

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



Briefing Paper 50

International Service for National Agricultural Research

PLANNING, IMPLEMENTING, AND EVALUATING CAPACITY DEVELOPMENT

Douglas Horton

This paper discusses 10 basic issues involved in planning, implementing, and evaluating capacity-development efforts in research and development organizations. Capacity development is the process by which individuals, groups, and organizations improve their ability to perform their functions and achieve the desired results over time. Without capacity development in research and development organizations in the South, the gap between the rich and the poor will continue to grow.

Capacity development is needed at many levels, ranging from the individual to the national and supranational levels. In recent years, the preoccupation with economic policies, institutions, and markets has diverted attention from the critical meso level of organizations. This is unfortunate, because sustained development efforts depend on effective research and development organizations. Organizational capacity development can be an important vehicle for improving an organization's performance. Capacity-development efforts should be planned so that they improve those capacities that most severely hamper performance levels.

To date very few capacity-development efforts have been systematically evaluated. Anecdotal evidence as well as experiences in other areas highlight the importance of top-level commitment and leadership, a conducive external environment, and the efficient management of organizational change processes. The success of many capacity-development efforts has been limited by the fact that they focus on technical factors, while critical social and political barriers were ignored. It is important to make more use of evaluation so that the lessons learned can be applied to the improvement of future capacity-development efforts.

Introduction

This paper has its origins in a presentation I gave at an international conference titled "Capacity Development for Participatory Research," which was organized by the Users' Perspectives with Agricultural Research and Development (UPWARD) network in Beijing, China, in September 2000. Since its inception in the late 1980s, UPWARD has worked to develop local capacity in order to undertake participatory root crop research and development in Asia. Although the network has accom-

plished a lot over the years, UPWARD's members decided to review their capacity development strategies and results in order to improve upon them.

In no time, they identified a number of gaps in their understanding of what capacity development entails and how it should be planned, implemented, and evaluated. Hence, the conference was organized, and I was invited, among others, to discuss issues involved in capacity development. Later, in

ISSN 1021-2310



ISNAR Briefing Papers examine policy and management issues affecting agricultural research in developing countries. They normally focus on advisory work or research recently completed or in progress at ISNAR. The target readership are research managers, policy makers, donors, and academics. Comments are welcome. Copyright © by ISNAR, 2002. Briefing Papers may be cited with acknowledgment of ISNAR as the source.

working with other groups, I discovered that similar issues were to arise again and again in different situa- | for a more general audience.

tions. This motivated me to prepare this Briefing Paper

Members of the UPWARD network strive to develop their own abilities to carry out participatory research. The International Institute for Geo-Information Science and Earth Observation seeks to develop the capacity of its partner organizations in the South. Nicaragua's National Agricultural University is eager to improve its faculties' capacities in order to achieve their educational, research, and outreach goals. To be successful, all these organizations need to deal with the issues discussed in this paper.

The purpose of this paper is to stimulate reflection and discussion, which can lead to improvements in capacity-development efforts in research and development organizations. The paper is based largely on my personal experiences with managing and evaluating capacity-development efforts. Over the years, I have worked with many colleagues at ISNAR and other organizations. Many of the ideas presented here have emerged from discussions with them, and I am greatly indebted to them for their insights.

The paper is structured around the following frequently asked questions:

- 1. What is capacity development?
- 2. Why is capacity development important?
- 3. How does capacity development contribute to organizational performance?

- 4. What level should capacity-development efforts target?
- 5. How do organizations develop their capacities and what are the roles of external agents?
- 6. What are the main tools for developing capacities?
- 7. What makes or breaks a capacity-development effort?
- 8. How should capacity-development efforts be planned and managed?
- 9. Why and how should capacity-development efforts be evaluated?
- 10. Until when should capacity-development efforts be supported?

1. What Is Capacity Development?

The terms capacity building and capacity development are highly elastic, in that they can be stretched to embrace many different things. In the sphere of agricultural research and development, capacity building is often equated with training activities and workshops. In management schools, capacity building often means organizational development (Harrison 1994).

