING PROCESSES IN SCALING-UP

225. Particularly important to the spread of zero-tillage farming in Brazil and Paraguay were processes of farmer-to-farmer learning and adaptation. Friends of the Land clubs, for example, matured from addressing farm management concerns only to addressing wider concerns (Landers, 1998). Farmer-to-farmer exchange of information serves as a means of demonstrating effectiveness, because farmers are generally disposed to trust information from other farmers.

226. Information on zero-tillage farming was disseminated, at higher levels, by collaborative research and extension services, working with NGOs and networks, and through national conferences of farmer associations (sponsored in many cases by the agrochemical companies). Seeing evidence of the effects of zero-tillage on incomes was crucial to the further adoption of this technology by farmer and officials alike.

227. Support institutions, especially the German Agency for Technical Cooperation (GTZ) and the World Bank responded to the above (e.g., Brazil Land Management programs, I, II and III), with a very strong emphasis on bringing various disciplines and farmers together in a more holistic demand-led research and extension agenda, especially at state level.

A3.5 CONCLUDING POINTS

228. This case study of the scaling-up of zero-tillage farming in Brazil and Paraguay underscores the importance of dealing with complex institutional issues and variable environments facing small farmers. It also suggests the importance of external triggers, such as price changes, in enabling widespread use. This experience of zero-tillage in Argentina has very similar features to the ones described above for Brazil and Paraguay (Ekboir and Parellada, 2002).

229. In the semi-tropical hilly regions of South America, very rapid and serious soil deterioration due to erosion has spurred a paradigm shift in local agriculture—a turn to complete zero-tillage. This paradigm shift was supported by a very dynamic entrepreneurial farming community and its networks, and key donor supported trials. The crisis, and the clear benefits of the zero-tillage technology engaged the support of the private sector in refining and spreading the technology, and developing appropriate accessible machinery. The refined and detailed body of technical and economic information convinced governments and larger donors to subsidize the risks and adaptation of zero-tillage technology for small

[28] William Sorrensen, U.N. Food and Agriculture Organization (FAO), Rome, personal communication, 2002.

farmers. A dynamic network of farmers associations and NGOs at the local and international levels assisted in the further spread of zero-tillage ideas in South America.

230. Apart from technical and input issues (e.g., credit; cheap, locally adapted equipment), the presence of a solid social capital base in Brazil does raise questions as to the feasibility of a wider spread of zero-tillage technology to other countries and regions, especially Africa (FAO, 1998).

231. It is interesting to note that in Brazil, at least at the small-farmer level, the zero-tillage experience has begun to encompass substantially more integrated micro-watershed management and political empowerment of farmer groups, which has parallels with the approaches of the integrated pest management (IPM) experience in Indonesia (Dilts, 2001).

Appendix 4 Scaling-Up Experiences of Two Sustainable Agriculture Networks

232. In this appendix, the provisional framework for analyzing experiences of scaling-up is applied to the scaling-up experiences of two sustainable agriculture networks established in the late 1980s by non-governmental organization NGO) practitioners and researchers involved in small-scale successful experiences in reducing farmers' dependence on costly and environmentally harmful chemicals. The broad goals of both networks are to provide international support for local-level sustainable agriculture and to advocate supportive policy changes at national and international levels:

- **Pesticide Action Network (PAN).** PAN is a network of NGOs, institutions, and individuals in over 60 countries working to promote sustainable agriculture and replace the use of hazardous pesticides with ecologically sound alternatives. This network has achieved some significant international policy changes with reference to experiences on the ground. Currently, its projects and campaigns are coordinated by five autonomous regional centers throughout the world: PAN-Europe (facilitated by PAN-UK and PAN-Germany), PAN-North America, PAN-Africa, and PAN-Asia and the Pacific). The network is working increasingly through these regional centers (e.g., support of the organic cotton project in sub-Saharan Africa via PAN-UK).

- **Integrated Pest Management Forum (IPMForum**). IPMForum is a network that aims to increase NGOs' awareness of, interest in, and capacity-building for integrated pest management and sustainable agricultural development. IPMForum had early success in stimulating awareness and changes in organizations such as the U.N. Food and Agriculture Organization's Global Integrated Pest Management Facility in Rome and subnetworks such as IPM Europe. IMPForum lacked clear objectives and had difficulty sustaining links on the ground, however, and partly as a consequence, has experienced declining resources.

233. Findings with respect to the scaling-up experiences of these two sustainable agriculture networks are summarized in the discussion that follows. In addition to using the provisional framework, the following analysis has benefited from and is organized using Paul Starkey's wider conceptual material and ingredients for the success of networks (Starkey, 1998).

