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**Toward More
Cost-effective
Nonfinancial
Assistance:**

**Case Studies
in Subsector
-based MSE
Development**

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GEMINI

**GROWTH and EQUITY through MICROENTERPRISE INVESTMENTS and INSTITUTIONS
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**Toward More Cost-effective
Nonfinancial Assistance:**

**Case Studies in Subsector-based
MSE Development**

by

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EXECUTIVE SUMMARY

The field of micro and small enterprise (MSE) development has evolved considerably over the past five years, with the greatest strides being made in the financial services area. To a large extent, however, excitement over proven methodologies that delivering financial services on a sustainable basis has eclipsed the need to develop innovative solutions to address other constraints that MSEs face. In addition, the cost-effectiveness and appropriateness of nonfinancial assistance has been challenged in a time of shrinking development sources and added emphasis on financial sustainability.

Developing sustainable delivery of nonfinancial services is difficult. Part of the difficulty results from the diverse set of activities that make up nonfinancial assistance. Precisely because there are so many forms of assistance other than financial, the term "nonfinancial assistance" means many things to many people. Thus, many disparate activities often are lumped together under its rubric.

The way to respond to the challenge nonfinancial assistance faces is to develop ways to assist many MSEs cost-effectively. This paper reviews an approach used by four institutions in Ecuador, Indonesia, Ghana, and Bangladesh to develop nonfinancial MSE assistance strategies. The institutions — the Institute of Socio-Economic and Technological Research (Ecuador), TechnoServe/Ghana, Yayasan Dian Desa (Indonesia), and the Bangladesh Rural Advancement Committee — used what is called a subsector approach. A subsector approach to MSE assistance focuses on firms that share a common product or input (for example, the woodworking subsector in Ecuador or the poultry raising subsector in Bangladesh) rather than on all firms or MSEs in a given region. A basic premise of the subsector approach is that entrepreneurs operating in a particular subsector are likely to face common constraints, whereas entrepreneurs from many sectors may face very different constraints. This similarity of concerns within a subsector makes it easier to assist many MSEs with fewer actions.

The approaches the four institutions took led them to interventions that reached many MSEs quickly and effectively. Their cases show that:

- MSEs need to be treated as clients rather than as beneficiaries;
- MSE service institutions should provide demand-driven services that clients are willing to pay at least part of the costs of delivering;
- Cost-effective service delivery can benefit from diagnostic market research to assess subsectors that hold considerable opportunities for MSE growth;
- Identifying opportunities and constraints for entrepreneurs within viable and dynamic subsectors yields higher payoffs than a nontargeted approach;
- MSE service institutions should focus on systemic interventions that can affect many firms with a single intervention; and
- Concentrating on specific subsectors seems a useful way of identifying systemic interventions more quickly and effectively.

While the subsector approach is a valuable way to assess which of a set of interventions can reach the largest number of MSEs, it reveals little about whether the intervention is cost-effective. In order to improve on the sustainable delivery of nonfinancial assistance to MSEs, work remains to come up with market-driven approaches and better measures of impact, and to learn from other interventions.

CHAPTER ONE

INTRODUCTION

One of the long-standing arguments in micro and small enterprise (MSE) development has centered around the usefulness and cost-effectiveness of nonfinancial assistance. Compared with financial assistance, which is easy to measure, monitor, and assess, nonfinancial assistance continues to elude rigorous assessment of its impact, and has proven difficult to offer at low cost. As a result, the arguments surrounding MSE development have established a seeming dichotomy between proponents of the two types of assistance. This dichotomy of views conceals a basic truism — that the relevance of the form of assistance necessary for enterprise development depends on the context, the sizes of firms being assisted, the range of needs at various stages of the life cycle, and the objectives of the intervention. This paper rejects the earlier questions of whether nonfinancial assistance is necessary, and whether it is better or worse than financial assistance, in order to ask a broader question: What are the constraints that MSEs face and how can we best address them?

MSE development has offered a path for many in search of a successful development paradigm. MSE development has typically encompassed a wide range of interventions, including the provision of credit, policy reform training, and technical assistance directly to MSEs. The most widely touted successes, however, have mastered the technique of intermediating between small savers and borrowers on a sustainable basis. Through these successes, the Grameen Bank of Bangladesh, BancoSol of Bolivia, Bank Rakyat Indonesia, and ADEMI of the Dominican Republic — all MSE finance institutions — have become synonymous with MSE development efforts. However, despite the excitement over financial successes, it is important to note that providing financial services solves only one constraint, albeit a major one, that MSEs face. We need tools to indicate what other services MSEs demand and how best to deliver them — and to do so cost-effectively.

The first problem encountered in discussing what is broadly termed nonfinancial assistance is one of definition. Because there are so many forms of assistance other than financial, the term means many things to many people. Thus, many disparate activities are lumped together under the banner of nonfinancial assistance. While financial assistance succinctly refers to credit or savings, nonfinancial assistance defies such categorization. In the MSE field, it includes everything from literacy or accounting training to policy reform to technical assistance.

Many programs tie together financial and nonfinancial assistance by requiring micro and small entrepreneurs to attend a mini-M.B.A. program in order to qualify for a loan. These kind of programs have caused the cost-effectiveness and efficacy of nonfinancial assistance to be challenged, especially in a time of shrinking development resources and added emphasis on financial sustainability, or at least cost-effectiveness, as a measure of success. Nonfinancial firm-level interventions have been challenged for reaching at best only a handful of entrepreneurs at a very high cost per unit.

The challenge remains to search for ways to assist vast numbers of MSEs cost-effectively. Interventions should target the system in which firms operate, rather than individual firms, in order to address concerns of scale and cost-effectiveness. Solutions will use a market-led, solid business approach that asks: What services are MSEs demanding? and, Which of them can be provided at a cost recipients are willing to pay?

CHAPTER TWO

ISSUES IN NONFINANCIAL ASSISTANCE

MSEs need a wide array of nonfinancial services, such as general business advice and planning; technical assistance and training; general management training; information on equipment and new technologies, markets, rules, and regulations; and representation on legal and regulatory issues that affect their business. The importance of these nonfinancial needs increases as MSEs attempt to grow. Because there are no ready means of providing nonfinancial services on a cost-covering basis, many development specialists have expressed some disenchantment with nonfinancial interventions despite MSEs' need for these services. In large part, this is due to the comparison made with recent major advances on the financial frontier.

One of the main reasons the field of MSE development has been skewed toward financial assistance is that methods have been devised for evaluating financial assistance, allowing definitive statements to be made about the sustainability of such interventions. Portfolio revenue, for example, as a proportion of total operating costs is used as a means of measuring impact directly, the supposition being that high repayment and savings rates indicate that economic growth is occurring within the target population. In this way, a healthy financial institution becomes a proxy, however flawed, for the success in reaching the development objective. It also satisfies donors' needs for accountability, making financial assistance an increasingly popular form of donor support.¹

No clear set of indicators has been developed to permit evaluation of specific implementing institutions, programs, and interventions providing nonfinancial assistance to MSEs. Developing adequate indicators and evaluation techniques for measuring nonfinancial assistance stands as one of the major challenges to encouraging greater donor involvement in this area. The most convincing indicators of success, such as increases in enterprise productivity, output, and revenue, are difficult and costly to measure, require longer time horizons to assess, and, even when measured, are difficult to attribute to a specific intervention.

