

QUALITY MANAGEMENT STANDARDS



LESSONS from Innovation



MARKET ACCESS
CONTINUOUS IMPROVEMENT
CUSTOMER SATISFACTION
GREATER COMPETITIVENESS
LASTING IMPACT

ABOUT MIF

Created in 1993, the Multilateral Investment Fund (MIF) supports innovative private sector development in Latin America and the Caribbean. In partnership with business organizations, governments and non-governmental organizations (NGOs), MIF provides technical assistance and investments to support micro and small business growth, build worker skills and help markets work better.

These projects are designed to test new development approaches, and help build region-wide networks of partner agencies. Through an active program of evaluating results and sharing lessons learned, MIF seeks to extend the reach of these experiences and promote the identification of effective ways to enhance broadly-based private sector development.

Lessons from Innovation

MIF *seeks to capture, synthesize, and share key lessons learned from its projects for the benefit of those pursuing similar development objectives. The material presented here is drawn from the direct experiences of executing agencies and beneficiaries, as well as from independent evaluations and other reports. All concepts and conclusions were discussed directly with the various implementing agencies to ensure that their experiences and perspectives were accurately presented. To access detailed reports on lessons learned, related information and publications, see: www.iadb.org/mif.*



INVESTING IN QUALITY MANAGEMENT SYSTEMS

Meeting international quality standards has become increasingly important whether in domestic, public sector or export markets. Quality management systems offer companies a practical approach to organizing their productive processes to ensure ongoing adherence to these standards, as well as fostering a culture of continuous improvement.

Beyond compliance with buyer requirements, adoption of quality management systems offers important competitive advantages to firms. Operational costs can be reduced, positive public recognition increased, risk management improved, and participation in supply chains greatly facilitated.

“The ISO 9000 certification is an indispensable calling card in the international environment. Thanks to the certification, we have begun to export to countries that demand the standards and that previously were closed to us. Definitely certification has allowed us to maintain clients and to improve our competitive stance, since being a certified company means we have more value.”

*–Gonzalo Ponce de León,
Engineer, BECAM Company, Uruguay*

The ISO Management System Standards, including the ISO 9000 quality series and the ISO 14000 environmental series, act as a central repository for best practices at the international level, offering particular advantages for businesses that adopt them. They are applicable to all categories of products, and in all sectors and sizes of organizations. Their use is simple and easily understood, and they include ongoing improvement and satisfaction of the client as essential components.

As other emerging market regions are forging ahead in implementing these standards, increasing their use in Latin America and the Caribbean has become essential to maintaining relative competitiveness.

In 1999, the Multilateral Investment Fund (MIF) introduced ISO quality and environmental management standards through a cluster of 12 projects throughout the region. These are building regional quality management capacity, working at both the firm level as well as with the regulatory and institutional frameworks. They focus on ensuring that small firms have access to the benefits that use of quality management techniques and certification can bring.

KEY TERMS

CLUSTERS or *Groups of Projects*, by which projects are identified, developed, implemented and evaluated as a group.

ISO 9000 STANDARDS, QUALITY MANAGEMENT SYSTEMS: a series of standards developed by the International Organization for Standardization, or ISO. They serve many different industries and organizations as a guide to quality products, service, and management.

ISO 14000 STANDARDS, ENVIRONMENTAL MANAGEMENT SYSTEMS: The ISO 14000 series is a family of environmental management standards developed by the ISO. They provide organizations with the tools to assess and control the environmental impact of their activities, products or services.

HAZARD ANALYSIS AND CRITICAL CONTROL POINT, HACCP: a system that helps prevent food contamination by identifying potentially unsafe links in the food processing chain.

CERTIFICATION SYSTEMS: verify an organization's continued compliance with the practices and standards of the quality management system through periodic independent audits.



