

**Independent Thematic Evaluation**  
**UNIDO Cluster and Networking**  
**Development Initiatives**



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

**Independent Thematic Evaluation  
UNIDO Cluster and Networking  
Development Initiatives**



**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
VIENNA, 2010**



Distr. General  
ODG/EVA/10/R.11

21 April 2010

Original: ENGLISH

The views expressed in this Evaluation Report are those of the authors based on their professional assessment of the evaluation subject. Those views and opinions do not necessarily reflect the views of the Secretariat of UNIDO.

The description and classification of countries and territories used, and the arrangements of the material, do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country, territory, city or area, of its authorities, concerning the delineation of its frontiers or boundaries, or regarding its economic system or degree of development. Designations such as '*developed*', '*industrialized*' and '*developing*' are intended for convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process. Mention of firm names, commercial products and/or technologies does not imply the endorsement of UNIDO.

Unless otherwise noted, references to \$ means United States dollars.



## Table of contents

Acknowledgements	v
Glossary of evaluation terms	vi
Abbreviations and acronyms	ix
<b>EXECUTIVE SUMMARY</b>	<b>ix</b>
<b>1. Introduction and evaluation background</b>	<b>1</b>
1.1 The evaluation subject - UNIDO cluster and networking development (CND) initiatives	1
1.2 Scope and objectives of the evaluation, including main evaluation questions	1
1.3 The evaluation approach and methodology	2
<b>2. The nature and context of cluster and networking development initiative</b>	<b>5</b>
2.1 The UNIDO definition and approach to CND	5
2.2 Methodologies used for CND	6
2.3 The portfolio of CBL Unit activities	8
2.4 CND initiatives within overall UNIDO priorities	11
2.5 Major changes and trends in framework conditions for CND	12
2.6 Characteristics and comparison of approaches to CND of other organizations: why is the UNIDO approach special?	13
Salient points in Chapter 2	16
<b>3. Assessment</b>	<b>18</b>
3.1 Design, programming and planning	18
Salient points on design	26
3.2 Implementation	26
Salient points on implementation	29
3.3 Relevance	30
Salient points on relevance	31
3.4 Effectiveness and impact	31
Salient points on effectiveness and impact	37
3.5 Efficiency	38
3.6 Sustainability	42
<b>4. Conclusions and recommendations</b>	<b>46</b>

**5. Lessons learned** **53**

Annexes

1	Terms of reference	55
2	List of documents and references used	68
3	Database of CBL Unit projects 1994-2009	71
4	Expert and stakeholder survey on UNIDO cluster and networking initiatives in developing countries	73
5	Sources for comparison of CND approaches of various organizations	77
6	Overview of CND upstream activities (prepared by the UNIDO CBL Unit)	78
7	List of tables/illustrations	83

## Acknowledgements

This thematic evaluation of the UNIDO Cluster and Networking Development (CND) Initiatives was prepared for the UNIDO Evaluation Group/Bureau for Organisational Strategy and Learning. A Steering Committee comprising the following persons guided the evaluation:

Government of Austria (Austrian Development Agency (ADA): Ms. Karin Kohlweg, Ms. Elisabeth Schmid and Mr. Helmut Traxler;

Government of Italy: Mr. Rosario Centola; Ms. Alessandra Pastorelli;

Government of Switzerland: Mr. David Best;

UNIDO Evaluation Group: Ms. Margareta de Goys (chair);

UNIDO Industrial Policy and Private Sector Development Branch: Ms. Giovanna Ceglie

The evaluation team acknowledges with appreciation the many and diverse contributions made to this evaluation by the aforementioned members of the Steering Committee, staff members of the UNIDO Cluster and Business Linkages Unit, UNIDO Field Representatives and staff of UNIDO projects in the field, as well as the national consultants who assisted with the country level evaluations. The advice and opinions of CND experts and stakeholders who participated in the Internet-based Survey are also greatly acknowledged.