An additional challenge encountered in delivering nonfinancial assistance is the issue of institutional sustainability. MSEs have proven to be good clients of financial institutions — willing to pay the full cost for effective financial services. Clients' willingness and ability to pay these costs, as well as their propensity to save, have allowed well-managed financial institutions to achieve self-sufficiency. In the case of nonfinancial assistance, it remains unclear whether MSEs can cover the full cost of services offered, particularly in technical assistance and training. For this reason, most institutions delivering nonfinancial assistance are forced to find additional sources of income, including donor transfers. Some institutions also augment income from fees by charging other nongovernmental organizations (NGOs) for services, or by engaging directly in commercial ventures.

Little is known about the replicability of nonfinancial interventions. Whereas a smoothly functioning financial institution can reasonably count on continued success by borrowing and fine-tuning procedures established in other MSE financial service programs, institutions delivering nonfinancial assistance are faced with the challenge of identifying tailored responses for each new set of clients. Thus, developing a prototype model may offer them fewer economies of scale.

¹ See Rhyne, 1992.

Although there are no clear answers to how to address the aforementioned challenges, this paper explores how four organizations in Ecuador, Indonesia, Ghana, and Bangladesh have embarked upon innovative approaches to deliver elements of nonfinancial assistance to the MSE sector. In each case, a subsector focus was used to develop an effective MSE assistance program. The subsector approach is the subject of the next chapter.

CHAPTER THREE

THE SUBSECTOR APPROACH

The subsector approach, based on techniques used in agricultural product marketing for more than 20 years, has been popularized by the Growth and Equity through Microenterprise Investments and Institutions (GEMINI) Project as a means to analyze MSE constraints, and identify interventions most likely to increase MSE access to growing markets.² This paper reviews the experiences of four institutions that provide subsector-oriented assistance, and draws some lessons on how to assess and meet MSEs' demands for services cost-effectively.

The subsector approach is a diagnostic tool to analyze the competitive context in which target enterprises that produce a like product or share a common input operate. The shared product or input defines the subsector. A subsector analysis assesses the forces that influence the competitive position of MSEs within single product groups, or subsectors. A basic premise of this methodology is that entrepreneurs operating in the same subsectors are likely to face common constraints, making it easier to assist many with one or a few strokes. Targeting producers that share the same constraints is almost always more cost-effective than general training, and its impact is easier to measure. Thus, linking silk producers with export markets, or developing improved spinning wheels, is a more targeted approach than training MSEs from various sectors in the basic principles of business management or marketing. The approach advocates providing assistance based on market demand and signals, hence assisting enterprises in competitive, viable subsectors.

The subsector approach to MSE development calls for identifying a dynamic industry, one that is producing products or services for which there is proven demand, and asking, What is inhibiting the participation and competitiveness of MSEs in this subsector? This approach offers a framework for analyzing the dynamics of a given industry and assessing the prospects for delivering cost-effective assistance to MSEs within that industry. It examines the vertical structure of a given industry, from input supply through production to final marketing of products, and identifies bottlenecks constraining the process. The approach also identifies niches in which MSEs either have or can have a competitive advantage and points to the specific kinds of assistance required to facilitate their move toward promising technologies and markets.³ The exact type of assistance is not predetermined or prescribed. Rather, it is based on what emerges from the analysis of bottlenecks in the input-production-marketing chain. In short, subsector analysis requires a bird's-eye view to assess the landscape, and make strategic decisions about where to intervene in order to assist the largest number of players possible.

In particular, subsector studies allow donors and implementing agencies to identify three types of systemic interventions that can benefit large numbers of MSE entrepreneurs at the same time: (1) by identifying system nodes, such as intermediaries, distributors, and suppliers, at which many products pass through a few hands; (2) by eliminating restrictive policies and regulations that constrain the activity of

² Because the subsector approach has been well-explained and -documented (Boomgard, et al, 1992; Haggblade and Gamsler, 1991), the nuts-and-bolts of the methodology will not be reiterated here.

³ Although the subsector approach can be used to target small firms, it has the potential to address systemic constraints to all firms within a given subsector, regardless of size.

large numbers of firms; or (3) by working through industry associations to disseminate information, training, or other resources. These types of approaches are said to possess "leverage" in the sense that a strategic intervention at one specific point in the system unleashes the productive potential of many small enterprises at the same time. The remainder of this paper reviews some of the successes achieved using these approaches, in an attempt to distill lessons for use in future programs.

CHAPTER FOUR

REVIEW OF PROGRAM EXPERIENCE

This chapter presents profiles of several programs that are viewed as being successful providers of nonfinancial services to the MSE sector. Each case study identifies the process the organization uses to identify needs and deliver assistance, including types of tools and techniques for achieving leverage and cost-effectiveness.

THE INSTITUTE OF SOCIO-ECONOMIC AND TECHNOLOGICAL RESEARCH

The Institute of Socio-Economic and Technological Research (INSOTEC) was established in 1980 as a private NGO to provide support to small industries in Ecuador. INSOTEC is a cross between a research institute and an implementing organization, as reflected in its involvement in a broad range of activities encompassing economic research, design and implementation of technical assistance programs, dissemination of technological advances, and policy and advocacy services. The institute's activities are funded by a variety of donors, including the Konrad Adenauer Foundation, the United States Agency for International Development (USAID), the Inter-American Foundation, the Inter-American Development Bank, the Swiss Development Corporation, and other national and international organizations.

INSOTEC uses its grant funds to support its research efforts and the assistance it provides to trade associations. In addition, it receives funds to carry out microenterprise research in response to specific donor requests, and has occasionally been involved in subsequent project implementation activities. Finally, INSOTEC also accepts contracts to carry out research on specific issues of interest to private-sector clients in Ecuador, such as large-scale industries interested in increasing their own productivity and profitability. In these cases, INSOTEC functions much like a consulting firm, taking on outside specialists to execute the assignment in question.

Key Role of Business and Trade Associations in INSOTEC's Work

One of the most distinctive features of INSOTEC's approach to small enterprise assistance in Ecuador is its strong link to FENAPI, the National Federation of Chambers of Small Industry. Through this link, INSOTEC provides technical assistance to business chambers and industry associations that support small businesses. The assistance is aimed at developing the chambers' internal structures and operational systems, improving their advocacy capacity, and improving member services. Specific activities include developing and carrying out regional and subsector studies, providing management training for staff and members, organizing trade fairs, and supporting other guild initiatives. In addition to FENAPI, INSOTEC works directly with 10 regional chambers, as well as local artisan chambers in Santo Domingo and Ambato; the national sectoral associations for the leather, wood, and metal products industries; and the Credit Union of Cotopaxi.

By coordinating with FENAPI and similar organizations, INSOTEC strengthens the role of groups already providing services to a large number of MSEs. In this way, INSOTEC effectively channels assistance to more firms than it could reach by delivering firm-specific assistance. Working through the

industry associations, INSOTEC funnels technical and market information and assistance down to firms, while providing information that strengthens the associations' advocacy position, improving their ability to provide input into policy decisions.

INSOTEC also conducts research on the key industries in each of Ecuador's regions to identify constraints to small enterprise participation. This information is then made available to small business chambers and industry associations for use in improving member services. INSOTEC's research focuses on industries with strong market potential and niches for microenterprise, examining each industry as a whole in terms of raw materials, technology, and market constraints to increased productivity and profitability. The institute's studies identify problems affecting MSEs in particular industries, propose solutions, and outline the benefits likely to result from adopting those solutions.