PROJECTS OF THE ISO CLUSTER



COUNTRY	YEAR APPROVED	PROJECT	EXECUTING AGENCY
Colombia	1999	Introducing Quality and Environmental Management Systems to SMEs	Instituto Colombiano de Normas Técnicas y Certificación (ICONTEC)
México	1999	Training in Environmental Management Systems	Instituto de Protección Ambiental (IPA)
El Salvador	2000	Strengthening Quality Management and Food Safety for SMEs	Comisión Nacional de Ciencia y Tecnología (CONACYT)
Uruguay	2000	Application of ISO Standards	Instituto Uruguayo de Normas Técnicas (UNIT) and Unión de Exportadores del Uruguay
Perú	2000	Mentoring Model Environmental Management	Fundación Perú 2021
Perú	2000	Improving Quality Control in SMEs	Instituto Nacional de Defensa de la Competencia y de la Producción de la Propiedad Intelectual (INDECOPI) and Centro de Desarrollo Industrial (CDI) de la Sociedad Nacional de Industrias (SIN)
Nicaragua	2000	Quality Management and Food Safety Standards	Cámara Nacional de Industrias de Nicaragua (CADIN)
Guatemala	2001	Strengthening Quality Management in the Construction Sector	Cámara Guatemalteca de la Construcción (CGC)
Argentina – Chile y Paraguay	2001	Promotion of Quality Management in SMEs	Fundación CANE
Jamaica	2001	Quality, Environmental and HACCP System Implementation in SMEs	Bureau of Standards Jamaica (BSJ)
Venezuela	2001	Competitiveness through ISO Standards	Fondo para la Normalización y Certificación de la Calidad (FONDONORMA)
Bolivia	2001	Improving SME Competitiveness	Instituto Boliviano de Normalización y Calidad (IBNORCA)

MIF'S APPROACH

To remain competitive, small and medium enterprises (SMEs) must increasingly focus on quality and continuous improvement, and ISO systems offer a practical way to achieve this goal. However, implementing these standards and practices can be a significant challenge. Not only do they require a focused effort over time, but the lack of specialized advisory and certification capacity in the region made compliance a relatively costly commitment.

MIF launched its projects as a group or *project cluster*, introducing international quality and environmental management and food safety systems in 13 different countries. This approach enabled the projects to work together across the region, in a concerted effort to strengthen each aspect of the quality management system.

Projects work with certification agencies, build awareness within the private sector and increase the capacity of local experts. Total investment in the cluster was US\$20 million with local private and public sector agencies covering some 40% of the final cost.

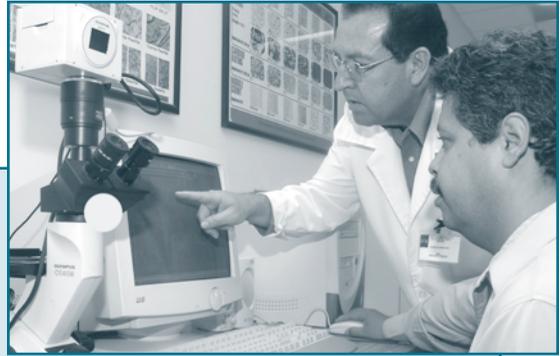
Results have exceeded expectations. A new market for specialized consultants is growing, lowering costs of implementing ISO standards or HACCP systems and improving the quality of services offered to SMEs. The network of partner agencies implementing these projects has been particularly active, functioning as a virtual community with an active interchange of ideas, contributing to the building of a regional model and approach to quality management.

"One of the project's strengths has been the level of confidence generated with respect to the companies and consultants. The high level of communication that has been maintained through conferences and work meetings, is particularly important now that we are beginning implementation of the system."

*–Patricia de Linares,
Project Coordinator, CONACYT, El Salvador*

URUGUAY

BUILDING QUALITY MANAGEMENT EXPERTISE



In early 2000, only 200 businesses in Uruguay had been ISO certified and the application of quality management was seen as being more applicable to large firms. Limited local availability of the kind of technical advice and support needed to implement quality management systems meant that costs were often more than a small or medium-sized firm could support.

In this context, two private-sector organizations – the Uruguayan Institute of Technical Standards (UNIT; www.unit.org.uy) and the Union of Uruguayan Exporters (UEU; www.uruguayexporta.com) – asked MIF to develop a project to demonstrate the benefits of quality management as a way to increase competitiveness for smaller firms, targeting some 200 SMEs throughout the country.

The goal of the project was to double the country's number of certified companies and consolidate a market of specialized quality management consultants. Two executing units were formed, each responsible for a specific area: UNIT helped train local experts in quality management, environmental concerns and standards of occupational safety and health; and UEU facilitated access of companies to the classified specialists to help the project's beneficiary SMEs implement ISO standards.

The project successfully consolidated a market of service providers, who have been incorporated into a Directory of Consultants (DIRCON). There are now more than 300 experts in environmental and quality management providing consulting services and 200 companies are in the process of implementing quality management systems. As a result of building both the supply and demand for this kind of specialized expertise, there is now a self-generating market, providing the UNIT-trained experts with an ongoing demand for their services, and ensuring the local capacity needed to open quality management benefits to additional SMEs.

