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EXPERT GROUP MEETING ON CLUSTER AND NETWORK DEVELOPMENT WITH SPECIAL EMPHASIS ON MONITORING AND EVALUATION ISSUES

Report

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, October 2003

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First published 2003

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SECTION I

INTRODUCTION

Introduction

The UNIDO Cluster and Network Development Programme

UNIDO has been implementing technical cooperation projects based on a cluster and network development (CND) approach since the mid 1990s.

The CND approach is built on three assumptions:

1. that clustering and networking among enterprises promotes enterprise competitiveness,
2. that public policy can help to facilitate clustering and networking; and
3. that support programmes targeting groups of enterprises are more cost-efficient and cost-effective than those targeting individual enterprises.

UNIDO has adopted this approach as one of its strategies for contributing to the development of small and medium enterprises in developing countries, as a means of promoting sustainable and equitable growth.

Encouraging results of, and increased demand for, CND projects from within developing countries have led to the establishment of a comprehensive international CND programme. This UNIDO programme includes[1]:

- project-level activities;
- the development of methodologies to guide project implementation;
- training programmes for CND development agents; and
- action-oriented research.

UNIDO is currently designing/implementing CND projects in Colombia Ecuador, Egypt, India, Morocco, Nicaragua, Nigeria, Pakistan, Senegal, Thailand, Tunisia, Zimbabwe.

[1] See UNIDO publications for more information on this subject in http://www.unido.org/en/doc/4297.

Importance of monitoring and evaluation

Projects implemented to date have adopted monitoring and evaluation (M&E) systems and several have undertaken evaluations, both internal (by the project team and project managers) and external (with external consultants recruited by the donors or other stakeholders). In the light of the differing types of information generated by the various M&E methodologies used, it has been decided that there is a need for the adoption of a more formal, rigorous and standardized methodology for the assessment of the performance and impact of CND projects. The design and implementation of evaluation instruments able to provide objective and relevant results is an important priority of most donors and development agencies. In order to facilitate this, the Committee of Donor Agencies for Small Enterprise Development has set up a Working Group with the task of establishing common M&E guidelines.

The UNIDO CND programme shares this concern and, consequently, has included in its workplan the development of guidelines to:

- measure the efficiency and effectiveness of the various inputs;
- ascertain the causal links between activities and their outputs;
- evaluate overall project performance; and
- assess project impact, that is, success in the achievement of the stated development objective.

Programme of the Expert Group Meeting

The Expert Group Meeting (EGM), held in Delhi from 9 - 14 December 2002, was the first step towards the development of these UNIDO guidelines. The objectives of the meeting were:

1. to exchange information about project implementation and M&E methodologies across projects;
2. to compare these methodologies and to generate a common M&E framework with a view to increasing rigor and compatibility; and
3. to compare experiences, share lessons learned and promote mutual learning among project managers.

The meeting brought together five project teams (from India, Nicaragua, Nigeria, Senegal and Zimbabwe). The workshop programme included:

- project presentations
- group work;
- visits to clusters; and
- plenary discussions.

This report describes the outcome of the EGM. The project case studies (based on the presentation made by each team) are presented in section II. Lessons learned through the sharing of experiences are described in section III. The outline of the common M&E framework that emerged is presented in section IV.

SECTION II

PROJECT CASE STUDIES

INDIA
Cluster Development Programmes

Project basic facts

Starting date: January 1997

Donor

Italian Government (approximately US $1 million for first project phase and US $1.2 million for the second phase).

Swiss Agency for Development and Cooperation (approximately US $1.3 million for the second project phase).

Objectives

- to strengthen the competitiveness of selected SME clusters by enhancing collective efficiency and cooperation (networking);
- to develop and disseminate a methodology for cluster development suited to Indian conditions;
- to promote a cluster development movement in India; and
- to enhance the contribution of cluster development to the development objective of poverty-alleviation.

Organizational set-up

National Counterpart: Development Commissioner, Ministry of Small Scale Industries, Government of India.

One Cluster Development Focal Point office in New Delhi (four national officers and administrative support staff) with five national experts recruited as Cluster Development Agents (CDAs) in the five clusters currently receiving direct assistance (in seven clusters, projects have been completed). Two more national experts are currently recruited as Technical Advisors (TAs) for the seven Indian organizations currently assisted.

A team of international experts.

A Steering Committee with members from public institutions currently involved in cluster development.

Strategy

The Programme seeks to develop sustainable capacity at both local and national levels to promote SME networking and cluster development through the following strategy:

1. assessment of the competitiveness and internal organization of SME clusters (including internal strengths and weaknesses, opportunities and threats presented by the global economy, social capital endowments and support institutions);
2. assistance to actors within the clusters (e.g. suppliers of raw materials & machinery, buyers, testing laboratories and research agencies, industrial associations, training institutions, local government and financial institutions) in developing a common vision of what they can achieve in national and international markets;
3. building up (through training, workshops and study tours), the capacity of cluster actors to implement such a vision; and
4. providing advisory services at the policy level to ensure implementation of cluster

development policies by partner institutions.[2]

In the implementation of this strategy, the Programme actively cooperates with several public and private SME support institutions in addition to its direct partners.[3]

Results

The following outcomes have been achieved since January 1997:

- seven clusters have been assisted on a pilot basis under the framework of project first phase, namely Jaipur (textile handblock printing), Pune (food processing), Tirupur (cotton hosiery) and Ludhiana (knitwear), Ahmedabad (drugs & pharmaceuticals), Ambur (leather tannery & shoes), and Bangalore (machine tools). As a result of this project, seven institutions (including export consortia, common service centres and SME support institutions and associations) have been established or revitalized. Approximately 1,200 firms have benefited from the programme activities;
- since July 2002 under the framework of project US/IND/01/193, three more clusters are being assisted namely Bellary (jeans), Kota (knitwear), and Jallundhar (sports goods);
- a comprehensive data-bank on 350 SME clusters in India has been made available to policy-makers through the web-portal of the Ministry of Small-Scale Industries. A list of 1,657 artisanal clusters has also been drawn up;
- more than 600 policy makers, development agents and academics have been sensitised to the cluster development approach through three national workshops (Delhi in 1996, Mysore in 1998 and Surajkund in 1999), four state-level workshops, training modules and various other seminars;
- seven state governments[4] have adopted the cluster development model within the framework of their industrial policies and have started pilot cluster interventions with UNIDO support;
- an international Joint Learning Workshop for CND practitioners was organized in New Delhi in December 2002. Several study tours have been organized to assisted SME clusters for practitioners from Pakistan, Thailand, and Bangladesh; and
- methodologies, tools and training modules have been prepared to assist the government, public institutions and associations to implement cluster development initiatives. A 12-week programme to prepare cluster development agents (CDA) was developed in collaboration with the Entrepreneurship Development Institute of India (EDII), Ahmedabad and run in three separate editions. A manual for trainees and another for trainers were prepared and distributed in the three CDA training programmes run under the framework of the Programme. Over 80 CDAs have been trained to date, the great majority of whom are presently operating as cluster development agents in one or more Indian clusters.

[2] such as: Development Commissioner (Ministry of Small Scale Industries), State Bank of India (SBI), Textile Committee (Ministry of Textiles), Government of Madhya Pradesh, Government of Andhra Pradesh, Government of Gujarat.

[3] These include the Small Industries Development Bank of India (SIDBI), National Small Industries Corporation Ltd., National Bank for Agricultural and Rural Development, Khadi & Village Industries Commission, Federation of Indian Chambers of Commerce and Industry, Confederation of Indian Industry.

[4] Andhra Pradesh, Madhya Pradesh, Karnataka, Rajasthan, Tamil Nadu, Gujarat, and Chattisgarh.

Inputs and success factors

To achieve the above results, the Cluster Focal Point received the following inputs:

- exposure to methodology on network development, building upon the key findings from other UNIDO projects in the field of SME networking, especially from Latin America;
- exposure to best practices in the field of cluster development: research studies on the emergence of cooperative behaviour in Italian SME clusters, and on service centres and consortia; study tours to Italian SME clusters; guidelines on cluster diagnostic methodology; and
- exchange of experience with other practitioners in the field of SME cluster/network development through a dedicated UNIDO website and "Joint Learning Workshops".