In nongovernmental and voluntary service organizations (NGOs and VSOs) capacity building is often associated with the empowerment of individuals and grassroots organizations (Eade 1997; Fals-Borda and Rahman 1991). At the United Nations and the World Bank, capacity building typically refers to improving national institutions to improve governance and economic management (UNDP 1998; Picciotto and Wiesner 1998).

The term building often implies that activities are carefully planned and executed, that they follow a clear and detailed plan or blueprint. However, capacity development involves more experimentation and learning than engineering (Horton 1999). For this reason, I believe the term capacity development, which implies an organic process of growth and development, is more appropriate than capacity building.

Peter Morgan (1997) has defined capacity development as the process by which individuals, groups and organizations improve their ability to carry out their functions and achieve desired results over time. This definition highlights two important points: that capacity development is largely an internal process of growth and development, and that capacity-development efforts should be results oriented.

2. Why Is Capacity Development Important?

Capacity development is at the heart of many development agencies' current strategies (OECD 1997, 2000). In the past, development assistance often emphasized the transfer of physical and financial resources and modern

technologies to poor areas, coupled with specialized technical education and training. It was assumed that these investments and technology transfers would trigger economic growth and development. Sometimes

this occurred, but many countries and communities stagnated and became dependent on aid instead. Development efforts often failed, because local capacities were not developed to manage the activities and maintain the facilities. Nor were local groups empowered to spearhead development activities after external agencies were pulled out.

In the current era of accelerating technological and institutional change and declining budgets for this kind of aid, improving the capabilities of individuals and organizations is essential for sustainable local development and poverty reduction. Without the constant application of capacity development strategies, the gap between the rich and the poor will only continue to grow.

3. How Does Capacity Development Contribute to Organizational Performance?

Capacity development is often needed to raise the performance levels of a particular organization. But an organization's performance also depends on its internal motivation and the external conditions of its operating environment (Lusthaus, Anderson, and Murphy 1995). The operating environment refers to the legal, social, and economic context in which the organization operates. Organizational capacity refers to the staff complement and resources, as well as its structure, management systems, and linkages with other organizations. Organizational motivation refers to the organizational culture and incentives that influence the use of capacities in pursuit of the organization's goals. Finally, the organization's performance is reflected in its effectiveness, efficiency, and sustainability. Effectiveness refers to the degree to which the organization achieves its goals. Efficiency refers to the degree it manages to minimizes costs. Sustainability refers to the organization's continuing relevance and the ability to acquire the financial and other resources needed for its operations. The relationship between the four dimensions, and the critical factors associated with each, is presented in figure 1.

Most capacity-development efforts focus on only one or a few of the critical capacities needed by an organization, on the assumption that the improvements brought about in these capacities will lead to improvements in the per-

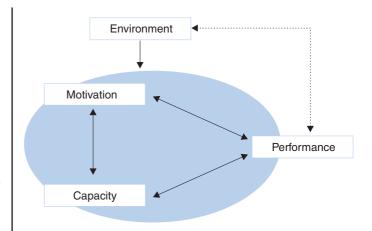


Figure 1: Relationship between an organization's environment, motivation, capacity, and performance

formance of the organization as a whole. However, this assumption is seldom tested. As will be discussed in point 9, the contributions of capacity-development efforts to the organization's performance should be evaluated periodically, as a "reality check" and to provide a basis for improving future capacity-development efforts.

4. At What Level Should Capacity-Development Efforts Be Targeted?

Capacity-development efforts may focus on different levels, ranging from the micro level of the individual to the meso level of the organization up to the macro level of national and international institutions (figure 2).

From the 1950s to the 1980s, capacity-development efforts included individual training, construction of physical facilities, and infrastructure and organizational development. More recently, they have focused on strengthening the national economic and legal institutions necessary for the promotion of private-sector development.