Prof. Carlo Pietrobelli (independent consultant, team leader)

Ms. Leny van Oyen (independent consultant)

Mr. Johannes Dobinger (Evaluation Officer, UNIDO Evaluation Group)

## Glossary of evaluation related terms <sup>1</sup>

<b>Term</b>	<b>Definition</b>
<i>Baseline</i>	The situation, prior to an intervention, against which progress can be assured
<i>Effect</i>	Intended or unintended change due directly or indirectly to an intervention
<i>Effectiveness</i>	The extent to which the development objectives of an intervention were or are expected to be achieved
<i>Efficiency</i>	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results
<i>Impacts</i>	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended
<i>Indicator</i>	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor
<i>Intervention</i>	An external action to assist a national effort to achieve specific development goals
<i>Lessons learned</i>	Generalizations based on evaluation experiences with projects, programmes, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact
<i>Logframe (logical framework)</i>	Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention. Related term: results based management (RBM)
<i>Outcome</i>	The likely or achieved short-term and medium-term effects of an intervention's outputs. Related terms: result, outputs, impacts, effect
<i>Outputs</i>	The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes
<i>Recommendations</i>	Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions
<i>Relevance</i>	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its

---

<sup>1</sup> Based on a glossary prepared by the OECD DAC Working Party on aid evaluation, May 2002.

	design are still appropriate given changed circumstances
<i>Results</i>	The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention. Related terms: outcome, effect, impacts
<i>Risks</i>	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives
<i>Sustainability</i>	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time
<i>Target groups</i>	The specific individuals or organizations for whose benefit an intervention is undertaken

## Abbreviations and acronyms

BDS	business development service
CAD	computer-aided design
CBL	cluster and business linkages
CDA	cluster development agent
C&N	clusters and networks
CDP	cluster development programme
CND	cluster and networking development
CSF	country service framework
CSR	corporate social responsibility
DCED	Donor Committee for Enterprise Development
DFID	Department for International Development
DIPP	Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, India
EDII	Entrepreneurship Development Institute of India
FeMSEDA	Federal Micro and Small Enterprises Development Agency
GEF	Global Environment Facility
IADB	Inter-American Development Bank
ILO	International Labour Organization
IP	integrated programme
ITC	International Trade Centre
LA	Latin America
M&E	monitoring and evaluation
MSME	micro, small and medium enterprises
NGO	non-governmental organization
NIMSME	National Institute for MSMEs
OECD	Organization for Economic Co-operation and Development
PSD	private sector development
R&D	research and development
ReMSEDA	Regional Medium and Small Enterprises Development Agency
SME	small and medium-sized enterprise
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development

## EXECUTIVE SUMMARY

### The evaluation subject - UNIDO CND initiatives

UNIDO has been implementing technical cooperation projects focused on cluster and network development (CND) since the mid-1990s. Over a period of 16 years (1994-2009), 64 projects were carried out, with a total allotment of \$31.4 million and expenditures to date of some \$28.5 million, covering 23 countries.

The core elements of the overall programme are country-level projects that include pilot projects for CND (since 2000), export consortia and activities to foster upscaling and local ownership of the CND approach. Additional elements of the programme include activities aimed at generating and disseminating knowledge beyond the country level. In addition to UNIDO funding, resources have been made available in the early stages (mid-1990s) mainly by bilateral donors including Austria, Italy, Switzerland, United Kingdom of Great Britain and Northern Ireland, and the European Union,

The present thematic evaluation was carried out by a team comprising Johannes Dobinger, Leny van Oyen, and Carlo Pietrobelli (Team Leader) from September 2008 to July 2009. The evaluation aims at assessing the relevance, effectiveness, efficiency and sustainability of the range of activities to promote clusters and networks, including export consortia, carried out by the Cluster and Business Linkages (CBL) Unit of UNIDO. It furthermore provides inputs for the discussion of the future CND strategy of UNIDO.