While it is just about impossible to single out all the elements that lie at the root of the success of the programme, the following points stand out as particularly relevant (though not necessarily in the order presented):

- a highly motivated and internally very cohesive implementation team;
- India is a large country where SME clusters are historically well-known and where SMEs can count on significant (though not always well-coordinated) support resources and political will;
- a supportive official counterpart, which gradually developed its own vision of SME cluster development;
- a strong emphasis on awareness-raising for cluster stakeholders;
- an implementation strategy that carefully balances long-term objectives (trust-building, institutional networking, local governance) and short-term objectives (visible impact at the enterprise level, conflict management); and
- continuous investment in identification and dissemination of information on best practice through a variety of media (internet, papers, presentations in international conferences, video, etc.).

Lessons learned

1. The process of cluster development requires an adequate amount of time for internal dynamics within the cluster to change (3 to 5 years).
2. At the level of enterprise development, a key task for the CDA is to identify the appropriate vehicles for cooperation: loosely-coordinated, ad-hoc, self-help groups; single-initiative networks; joint ventures; consortia; and associations.
3. The dissemination of the cluster development model to official counterparts (e.g. state governments, national SME support agencies) has emerged as the only credible strategy for widespread adoption of cluster development in a country the size of India.
4. This dissemination strategy requires a three-pronged approach aimed at sensitising top policy- makers, transferring competence to the apex implementation level, and ensuring empowerment and flexibility at the grass-roots. Synchronization of all three levels is of paramount importance.
5. The core competences of cluster development practitioners are in the fields of cluster diagnostics, support in the formulation of cluster action plans, trust-building, institutional networking and impact assessment. It has also proved helpful to have fully sensitised focal points within the programme management office to act both as providers of first-hand information (required to convince local stake-holders) and as referees (to be able to mobilise existing funding schemes and technical assistance).

6. In relatively large programmes where several objectives are tackled simultaneously and where experts are dispersed over large distances, it is of paramount importance that the team of experts: i) ensures proper dissemination of information; ii) continuously elaborates and updates information on best practice; and iii) identifies and disseminates shared priorities and guidelines. Frequent face-to-face meetings, supplemented by internet-based circulars and visits by senior experts, have proved the only sustainable (albeit expensive) solution here.

Work Ahead

- There is a continuous need:
  i) to integrate into the methodology and training modules lessons learned in project implementation; and
  ii) to ensure that these lessons are employed at the field level in future projects.
- Evidence on the value of SME clusters in India should be further disseminated to ensure the build-up of a positive momentum behind the cluster development model. This is likely to require more investment in the development of the existing cluster database.
- The contribution of the cluster development model to poverty-alleviation must be gauged in practice through pilot-level cluster development initiatives.
- A greater number of official counterparts should be drawn into cluster development to promote an enhanced level of long-term commitment and motivation at the top policy level.
- The training capacity of senior cluster experts should be strengthened to meet the mounting demand for cluster development practitioners, both in India and in the South Asia region. This will require training modules that are less specifically "Indian" in nature.
- In view of the broad liberalisation process currently underway in India, it may be of strategic value to identify official partners for implementation at the field level (including NGOs, charities and large-scale commercial entities). Where such parnerships prove successful, an appropriate implementation strategy should also be agreed upon.
- The capacity of the programme to provide an adequate assessment of value-chain dynamics in some of the more successful Indian clusters remains limited. Affordable, appropriately-skilled consultants in this very innovative field appear hard to find. The whole area of cluster benchmarking requires further exploration.

NICARAGUA
Development of local production systems, based on SMEs

Project basic facts

Starting Date: 1995, now in its third phase of implementation: May 2002-November 2004

Donor: Austrian Government

Objectives

The project's aim is to contribute to the country's equitable development by increasing the competitiveness of SMEs, through the following:

- foster a shared vision of enterprise development in the regions of Masaya-Meseta de Los Pueblos and Boaco-Chontales and the coordination of the activities of local actors with a view to establishing competitive, integrated, local production system;
- promote horizontal and vertical enterprise-to-enterprise links in the above-mentioned localities and improve access to business development services (BDS);
- help strengthen inter-institutional coordination at the national level in the implementation of SME development policies and programmes.

Organisational set-up

National counterpart: Nicaraguan Institute for the Promotion of Small and Medium-sized Enterprises (INPYME).

Project team: seven Nicaraguan professionals of diverse backgrounds, located in the two selected regions with a central National Coordination office in the capital, Managua, supported by 2 Peace Corps volunteers, plus a team of part-time international advisors.

A Steering Committee with members from private and public sector.

Strategy

Nicaragua is the second poorest country in Latin America and it ranks 5th in the world in terms of international aid received.[5] Some 93% of its enterprises are classified as micro, small or medium-scale.[6]

At the outset of the project, the local business environment was characterized by very weak institutions, low levels of trust and collaboration between institutions and enterprises and a generally passive attitude on the part of enterprises. This latter attitude was exacerbated by the common practice among aid agencies generally to provide grants rather than promote market-led service provision. In this environment, project strategy focused, during its initial phase (1995-1997), on: i) a concentrated effort to stimulate self-help activities among the enterprises in order to promote entrepreneurship and leadership; and ii) joint initiatives among SMEs (also called ***horizontal networks***) to facilitate the development of economies of scale, better products and increased efficiency in the organization of production.

During the second phase (1998-2002), in order to increase impact and promote sustainability, the project started training local

[5] The Economist, Pocket World in Figures, 2002 Edition.

[6] MIFIC (Ministerio de Fomento, Industria y Comercio).

professionals (mainly belonging to local institutions) as network brokers and promoting the development of ***vertical networks***.[7]

The ***local dimension*** also assumed increasing importance during this phase because of the need for greater coordination with other local business actors (suppliers of inputs and services, business associations) and institutions (local authorities, service providers, schools, etc.).

This natural evolution towards increasingly complex integration at the local level is being fostered and consolidated during the third phase (2002-2004). The aim is to support a truly cluster-based production system, with sustainable relations developing among the SMEs themselves and between the SMEs and local institutions. It is anticipated that such linkages will develop at the following levels:

- within integrated networks;
- between BDS providers and brokers;
- between large, medium and small-scale enterprises;
- between the clusters and local governments; and
- between the local systems and the national support institutions .

[7] Vertical networks or supply networks refers to the promotion of closer commercial relationships between larger enterprises (industrial buyers) and SME (suppliers).

Results

In terms of promoting self-help efforts, collaboration and social capital development at the regional and national levels:

- the project has succeeded in being a *catalyst for strategic endeavors* at all levels (firm, business association, municipal, national);
- the project has succeeded in promoting project initiatives within *all the different government institutions* concerned with small enterprise development, in terms of both technical interventions and policy formulation, at both the local and national levels; and
- increasing the *participation of all stakeholders* in the design of development activities through efforts to build trust and promote cooperation.

At the level of capacity-building and promoting sustainability:

- *new private sector alliances* and leadership have been stimulated at the local level, resulting in the development of strategies based on the real needs of local businesses: 30 new business networks (incorporating a total of 480 enterprises) have been created and other membership institutions fostered, including, for example, an association in the dairy sector that draws its members from various parts of the Central American region;
- the achievement of widespread awareness of networking models and the development of *three specific methodologies and comprehensive training programmes.* These cover methodologies for the promotion of both horizontal and vertical networks and of local-level development. Nine institutions in the country are currently promoting networking/clustering strategies, with more than 30 horizontal network brokers. A project has been started to transfer the capacity to provide training in these methodologies to a local university;
- further training of network brokers has been carried out in Guatemala, El Salvador and Senegal in response to requests from these countries; and
- cluster development is now under consideration as a potential component of the *national development strategy* and the project is actively working with government authorities in the design of this strategy and its implementation.

In the area of service-provision based on market development:

- the project has systematically promoted

the *payment of fees for services* by enterprises and institutions: US $30,000 has been generated in sales of training and consulting services by institutions implementing networking strategies and enterprises in vertical networks.