While national institutions are necessary, they do not adequately ensure economic growth and development. Capacity development is also necessary at the meso level of research and development organizations. Without

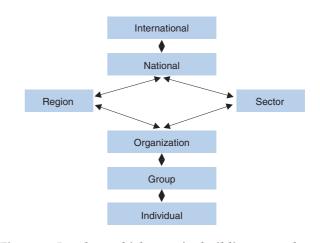


Figure 2: Levels at which capacity building may take place

viable research-and-development organizations, no country can expect to develop economically or socially.

It is often assumed that developing individual capacities will automatically lead to improved organizational capacity and performance. This is not the case. For example, there are many cases where individuals have developed skills in participatory research, but very few cases where participatory research has become institutionalized in the standard operating procedures of research or development organizations (Blackburn and Holland 1998).

Similarly, the need to improve planning and evaluation procedures is often addressed by providing technical training for middle managers. This seldom leads to better management, however, because changing an organization's planning or evaluation procedures requires top-management decisions and changes throughout the organization.

The bottom line is that a capacity-development effort needs to address challenges at various levels within the organization, as well as externally.

In recent years, Cuba's Swine Research Institute has developed its capacity to carry out agro-food chain studies and to use these results to reorient its research projects. The strategy for developing this capacity involved researchers and managers at all organizational levels as well as representatives of key organizations at various points in the food chain. This participatory strategy ensured that managers and researchers at different levels and key stakeholder groups outside the organization would all support the new approach.

5. How Do Organizations Develop their Capacities and What Are the Roles of External Agents?

Capacity-development efforts are fundamentally different from programs that supply well-defined products and services to relatively uniform client populations (Kibel 1999). The objective of a capacity-development effort is not to supply a product or service but to foster the development of specific individuals and organizations.

Capacity development cannot be "done" by outsiders. A change agent or facilitator can promote or stimulate capacity development and provide information, training, and other types of support. But an external agent should not attempt to lead an organization's capacity-development effort or take responsibility for it. Leadership must emerge from within the organization, and the organization's members must do most of the required work. However, an organization can benefit from external expertise and advice. But ultimately, the organization's own managers must be in the driver's seat.

Capacity development involves the acquisition of new

knowledge and its application in the pursuit of individual and organizational goals. For this reason, learning by doing, or experiential learning, lies at the heart of capacity development.

Development agencies often design and manage capacity building programs that aim to improve the capacities of individuals or organizations, who are viewed as targets or intended beneficiaries. In such cases, the recipients have little voice in goal setting or decision making.

These kinds of supply-driven programs have generally had limited success (Israel 1987). In contrast, the more successful efforts involve a negotiation of goals and strategies based on mutual interests and collaborative, rather than hierarchical, relations. This results in a more flexible collaborative arrangement, as opposed to the conventional development program. For this reason, I prefer the term capacity-development effort rather than the more conventional capacity-building program.

6. What Are the Main Tools for Developing Capacities?

capacity-development efforts generally include one or more of the following approaches:

- information dissemination;
- training;

- facilitation and mentoring;
- networking;
- feedback, to promote learning from experience.

Capacity developers need to combine various approaches to achieve the best results within their budget constraints. For example, ISNAR's New Paradigm Project began with an emphasis on information and training. After two years, at the request of the partner organizations in the project, it shifted its focus to facilitating change processes in four pilot-case organizations. Gradually, the project evolved into a regional network for generating and applying knowledge on strategic management and institutional innovation.

Virtually all capacity-development efforts disseminate information in one form or another. Training is another common tool used in developing the participants' knowledge, skills, and attitudes. While training is generally more effective in promoting learning, it is also more costly than information dissemination. Simply providing information or one-off training sessions seldom produces lasting changes in the participants' behavior (Kibel 1999). Facilitation by a change agent is generally more effective. However, facilitation tends to be laborintensive and considerably more costly.

There is an inverse relationship between the reach and the effectiveness of information, training, and facilitation as capacity development approaches. This is illustrated in figure 3. Although more organizations can be reached via information dissemination and training, their effectiveness is much lower. Each individual capacity-development effort needs to decide on the proper mix of approaches to be employed, based on its own goals and budget constraints.