### The evaluation approach and methodology

The present evaluation consists of four interrelated components:

- (a) Project evaluations carried out within the framework of the present thematic evaluation;
- (b) Review of existing evaluations (reports) of CND projects;
- (c) Review of programme-level or upstream activities;
- (id) Expert and stakeholder survey conducted in the context of the present evaluation.

### The UNIDO approach to CND

According to UNIDO documents the CND approach is based on the assumption that micro-, small and medium enterprises (MSME) play a key role in terms of employment and income generation in developing countries. It has been shown that, especially in developing countries, development of MSMEs is often hampered by their isolation. Therefore, the CBL Unit aims at boosting the development of a competitive private sector and contributing to poverty reduction by building **sustainable linkages** both *among* SMEs (small and medium-sized enterprises) and *between* SMEs, large(r) scale enterprises and support institutions.

To achieve this aim, the UNIDO approach in support of the development of networks and clusters typically consists of two main elements:

- (a) Technical cooperation in formulating and implementing CND initiatives that generates **pilot projects** in the client countries;
- (b) **Upscaling CND** efforts through institutional capacity-building and policy advice with a view to fostering the dissemination of CND policies on the regional or national scales.

An additional noteworthy feature of CND projects is their heavy reliance on local expertise, with international expertise involvement invoked primarily in the start-up phase and gradually reduced over time. Secondly, the UNIDO approach differs from other donors' programmes in terms of its smaller size of interventions and its focus on forming "social capital" that can provide the "glue" between groups of entrepreneurs in clusters, while later serving as a "lubricant" to stimulate development of new business relationships in value chains.

## **The Assessment**

### **Design**

The theory of change on which the CND approach is based centres on the benefits of agglomeration economies and joint actions. UNIDO CND interventions at the country and global levels are largely in line with this theory of change.

The UNIDO CND interventions follow essentially a "pilot logic", i.e. they help to establish well functioning clusters and networks that demonstrate the benefits of CND. However, this pilot logic is not always made explicit ex-ante in the interventions' design and in the overall programme logic.

The design of CND interventions at the country level does not always make effective use of the pilots by including specific outputs and related activities to utilize pilots for capacity-building and policy advice in the country/elsewhere. The activities to create and disseminate knowledge to ensure replication effects and effects at the policy level should be further extended and strengthened.

### **Implementation**

The use of upstream resources (e.g. for CND methodologies, study tours, international training, case studies) has contributed to a rather homogenous implementation practice of UNIDO CND projects. Although in several cases the design did not explicitly reflect the overall pilot logic inherent in the programme, individual CND interventions have mostly been implemented in line with the underlying theory of change. Overall, weaknesses in design did not necessarily translate into poor project results.

Examples of good functioning of pilot logic and effective upscaling are found in various CND projects in India, and in Morocco where upscaling was made easier by the strong commitment of policymakers.

The stated difference between clusters and networks – and the ensuing support methodologies - has not systematically been followed through in project design or in actual implementation. In fact, in field projects the difference is often watered down to a continuum of different cases, sharing some central elements that are present in different degrees.

## **Relevance**

The relevance of UNIDO CND initiatives to developing countries is generally high, with CND project objectives (poverty reduction, competitiveness) being generally in line with government priorities. The institutional outcomes (capacity-building, enabling environment for CND) are also mostly found to be relevant. Official counterparts were typically involved in project design and implementation, thereby raising projects' relevance and local ownership of the approach.

Also at the local level, project level evaluations confirmed that CND interventions have been relevant for target groups, helping to address fundamental challenges facing local entrepreneurs, business organizations, and local governments.

CND interventions are relevant to UNIDO, since their objectives (poverty reduction, competitive industry) are covered by its mandate and corporate priorities.

Action-oriented research has also been a relevant activity when comparing and positioning upstream work by UNIDO with regard to other development actors.