THE ISO CLUSTER PROCESS

- **Focusing attention:** In 1999, MIF convened a major conference of private and public sector representatives from the region and leading quality management experts, to discuss the potential of quality management for improving competitiveness and to launch the project cluster.
- **Competition for projects:** To broaden interest in the concept and promote transparency, projects for inclusion in the cluster were selected on a competitive basis. After a transparent review and evaluation process, 10 projects were chosen from the final list of 46 proposals. Projects were then approved during 2000/2001 period.
- **Building a concerted approach:** Special mechanisms were needed to ensure that the projects in the cluster supported each other by exchanging information and experience. A cluster coordinator and technical advisor were appointed to monitor project activities and facilitate discussion among the group. Workshops were held for project directors with coordinators and technical experts providing an important forum for the sharing of lessons and best practices.
- **Using new technologies:** A virtual community was established and supported with new tools to share documents, case studies and enable a systematic exchange of information on subjects of common interest. Specialized software was developed to support close tracking of results and identify where any changes needed to be made.
- **Ongoing identification and sharing of lessons:** This is a central feature of the cluster approach. Lessons and useful practices are identified from more advanced projects and through workshops, and then shared with projects that are less advanced in their execution. This facilitates an ongoing development of the model and promotes establishment of a network to continue progress after MIF funding is completed. The experience of the cluster is also made fully accessible to others, contributing to the general knowledge base.

THE INTERVENTION MODEL

COMMITMENT FROM THE PRIVATE SECTOR: Projects were driven by demand and responded to all business sectors where there were requests for implementation of quality management standards.

RAISING AWARENESS: In order to sensitize businesses, consultants, and the private and public sectors, an awareness campaign was carried out on the importance of standards and the objectives of the projects.

BUILDING LOCAL CAPACITY: Training experts was a central feature of projects. In the majority of cases, there were no local consultants for training or implementation of quality management and environmental systems. In some countries, a certain level of training existed within export companies or companies affiliated with multinationals that imposed implementation of systems from their headquarter offices. However, this was not available to other firms.

A FOCUS ON IMPLEMENTATION AND CERTIFICATION: This is the defining element for the cluster of MIF projects, since competitiveness at the level of businesses occurs once the systems are implemented and certified.

PROJECTS WERE PART OF A GROUP: A cluster approach was used to help generate a cross-regional quality management network to build a mechanism for ongoing learning and development of capacity in the region. The design included a cluster coordinator and a technical expert to facilitate the sharing of experiences, materials, and explore joint actions. Projects also benefited from workshops, new mechanisms to exchange knowledge, and an active virtual community.

MEASUREMENT OF RESULTS: Special instruments were designed to measure the impact that implementing management systems had on SMEs. These allow a comparison to benchmark results between same-sector companies within a country or with companies in other countries participating in the cluster.

ADDING TO THE KNOWLEDGE BASE: Projects emphasized evaluation to identify advantages and benefits of quality standards and their impacts on businesses. Best practices and lessons learned are then broadly disseminated.

QUALITY MANAGEMENT SYSTEMS: THE INTERVENTION MODEL



"Implementing quality standards has really paid off for us. It allows managers to move beyond 'putting out fires,' freeing up time to focus on strategic and competitive planning and product development."

—Luis Huizi, Engineer, Conindustria, Venezuela



MEXICO

PRIVATE/PUBLIC COOPERATION

The Environmental Administration Project was an important pilot for a private/public sector approach that is now being considered for replication at a national level. Implemented by the Institute for Environmental Protection of Nuevo Leon (Instituto de Protección Ambiental, IPA), the project introduced the use of environmental management systems in the state of Nuevo Leon.

The project earned the recognition by the federal environmental authority, (Procuraduría Federal de Protección Ambiental, PROFEPA) and an agreement was reached in which environmental management systems implemented under the project were accepted as meeting regulatory requirements. IPA has been asked to lead similar project implementation at the national level.

The pilot not only increased the body of professionals and technicians trained in the implementation of environmental management systems, but utilized an innovative approach to reach SMEs, whereby the supply chain became the central mechanism to implant environmental management systems.

The project received the State Ecology Award in 2002 for advances in SME environmental achievements, and in August 2003, an agreement between the Environmental and Natural Resources Secretariat, PROFEPA, IPA, and the Chamber of Transformation Industry of Nuevo León was signed to recognize and implement the strategy at a national level.