One of INSOTEC's most successful examples of direct support to the small enterprise sector is its work with the National Association of Small Industry Woodworkers (ANIPIM). In this case, INSOTEC combined a focus on a particular, high-growth-potential industry with assistance to the appropriate membership organization, resulting in innovative, cost-effective assistance to MSEs in the woodworking subsector. The woodworking industry includes a large number of small producers, draws 90 percent of its raw material from national sources, and has a high degree of export potential, making it an important sector in the national economy. In 1989, INSOTEC provided a legal advisor to facilitate the formation of ANIPIM. With the assistance of INSOTEC advisors, ANIPIM carried out an assessment of the problems facing small producers in the woodworking industry. The association found that one of the most pressing problems was obtaining high-quality raw materials in appropriate quantities at affordable prices. This was true for locally produced raw materials, such as lumber, as well as for imported items such as varnishes, lacquers, machinery, and spare parts.

Upon identifying procurement of inputs as a key constraint, ANIPIM decided to establish a supply outlet to serve its members. INSOTEC then carried out a study on the feasibility of setting up an input purchasing association. The study identified the most commonly used raw materials as well as importers and distributors willing to provide discounts to a supply outlet that would buy in volume. INSOTEC also provided the services of a lawyer to examine different possible legal formats for the outlet. Finally, in view of the close fit between INSOTEC's own industry-oriented research agenda and ANIPIM's stated objectives, INSOTEC contributed some of its own funds to the start-up capital used to create the supply outlet, called CENTRIMA. INSOTEC also covered the costs of CENTRIMA's personnel for the first year.

ANIPIM members strongly supported the creation of the supply center, as evidenced by their willingness to pledge nonreimbursable funds to support its start-up. Ten members contributed funds for the feasibility study and, subsequently, 22 firms contributed US\$400 each to capitalize the supply outlet. INSOTEC attributes much of the subsequent success of the venture to the fact that it was so clearly demand driven, responding to clearly perceived needs on the part of entrepreneurs.

CENTRIMA has been very successful, surpassing original performance projections. Both sales and profits have continued to increase in real terms. During its first six months of operation, monthly sales surpassed the break-even point, generating a monthly profit of 3 percent of sales. The outlet secured a 15 percent discount on plywood and a discount of up to 30 percent on some other inputs. Products are priced to include a 5 percent markup, which is used to meet operating costs, but the resulting prices still represent substantial savings to small producers compared with market costs. Besides purchasing inputs for member firms, CENTRIMA has also begun selling to the general public, at slightly higher prices.

CENTRIMA plans to expand its services to include direct importing of inputs besides wood (such as abrasives, adhesives, lacquers, and capital equipment). It also plans to develop an information service to provide members with information on using new materials to improve product quality, and on introducing new product designs. Additionally, CENTRIMA intends to assist members with procurement of the latest machinery. To help members gain access to improved markets, CENTRIMA also plans to expand its marketing services by organizing and taking part in national and international trade fairs.

INSOTEC's total investment in CENTRIMA totaled roughly US\$25,000, and as a stockholder, it accrues dividends. For the first five years, any dividends will be reinvested in CENTRIMA; after that time, dividends accruing to INSOTEC will be directed to a fund supporting similar ventures for other industry groups. The industry association for metalworkers has already expressed interest in setting up a similar facility.

It is difficult to assess conclusively the impact of INSOTEC's assistance on MSEs in the woodworking subsector. Information on member firms is unavailable, and even if it were, it would be hard to attribute improvements in performance to CENTRIMA alone. The supply outlet's sales and profitability provide the only available measures of success. Sales figures through 1990 show demand to be higher than projected and increasing over time. Member firms currently account for three-quarters of all sales, but the one-quarter represented by nonmembers shows clear potential for further growth. Demand appears particularly high for imported goods such as lacquers, suggesting that the facility provides a valuable service in helping small producers overcome constraints to accessing imports and dealing with foreign exchange rates.⁴

The CENTRIMA experience is a good example of a leveraged intervention. The idea of developing a supply outlet flowed very naturally from INSOTEC's history of working with trade associations and its experience conducting industry research. In CENTRIMA, INSOTEC established an association to represent the interests of a large number of small producers in a very important industry. INSOTEC used straightforward analytical techniques to focus in on a key constraint experienced by small-scale producers in this subsector, and it identified a solution that responded to producers' needs, as evidenced by INSOTEC's willingness to put up its own resources to solve the problem. In this way, with a relatively modest investment of its own resources, INSOTEC supported development of a self-sustaining facility that is providing lasting benefits to a growing number of small-scale entrepreneurs.

The challenge INSOTEC faces now is to systematize the CENTRIMA approach into a replicable strategy for research and assistance, one that is consistent with its institutional structure and financial resources. INSOTEC has developed considerable expertise and sophistication in carrying out industry studies that successfully identify constraints and opportunities for small enterprises. However, despite CENTRIMA, for the most part, INSOTEC's experience with implementation has been limited to conducting projects it has not necessarily helped to design and that do not incorporate an industry-oriented approach.

TECHNOSERVE

TechnoServe, Inc. is a private, nonsectarian, nonprofit United States voluntary organization. Founded in 1968, its goal is to improve the economic and social well-being of low-income people in

⁴ As of 1990, a two-tiered system of foreign exchange rates in Ecuador favored large industries and discriminated against small producers, further complicating their access to affordable inputs.

developing countries by fostering the development of small and medium-scale enterprises. TechnoServe provides management and technical assistance and training to private enterprises and local development institutions through a network of local Country Program Offices staffed and operated mostly by local professionals. These offices work with rural, farmer-owned and -operated enterprises, emphasizing agricultural production, processing, and marketing as a means of raising farm productivity, rural employment levels, and family incomes.

TechnoServe/Ghana is one of the organization's most established field offices, having been operational for nearly 20 years. During that period, the program has focused on assisting poor farmers with the establishment of rural agricultural enterprises in a variety of commodity sectors, including sugar cane, rice, charcoal, rabbits, and vegetables. Since 1986, the program has concentrated on palm oil processing and the creation of farmer service cooperatives. The development of the palm oil enterprise program is an excellent example of TechnoServe's "Commodity Sector Approach." This approach begins with a detailed study of a selected subsector and then targets interventions that focus on strengthening community-based enterprises. The approach encompasses community organization, business formation, and assistance with marketing and general, financial, and technical management. Training is provided through long-term management assistance from an on-site TechnoServe advisor and short-term consultancies.

TechnoServe/Ghana's Palm Oil Subsector Study

In late 1985, two TechnoServe/Ghana staff members conducted a detailed analysis of the country's palm oil sector. The purpose of the study was to assess whether the sector offered good prospects for the development of small-scale businesses and whether the sector's economic activities could be extended to other parts of the country. Palm oil was selected for analysis for several reasons: palm oil processing is a common village-based cottage industry in Ghana; prospects for palm oil on the world market at the time appeared positive; low wages, established plantations, a quality product, and access to shipping give Ghana a long-term comparative advantage in palm oil production; and internal and regional markets for palm oil were strong and expanding.