A4.1 Achieving Impacts and Outcomes in Scaling-Up

- **Clearly defined, measurable objectives**. PAN had bottom-up goals, linked to lobbying for conventions on specific pesticides on behalf of country organizations, and in addressing the aims of the organic cotton project covering 20,000 farmers in five sub-Saharan countries and linking them to markets. IPMForum, on the other hand, lacked such clear objectives. The lack of clearly defined, measurable objectives may have contributed to the decline in IMPForum's resources. Donors are not keen on funding organizations that lack clearly defined, measurable objectives.

A4.2 STRATEGIES FOR TRANSFER AND EXPANSION IN SCALING-UP

- ***Clear strategy for achieving objectives.*** PAN had mapped out strategies linked to the work of on-the-ground partners, for example between PAN-UK and PAN-Africa. IPMForum had very broad goals and weaker links to local organizations' aims.
- ***Concrete activities.*** Concentrating efforts on particular issues (e.g., PAN-UK's organic cotton project in sub-Saharan Africa, or African stockpiles project) makes success in scaling-up more likely. More is learned at a faster rate, and a critical mass is more likely to be achieved. IPM-Europe seems to be following a similar route with the setting up of task forces involving developing country partners on specific themes.
- ***Long-term planning and commitment.*** Change and benefits can take a long time to achieve. Donor funding is generally not conducive to this, so network coordinators must be skilled in knitting different short-term funding contracts together into a coherent whole.

A4.3 FACTORS RELEVANT TO SUCCESS IN SCALING-UP

- ***Network participation and benefits***. Network members must feel that they are benefiting from being part of the network, and that the benefits outweigh the transaction costs. PAN used a much more decentralized region-to-region and country type of networking approach, based on sharing context specific work as needed. PAN-UK's relationship with its African country partners is based on built-up trust and a long-term commitment. The benefits here are of real progress in terms of discrete policy change and socio-economic benefits to farmers.
- ***Demand-led process of development***. PAN was created by local developing country organizations and northern NGOs (e.g. Oxfam, Friends of the Earth, WWF) focusing on advocacy (both national and international) and local awareness raising on issues. IPMForum arose out of a donor-led review process, even though this legitimately addressed the need for integrated pest management to address broader institutional and economic approach.
- ***Legitimacy.*** Both PAN and IPMForum have achieved wider legitimacy through formal recognition by organizations such as the U.N. Food and Agriculture Organization (FAO). PAN developed this through the results of its activities. On the more local level, PAN's leaders were widely recognized. This recognition strengthened the interactions within the network.
- ***Enabling environment versus technological improvement***. Both PAN and IPMForum recognize the importance of policies and institutions. Good technological practices are not enough. Policy information (as well as 'good practices' info) can be shared (e.g., country pesticides reduction strategies). IPM-Europe may also have more funding than IPMForum because of the congruence of its goals and the European Union's political goals.
- ***Markets versus technological improvement***. PAN organic cotton project in sub-Saharan Africa highlights the importance of markets as a constraint: key issues are the need for cheaper certification processes and building up distribution and market awareness. PAN-UK, for instance, is trying to get retailers to sell a particular kind of cotton product.
- ***Access to inputs.*** Lack of access to critical inputs (e.g., organic cotton seeds) can be a constraint.

A4.4 INFORMATION AND LEARNING PROCESSES IN SCALING-UP

- ***Participatory networking processes***. Learning is more effective if network members are free to express their views and to question progress and plans. Appropriate fora for participatory networking processes, transparency should exist, and members should be encouraged to join and to participate actively. Giving network members a sense of involvement and ownership is important, as is ensuring that network hub/center is in touch with grassroots realities. Planned activities are more likely to be "demand-led" in a decentralized approach. A healthy network will be active at more than one level (e.g., regional, national, and international). Advocacy supported by central node is important in developing consistent policy messages. Regional networking was considered key in both the PAN and IPMForum networks, because it afforded greater personal contact, sharing of context-relevant information, and closeness to activities on the ground; however, regional networking takes time and resources.

- ***Monitoring system***. A monitoring system should be in place to target achievables and monitor concrete outcomes. Networks may deal with more than just the supply of information; they may actively seek to change policies and institutions, which is more than information exchange. Measuring such changes still needs development of useful indicators. This is made more difficult for networks in terms of attribution, with many actors and "soft" processes.

- ***Network feedback system.*** Feedback systems are very important for networks in monitoring. For PAN, feedback worked relatively well through local and regional networks meetings. For IPMForum, in working on a very global scale, getting feedback was more difficult.

- ***Media and face-to-face communication.*** Written media, both electronic and other, played an important role, but face-to-face communication was always considered vital to the stimulus and influence in sharing convincing experiences between partners.