In terms of enhancing the capacity of participating enterprises:

- joint initiatives have been launched to enable participating enterprises to enhance their access to new markets, to reduce their production and marketing costs, to modernize their production techniques, to introduce environmentally-friendly production processes and to have greater influence in national and regional policy formulation. Other achievements include:

  ➢ credit of more than US $ 100,000 obtained by enterprises to implement joint actions ; and

  ➢ more than US $300,000 of new investment performed by participating enterprises.

What made the difference?

1. A *project team* with diverse professional backgrounds sharing a common vision of SME development and capable of catalysing resources and actions by local actors.
2. Strong investment in *training and motivating* the project team.
3. Technical assistance *principles, tools and methodologies* which makes implementation smoother and more efficient and has permitted the transfer of know-how to other institutions to promote sustainability.
4. The promotion of a *culture of self-help* among client entrepreneurs.
5. The *establishment of trust* between the various stakeholders as the base for joint initiatives and *collaboration between actors* as a way to achieve concrete economic gains and not just as a lobbying mechanism.

Lessons learned and future challenges

- The promotion of clusters and networks is based on *facilitating self-help initiatives* in which the principal players are private enterprises and the organizations that support them. Project teams should not try to replace or substitute for these actors. The culture of cooperation must develop at its own pace within a participative process in which the actors themselves recognize the need for change.
- The degree of *decentralization, empowerment and capacity within local government* is a crucial element in cluster development. A highly centralized government structure is likely to inhibit the development of locally-based alliances and is more likely to require the establishment of alliances with the centralized institutions if local strategies are to be successfully implemented.
- Implementation of the cluster development process needs to take into account the particular characteristics of each geographic area as the basis for the activities to be undertaken. Even in clusters with similar characteristics, there is no unique path to development. The main factor underlying the selection of strategy is *the determination and vision of local actors.*
- For a market-led culture in service-provision to emerge, it is essential that *coordination mechanisms with other donors* be developed to ensure consistency of approach.

SENEGAL
Support to the small firms of Senegal

Project Basic Facts

Starting Date: October 2001

Donor: Austrian Government

Budget: US $706,250

Objectives:

- Organization of **business networks** and implementation of joint business initiatives;
- capacity-building of **professional associations** and development of their services; and
- promotion of the interests of SMEs within the framework of the current **policy reforms.**

Organizational set-up:

Counterpart:

Ministry of Industry and Handicraft and SODIDA (Soci t de gestion du domaine industriel de DAKAR, a semi-public company, operating as the national platform for SME support projects).

Local team:

- 1 project manager,
- 1 business advisor and support staff (located at SODIDA),
- 3 network brokers located in Dakar, Thi s and Saint Louis.

A part-time international advisor.

Steering committee, including representatives of public and private sectors.

Strategy

The project targets small enterprises (about 3-30 employees) in 5 sectors: metal-mechanics, agro-industry, wood products, leather products and garments.

The project strategy aims at strengthening cooperation between stakeholders and social capital formation within small enterprises, following a bottom-up methodology and operating at three levels (as described below).

Results envisaged are as follows:

1. At the micro-economic level,

   ➢ 20 new business networks, incorporating more than 120 businesses.

   ➢ Implementation of the strategic projects by these networks, resulting in the launch of more than 25 cooperative initiatives between enterprises.

   ➢ The training of specialist network brokers to promote the dissemination of the model.

2. At the meso-economic level,

   ➢ BDS provision, co-financed by the project, to develop eight professional associations (including the training of association leaders) and the design of six new services offered to the members of these organizations.

3. At the policy level,

   ➢ Study into the specific concerns of small enterprises and the organization of events (conferences, seminars, thematic workshops), supported by expertise and an information campaign. The objective is to increase the capacity of small firms to dialogue with the state and to promote reforms of the business environment to make it more conducive to SME development.

Results

After one year of project activity, 16 business networks encompassing the three geographic locations and the five designated sectors, have been established and have received training. Demand for assistance remains strong and 15 further groups are ready to enter into the same process with the project.

Seven of the networks to have received assistance to date are now entirely self-managing; five are undertaking their pilot project activity (three in common purchasing, one undertaking joint promotional activities, one upgrading production); and four have undertaken feasibility studies of their strategic programmes with the assistance of external consultants co-financed by the project. Moreover, the project has attracted the attention of several organizations interested in the possibility of providing financial support to the initiatives.

The methodological tools for assisting the business networks have been systematized and are continually improved on the basis of best practices learned. This serves not only to improve the effectiveness of the project, but also to promote replication and transfer of the model to other local SME support organizations

Three associations (in the garments, mechanics and fruit and vegetable sectors) are receiving support from the project in developing their strategic plans, with support from external consultants. These plans will underlie the activities, partnerships and organizational relationships that will emerge under the project. These associations have a national coverage, but their strategies are defined on a regional basis, in a manner very congruent with the cluster approach.

Activities relating to the creation of a dialogue between small enterprises have not yet been implemented. However, the project has already negotiated partnerships with a range of national-level bodies prepared to provide financial or non-financial assistance to small enterprises.

Success factors

Good local knowledge on the part of the project team permitted the rapid identification of potential candidate networks through direct contacts with: the enterprises, local leaders, associations and already-existing groups.

The project team benefited from the outset from a transfer of knowledge from the project in Nicaragua on: facilitating business networks, reinforced by training of brokers in managing meetings and resolving conflict; strategic planning; individual and collective diagnostics; the design of business plans, leadership, etc.

This transfer permitted a process of learning by doing on the ground, which was especially useful for project officers who already had solid experience in facilitation of group dynamics.

This participatory approach ensures strong involvement on the part of trained enterprises. This enables them to let go of the dependency mentality created by some previous aid projects and to become more self-sufficient and commercial in their outlook, thus facilitating cooperation among them.

A real willingness exists among the client small enterprises to organize themselves and cooperate: for example, there already exists in four out of the five designated sectors a regional or national producer association. However, none of these organizations had a well-elaborated strategic plan, thus their interest in support from the project.

Lessons learned

Project experience suggests that an important part of the group-building process for business networks is the implementation of a pilot project, using just their own resources, without project support.

The project came to understand that its effectiveness is in large part dependent on the rigour with which it selects groups and networks to support.

This selection needs to be made using precise criteria.

Monitoring tools (to measure, for example, increasing maturity of networks) are seen as indispensable, especially for structuring activities whose results are relatively qualitative and intangible in nature.

In numerous cases, active brokering seems to be an excellent way of breathing life back into networks or associations that have become discouraged by previous set-backs and failures.

Within the overall logic of the project (building from the bottom up the social capital of small enterprise business networks), it makes sense to support business networks existing within associations.

Next steps

- Training of network brokers in other small enterprise support organizations, using the tools and methods developed by the project.
- Encouraging public authorities to integrate the cluster development approach into their small enterprise support programmes.
- Action needs to be taken to implement component 3 of the project: the creation of a dialogue between the small enterprises through which they can voice their concerns and needs in a concrete fashion to national policy-makers.

ZIMBABWE
Development of the Small-scale Industry Sector Through Clustering and Networking

Project basic facts

Starting Date: September 2001 (Phase II)

Donor: Austrian Government

Total: U$594,000; Phase I: US $ 91,248 (Preparatory Phase); Phase II – US $ 502,752

Objectives:

- enhance the operating environment of SMEs, promoting changes in policies and regulations;
- increase competitiveness of SMEs by creating and strengthening viable SMEs networks; and
- strengthen the capacity of SMEs and networks through accessible, appropriate and complementary training, advisory and information services.

Organizational set-up

Counterpart: Ministry of Industry and International Trade of Zimbabwe

A National Project Coordinator and a technical team organized by the Organisation for Socio-Economic Research and Consultancy Services (OSERCS) together with the Institute of Development Studies (IDS) of the University of Zimbabwe. The technical team includes 1 Team Leader, 1 Senior Technical Adviser and 6 network brokers (one with a business background, the other with an engineering background) operating in the 3 project locations: Harare, Bulawayo and Mutare.

A part-time international advisor.

A project Steering Committee with members from private and public sectors.