The study involved interviews with knowledgeable sources in the palm oil industry, including technical and business consultants to the industry, mill owners and managers, and palm oil equipment manufacturers. Interviews covered global and local industry trends, industry profitability, barriers to entry, and technical requirements. More in-depth discussions focused on sector-related policy considerations, production issues, marketing opportunities and constraints, competition, and consumption trends. The study concluded that Ghana's palm oil sector offered significant opportunities for rural small-enterprise development, and that it was appropriate for the type of intervention TechnoServe was seeking to develop. The study showed that there existed significant unsatisfied demand for palm oil, the potential to increase local efficiency and productivity through improved management, and the potential for profitability, local income enhancement, and job creation. Local equipment for the production process, at a cost not beyond the reach of local communities, was readily available. Another positive factor, particularly for a nonprofit agency such as TechnoServe, was the prospect of having a significant impact on women in terms of jobs, income, and quality of life. The type of plant envisaged offered good potential for replication, and an expanded program of assistance could have significant potential for national policy impact.

Choosing an Appropriate Intervention

TechnoServe/Ghana's subsector analysis allowed identification of a variety of bottlenecks to the smooth functioning of Ghana's palm oil industry. Some bottlenecks were endemic to virtually all industries in the country at the time, such as inconsistent government policies vis-à-vis imports and taxes, a focus on government-owned plantations and processing facilities, and limited availability of credit, agronomic inputs, and managerial expertise. Based on its findings, TechnoServe decided to set up and strengthen community-owned and -operated processing plants. By working intensively with several such enterprises over a period of several years, TechnoServe reasoned that more could be learned about critical constraints to their development, and that these factors could then be addressed.

Over a five-month period, TechnoServe staff visited more than 30 villages throughout Ghana to develop an understanding of local community groups, local production techniques, market demand, and other intricacies of the palm oil industry. TechnoServe then assisted in the creation of community groups to serve as the recipients or "clients" of its assistance. The relationship between the groups and TechnoServe was structured as a business relationship, using a contract to lay out the respective responsibilities of TechnoServe and a particular community group. TechnoServe also required the groups to pay a management fee and to register as enterprises with the Government of Ghana, thereby giving them legal standing and legitimizing their status as a signatory to a business contract. Groups were also asked for a tangible expression of their willingness and commitment to work with TechnoServe, namely to contribute 25 percent of the start-up capital required for the venture. This stipulation clearly identified the groups that were serious about undertaking such a venture. The village of Ntinanko was the first community to amass the required investments, and it served as the "model enterprise" in the pilot project phase.

Full-time, on-site assistance to the Ntinanko Oil Palm Farmers Cooperative Society began in early 1987. TechnoServe worked closely with the group to develop operational bylaws and to register it formally as a legal entity. Simultaneously, TechnoServe worked with the group to develop a plan for the start-up phase, including defining the management team, organizing the fruit supply, assembling the finance package, sourcing equipment, planning construction of the processing facility, and setting up an appropriate accounting system. Palm oil processing operations began in October 1987 on a "buy-sell" basis (that is, the plant bought palm oil fruit from the farmers, processed it, and then marketed the oil). After just a few months, it was determined that this model was not working. The technology initially chosen was inadequate in scale for commercial viability, and the management demands and operating costs of the "buy-sell" operation were too great. The situation was complicated by the imposition of a new, unanticipated tax on the sale of palm oil.

TechnoServe's project advisors met with representatives of the Ntinanko group to discuss these problems and determine jointly how to overcome them. This was a critical juncture in the development of the group, as its original course would have led to certain failure. These discussions led to two important decisions. First, the Ntinanko group decided to abandon the hand-operated screw press it was using and instead adopt a hand-operated hydraulic press. The original press had too low a capacity to be economically viable on a commercial basis, whereas the hydraulic press offered much greater capacity. More importantly, Ntinanko decided to shift to a "custom processing" or "service" mode whereby it would essentially rent its equipment, on a batch basis, to local producers and processors. These clients would assume responsibility for getting the fruits to the plant and for marketing the oil. As an additional assistance measure, TechnoServe established a nursery to produce improved oil palm seedlings for sale to group members.

These changes made the difference between success and failure for the Ntinanko group. By the end of the first year of operations, the plant was processing all of the available fruit from the village, as well as fruit from neighboring villages. All of the women in the village who previously produced palm oil by traditional methods had adopted mill processing and, as a result, had doubled their volume and increased their net profits. Additionally, another 20 women in the village had adopted mill processing as a means of supplementing their incomes. Local farmers were selling all of their output, leading several to rehabilitate neglected farms and others to increase their acreage. Another obvious sign of success was that oil sellers from a neighboring village were driving past a larger parastatal plant to purchase the Ntinanko group's oil at a higher price.

By late 1988, the Ntinanko group was on solid footing. Full-time management of its processing facility was turned over to a local manager who had received a full year of on-the-job training in general management and financial accounting from the resident TechnoServe management advisor. In 1989, the Ntinanko mill processed 680 tons of fresh fruit bunches, as compared with a projected 527 tons, realizing a net surplus of 500,000 cedis. A dividend was paid to community shareholders, and a new profit center — a community-owned and -operated oil palm nursery — was generating additional funds for community use. A fledgling community credit union was also established as a place to safeguard and productively recycle ash flow from the mill.

Replication of the Ntinanko Model

Perhaps the most exciting development within the TechnoServe Palm Oil Sector Program was the recognition of the Ntinanko "model" as a viable and highly desirable model for replication by Ghana's Ministry of Agriculture, the Food and Agriculture Organization, and the World Bank. In June 1989, the World Bank hired TechnoServe to conduct a feasibility study on establishing a regional community-based palm oil processing training and service center in Ntinanko — a center capable of replicating the Ntinanko model 45 times over a five-year period. Upon completion of the study, the bank and the Government of Ghana discussed the merits of focusing on small-scale palm oil processing by private, independent farmers versus their earlier idea of expanding the oil palm acreage of small-scale outgrowers of the Ghana Oil Palm Development Corporation (GOPDC). TechnoServe/Ghana participated in that policy dialogue and promoted the Ntinanko model of small-scale, private, independent palm oil processing as the most promising model for development within the country's palm oil sector. The following year, the Government of Ghana and the World Bank signed an agreement to proceed with the establishment of 60 small-scale, privately owned palm oil processing facilities under the Agricultural Diversification Project. The government then signed a grant agreement with TechnoServe/Ghana for the management and implementation of this replication program. By mid-1993, TechnoServe had identified 50 community groups interested in establishing palm oil plants. Two dozen of these groups are expected to establish plants in 1994. TechnoServe staff are now investigating the feasibility of establishing (or strengthening) a local NGO to ensure the sustainability of assistance beyond the five-year World Bank project.

YAYASAN DIAN DESA

Yayasan Dian Desa (YDD) is an Indonesian NGO based in Yogyakarta that specializes in appropriate technologies for MSEs. It was founded in 1972 by Anton Soedjarwo, an engineering instructor in Yogyakarta. By 1992, YDD had a staff of 200, composed primarily of engineers, sprinkled with business specialists, anthropologists, and other social scientists. YDD was a major actor in

implementing the USAID-supported Central Java Enterprise Development Project (CJEDP), and has continued to work in CJEDP-initiated activities in shrimp farming and metalworking on a commercially viable basis, even though the project ended in 1988. YDD has recently developed an innovative technology to transform underutilized or discarded fish by-products into profitable top-of-the-line leather accessories, in the process creating employment for 5,500 families.