234. The weaknesses and strengths of sustainable agriculture networks reflects the difficulties in more indeterminate evidence of economic returns from networking, in contrast to the other cases in this working paper. This has created difficulties in generating longer-term external support. It also, of course, highlights the dynamics and need for sharing information on concrete experiences between peers. And in this shares some common strategies and processes of the other case studies.

Appendix 5 Expanded Description of the Checklist for Thinking Systematically About Scaling-Up Impact

235. A provisional checklist developed by the authors of this paper to help rural development practitioners and their partners think systematically about scaling-up was presented in Table 4.1 in Section 4 of this paper As noted earlier, that checklist is not supposed to be used in a rigid way. The checklist is meant to provide support for development practitioners in bringing together different perspectives for tasks that include (1) assessing the state of practice of experiences; (2) designing or evaluating a project, program, or policy; and (3) evaluating a project, program, or policy. It is expected that different parts of the checklist will be used in different combinations and emphasis depending on the task.

236. This appendix provides further details about each of the seven major items in the checklist and broadly outlines how information about these items might be gathered, specifically:

1. Country demand,
2. Nature of the scaling-up task and outcomes,
3. Information about impacts,
4. Strategy options used,
5. Factors that have enabled or hindered success,
6. Assessment of current state of practice, and
7. Information and learning processes.

A5.1 Country Demand for Scaling-Up

237. Item #1 in the provisional checklist presented in Table 4.1 in Section 4 of this paper is country demand for scaling-up. The questions that might be asked with respect to country demand include the following: Is there clear evidence of demand from one or more countries to scale-up an approach or elements of an approach? Where is demand coming from, which stakeholders? Where does a particular experience fit in with and address wider pro-poor and sectoral priorities?

A5.2 Nature of the Scaling-Up Task and Outcomes

238. Item #2 of the checklist is the nature of the scaling-up task and outcomes. Among the questions that might be asked in conjunction with this item of the checklist are these: What is to be or has been scaled-up? Is what is being scaled-up an entire approach (e.g., competitive grants for agricultural research)? Or is what is being scaled-up one or more elements, processes, or techniques that contribute to an approach (e.g.. participatory planning at community level)?

239. Other questions pertain to outcomes. Are there clear desired or actual outcomes? Are there several similar experiences but in different settings, by different agencies or sectors? It may be necessary to distinguish each experience and/or major outcome, particularly when comparing sectors.

Table A5.1 Questions related to outcomes

Outcome Element (Examples only; actual elements will depend on issues addressed and context)	***Setting 1 or Agency 1***	***Setting 2 or Agency 2***	***Other settings and agencies***
Increased economic opportunities to communities	Expected: Achieved:		
Improved community social capital for future claim making			
Greater local public resources for public services through fiscal decentralization of services			
Greater community access to natural resources			
Better access to service delivery by the poor			

[NOTE: Additional elements can be added as appropriate]

A5.3 INFORMATION ABOUT IMPACTS

240. Item #3 of the checklist, information about impact, should if possible be described in relation to a baseline, even if roughly known, to understand the relative change involved. Negative impacts and unexpected benefits are also relevant in learning lessons.

Table A5.2 Questions related to the impact of scaling-up

Impact	***What is known about the impact? What evidence?***	***Scaled-up impact targeted in planning***
Level of social or economic impact		
Nature of the beneficiaries, target group		
Coverage in terms of numbers of target group where there is confidence of impact; overall coverage		
Other social, economic and environmental benefits and negative effects		
Overall costs of delivery of benefits		
Time-scale of current experience		
Source:		

A5.4 STRATEGY OPTIONS USED

241. The fourth item of the checklist pertains to strategy options. There may be several strategy options for scaling-up available to development agencies, and the options may be relevant in combination

or at different stages of the process. For that reason, it is important to ask: Which groups have what experiences at what stage (separate tables may have to be done for different phases of experience)?

Table A5.3 Questions related to strategy options for scaling-up

Approach	*Strategy (examples)*	*Main Actors*	*Feasibility, Cost, Resource Requirements, Logistics*	*Relative Effectiveness In Context*
Direct organizational growth	Internal replication			
	Program development/ expansion			
Indirect organizational growth	Catalyzing and supporting partners			
	Joint venturing and integration			
	Decentralizing			
Direct institutionalizing/ mainstreaming	Capacity building			
	NGO-government partnership			
Indirectly influencing approaches and policy	Diffusing concepts and models			
	Policy advocacy			

Source:

A5.5 REVIEW OF FACTORS THAT HAVE ENABLED OR HINDERED SUCCESS

242. The fifth item of the checklist addresses factors that have been shown to have enabled or hindered success, whether in one's own experience or experience elsewhere. A key question is: To what extent can these factors that affect success be evaluated in terms of their applicability to a new context?