Strategy

SME networks are being organized by the project for the network members to exploit opportunities and address common problems for mutual benefit. The project operates in the urban centres of Harare, Bulawayo and Mutare where there is a broad base of SMEs. It focuses on three sub-sectors: metal fabrication, woodworking and garments. The project provides access to training and advisory services to strengthen the internal operations of the networks. These services are provided by the BDS project partners.

The preparatory phase demonstrated that while there already existed support institutions with varying capacities to provide services for SMEs, their needs were not being sufficiently and effectively addressed. The project stimulates demand for BDS services among the SMEs through the networks; and enhances the capacity of BDS providers to address identified needs in an effective and sustainable manner. This contributes to the development of a BDS market.

As SME networks are created and/or strengthened, SME sectoral associations will find it easier to expand linkages, enhance their collective efficiency and become more effective in their advocacy activities.

In order to promote a more conducive operating environment for SMEs, a study is being initiated to identify direct regulatory constraints as well as laws that could be changed or implemented in a more fa-

vourable way for SMEs. The capacity of local authorities to make the required changes and to monitor their implementation will be strengthened.

Results

1. As of 30 December 2002, 16 networks have been formed and all have adopted articles of association. A further 12 networks are in the process of being organized. All 16 of the existing networks have received training in team-building and awareness of strategic issues relating to their businesses. The brokers are currently helping the networks to identify common projects. One network has received funding from a donor agency to purchase shared equipment.
2. The project is currently working with 18 BDS providers which have received capacity-building from the project in providing training in the creation and strengthening of networks, quality management and the provision of industrial extension services.
3. Four BDS providers are using the training materials on group-strengthening for their own client groups. Two of these are also using the training materials in team-building training programmes for the workers and staff of medium-scale enterprises.
4. Six BDS providers are considering offering quality management training to the networks. Following on from the training programmes conducted by the project, the BDS providers are now developing tailor-made business and technical training programmes for the SMEs (a change from their normal practice of offering pre-packaged training programmes).
5. The networks and entrepreneurs have started paying for the services of BDS providers. The Murahwa Green Market Network of metal-fabricating entrepreneurs, for example, paid ZWD 5,000 to a BDS provider (Women In Business) for the preparation of a project proposal to solicit funds from the Ministry of Youth for a raw material procurement project. Women in Business is using the guidelines provided by the project to develop this proposal. In Bulawayo, members of two associations have paid for an S/IYB training course for two BDS providers. Fees paid ranged from ZWD 1,500 to ZIWD 6,900 per trainee.

Project Inputs

The network brokers and the BDS partners were given the following training:

- Training of Trainers – Presentation and Training Skills – 1 week - Topics: training defined, training cycle, training needs analysis, setting training objectives; designing a training course, adult learning principles, adult training techniques and practice teaching.
- Training on organizing and strengthening networks – 1 week - Topics: definition of networks and clusters; phases of network development; group strengthening – vision/mission formulation, effective communication, conflict-resolution, problem-solving techniques, effective group leadership, and how to handle group meetings; and group project development;
- Quality management and industrial extension – 3 weeks - Topics: industrial extension processes, total quality management, quality management process, problem-solving cycle, error proofing, flow chart, process flow chart, routing diagram, machine utilization, technology audit, 5s and plant design, production planning and materials, work-force organization, lean production, maintenance, competitive marketing, Pareto analysis, estimating working capital requirements, integrated cashbook, product costing and financial analysis. The training programme was complemented with in-plant study for the participants to practice the tools learned during the course.

An international expert conducted the first two training programmes. Two international experts and a national consultant conducted the last training programme.

BDS partners selected to attend the above training programmes included non-government organizations, private consultants and technical training institutions.

Lessons learned

- For a project of short duration, it is better to work with already existing networks or associations of entrepreneurs rather than starting with a fresh group. Organizational inputs will take less time and the pace of development will be faster.
- For greater effectiveness of project staff, it is better to organize/strengthen networks that are physically contiguous to each other. Thus, an area where there is a concentration of entrepreneurs should be targeted first.
- Entrepreneurs are willing to pay for a service that they believe they need.
- If the project is seeking to develop BDS markets, there should be a clear demarcation between where the work of the network broker stops and where the BDS providers should come in.

Work Ahead

- There is a need to transfer capacity from the project to BDS providers to enable them to deliver a package of services and training to the networks and individual SMEs.
- As a way of helping to consolidate the networks, they should be helped to plan their group projects and to follow-through on vertical network promotion activities.

SECTION III

LEARNING FROM PROJECTS

Learning from projects

Considerations on overall experience of the UNIDO CND projects

1. The main scope of CND projects is the establishment of a new culture of cooperation both among enterprises and between enterprises and other actors in their institutional environment. The starting point is to help enterprises realize the value of cooperation by facilitating joint-action projects, whose success can be used to further promote a philosophy of cooperation. The challenge is to ensure that this approach contributes to the development goal of increasing SME competitiveness and alleviating poverty.
2. CND is a long-term process. Due to its characteristics of promoting participation, empowerment, trust and collective action, the cluster development process needs time to take off and reap all potential benefits. Those benefits, on the other hand, can be far-reaching and long-term. In other words, CND programmes must be planned and implemented with a long-term vision and not just for quick returns. Short-term activities to generate quick results can be a good way to stimulate interest and participation but should not become the main scope of CND programmes.
3. The success of UNIDO's efforts in this field should be measured in terms of
   - the number of entrepreneurs entering into cooperative efforts with their fellow entrepreneurs;
   - the impact of this enhanced cooperation on their businesses and the contribution this makes to the local economy;
   - the positive changes in the institutional and business environment; and
   - in terms of the changes that it helps bring about (an impact that is likely to be especially long-term in nature).

Methodological issues

1. As vehicles for cooperation, there is a general inclination for cluster development projects to create "hard" networks (that is, formalized networks). Experience shows that this type of network offers an effective learning opportunity in the sense that, even if they do not survive in the long term, participating entrepreneurs acquire a more favourable attitude towards cooperation and will be able to recreate networks in other circumstances.

   In some cases, however, enterprises may need to participate only in "soft" networks – where alliances are of limited duration and focused on achieving limited, time-bound objectives. In fact, loosely-coordinated, ad-hoc, self-help groups, single-initiative networks, joint ventures, consortia and associations, are all different alternatives vehicles for cooperation (each with different needs and capabilities), which should be chosen depending on: i) the task at hand; ii) the investment capacity of the potential participants; iii) the extent of competition among the potential participants; and iv) the expected rate of return from the joint ventures.
2. CND approaches should be seen not as being distinct, but as complementary and occasionally sequential. In some projects

the cluster aspect prevails and the promotion of the networks is pursued as part of the cluster development strategy. In other projects, activities start with the development of horizontal or vertical networks and then, as networking intensifies, the territorial or cluster dimension starts to emerge with the involvement of BDS, providers, association, governmental institutions.

3. The role of the cluster development agent (CDA, also referred to as cluster broker) has to be clearly defined in relation to that of the BDS provider. This is particularly true where the supply of BDS is weak or non-existent and has to be stimulated or created. The CDA always needs to try to find an appropriate balance between "hand-holding", in order to ensure that projects advance at a reasonable pace, and depending on local service providers, with the possible consequence of slower progress but greater local ownership and, ultimately, sustainability of the process.
4. The cluster development approach has repeatedly proved an effective complement to the efforts of other SME support initiatives, (including BDS development, credit support, private-public partnerships for infrastructure, vendor development, etc.), enabling them to increase their impact and sustainability. The approach can also contribute, at least in principle, to a whole range of social development measures (including empowerment of women and scheduled castes, environmental protection and improving the responsiveness of local government).
5. The length of intervention of cluster or network development programmes must be sufficient for internal dynamics within the cluster to change. As a general rule, this will not be possible in less than three years. While exit strategies need to be developed, the right time to pull out must be carefully anticipated. This is particularly true in artisanal clusters or in those located in remote areas. In such cases, the time required both for the necessary changes in ways of thinking and operating to take place and for the emergence of a sustainable governance framework for the cluster tends to be longer.
6. The specific objectives and operating mechanisms of business associations working in the context of networks and clusters need to be defined. A methodology for developing business associations as cluster leaders needs to be established.
7. There is a need to promote vertical networking within clusters, using specific tools that foster interactions between different actors in the value chain. Such tools could include: promoting specialization within a cluster; facilitating the development of subcontracting relationships; encouraging enterprises within the cluster to fill existing gaps in the value chain; creating new supply linkages; and providing information on best practice in the areas of cluster-based purchasing, subcontracting and marketing.
8. Monitoring and evaluation tools must be developed that are both sufficiently rigorous and comprehensive to be useful in terms of the information they provide; and sufficiently simple to be easily implemented on the ground. There also needs to be a clear understanding of the need to gather data not just on activities and outputs, but also on project impact.