## **Effectiveness and impact**

The results at the pilot project level have generally been positive in terms of competitiveness. There were also positive results in terms of poverty reduction when the projects were explicitly oriented to that goal.

The evidence on the degree of effectiveness with regard to institutional outcomes (capacity-building, enabling environment for CND) is less systematic, but reveals several clear cases where significant institutional outcomes were achieved, for example, in India, Ethiopia and Morocco.

The effectiveness at the level of CND pilots has been influenced by several factors. Of special note are active involvement of local stakeholders in design and implementation, and a solid institutional anchorage, especially at the local level. Because the catalytic nature of CND interventions that also includes improving access by target groups to other sources of support, it has often enhanced effectiveness.

However, the longer-term impact at the project and country levels cannot be documented with certainty in most cases. This is because long-term impact emerges beyond project life (some three to five years) and could only be documented by ex-post evaluations, for which funds are rarely available. That situation notwithstanding, the few ex-post assessment studies carried out

indicated that the project results were sustainable and had multiplied over time (US/ECU/02/D75). A rigorous cost-benefit analysis that measures the outcome and impact against the costs of the interventions has not yet been undertaken.

An appropriate assessment of results (outcomes and impacts) requires proper monitoring and evaluation (M&E) tools. Projects aiming at introducing CND aim at working on two different, parallel and simultaneous levels: direct interventions through pilot projects, and indirect interventions at the policy level leading to upscaling. This approach poses special problems for M&E. Several M&E tools have been developed and applied in the context of individual direct interventions and efforts have been undertaken to harmonize the tools across interventions. Attempts also include tailoring projects to conform to specific development objectives (enterprise competitiveness or poverty reduction or combinations of the two objectives) set by the projects. Ongoing efforts in this respect include fine-tuning the M&E system to accept direct interventions and experimentation of new assessment techniques in the context of specific projects - both according to resource availability.

Selecting which clusters and networks (C&N) to support has often followed a bottom-up and highly participatory demand-driven approach, but that approach has sometimes omitted consideration of real market potential. Moreover, that approach should particularly encompass: considerations of emerging trends in technologies; strategic considerations related to trends in international demand; market access obstacles; opportunities derived from trade negotiations; distribution of rents across the value chains; and areas of international specialization.

## **Efficiency**

The efficiency of most CND interventions has been sufficient in terms of implementation (quality, quantity, timeliness of inputs), and high in terms of the efficiency of the project approach, which can be described as a “catalytic approach”. In most instances, projects did not reach a large financial magnitude, but nonetheless leveraged other sources of funding and offered “change agents” to local actors, that stimulated behavioural and institutional change.

One remarkable dimension of efficiency has been the ability of project managers to coalesce highly motivated and well-qualified teams of local professionals and establish operational interaction between local and international experts.

A further dimension of efficiency is the extent of external coordination with other United Nations entities and donor initiatives and internal coordination with other UNIDO programmes. External coordination exists in several cases (e.g. with the International Labour Organization (ILO), the Inter-American Development Bank (IADB), the Donor Committee for Enterprise Development (DCED)), but could be further developed at the country level and in upstream activities. Internally, very few examples of cooperation were observed. Indeed, the potential to increase

efficiency by coordination of CND activities with other UNIDO services has not been sufficiently exploited.

### **Sustainability**

Fostering cooperation among enterprises is often a lengthy process. In this respect, sustainability of CND initiatives requires continuity of funding over a longer period.

The existence of an explicit exit-strategy – i.e. a strategy to prepare the smooth continuation of activities after the end of UNIDO project – has often improved sustainability.

A continued presence of UNIDO CND interventions in the country, combined with a sequence of activities developed over time,- together with efforts to learn from past experiences and adapt the approach to the country circumstances - helps build a solid partnership with local counterparts and contributes to the sustainability of CND interventions. This has been notably shown by the UNIDO experience in India where CND activities have clearly displayed several features of a long-term and well-integrated CND programme.