Capacity development can also be promoted through the exchange of information and experiences among

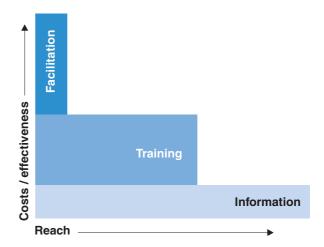


Figure 3: Reach and costs/effectiveness of interventions

people working on similar tasks in different settings, as well as through workshops, networks, and communities of practice (Wenger and Snyder 2000). Learning within an organization can also be promoted by internal evaluations that provide rapid feedback to individuals and groups (Leeuw and Sonnichsen 1994).

7. What Makes or Breaks a Capacity-Development Effort?

There is considerable experience with capacity development and organizational change processes in many settings, not only in agricultural research, but also in education and the private sector. This experience indicates that capacity development is promoted by the following key factors (Harvard Business School 1998; Huberman and Miles 1984):

- an external environment that is conducive to change;
- top managers who provide leadership for institutional change;

- a critical mass of staff members involved in, and committed to, the change process;
- availability or development of appropriate institutional innovations;
- adequate resources for developing capacities and implementing changes;
- adequate management of the capacity development process.

Nowadays, most agricultural research organizations are under external pressure to improve their planning and evaluation procedures. However, not all of the senior managers are willing to make the changes needed to improve these management functions, as doing so often includes sacrificing some of their decision-making powers. Where top managers are committed to change, institutional innovations can often produce a high payoff. New planning or evaluation techniques are of little value without the commitment of leadership to change.

8. How Should Capacity-Development Efforts Be Planned and Managed?

Most capacity-development efforts are driven by external agencies and thus reflect their priorities, assumptions, and the services they offer. Common examples of this include standardized training courses offered by universities, development agencies, and international NGOs, which cover a prescribed set of technical areas presumed to be useful for a broad range of organizations.

There is no single formula or recipe for capacity development that is appropriate for each and every organization. In defining priorities for capacity development, managers need to assess the factors that are limiting the organization's performance and identify those capacities that constrain performance the most.

Training, information, and other services contribute most significantly to capacity development when they are tailored to fit the needs of the organization in ques-

tion. An organizational diagnosis is needed to determine performance and capacity constraints and opportunities for change. Harrison (1994), Lusthaus, Anderson, and Murphy (1995), and others as well, provide useful frameworks for assessing organizational performance and defining the various capacity constraints.

The most common techniques involved in the planning and managing of development projects and programs usually assume that objectives are well defined and that blueprints and logical frameworks can be developed to properly guide the implementation, monitoring, and evaluation processes. However, blueprint approaches seldom work for capacity-development efforts. As

Albert Hirschman noted back in 1967, most development programs are "voyages of technological and sociological discovery," in which the goal and the path to that goal remain highly uncertain (Hirschman 1967). This is especially true for capacity development.

Capacity-development efforts can benefit from a solid initial diagnosis and proper planning. But the plans developed should be viewed as works-in-progress rather than finished blueprints. Managers involved in capacity-development efforts need the flexibility to be able to modify planning targets and implementation procedures as conditions change and lessons are learned (Mosse, Farrington, and Rew 1998).

9. Why and How Should Capacity-Development Efforts Be Evaluated?

Evaluations can serve two purposes: accountability and improvement. Accountability refers to the obligation of reporting on or justifying a particular activity. Most evaluations are carried out to meet government or funding-agency accountability requirements. These evaluations are generally conducted to determine whether objectives have been achieved and resources have been used appropriately.

Evaluations carried out to learn lessons that can be used to improve ongoing or future capacity-development efforts are of potentially greater value. Unfortunately, improvement-oriented evaluations are seldom carried out. This is a serious shortcoming of evaluation practice, since capacity-development efforts involve a great deal of experimentation, and managers need to know the results in order to sharpen or reformulate objectives and reorient their activities in appropriate ways.

ISNAR is currently working with a group of national and international organizations to improve their organizational capacity development through the use of evaluation. Horton (2001) has summarized the activities and results to date. Additional information is available at www.isnar.cgiar.org/ecd/.