   A commonly accepted framework for monitoring the performance and impact of networks and cluster development initiatives is needed. This will permit a better assessment of the outcomes of support projects; easier comparisons between them; and a more transparent presentation to donors, counterparts and beneficiaries from the outset.

   This performance and impact measurement framework should allow us to: (i) assess changes in the level of institutional networking and cooperation; (ii) measure economic impact (income and employment gains, etc.); iii) measure impact on poverty alleviation; iv) assess progress in project implementation; and (v) monitor changes over time in terms of the emergence of governance structures of the cluster.

There is a need to monitor the dissemination of information, new skills and working methods to project partners and to measure how much of this is retained over time. Such information needs to be recorded at three levels: among official policy-makers, intermediate organizations and enterprises within the cluster.

Similarities among projects

1. The degree of similarity between the projects described above is remarkably high, in spite of the very different social and cultural environments in which they are being implemented: all of them are promoting increased cooperation among enterprises as a way of improving their individual businesses through cluster- and network-oriented approaches.
2. The scope for mutual learning among projects appears to be largely untapped, largely due to a lack of common channels of communication. It might be useful to experiment with an internet-based communication-channel, though the EGM has made it clear that face-to-face interactions are also of great value.

Differences among projects

1. Differences in approaches are mainly the result of the differing conditions prevailing in each country; the varying levels of development of the different clusters; the extent to which there exist other projects which complement UNIDO's efforts; and the difference in project inputs in each country.
2. The size of enterprises targeted by the different projects varies, depending on whether they are urban- or rural-based and on the impact of national development strategies on the original project design.
3. The scope of interventions varies between projects according to the size of their budgets. While all acknowledge the importance of a healthy BDS market to a cluster's performance, for example, not all are active on this level. Similarly, some but not all are active in creating and/or strengthening business associations, supporting local economic development commissions; and helping to establish mechanisms through which the small enterprise sector can influence government policy.
4. The level of cooperation with and support to BDS providers also varies between projects. There is, similarly, significant variation in terms of how much small client enterprises pay for BDS services. This seems to depend on the availability of BDS providers, their capacity and willingness to work with the networks/clusters; the extent to which targeted enterprises use their services; and also differences in donors' practices.
5. One other interesting variation between projects is that while some have found business associations to be a useful starting point for the subsequent creation of smaller networks, others have first fostered the creation of networks that have later joined together to form business associations.
6. Despite the conceptual distinction made between a "network" approach and a "cluster" approach, it became clear during the course of the meeting that these, in fact, appear to be two different stages in the sequence of project support: all of the projects began by promoting joint action between firms (*network* development) before then turning to facilite the development of local economic development strategies by groups comprised of both private and public sector actors (*cluster* development).

Successes and challenges of the approach

1. The projects have demonstrated that enterprises and other actors in their value chain can cooperate, and that when they do, they can improve the efficiency of their enterprises and of their networks/clusters. In this self-help process, when the networks or clusters prove successful, it is the entrepreneurs themselves who take the credit, with the role of the project being limited to that of facilitator.
2. An important challenge facing the approach is to identify and groom key leaders within the networks and clusters who will keep the facilitation process going, since this will be needed when the CDA or the network broker leaves.
3. Training courses for brokers need to be supported by user-friendly manuals and regular hand-holding.
4. Ensuring the sustainability of the approach also presents a significant challenge, given the limited willingness on the part of the cluster actors to pay for CND services. Capacity-building work with local institutions and business associations needs to be geared towards addressing this issue. Similarly, there is likely to be a need to encourage governments to become involved in helping to fund this "partly public" function of cluster brokering. That is, it is clear that part of the rationale for a cluster intervention is that the benefits introduced by the project will ripple out beyond direct project clients – as cluster dynamics start to function; as networking models are replicated, as the capacity developed by participating enterprises and associations is used to undertake other initiatives beyond the project's objectives; and as advances in certain strategically important sectors, light engineering for example, ripple through in the form of benefits to enterprises in other sectors. The 'public good' nature of these benefits merits careful government attention in spending decisions.

Future of the approach

The EGM arrived at the following recommendations for future work:

1. While it is important to encourage large- and medium-scale entrepreneurs to participate in cluster development initiatives, we need always to bear in mind that the target of our assistance is SMEs including micro enterprises.
2. Where possible, it is preferable to work initially with existing networks, in order to shorten the time needed for team-building and the creation of trust.
3. Projects should refrain from introducing formal systems into networks that want to keep it "soft".
4. It is good to introduce complementary types of BDS interventions that will support the CND approach.
5. Adequate time must be devoted to awareness-building and promoting the basic concepts of CND, remembering that the process is generally slower and costlier than anticipated. Rushing to get short-term results ultimately tends to lead to failure.
6. Enough time needs to be allocated to the project (generally no less than three years) for the culture of cooperation to take hold.
7. Monitoring and evaluation systems should be kept as simple and as well-focused on specific indicators as possible. It may often be preferable to devise systems that are easy for field staff to use than to aim for perfectly designed comprehensive data systems.

SECTION IV

MONITORING AND EVALUATION ISSUES

Monitoring and Evaluation Issues

Introduction

This section is addressed primarily to project staff, especially those involved in the design and implementation of monitoring and evaluation systems. The aim is to provide an introduction to the key concepts and methodologies that are likely to be relevant to measuring progress in CND initiatives.

What is M&E?

Both monitoring and evaluation (M&E) are involved with the gathering of data to measure the work undertaken by a project and to compare this with the targets set out in the project document. Monitoring is geared towards recording project activities on an ongoing basis during the life of the project. Evaluation takes place both during the life of the project and retrospectively, at the end of a project or project phase. It has to do with appraising both the **efficiency** of the project (its success in achieving the targets set within the agreed budget); but also its **effectiveness** (that is, the degree to which project activities have led to the anticipated improvements in key impact indicators – income, employment, empowerment, etc. We will return to this below).

Why do M&E? : different needs of different stakeholders

There is no one reason for undertaking M&E activities. Different stakeholders involved in promoting CND development have different interests, which in turn determine the type and scope of M&E information that are relevant to them. The M&E needs of the key stakeholders are described below:

For **CND project managers**, M&E is a management tool whose primary functions are: i) to keep track of whether the various project activities being implemented are on schedule and in line with the budget; ii) to analyse the degree to which these activities are translating into the anticipated outputs (are vertical and/or horizontal networks developing in the way that had been hoped? are skills and market access improving in the ways that had been anticipated? etc.); and iii) to measure the effect these outputs have on the project's key impact indicators – levels of income, employment, empowerment, etc. M&E systems need to deliver information at each of these three levels to enable project managers to maximise impact, cost-effectiveness and sustainability for their initiatives.

Private sector BDS providers are likely to undertake M&E to monitor customer satisfaction, respond to changes in demand, develop new and better products, manage costs, and establish staff incentives.

Donors need M&E information to ensure accountability in the use of their funds and to decide between different types of approach and project in their funding decisions. Donors often focus on broader social and economic objectives of employment, enterprise competitiveness, and poverty alleviation.

Governments value M&E because it is can provide them with useful information on the relative value of different approaches and models. This, in turn, can feed into the process of policy formulation and the coordination of programmes on the ground.

For project **client enterprises**, participation in M&E exercises can provide an important opportunity for cooperation and trust-building and for having a meaningful input into the design and implementation of initiatives that directly affect their performance.