The majority of YDD's technology developments cost under US\$5,000, and the NGO covers 42 percent of its costs with income earned from the following activities: consultancies to other NGOs and donor agencies; marketing of products such as shrimp seeds, special equipment, and technologies; and the sale of marine products and training fees. YDD also attempts to meet costs by generating sufficient profits through its commercial ventures. It has established field stations in Yogyakarta, Central Java, Timor, and East Nusa Tenggara to develop, test, and disseminate technologies.

YDD's Enterprise Development Approach

YDD identifies a particular subsector based on the subsector's employment- and income-generation capacity for MSEs, and YDD's knowledge of and expertise in the subsector. YDD then identifies a particular constraint or bottleneck in the subsector, assesses needs and the market demand for a particular technology to address the constraint, creates the technology, and trains entrepreneurs in development of the technology. YDD may also produce and sell the technology to entrepreneurs, and teach them how to use it.

YDD's approach is demand led; technical assistance and training are provided on the basis of demand for them. After conducting market research to identify niche products, YDD develops prototype products and conducts workshops to demonstrate development of the prototypes — metal and wood products, banana and pineapple fruit processing equipment, welding tools, and so on. These workshops are very practical. Assistance is technical and sector specific, although some basic business management training may be conducted as well, particularly in how to develop business plans. Assistance almost always begins with the provision of nonfinancial assistance. After the client has received technical assistance from the program, small loans ranging in size from US\$25 to US\$250 are often made to finance the purchase of technology YDD has developed. Loan terms may be up to one year, and on-time repayment exceeds 90 percent.

Case Study: Utilization of Underutilized Marine Products⁵

In a 1992 case study, YDD explored the possibility of processing underutilized fish products in Japan. YDD based this decision on its having identified a market niche among Japanese consumers for fish skin products such as those made from shark skin, which is thrown away except for the expensive shark fin, and sting rays, which are discarded from the fish catch. YDD then located the technology for fish skin processing and tanning, receiving information from a vast network of appropriate technology groups worldwide. The time from market assessment to development of fish tanning technology to final product development took 18 months. The project implementation phase involved organizing groups in

⁵ This example is taken from a YDD paper by Anton Soedjarwo entitled, "A Case Study on the Utilization of Underutilized Marine Products," 1992.

the coastal communities, and training them in the techniques of fish skinning and tanning. Under this project, YDD disburses loans to suppliers to enable them to purchase the technology (fish skinning knives, and the like) that YDD developed for this activity. YDD then purchases those fish skins that meet its specified quality standards. The processed fish skins are then turned into leather accessories in YDD's processing unit by urban entrepreneurs whom YDD has trained in this activity. YDD then exports the finished product to Japan and elsewhere through a marketing unit set up for identifying export markets and buyers. This has been a highly profitable venture for YDD, and has increased the income of 5,500 families.

Other Examples under YDD

Under CJEDP, YDD developed the technology for increasing shrimp yields from 300 pounds per hectare to 1,210 pounds per hectare. YDD owns a hatchery from where it develops and sells seeds to shrimp farmers on a commercially viable basis. Although shrimp farmers are responsible for selling their production, YDD provides assistance in linking small producers to large buyers.

In other cases, YDD develops a technology and trains MSEs to produce it. An example is in the case of meat grinders for food vendors. YDD was approached by a group of food vendors who wanted to grind meat in a better fashion. YDD developed a prototype machine, tested its market viability, and turned the design over to a group of metalworkers. The metalworkers now produce the product, which is sold through retail outlets.

Sometimes YDD produces and markets products itself. An example is in stainless steelware, which typically is imported from Japan or Taiwan. In this instance, YDD developed the technology, then, because local small metalworkers lacked the appropriate equipment to undertake production, decided to produce the product itself. It sells the steelware at a profit to major hotels and restaurants.

YDD's approach to cost-effectiveness is to minimize risk in naturally risky activities. Product development is almost always stimulated by market demand. Technology is developed only after ensuring that it does not already exist. YDD is often involved in technology adaptation, and is internationally networked with appropriate technology groups. Information is disseminated through a monthly bulletin with a circulation of 5,000. YDD also maintains low overhead costs.

In organizing groups in the communities with which it works, YDD works with existing informal group structures rather than impose a standard structure it may have devised. YDD also ensures that it has several commercially profitable ventures to offset its research and development. Additionally, the organization continues to rely on donor funds to subsidize partially its activities. To date, it does not charge training fees for the courses and workshops it offers.

THE BANGLADESH RURAL ADVANCEMENT COMMITTEE

In Bangladesh, a country not only densely populated in general, but densely populated with development assistance programs as well, the Bangladesh Rural Advancement Committee (BRAC) stands out as one of the strongest and most innovative institutions providing support to low-income groups.

BRAC was started in 1972 as an organization to provide relief and rehabilitation services to refugees from the 1971 Liberation War. Since then it has grown into a multifaceted development organization with more than 11,000 full-time and 20,000 part-time staff, and an annual operating budget exceeding US\$15 million. BRAC's focus is on helping the landless rural poor learn to mobilize and manage resources in order to achieve sustainable, self-reliant economic growth. Rural landless women, with their pronounced lack of social and economic support, are a primary target group.

Although BRAC also provides financial services to its clients, it has come to the conclusion that credit alone is insufficient for producing sustainable changes in the lives of the rural poor, and has developed a variety of other programs to help clients identify and implement viable economic opportunities. The cornerstone of BRAC's operation has been the Rural Development and Credit Program (RDP). Under this program, BRAC groups landless women and men into village organizations; builds solidarity and awareness through meetings, workshops, and functional education; identifies viable enterprise opportunities; provides occupational training, management training, and marketing support; and provides credit and savings facilities.

Other BRAC activities include a health program (focusing on immunization and oral rehydration therapy); an informal primary-education program, under which 4,500 village-level schools provide training in basic literacy and arithmetic; and support services such as paralegal services, research, and monitoring and evaluation. BRAC is also involved in commercial ventures, such as a handicraft sales outlet, a printing press, and a cold storage and ice plant, to help the organization reduce its reliance on external funds. As of 1993, BRAC was meeting about 42 percent of its total operating costs.

Under the first phase of RDP, BRAC staff conducted studies to identify viable enterprise opportunities in the fisheries, livestock, and textiles subsectors. Based on these studies and on some in-depth cost-benefit analyses, BRAC identified a number of enterprise opportunities and helped clients get started by providing training manuals, introducing and improving products and technologies, and developing enterprise management and marketing systems. The types of opportunities identified included those in shrimp/carp polyculture, nursery ponds, hatcheries, brick fields, rice mills, power tillers, yarn and cloth dyeing, waste silk spinning, yarn twisting, mushroom culture, and horticulture.

In general, BRAC seeks enterprise opportunities that involve low to intermediate technology, can be managed by the poor, provide long-term employment, and yield high returns on investments. BRAC assists clients to generate specific enterprise ideas, carry out feasibility studies, develop business plans, implement activities, and monitor and evaluate results. It also identifies and promotes individual as well as group economic activities.