Some dos and don'ts for evaluating capacity development are presented in box 1.

Box 1: Some Dos and Don'ts for Evaluating Capacity Development

Do

- Map out the program logic of the capacity development effort (the hierarchy of objectives and the underlying assumptions).
- Monitor activities, outputs, and outcomes.
- Periodically assess results in relation to the initial objectives and expectations.
- Involve stakeholders throughout the evaluation process.
- Think in terms of contributions of external partners, rather than impacts.

Don't

- Don't evaluate capacity development strictly in terms of the original goals.
- Don't gloss over capacity-development processes and look only for long-term development impacts.

10. Until When Should Capacity-Development Efforts Be Supported?

Capacity development should not be viewed as a one-time event such as a training event or the installation of a new accounting system. Capacity development is a process that needs to be nurtured and managed over time. Research and development organizations need to

continuously develop their capacities to deal with new opportunities and threats arising from changes in technology, markets, politics, and other factors. In this sense, there is no final, achievable goal for an organization's capacity development.

Conclusions

In this Briefing Paper, I have argued that organizations need to take responsibility for their own capacity development. Due to the acceleration of changes in technology, institutions, and markets, organizations need to be changing continuously. As a result, they need to develop the ability to undertake their own capacity-development efforts. Organizations can benefit from external sources

of support, but they should avoid a dependence on external suppliers. In this context, an external agent's most valuable contribution to an organization's capacity development is the improvement of its in-house capacity to define its needs, manage its own capacity-development efforts, and evaluate the results.

About the Author and this Briefing Paper

This Briefing Paper is based largely on the author's personal experiences with capacity-development efforts in the agricultural sector. It also reflects current thinking on organizational capacity development as reflected in publications and "gray literature." Many of the ideas presented here have been developed through many conversations with colleagues in ISNAR and in the author's broader network of colleagues around the world. The

author would like to thank Ronald Mackay for his insightful comments on an earlier version of this Briefing Paper.

Douglas Horton is a specialist in capacity development and evaluation. He is Leader of ISNAR's project on Linking Research Organizations and Stakeholders in a Changing Context.

References

- Blackburn, J. and J. Holland (eds.). 1998. Who changes? Institutionalizing participation in development. London, UK: Intermediate Technology Publications.
- Eade, D. 1997. Capacity Building: An approach to people centered development. Oxford: Oxfam.
- Fals-Borda, O. and Md. A. Rahman (eds.). 1991. Action and knowledge: breaking the monopoly with participatory action research. London: Intermediate Technology Publications.
- Harrison, M. I. 1994. Diagnosing organizations: Models, methods and processes. Thousand Oaks, CA: Sage Publications.
- Harvard Business School. 1998. Harvard Business Review on change. Boston: Harvard Business School Press.
- Hirschman, A.O. 1967. Development projects observed. Washington, DC: The Brookings Institution.
- Horton, D. (ed). 2001. Learning about capacity development through evaluation: Perspectives and observations from a collaborative network of national and international organizations and donor agencies. ISNAR. The Hague: International Service for National Agricultural Research.
- Horton, D. 1999. Building capacity in planning, monitoring, and evaluation: Lessons from the field. Knowledge, Technology, and Policy, 11(4): 152-188.
- Huberman, A.M. and M. Miles. 1984. Innovation up close: How school improvement works. New York: Plenum Press.
- Israel, A. (1987). Institutional development: Incentives to performance. Baltimore, MD: Johns Hopkins University Press.
- Kibel, B.M. 1999. Success stories as hard data: An introduction to results mapping. New York: Plenum Press
- Leeuw, F.L., and R.C. Sonnichsen. (1994). Evaluation and