In the remainder of this section, priority will be given to the M&E needs of CND project managers, recognising that their needs will, to a greater or lesser extend, tend to coincide with or complement the needs of each of the other stakeholders.

What needs to be measured?

The first and most important step in the design of an M&E system comes at the stage of project design. It is here that the key stakeholders need to reach a common vision about:

1. what it is they want to achieve;
2. what things the project needs to do for this to happen;
3. how they would know if they had succeeded in their goals; andm
4. how they intend to measure progress on these fronts

The log-frame as a tool for M&E

Within the context of the logical framework (log-frame) planning tool, these four questions relate to:

1. development objective and immediate objective;
2. outputs and activities;
3. indicators; and
4. sources of verification.

So, using the vocabulary of the log-frame, M&E can be described very simply as the process of measuring project achievements against the various targets set for each indicator at the four levels of the log-frame (activities, outputs, immediate objective and development objective).[8]

The three core problems faced by most SME projects are that:

1. they tend to gather much data on activities and outputs, but very little on the project's immediate and development objectives;
2. their collection of financial data on both costs and benefits is rarely sufficient to enable them to undertake rigorous and authoritative benefit-cost analyses; and
3. their indicators for sustainability are insufficiently clear to serve as a useful management tool.

Thus, the case studies described above, for example, are rich in terms of details of manuals produced, training courses provided, exchange visits undertaken, etc. (activities); and of clusters strengthened, policy-makers sensitised and producer associations empowered (outputs). This can be described as **project performance**. However, they have little to say about increases in employment or income, etc. (immediate objective); or about poverty alleviation or other higher order development objectives. This is **project impact**.

As noted at the beginning of this paper, the CND approach is based on the belief (among others) that clustering and networking among enterprises promotes enterprise competitiveness. But can this belief be assumed

[8] It should be noted here that the log-frame created at the beginning of the project is not cast in stone: stakeholders can return and make changes to it as necessary in response to unanticipated factors or project results. Nonetheless, in most cases, the initial creation of the log-frame is most important step in the process of creating a shared vision, indicators and targets among the various stakeholders.

to be true? We know, for example, that some clusters are highly dynamic while others are more or less stagnant. The relationship between the *outputs* associated with CND projects (increased cooperation and networking within networks and clusters) and their *impacts* (increased wealth and poverty alleviation, etc.) is complex and relatively little understood. There are clearly significant differences between clusters in the degree to

A. Measuring project performance

which increased cooperation and capacity translates into solid improvements in the quality of life of the people and performance of the organizations inhabiting them. It is the role of a properly functioning M&E system to throw light on these questions.

Similarly, the case studies contain little information on the relative costs and benefits associated with their various initiatives (cost-effectiveness). In addition, while they do provide some information on the transfer of services to BDS providers and other actors, this is rarely presented in the context of a clear and time-bound strategy for post-project sustainability.

These various omissions are, in part, due to the very real methodological problems associated with data- collection and analysis at these levels as well as with the "evolving" nature of CND projects. Nonetheless, if M&E systems are to be an effective management tool, these problems must be satisfactorily addressed. The remainder of this section describes some of the main methodological problems and how they might be tackled. We will look in turn at the measurement of project performance, project impact, cost-effectiveness and sustainability. Finally, some of the principles underlying a common methodology for CND projects are proposed.

Provided that clear, specific and time-bound indicators and targets have been set in the log-frame and realistic sources of verification have been established, the gathering of data on project performance should pose few problems. Indeed, this has been the experience of the case studies described above, each of which provides substantial information on the number of clusters strengthened, associations established, business networks created, awareness-raising campaigns undertaken, trade fair visits sponsored and so on.

The only methodological problem in measuring the performance of CND projects lies in how to define the 'strengthening' of clusters and networks. This is the relationship between project activities and outputs: it cannot be taken for granted that, for instance, the establishment of a network produces economic gains for the enterprises that comprise it or providing training to the staff of a producer associations, will necessarily result in a real strengthening of the association capability to be useful for its members. As noted above, the factors underlying the emergence of dynamic clusters and networks are complex: in some cases, for example, the economic climate can be so unfavorable in the sector concerned that no amount of such activities can, in fact, lead to effective joint action among clustered enterprises. Many other such factors are also likely to be at play.

What is required is the identification of indicators that characterize strong and effective networks and clusters. These may relate to the types of decisions taken, the nature of joint projects undertaken, the quality of the relationships that develop with other cluster actors – the relative importance of these is likely to vary between cultures and contexts. Of key importance is that appropriate indicators be identified in a dynamic and context-specific process, rather than drawn mechanically from a list.

Here, developing a culture of rigorous and efficient M&E will bring its own rewards. For it is just such a culture that will facilitate the identification of the key types of behaviors and factors that characterize truly strengthened clusters and networks. Once these have been identified and demonstrated in a good number of cases, project staff may be able with greater authority to draw a convincing connection between the undertaking of certain activities, and cluster and network strengthening.

B. Measuring project impact

The impact of a CND project can be defined as those changes, both intended and unintended, that occur (especially but not exclusively) among its target groups – MSEs, producer associations, BDS providers, etc. – that can reasonably be attributed to the project. In this sense, project activities and outputs (all of the various things that project staff do) can be seen primarily as the means towards the end of effecting tangible changes in the conditions of their target groups – which is project impact.

In terms of the measurement of impact, four points need to be made at the outset:

1. Even if there were to be no limits on the resources devoted to M&E (which is never the case), it would be just about impossible to arrive at an exact and objective calculation of the impact of any project. Especially in the world of MSE clusters and networks, conditions are much too complex to enable the M&E team to either: i) capture all of the various effects of project activities that ripple out from direct project clients to other enterprises within and beyond the cluster; or ii) precisely attribute benefits to the activities of the project, as opposed to all of the other forces and initiatives at play.
2. Neither donors nor project managers *expect* the M&E team to deliver scientifically objective findings on project impact. The aim, rather, is to make an assessment on the basis of reasonable assumptions (that is, assumptions that will stand up intelligent scrutiny and common sense) of what benefits can reasonably be attributed to the project.
3. Effective M&E systems are those that find an appropriate balance between delivering useful (that is, specific and reasonably accurate) findings without using up an unreasonably large amount of the human and financial resources at the disposal of the project.
4. Effective M&E systems tend to be those that focus on a small number of indicators (generally including trends in income and employment) and investigate them thoroughly and well. Conversely, projects that rely on long and poorly-focused questionnaires for their M&E systems tend to alienate both staff and clients while delivering information that is of limited value.

What needs to be measured to determine project impact?

Measurement of trends in the following areas are likely to lie at the heart of all CND projects. (Only specific areas may need to be measured in particular projects, but the following can be considered as to cover the broad range of impact assessment issues for CND.)

- **Scale**: how many people, enterprises and/or institutions were affected?
- **Outreach**: to what extent did the effects (hopefully benefits!) of the project spread to specific target groups (the poor, women, specific castes or ethnic groups, particularly isolated or marginal target groups)?
- **Economic gains or losses among client enterprises**, (e.g. changes in output, productivity, product range and quality, income, employment, etc.)
- **Total economic gains or losses**, i.e. including those beyond client enterprises.
- **Capacities and strengths of enterprise networks**, including horizontal and vertical linkages achieved during the life of the project.
- **Total entrepreneurial and networking capabilities**, i.e. including those beyond client enterprises.
- **The development of BDS and financial markets**: in what way has demand for and supply of BDS and financial services been affected by the project?
- **Strengthening of support institutions**: in what ways have the various support institutions, including producer associations and government agencies, been strengthened by the project?
- **Changes in the overall business envi-**

ronment that have an effect on enterprises

- **Corporate responsibility**: that is, capability of firms to be "responsible" for social and environmental issues
- **Social Capital**: including issues such as collective action and cooperation, social inclusion and empowerment.

The methodological difficulties and challenges associated with the first four of these areas (considered as core elements of an impact assessment system) are relatively well understood and will be discussed below. There are significantly greater difficulties associated with measurement of many of the distinctive elements of the CND approach, to do with increasing the capacity of business networks, and support organizations; enhancing the business environment and the local social capital; and developing BDS and financial services markets. These issues are the subject of a further study undertaken by UNIDO whose results will be published at a later stage.