In 1989, BRAC entered Phase Two of RDP, which was marked by an important structural reorganization. Recognizing the need to reduce its dependence on external funding, BRAC introduced a two-tiered approach to its financial services. Under this approach, during an initial developmental period, BRAC continues to use donor grant funds to organize village groups, provide training, and establish savings and credit discipline. Subsequently, mature area offices are sold to self-supporting banks operated under BRAC's Rural Credit Project (RCP), at which time bank operations must cover operating costs. By December 1990, BRAC had disbursed more than US\$25 million in loans under RDP I and RCP, second only to the Grameen Bank in terms of total amount disbursed in Bangladesh (Grameen had disbursed US\$216 million by the same date). Average loan size is around US\$300, with most loans going toward petty trade, and poultry and livestock raising.

RDP II is also expanding its program of support to help entrepreneurs overcome the many hurdles involved in starting and operating MSEs. BRAC intervenes directly in selected economic subsectors to eliminate bottlenecks and allow clients to achieve a higher rate of return on the funds they borrow and invest from the credit program. BRAC created a special unit, the Rural Enterprise Project Unit, to develop and test ideas for starting and improving rural enterprises. REP staff look for bottlenecks in key subsectors that dominate the activities of the landless poor, namely poultry, livestock, sericulture, fisheries, and irrigation. The REP unit then experiments with different approaches for overcoming bottlenecks, such as stimulating government ministries to supply needed inputs or services, or developing new sources of inputs and market channels.

In one instance, BRAC solved clients' marketing problems in a manner that generated revenue for the organization. Through a number of regional projects, BRAC assists women in handicraft production. The women often have trouble selling their products because many stores are only willing to buy on consignment — an unattractive option for those who need money right away. BRAC solved the problem by opening an outlet for the sale of clients' products. BRAC also develops designs to expand product demand and provides design training for artisans. Starting with one store in Dhaka, this commercial operation now includes six outlets employing 150 people, as well as an export office. The outlets currently export to Europe and are exploring opportunities for exporting to the United States. In 1988, sales totaled US\$1.3 million, with all profits reinvested to fund further expansion of the women's handicraft production centers. The marketing outlets support the activity of approximately 10,000 women.

Case Study: BRAC Assistance in Poultry Raising

Poultry raising is one of the most important sources of supplemental income for thousands of Bangladesh's rural families, and is a particularly important source of income for women, for whom poultry raising is compatible with home duties. BRAC began its poultry raising activities in the late 1970s with an experiment in one project region to train 400 women in improved methods of household chick raising. As a result of this experiment, BRAC quickly identified a series of interrelated bottlenecks that were constraining household poultry production and initiated steps to overcome them.

Early on, BRAC identified low-yield stock as a key constraint and established its own poultry farm to experiment with improved high-yield varieties (HYV). BRAC initially supplied fertile eggs to poultry raisers, but abandoned this approach due to high egg breakage rates and problems with incubation. BRAC then adopted the approach of training successful poultry raisers to establish hatchery centers for high-yield varieties and lending them money for equipment and stock. The raisers obtained HYV cocks or eggs from BRAC and raised HYV chicks to the point at which they could be sold to other village women.

A second problem BRAC uncovered was the high number of young chicks that were dying from poultry disease. If chicks are not vaccinated within seven days of hatching, only 1 in 10 survives. To combat this problem, BRAC worked with the Bangladesh Ministry of Agriculture's Livestock and Poultry Section to develop a vaccination program. Under the program, each BRAC village organization selected one woman to be trained as a paravet (veterinary paramedic). The government then supplied syringes and vaccines free, while the paravets purchased additional medicines from local pharmaceutical firms, the government, or from BRAC's farm. The poultry raisers paid the paravets to vaccinate each chick and supply any needed medicines.

BRAC identified a lack of appropriate chicken feed as another bottleneck. HYV chick raising units require specially formulated chicken feed, of which none was available. In response, BRAC trained and lent money to clients who wished to become feed manufacturers and suppliers. These clients received training in locating and purchasing ingredients, learning proper mix proportions, and carrying out market surveys so that feed would not spoil before being sold.

As egg production became more widespread, BRAC identified deficient marketing channels as an additional bottleneck. In 1989, it began encouraging some clients to become egg collectors and sellers, and issued trading loans to facilitate these businesses. Under this arrangement, the paravets would buy eggs door-to-door and sell them on preset collection days to egg traders for an agreed-upon 10 percent markup. BRAC introduced the set price for paravets, after experience showed that egg sellers (typically men) were trying to take advantage of the paravets (all women) and get them to accept lower prices.

Starting from one village organization, BRAC expanded its poultry raising program in the mid-1980s to all of the areas covered under its Rural Development and Credit Program. By the end of 1990, BRAC had trained 98,000 household poultry raisers and 9,000 paravets; helped establish 665 chick raising units supplying 750,000 HYV chicks annually; and established 95 feed merchants, and 88 upgraded egg sellers, each covering 15 to 20 villages as well as urban markets.

Based on its successful poultry raising scheme for clients, BRAC developed a poultry raising scheme in collaboration with the government's Vulnerable Group Development Program. This program provides food rations to 450,000 families representing the poorest 3 percent of the country's population, primarily female-headed households. Prior to 1985, recipients received only food rations and were in no better position to take care of themselves at the end of the program. In 1985, BRAC began working with these recipients to teach them poultry raising skills that would enable them to generate income. BRAC loaned the women money to buy day-old chicks, arranged the necessary input supply links with the government, and provided the women with training and technical support to teach them to raise the chicks. This project now reaches about 60,000 individuals.

The payoffs from BRAC's assistance have been substantial for village women and their families, in return for a modest investment. An economic analysis conducted in 1991 showed that for a total investment by BRAC and the Government of Bangladesh of US\$471,494, returns amounted to US\$2,172,434, or 360 percent. This included interest on loans accruing to BRAC, as well as increases in the incomes of paravets, poultry raisers, chick raisers, egg sellers, and feed processors. In addition to these quantifiable benefits, one must add the value of improvements in the status of many thousands of rural women, positive nutritional impact, and the development of saving, borrowing, and banking habits. A second study compared the profitability of BRAC-assisted raisers with a group of raisers whom BRAC did not assist, and found that the mean income among assisted raisers was almost twice that of the control group.

CHAPTER FIVE

LESSONS LEARNED

The four organizations discussed in Chapter Four all clearly have one thing in common — they exploit their unique comparative advantages and access to information to make astute market-oriented interventions in the MSE sector. Taken together, the organizations engage in an impressive array of technical, institutional, and financial support to the clients they serve.

At first glance, the four organizations' interventions seem rather disparate. Analysis of the interventions raises the question of whether they are simply well-aimed targets in and of themselves, or whether they point to broader policy and program lessons. Despite the great diversity of the four groups' activities, important similarities exist in their approaches:

- They take a specific market or subsector approach rather than focus on all MSEs in a given region.
- They start with the big picture of the market, and follow market-led prescriptives. This involves the following:
 - They treat MSEs as clients.
 - They follow solid business approaches, providing demand-driven services for which clients are willing to pay in part.
 - They begin by conducting market research and diagnostic analyses to assess the opportunities for and constraints against entrepreneurs within a viable subsector.
 - Services are extended only on the basis of demand, and are tailored to the unique demands of operators in the target subsectors.
- They assess their comparative advantages in providing services that MSE clients demand.
- They network with other institutions that are more adept at providing solutions to other important constraints unveiled, and work closely with local communities.
- They identify systemic rather than firm-level interventions.
- They actively seek cost-saving strategies.