KEY FACTORS AND LESSONS LEARNED

Financial contribution from the companies:

Financial contribution is a critical element in obtaining the commitment by upper management and employers to ISO implementation, and contributes to sustainability.

Certification leads to sustainability:

Systems that are implemented are fragile if they are not audited and certified as successfully launched through an independent certification process.

The cluster approach has benefits:

The most recently approved projects have been able to apply the lessons learned by the more advanced projects. Economies of scale have been realized by the sharing of documents and information materials, and implementation has been facilitated by the sharing of experience leading to speedier project execution.

Positioning the executing agency as an intermediary

between the demand and supply has helped create a market for service providers that had previously been undeveloped or nonexistent, and has contributed to the delivery of services at both a competitive price and of international quality.

Separate but coordinated action by certification and business groups:

One of the mechanisms of execution that has functioned efficiently is to have two specialized executing units in the same country: a certification body to address awareness raising and training; and a business association to articulate demand and supply of specialized assistance during the implementation of the ISO systems.

Quality management systems are mutually reinforcing:

The ISO 9000 standards are seen by business managers as an incentive to use other complementary systems, such as ISO 14000 in later phases.

Reaching SMEs can be done directly or through productive chains:

The two strategies that have defined the executing units – either in direct demand by SMEs to implement ISO, or the productive chains tying SMEs to large companies that require their providers use quality systems – have demonstrated their effectiveness and both can be used in different phases of the project cycle.

Projects are reaching smaller firms:

The firms in the cluster implementing ISO are primarily small enterprises– 37% have less than 15 employees and 39% have 16-51 employees. Nearly 50% are in services and 25% are in manufacturing. These firms are primarily suppliers to other firms in their own countries and nearly half of the firms make more than 75% of their sales to other firms in their own countries.

COLOMBIA

SUSTAINABILITY THROUGH INTER-INSTITUTIONAL AGREEMENTS

In December 1999, MIF approved a project with the Colombian Institute of Technical Standards and Certification (ICONTEC) as executing agency. The project adopted the commercial name "Quality and Environmental Management" (CYGA). That year, the country had nearly 500 companies certified in ISO systems.



Three years into the implementation of the program and as a result of the awareness and training campaigns, the number of certified companies in the country has increased fourfold.

A significant part of these results and the sustainable growth of the services offered by the project are due to inter-institutional agreements signed by ICONTEC-CYGA. The more than 30 inter-institutional agreements they have established are achieving a greater leveraging of resources, contributing to the

sustainability of the program and supporting the development of local, regional, and national training for the National Quality System and the National Competitiveness Program in Colombia.

Among these are the agreements signed with the export agency PROEXPORT, the national training service SENA, various business associations, and other private sector and state-owned organizations in over 25 Colombian cities.

The local, municipal and sectoral agreements have raised awareness of the potential of management under quality systems such as ISO 9000 and environmental systems such as ISO 14000, as well as the search for more efficient ways to incorporate these systems in the exporting chain.

A DRIVE FOR CHANGE

Quality management systems can play an important role in helping firms build market share and improve profitability. MIF projects have extended this benefit to small and medium-sized firms, demonstrating that these systems are a highly cost-effective way to rationalize productive processes, improve the quality of products and services, and thereby open new market opportunities.

SMEs in the region tended to have limited awareness of the potential of quality management systems. Developing a self-sustaining quality management capability in the various countries of the region called for building specialized consulting services, raising interest to stimulate demand and creating certification capacity. The strategy of the projects was to address all of these aspects in a multi-faceted approach. This has resulted in the creation of a viable market in each country, with the capacity to grow and extend to meet the needs of SMEs across the region. Participating companies have shown cost savings, better access to markets, strengthened internal systems and greater satisfaction from clients.

More than 40,000 SMEs have become aware of the importance of standards and more than 30,000 people have been trained, many of whom are now offering technical assistance services to the SMEs that participate in the implementation of standards supported by the projects. As most of the projects move into the next phase, the fact that over 6,000 companies have expressed formal interest in implementing ISO standards augurs well for the future of quality management in the region.

Designing and executing these projects as a group has fostered the establishment of a regional network of the agencies involved in advancing the use of quality management. This network is actively exchanging knowledge and information, reducing the learning period for new initiatives and enabling an ongoing sharing of experience.

For further information on the MIF's work in this and other areas, please visit:

www.iadb.org/mif.



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