Measuring Scale

How many institutions, enterprises, households and individuals have derived benefit from the project? Of course, in most cases, it is impossible to know exactly: good ideas are self-seeding and such impacts are generally difficult to track. The aim is to make a sound estimate on the basis of reasonable assumptions.

A first step is to **distinguish between direct and indirect beneficiaries**. Direct beneficiaries should be easy to count – these are the clients with which the project has direct contact. Greater methodological challenges lie in the calculation of indirect beneficiaries. This is especially so within enterprise clusters, where part of the rationale for interventions is that innovations introduced by the project will spill over beyond direct project clients, thus increasing the cost-effectiveness of the intervention.

In seeking to quantify indirect beneficiaries, it is necessary to establish what are the main anticipated benefits (or in the case of post-project evaluation, what *have been* the principal benefits) of the project: new techniques or technologies introduced? new products developed? joint raw materials purchase? new markets opened up? others? The aim then is to attempt to gauge the degree to which other actors that have had no direct contact with the project have also adopted the new techniques, technologies, working methods, forms of organisation, or whatever the specific benefits might be.

How one would investigate this and where one would look for evidence will depend on the nature of the anticipated benefits and identity of the likely beneficiaries. Remember that beneficiaries will not necessarily be limited to other small enterprises: they may also include other actors both upstream (those supplying benefiting enterprises with raw materials, equipment, components, etc.) and downstream (those using the products of benefiting small enterprises in their various activities). It is important here to think in terms of 'value-chains' – to attempt to track impact throughout the chain of relationships of which client small enterprises form part.

In most cases, this is best done relatively informally – that is, by visits to other areas or enterprises where it is anticipated that the innovations may have taken root and the use of key informant and semi-structured interviews – rather than by highly rigorous and scientific analysis.[9] This latter strategy is likely to prove too time-consuming and expensive. Remember, the principal aim of M&E for project staff is as a source of information to improve the quality of management, *not* as a propaganda tool. In consequence, those undertaking such studies should be motivated primarily by curiosity about the degree to which project strategy is working and benefits are spreading through-

9 'Key informants' are people identified by the M&E team as particularly important sources of information by virtue of the position they occupy in the SME world or in the value-chain of which they form part. Semi-structured interviews can involve the use of both questionairesquestionnaires and more informal discussions. They provide greater flexibility and permit the gathering of more qualitative information than conventional, questionairequestionnaire-based interviews.

out the cluster and beyond. If this is happening to a significant degree, what has the project done right and what lessons can be learned to guide future actions? If not, what more could the project be doing to facilitate dissemination? It serves no one for project staff to actively seek out those cases that justify its approach, over-looking cases of failure.

Measuring outreach

To what degree has the project succeeded in delivering benefits to particular target groups? Begin by noting which (if any) specific groups the project seeks to reach – women? the poor? specific ethnic groups or castes? etc? Particular attention is required in projects with a strong focus on poverty-alleviation in defining what constitutes 'the poor'. Is poverty to be measured in purely financial terms or is there a place for considerations such as access (to health, education, land, etc.) or vulnerability?

Having clarified precisely which special groups are to be targeted, these need to be represented to an appropriate degree in the M&E's baseline sample and control group (see below). If non-financial measures of improvement in the condition of the poor have been adopted, a more qualitative approach to impact assessment will be required. This is likely to entail the adoption of a highly participatory approach to ensure both that appropriate indicators are identified and that high-quality information on project impact is gathered. There is likely to be a need to complement (or, in some cases, to replace) the questionnaire-based method of information-gathering, so suited to quantitative data collection, with key informant and semi-structured interviews and focus group formats. (This point is equally true when setting and measuring all qualitative indicators, not just those relating to poverty.)

Measuring economic gains among client enterprises.

Remember that a core rationale for most enterprise development projects is to promote an increase in the material well-being of households and individuals, and the most accurate indicators we have for measuring this is jobs and earnings. A crucial factor to be considered here, however, is time. In CND projects, in fact, the impact on enterprise profitability "matures" only over time because these projects focus on institution building and inter-enterprise relationships rather that on direct support to individual enterprises

Keeping this factor in mind, it is still important that economic gains of local enterprises are adequately accounted for and the first task here is to **draw up a representative sample** of client enterprises to provide the data base-line. What are the key variables within the target group you are working with most likely to have an impact on enterprise-level trends in employment and income? – sector? enterprise size? level of technological sophistication? gender of the owner or workers; caste or ethnicity? (The relative importance of these is likely to vary significantly between projects.) Identify which are the most important and ensure that the baseline sample offers an approximate reflection of how these variables are distributed among the total universe of enterprises that the project is targeting. The sample needs to be large enough to compensate for any particularities or exceptional cases at enterprise-level: generally ten per cent or so of the total number of direct beneficiaries is recommended.

In general, getting information on trends in employment at enterprise-level is relatively straightforward. However, it is important to remember that in many situations, a significant amount of employment is neither full-time nor permanent. M&E systems need to have sufficient sensitivity to track trends in seasonal and part-time work. This requires either relatively frequent monitoring (quarterly information-gathering should be sufficient) or training of sample entrepreneurs to record this information themselves on simple questionnaires. M&E should attempt to record not just the number of workers but also: i) category of worker (skilled employee, apprentice, part-time, seasonal); and ii) how many hours per week they are employed.

Gathering data on trends in income among client enterprises can be significantly more

difficult. There are numerous reasons why an entrepreneur might provide inaccurate information to a project M&E worker: poor memory recall in a context of little or no record-keeping, fear of the information leaking to the tax authorities; believing that under-reporting or over-reporting gains might result in additional project assistance; or a simple desire for privacy and/or resentment of perceived intrusion. In spite of all this, and especially where strong relations of trust have developed between project and clients, direct enterprise-level questionnaires on income trends can deliver valuable results.

In those cases where it is not safe to trust information on income gained from direct interviews, one alternative (or complementary) approach is to identify **proxy indicators** – that is, indicators which are closely related to the trends to be measured and which can be expected to throw significant light upon them. In the case of income, the best proxy indicator is production. Here, the task is to identify the principal products made by target enterprises and to track changes in their levels of production.

This can be done in one of three ways. First, and easiest, in those cases where enterprises are involved in joint marketing, the records of the marketing company can provide all the necessary information. Second, entrepreneurs can be trained to record production data on simple questionnaires. Finally, the information can be gathered through regular visits by field staff. Remember, the aim is not to record every item produced, but only the major ones.

The next challenge for the M&E system is that of **attribution** – that is, to what extent can any gains that are recorded among client enterprises be attributed to the activities of the project, as opposed to other forces at work within the cluster or network? The best way of addressing this problem is to establish a **control group**. A control group is a group of enterprises that, as far as possible, resembles the base-line sample in every respect other than that it derives neither direct nor indirect benefit from the project. Thus, in theory, by using a control group, the specific impact of the project can be isolated.

The use of control groups is rarely without its complications. Enterprises enjoying no project support have little interest in cooperating with M&E staff – in many cases where control groups are used, in fact, they are paid a small fee to encourage them to do so. In addition, it is rarely easy to find a truly similar control group, not least because clusters are often selected for participation in CND projects because they already enjoy some special distinctive characteristics that set them apart from others.

Within the cluster, it can also be difficult to identify enterprises that are in no way affected by the project – for one of two reasons. First, where cluster-based projects are successful, their effects are likely to ripple widely throughout the cluster, with the innovations introduced by the project imitated and replicated by many others. Second is the problem of **displacement**; that is, do the gains recorded among the sample group genuinely represent new economic activity, or do they merely indicate that enterprises benefiting from project assistance have displaced to others that have not? If this is the case, the contrast in fortunes between the two will be exaggerated (and the project may believe it is being very successful), even if little or no new economic activity is being generated.

There are no easy solutions to these challenges. The most that project staff can do is to be aware of the dangers in the creation of their control group and to aim for a group that as nearly as possible resembles the baseline sample in all respects other than participation in the project.