MARKET-LED INTERVENTIONS

All of the four institutions follow a sound business approach in which they assess their clients' position in the larger market system, analyze the constraints MSE clients face operating in high-potential subsectors, and assess the services for which entrepreneurs are willing to pay and their own institutional

capacity to deliver those services cost-effectively. This business and private-sector orientation is balanced with the institutions' own development goals.

INSOTEC launched its successful wood sector input supply center based on an analysis of constraints facing small producers in the wood sector. Its other interventions are based on subsector research conducted on Ecuador's key industries, several of them export oriented, to identify ways to integrate small producers. YDD develops products only after conducting market research to test their marketability and profitability. Much like INSOTEC, it analyzes the constraints facing small producers in key sectors, and develops or adapts technologies to address them, such as in the case of high-yield shrimp seeds, or fish skin products. In order to identify enterprise opportunities, BRAC has analyzed subsectors that employ many poor people, are labor intensive, involve relatively low technology, and yield high returns on investment. BRAC also identifies constraints in subsectors based on its long involvement in assisting producers in them, as in the case of its poultry raising program. TechnoServe launched an intensive analysis of the palm oil industry to assess market trends both globally and in Ghana, industry profitability, barriers to entry, technical and managerial requirements, policy considerations, consumption patterns, competition and employment, and productivity potential. Based on this exhaustive diagnostic process, TechnoServe decided to develop community-owned and -operated processing plants. TechnoServe then spent another five months visiting more than 30 villages to develop an understanding of local community groups, local production techniques, and other details about the subsector.

All four of the institutions above assess market demand for the product groups of their target enterprises, as well as entrepreneurs' demand for services prior to intervening. The supply outlet INSOTEC created has been successful because it provides inputs and services that respond directly to entrepreneurs' needs. Entrepreneurs put up their own funds to finance the start-up of the outlet, and strong and sustained demand for services has helped ensure the outlet's continued financial viability. In Bangladesh, BRAC systematically identified and eliminated the bottlenecks constraining poultry raising, a subsector in which the rural poor could easily get involved making a product for which there was substantial rural and urban demand. YDD developed meat grinders in response to a request from food vendors, as well as fish tanning and processing technology based on identifying a premium price export market niche for fish skin products. TechnoServe was able to determine significant unsatisfied demand for palm oil before intervening in the sector. It also ensured demand for the processing plant by asking local groups to contribute 25 percent of the start-up capital required for the venture.

INSTITUTIONAL COMPARATIVE ADVANTAGE

INSOTEC uses its links with Ecuador's National Federation of Chambers of Small Industry, regional chambers and sectoral associations, as well as its research capabilities and sectoral focus. It also uses its knowledge of key subsectors and links with related associations to address constraints at both the policy and the industry levels. YDD sticks to what it knows best — appropriate technology. Although it offers other services, technology is YDD's mainstay. BRAC has been able to capitalize on its nationwide network of village-based structures and its international fame to attract funds and rapidly disseminate its interventions and programs through its network. It also leverages its reputation to get a seat at the policy table in Bangladesh, and get various government ministries involved. TechnoServe focuses its efforts on setting up and developing community-owned and -operated enterprises, based on commodity analysis. It also capitalizes on detailed knowledge of Ghana, accumulated over 20 years.

INSTITUTIONAL AND COMMUNITY LINKAGES

MSE-support institutions capitalize on the "multiplier effect" by working through a broad range of indigenous and community organizations. For example, they may provide technical and/or management training to selected individuals from a given community, who in turn train larger numbers; they may train staff of other NGOs to increase the expansion of benefits; or they may use indigenous structures to organize supplier groups. YDD, for example, trains groups of individuals in the communities in which it works, who then train other interested members. It also trains staff of other NGOs, who in turn train MSE personnel. YDD also studies local community structures and indigenous technologies to build on, rather than replace, such systems. BRAC groups individual clients into village-level organizations to provide them with training, technical assistance, and credit. It has also developed key links with the Government of Bangladesh to get the government involved in its rural development programs. For example, BRAC worked with the Ministry of Agriculture to develop a poultry vaccine under the country's poultry raising program, and got government funding for the program as well. INSOTEC provides the most interesting example of developing linkages with chambers and associations that already group entrepreneurs by subsector or region — through them, INSOTEC expands its outreach to affect many more enterprises than it could single-handedly. TechnoServe assists in the creation of community groups. It has also developed links with the World Bank and the Government of Ghana to replicate its Ntinanko model on a regional level.

SYSTEMIC INTERVENTIONS.

All of the aforementioned institutions leverage resources by assisting entrepreneurs facing common constraints in a subsector. Working with industry associations as INSOTEC does is an excellent way of achieving leverage. Working through industry groups also permits systemic interventions that help all or many MSEs in a subsector, rather than interventions that target individual MSEs.

Associations represent voluntary groupings of firms with many things in common, including similar problems and assistance needs. By facilitating creation of these kinds of organizations, INSOTEC helps create networks through which it channels interventions. These associations also serve as forums for identifying common constraints that members face. This information in turn can be channeled into policy dialogue, leading to policy and regulatory reform to improve the enabling environment for large numbers of small producers at one time. Finally, the associations can serve as vehicles for distributing information, technical assistance, and services cost-effectively.

For its part, BRAC has repeatedly intervened at the systemic level. It created important market linkages by developing profitable outlets for the sale of handicraft products when women producers faced difficulties selling their output individually. Under the poultry raising program, BRAC trains a few people from each village organization to serve as vaccinators, raisers, feed makers and suppliers, and egg traders, thereby catalyzing the development of a whole industry in poultry production, with multiple spinoffs. TechnoServe transformed the production process of an entire subsector by introducing new palm oil processing technologies. Through these efforts, BRAC and TechnoServe have earned themselves seats at the policy table, enabling them to devise policy solutions that affect all producers in a given industry.

COST-EFFECTIVENESS

Cost-effectiveness in MSE operations is achieved by defraying costs of services through fees, or by cross-subsidizing specific interventions with proceeds from related commercial ventures. YDD uses both of these strategies; it earns consulting fees from donors and NGOs, and uses revenues from profitable ventures to finance research and development and to provide other forms of nonfinancial assistance. YDD earns a portion of its income by developing prototypes (inputs, tools, and products) in response to market demand, and selling them to MSEs on a commercial basis. YDD says its strategy for cost-effectiveness is to avoid repeating past mistakes, invest in staff development, devise creative staff incentives, maintain low overheads, and calculate service and project costs realistically. It also makes it a practice to build on existing indigenous technologies to the extent possible.

In BRAC's search for cost-effectiveness, the organization has established a series of marketing outlets that generate revenue for the organization while supporting the activities of clients engaged in handicraft production. BRAC also trains a select number of successful producers who in turn train through demonstration other participants or entrants into the poultry subsector. In this way, BRAC catalyzed the development of a vertical chain in which all players earn incomes. A 1991 analysis showed that the US\$471,494 investment in poultry raising resulted in returns of US\$2.2 million, or 360 percent. INSOTEC's approach of strengthening key intermediary institutions is more cost-effective than trying to reach individual firms. TechnoServe considers its assistance to the palm oil subsector to have been highly cost-effective, generating US\$0.71 in benefits for every US\$1 invested for the pilot, and US\$5.10 in benefits per every US\$1 invested for subsequent replications.