- organizational learning: International perspectives. In *Can governments learn? Comparative perspectives on evaluation and organizational learning*, edited by F.L. Leeuw, R.C. Rist, and R.C. Sonnichsen. New Brunswick, NJ: Transaction Publishers.
- Lusthaus, C., G. Anderson, and E. Murphy. 1995. Institutional assessment: A framework for strengthening organizational capacity for IDRC's research partners. Ottawa: International Development Research Center.
- Morgan, P. 1997. The design and use of capacity development indicators. Paper prepared for the Political and Social Policies Division, Policy Branch, CIDA. Hull: Canadian International Development Agency (CIDA).
- Mosse, D., J. Farrington, and A. Rew (eds.). (1998). Development as a process: Concepts and methods for working with complexity. London: Routledge.
- OECD. 1997. Criteria for donor agencies' self-assessment in capacity development. Document no. DCD/DAC(97)31. Paris: Organisation for Economic Co-operation and Development.
- OECD. 2000. Donor support for institutional capacity development in environment: Lessons learned. Paris, France. Organisation for Economic Co-operation and Development.
- Picciotto, R. and E. Wiesner (eds.). 1998. Evaluation and development: The institutional dimension. New Brunswick, NJ: Transaction Publishers.
- UNDP. 1998. Capacity assessment and development in a systems and strategic management context. Management Development and Governance Division, Technical Advisory Paper no. 3. New York: United Nations Development Program.
- Wenger, E.C. and Snyder, W. M. 2000. Communities of practice: The organizational frontier. Harvard Business Review. Jan–Feb.

Briefing Papers previously published by ISNAR

No. 49

Innovaciones institucionales en la investigación agrícola pública en los países desarrollados

No. 48

Listening to Stakeholders: Agricultural Research and Rural Radio Linkages

No. 47

A Conceptual Framework for Implementing Biosafety: Policy, Capacity and Regulation

No. 46

Assessing the Training Needs of Genetic Resource Managers

No. 45

Methods for Planning Effective Linkages

No. 44S

Uso de Insumos y Biotecnologias Apropiadas en Asolgunos Sistemas Naconales de Investigacion Agricola Latinoamericanos

No. 43

Biotechnology in African Agricultural Research: Opportunities for Donor Organizations

No. 42

Agricultural Biotechnology Research Capacity in Four Developing Countries

No. 41

Evaluating Research on Natural Resource Management: The Case of Soil Fertility Management in Kenya

No. 40

Benchmark Study. The Agricultural Technology Development Fund for Contract Research: An INIA (Uruguay) Initiative

No. 39

Proprietary Biotechnology Inputs and International Agricultural Research

No. 38

Strategic Decisions for Agricultural Biotechnology: Synthesis of Four Policy Seminars

No. 37S

Estudio de Caso Gerencial Exitoso. La Creacion de Un Sistema Nacional de Investigacion Agricola Coordinado" El Caso de Costa Rica

No. 37

Benchmark Study. The Creation of a Coordinated National Agricultural Research System: The Case of Costa Rica

No. 36

A Social Network Approach to Analyzing Research Systems: A Study of Kenya, Ghana, and Kerala (India)

No. 35

Benchmark Study. A Research Partnership with Farmers: The Case of El Salvador

No. 34

Commodity Program Priority Setting: The Experience of the Kenya Agricultural Research Institute

No. 33

Developing an Integrated Agricultural Research Policy: Experiences from Benin

About ISNAR: The International Service for National Agricultural Research (ISNAR) assists developing countries in making lasting improvements in the performance of their agricultural research systems and organizations. ISNAR promotes appropriate agricultural research policies, sustainable research institutions, and improved research management. ISNAR's services to national research are ultimately intended to benefit producers

and consumers in developing countries and to safeguard the natural environment for future generations. A nonprofit autonomous institute, ISNAR was established in 1979 by the Consultative Group on International Agricultural Research (CGIAR). It began operating at its headquarters in The Hague, the Netherlands, on September 1, 1980.



International Service for National Agricultural Research

Laan van Nieuw Oost Indië 133, 2593 BM The Hague P.O. Box 93375, 2509 AJ The Hague, The Netherlands Tel: (31) (70) 349 6100 ● Fax: (31) (70) 381 9677 www.isnar.cgiar.org ● E-mail: isnar@cgiar.org