Measuring total economic gains

We return to the question of how to track impact beyond the direct project clients. *Within* the cluster, as noted above, successful projects are likely to generate significant cluster-wide ripples, with new products, techniques, technologies, working practices, forms of enterprise cooperation, etc. being widely imitated and replicated. In addition, the capacity of producer associations and other organisations is likely to grow, enabling them to better promote the interest and fortunes of their members. Further,

within the cluster as a whole, capacity for design may well be enhanced, with additional positive consequences in terms of increased growth.

External to the cluster, there may well also be significant benefits to a range of actors along the value-chain. An increase in the capacity of small-scale capital goods manufactures, for example, is likely to have a wide and deep impact through the dissemination of small-scale manufacturing and food-processing equipment, creating new opportunities for rural enterprises, with employment and income gains among both rural entrepreneurs and farmers. Increased vitality within MSE clusters, irrespective of the specific sector, will generate additional economic activity, both up-stream among suppliers; and down-stream among clients (except in the case of purely consumer goods).

It is important for CND projects to attempt to capture these various indirect benefits, for two principal reasons. Firstly, as a management tool. One cluster development project in Zimbabwe began by gathering data only among the small-scale engineers that it was working with. At this level, it concluded that impact was relatively low – significantly lower than project costs. Only later did it recognise that most project benefits accrued not to the small-scale engineers (their direct clients) but to the rural entrepreneurs who bought their equipment and the farmers from whom they, in turn, demanded an increased supply of inputs. This insight permitted a shift in project strategy that saw a much greater focus on the marketing of the equipment made by their client enterprises in the rural areas of the country. This shift resulted in the project having a significantly increased impact.

Second, to ensure efficient allocation of development funding, it is important to be able to compare the total relative costs and benefits of different projects and of different approaches and models. As CND projects are often characterised by relatively high levels of ripple benefit (beyond direct project clients), it is especially important for them to be able to track these wider impacts. We will return to this in the next section on cost-effectiveness.

C. Measuring cost-effectiveness

There are two dimensions of cost-effectiveness that CND projects need to measure. The first is that noted above, namely relative project costs and benefits. There are well-established conventions governing the calculation of benefit:cost ratios, including the projecting of anticipated monetary benefits for 10 – 15 years beyond the life of the project. It is essential that such calculations, whether undertaken during the project or after its completion, be undertaken in as transparent and professional a manner as possible.

A negative benefit:cost ratio does not necessarily mean that a project has failed; many are able to argue that certain of the benefits generated have some 'public goods' characteristics (enhanced skills and other capacity spreading far beyond the direct target group) for which full cost-recovery is neither possible nor reasonable. However, a transparent and professional benefit: cost analysis will help to make this rationale explicit and to make the case for on-going government or donor subsidy.

It is also useful, where possible, to attempt to separate out the costs and benefits associated with different services provided by a project. This enables project managers to get a feel for which of the services (or which combination of services) they provide are having greatest impact. It is true that where services are bundled together, such a disaggregation of costs and benefits may be difficult. However, calculations of the relative costs and benefits of packages of bundled services may also be both possible and useful. The greater the level of disaggregation, the more useful it is likely to be to project managers.

The second dimension of cost-effectiveness needing to be tracked can be described as 'value-for-money' – that is, are the services being provided in the cheapest and most efficient way possible? This is a particularly important consideration when considering

services for which there is the potential for competition between the project and other BDS providers.

Every effort needs to be made to ensure that donor funding is not providing hidden subsidies in service areas where private service providers could emerge. If project managers are to make informed decisions on the allocation of resources; and if they are to encourage rather than inhibit the development of private sector BDS markets, M&E systems need to be designed to permit the tracking of service-specific costs and benefits.

D. Measuring sustainability

Is there a need for the services provided by the project to continue beyond the life of the project? If so, how are they to be provided? The case studies in section two suggest five possible sustainability strategies (that are, in fact, complementary – most of the case studies include at least several of the following elements).

Transfer services to private sector BDS providers.

Strengthen the capacity of business associations to provide services beyond the life of the project.

Client enterprises within the cluster take over from the project payment for the services of the cluster or network broker.

Look to donors or government for long-term subsidy. This will be possible only where projects succeed in persuading donors or governments of strong 'public good'-type benefits accruing from projects that will incline them to provide on-going support. However there is an obvious risk in this type of strategy especially in countries where public budgets are scanty and development priorities may change. Only rarely will this prove to be a viable sustainability strategy.

Support 'soft networks', for short-term, specific goals, that will not need to continue beyond the life of the project.

The first task is to be clear about which of these elements, and in what combination, are to make up the project's sustainability strategy. Then, targets and timetables need to be set for each. For example:

Which BDS are to be transferred to private sector providers? What should be the timetable for this transfer? How is it to be achieved?

According to what timetable should business associations take over project activities? Which ones? How?

What is the strategy for engaging donors and/or government into playing the role of long-term funder? What are to be the indicators and targets for this?

Each of the key stakeholders concerned should be involved in negotiating and setting the targets and timetables for the sustainability strategy. This will create consensus around the strategy that evolves, thus contributing to its chances of success.

A few words are needed specifically about tracking the development of a BDS market, since this is likely to be a particularly important element of most CND sustainability strategies. In many (some would say most, or even all) cases, private sector organisations are likely to be able to deliver BDS more efficiently, cheaply and sustainably than donor-funded projects. In this context, the appropriate role of projects should be to stimulate private sector BDS provision rather than attempting to play this role (in the long-term) themselves. Thus, it is legitimate for projects to act as BDS providers only as a means of stimulating demand for and/or private sector supply of the services in question.

However, it will be difficult for project managers to gauge when and at what speed to withdraw from service provision without good information on the levels of existing demand and supply potential within the marketplace. On the demand side, the M&E system needs to be able to track both what services are required by small enterprises within the cluster and their willingness to

pay for these. On the supply side, indicators need to be developed and tracked that describe the capacity of private sector providers to deliver services of an acceptable quality.

It is important that private sector BDS providers have the capacity to undertake market research of this kind into the future, if they are to be able to adapt their services to changing patterns of demand. Consequently, it should be an important part of the capacity-building work of CND projects to undertake this M&E work in close cooperation with these private sector service providers.

Conclusions: key principles of a CND M&E system

The following are some of the key principles of an appropriate M&E system for CND projects arising out of the foregoing:

M&E for managers of CND projects should be seen primarily as a **management tool**, whose function is to feed information into the process of **maximising the impact**, cost-effectiveness and sustainability of this and other similar projects. Project M&E systems that are geared towards proving impact to donors and governments are too often selective in their search for positive evidence and thus, miss out on the many positive lessons to be learned from failed experiments.

M&E should be seen as a learning experience, an opportunity to engage all stakeholders in the process of setting indicators and targets and measuring performance and impact against them. This is likely both to build the capacity of the various stakeholders and to lead to an improved flow of information at the disposal of the project team.

It is important to deliver high-quality information not just on project activities and outputs; but also on immediate and development objectives.

Indicators need to be adapted to sector- and culture-specific contexts rather than drawn in a mechanical way from a pre-prepared list.

Effective M&E systems tend to work with a relatively small number of highly-focused indicators. The process of designing and implementing an appropriate M&E system should arise out of the questions: 'what are we trying to achieve?' and 'how would we know if we were succeeding in this?' If done this way, the process of M&E data collection and analysis should feel meaningful and exciting as all involved track progress against commonly-agreed indicators and targets.

Neither project managers nor donors expect scientifically rigorous findings from an M&E system. What is required are results based on reasonable assumptions, that demonstrate awareness of the factors that are most likely to distort the true picture.

Devote resources at the outset to the establishment of a base-line data set and of a control group. This is likely to save many M&E problems in the longer-term.

It is desirable to provide some form of benefit: cost analysis. If this is to be relevant to CND projects, which have the potential to create substantial ripple benefits, ways must be identified to track and quantify impact beyond direct project clients, throughout the value-chain.

For the M&E system to be a useful management tool in tracking progress towards sustainability, a sustainability strategy must be clearly articulated and appropriate indicators and targets set.

Measurement of trends in the supply and demand of BDS should be done in close cooperation with private sector service providers as a way of transferring capacity to them.