Table A5.4 Questions related to factors that enable or hinder success

Factors Relevant to the Success of Scaling-Up (not an exhaustive list)	*Which factors have been shown by past experience to be important for success or failure?*	*What is known about the relevant factors at scale or new setting?*
More internal factors		
Organizational processes used: administrative		
Organizational decision-making and incentives		
Levels of overall organizational capacity necessary, technical, coordination, etc		
Role of dynamic individuals		
Systems for financial sustainability		
More external factors		
Local external factors		
Group or individual characteristics of beneficiaries – heterogeneity		

Table A5.4 Questions related to factors that enable or hinder success

Factors Relevant to the Success of Scaling-Up (not an exhaustive list)	***Which factors have been shown by past experience to be important for success or failure?***	***What is known about the relevant factors at scale or new setting?***
Cultural factors – dynamics between groups		
Environmental factors		
Technical aspects and availability of inputs		
Community participation		
Political dynamics and support		
Public/private linkages		
Market constituents and products		
Wider external factors		
Legal/regulatory system		
Macroeconomic policies and fiscal situation		
Public administration: national and decentralized, e.g. accountability mechanisms		
Sectoral capacity		
NGO and civil society capacity		
Financial intermediation		

A5.6 ASSESSMENT OF THE CURRENT STATE OF PRACTICE

243. Item six of the checklist is assessment of current state of practice. Questions here include the following: How confidently can a specific state of practice be set? The table below illustrates how one approach to synthesizing available information for about the state of practice.

Table A5.5 Questions related to the state of practice

Characterization State of Practice	***Nature of evidence*** *"The evidence we have shows that…"*	***Assessment of likelihood of success*** *"It may work in terms of outcomes and impact…"*	***Assessment of applicability for scaling-up through expansion of experience*** *"…on a larger scale, but only if…"*	***Assessment of applicability for scaling-up through transfer of experience*** *"…in a new place, but only if…."*
Policy principle: A policy principle has been proven in multiple settings, replication studies, evidence is quantitative and scientific				
Best practice: Evidence from multiple settings by meta-analysis or expert review supports	Type of impact evaluations and economic analysis with controls	For example, negative impacts from X no. of projects	For example, on a new larger scale, what are risks based on evidence of resources and new contextual issues	For example, with context X1, X2, etc., unlikely success
Good practice: Clear evidence from some setting, several evaluations, supports				
Model: Positive evidence in a few cases supports	Project evaluations or mid-term reviews	For example, positive impacts in two projects evaluated		For example, confidence in success with given resources and context
Promising practice: Anecdotal evidence, testimonials, articles, reports support				
Innovation: Minimal objective evidence, inferences from parallel experience and contexts				

Notes: A. Type of evidence; sources; rigor of analysis, both for assessing outcomes and impact, as well as identifying of factors relevant to success. B. Confidence in achieving outcomes and impacts, or a wider range of evidence for weak or negative impact, cost- effectiveness. C. Confidence and/or risks in applicability on a larger scale arising from presence or absence of success factors. D. Confidence and/or risks in applicability in new settings, arising from presence or absence of success factors

A5.7 INFORMATION AND LEARNING PROCESSES

244. The final item of the checklist, Item #7, is information and learning processes. This item addresses questions such as the following: What are the best *means* of using information to achieve change for particular outcomes? Appropriate means would be identified on the basis of context and level of global experiences. What does experience show? The following table shows how information about questions related to information and learning processes might be synthesized.

Table A5.6 Questions related to information and learning processes

Phase/Stage In Scaling-Up	***Learning from Experiences Elsewhere***	***Internally Learning and Building on Experience***	***Influencing Other Agencies from Own Experience and Analysis***
Scope for innovation with new ideas in a new area	High: What means gathering and assessing information?	Medium: What possibilities of fostering ideas?	Low: Experience usually necessary to be convincing
Developing model from innovations	High	High	Medium
Reaching good practice	Medium?	High	High
Institutionalizing policy principles	Medium?	High	High

References and Further Reading

245. In addition to references used in the main text, the list here includes further reading in natural resources management, agriculture and microfinance relevant to scaling-up that was used as background for this study. References for the case studies are cited at the end of the appendix in which details about the case study are presented:

- Case Study of Scaling-Up Participatory Watershed Planning and Development Systems in India (Appendix 1);
- Case Study of Scaling-Up a Microcredit Service Delivery Program in Bangladesh (Appendix 2);
- Case Study of Scaling-Up Zero-Tillage Farming in Brazil and Paraguay (Appendix 3); and
- Scaling-Up Experiences of Two Sustainable Agriculture Networks (Appendix 4).

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