CHAPTER SIX

IMPLICATIONS FOR DONORS AND IMPLEMENTING INSTITUTIONS

Nonfinancial assistance can be highly risky and complex. It requires a keen understanding of the private sector, market principles, and sound business acumen — all of which are not necessarily readily available in the development community. The market-driven approach exemplified in the case studies in Chapter Four calls for relatively complex market analyses, and strong implementation skills given the diverse range of services MSE clients may demand at different points in the production-distribution-marketing system. In addition, a longer time frame than a normal project life may be required to realize benefits. Nonfinancial assistance also requires forging relationships with traditionally overlooked partners in the private sector — such as trade associations, chambers of commerce, large business conglomerates that subcontract MSEs, exporters, and other, often larger, participants that also operate in a given subsector.

NEED TO SPECIALIZE AND TO NETWORK

Institutions wishing to embark on nonfinancial assistance should observe one of the key lessons learned by institutions implementing financial assistance programs: Specialize in a few market-driven activities and do them well. It is highly unlikely that any single organization could provide all of the different kinds of services that the MSE sector could demand. Therefore, each institution must begin with an analysis of its comparative advantage versus that of its competitors, to specialize in some subset of these services based on the institution's mission, structure, and resources. For some subsector interventions, such as developing and introducing new technologies, there should be a minimum number of MSEs able and willing to adopt the new technology in a given subsector to justify the investment in research and technology development or adaptation.

At the same time, institutions seeking to provide nonfinancial assistance should increase their knowledge of what services other organizations can provide that complement their own. If an institution uses the subsector approach, it is likely the institution will likely identify a range of constraints and opportunities. In such cases, institutions that collaborate with outside experts will be able to show greater cost-effectiveness than those that try to maintain sufficient in-house capacity to tackle all problems.

REPLICABILITY

It remains questionable how readily a given organization can replicate a strategy that has worked successfully elsewhere. Institutions that provide subsector-specific assistance are frequently called upon to provide tailored responses to particular situations. Thus, a solution that worked for MSEs in a subsector in one region might not work for MSEs in the same subsector in another context, as competitive forces and marketing channels within the two could differ. An appropriate response in one subsector might call for a technological solution, while another subsector might need regulatory constraints to be resolved. In order to be able to diagnose and respond to a broad range of subsector constraints and opportunities, an organization must have access to staff with appropriate combinations of analytical and technical skills or good connections with other organizations from which such expertise can be obtained.

IMPACT

The ultimate test of any intervention's success is its impact on the individuals and firms in the affected MSE community. Unfortunately, numerous difficulties exist in measuring impact. Often the full flow of benefits from a particular intervention is not realized within the life span of the sponsoring donor project. Additionally, the time lag between implementation of an intervention and realization of its benefits is difficult to assess. A project outcome such as an increase in household income has a multiplier effect that is rarely estimated in impact measurement. Often, benefit streams from a specific intervention cannot be separated from a multitude of other factors, such as other projects or macroeconomic changes. In addition, the extent of impact depends on the effectiveness of linkages created with other firms, on general market performance, and on policy changes. Each of these factors not only can delay the realization of benefits, but also decrease — or amplify — the benefits from the original intervention. For these reasons, donors and institutions are unlikely to be able to point to demonstrable impact for their nonfinancial development dollar within the lifetime of a given project. Even when they employ a longer time horizon, these organizations may find it difficult to measure the returns on any specific intervention, given the nonlinear relationship between dollars invested and dollars returned.

Nonetheless, if institutions want to attract donor resources in support of nonfinancial assistance, they will increasingly be required to demonstrate results. Given that project funds are limited, a particular concern is the sustainability of the flow of benefits and the opportunity cost of resources employed to create benefits. Institutions that want to offer nonfinancial aid will need to develop appropriate indicators to measure the impact and cost-effectiveness of specific assistance. Indicators such as the financial sustainability of an intervention could be used to show how the intervention stands up to the acid test of the market. For example, in the case of the CENTRIMA supply outlet in Ecuador, members of the woodworkers' association put up their own funds to launch the operation, and the continued financial success of the outlet indicates that it is providing valued services for which customers are willing to pay.

SUSTAINABILITY

There are two levels at which to assess the sustainability of nonfinancial measures: sustainability of the benefits that accrue to assisted firms, and sustainability of the support institution. One of the greatest difficulties in measuring the benefits when intervening at the system level is that interventions are no longer firm specific, which makes it difficult to pinpoint exactly which firms are benefiting from the interventions. Once identified, gains must first be measured, then the sustainability of the benefits can be assessed over time, often past the end of the project. Not only is this process of identifying beneficiaries, measuring impact, and assessing sustainability long term in nature, it is also resource intensive.

In terms of the assisting institution itself, sustainability is directly tied to the organization's ability to cover its operating and program expenses. Most organizations delivering nonfinancial assistance to MSEs rely on some level of donor support. Some charge fees for selected services, but these rarely cover more than a portion of total operating costs. Others rely on commercial ventures or delivery of services to other NGOs or large-scale enterprises to cross-subsidize their services to MSEs. Both INSOTEC and TechnoServe have asked MSE clients to contribute a portion of the capital for starting new

ventures as evidence of their commitment. As noted above, TechnoServe asked the groups with whom it formed community enterprises to pay a management fee and 25 percent of the costs of its venture in the palm oil subsector.

Whereas it is now almost common wisdom to expect MSEs to cover the full costs of the efficient delivery of financial services extended to them, it remains to be seen whether that goal is realizable in the nonfinancial arena. Instead, what is increasingly expected is increased program cost-effectiveness, in which clients cover a growing proportion of service delivery costs. Unlike financial services, the benefits of nonfinancial assistance are not immediately tangible to the recipients, perhaps lessening the latter's willingness to demand and pay for them. Furthermore, it is debatable whether nonfinancial interventions, such as education, should be considered investments in the economy, in which case their efficacy would not only be measured in terms of institutional financial self-sufficiency in the short run, but also in terms of economic and social gains that help fulfill national development goals.

CHAPTER SEVEN

WHERE TO NEXT?

Despite its longevity, the field of nonfinancial assistance to MSEs is in a nascent stage. Institutions can take various approaches to offering assistance, yet none that can stand up boldly to the tests of sustainability and proven impact. In order for the field to avoid being discounted by those ready to "throw out the baby with the bath water," three steps are necessary:

1. The market-driven approaches explored in this paper should be taken to the next step — implementation. Although several PVOs and NGOs use the type of analysis and methodology employed in subsector studies, these tools have limited application to date in major USAID MSE development projects.
2. Lessons must be extracted from the array of interventions that other nonfinancial service providers have implemented. These lessons can lead to models that lend themselves to adaptation. Lessons can emerge in policy reform, technology transfer, developing distribution channels, information technology, training and technical assistance, developing marketing linkages, and any other type of intervention deemed useful and that has demonstrated results for MSEs.
3. New measures of performance, cost-effectiveness, and impact must be developed and existing ones refined. With increased emphasis on accountability for the expenditure of scarce development resources, quantifiable ways must be made available to measure the return on investment in any development activity.

The steps above will enable organizations to pursue interventions and offer nonfinancial services that meet MSE clients' needs, that are sustainable and cost-effective, and that perhaps can pass the same stringent tests of suitability as the best programs offering financial assistance to MSEs.

MSEs should continue to seek cost-saving strategies. To that end, subsector analysis can be helpful because it enables us to determine which among a set of possible interventions will be the most cost-effective. What remains is to find ways to identify which of the services MSEs demand can be covered by fees, and which should be considered a social investment.

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