### **Main recommendations**

#### **Design and programme development**

- The UNIDO CND approach has been applied in many countries in a largely coherent manner, but the design of the UNIDO CND programme still lacks some important features of a fully fledged programme, such as an overall theory of change and intervention logic, a common system of indicators, different strategy options for different framework conditions and states of development, etc. UNIDO should invest resources in developing such a fully fledged CND programme and define it in a programme document that describes these features and provides guidance to project managers, project staff, stakeholders and implementing partners.
- The stated difference between networks and clusters has not always been followed through in project documents or in actual implementation. UNIDO should clarify this issue, avoid possible confusion and ensure coherence between principles, methodologies and actual practices.
- So far there have been only a few cases of action-oriented research that aims at developing the CND approach in the direction of upscaling activities. The CBL Unit should develop dedicated global forum projects to achieve this aim.
- UNIDO should ensure that the pilot logic is made explicit in project documents.

- UNIDO should strengthen the upstream-level work in CND, by pursuing and deepening action-oriented research that is specifically focused on upscaling strategies.
- UNIDO should continue to promote a catalytic approach in all its CND interventions. The catalytic approach should become a core element of the CND strategy and be explicitly included in project documents.

### **Monitoring and evaluation**

- Monitoring and evaluation (M&E) systems need to be improved to allow measurement of effects of CND programmes at different levels (e.g. directly operating at a C&N level and fostering the conditions for structural change). It is recommended that donors actively support this effort.
- It is recommended that monitoring tools be enhanced in order to capture possible unintended results and take corrective actions to avoid potential negative effects.

### **Implementation**

- UNIDO should guide project teams to always explore and possibly develop the potential offered by vertical linkages in design and implementation. A stronger value chain approach would not contradict but rather deepen the C&N approach. This should include the analysis of trends in international demand, consideration of market access obstacles and opportunities derived from international and bilateral negotiations, and the distribution of rents across value chains and areas of international specialization.
- UNIDO and partner Governments should undertake explicit efforts to design and follow up an unambiguous strategy to ensure widest outreach. Thus, clear rules would be set on whether a network is open or whether openness is left at the discretion of members. Those efforts would ensure that the selection criteria for supporting networks and clusters are defined in project documents and are consistently applied during implementation.
- UNIDO should sustain and explore further the potential of CND initiatives for South-South cooperation that have already proven effective in some experiences.
- UNIDO, donors, and partner Governments should not initiate CND projects unless there is a good probability of ensuring a continuity of funding and presence, and realistic time frames for this type of intervention should be jointly set. While the actual duration of an intervention depends upon the state of development of CND initiatives in a particular country/region, the development of a phased approach to CND interventions (as part of the programme definition) would help to adapt CND projects and their expected duration to the specific needs of partner countries.

### **Integration with other UNIDO interventions**

- A strong need has been detected for coordinating and integrating CND activities with other UNIDO services. UNIDO should use the experience and the methods developed by the CBL Unit to support bottom-up, locally driven processes of local economic development. This should be achieved by incorporating horizontal CND components in country- and integrated programmes and/or using the CND approach to develop integrated projects and programmes.
- It is recommended to further develop the approach currently applied in the “Integrated Cluster Development Programme” in India and to present the experiences and lessons gained from its application to UNIDO management.



# 1

## **Introduction and evaluation background**

---

### **1.1. The evaluation subject - UNIDO cluster and networking development (CND) initiatives**

UNIDO has been implementing technical cooperation projects focused on cluster and network development (CND) since the mid-1990s. Over a period of sixteen years (1994-2009), 64 projects in 23 countries were carried out, with a total allotment of \$31.4 million and expenditures of some \$28.5 million.

The core elements of the overall programme are country-level projects that include pilot projects for CND and, since 2000, cover some 2000 projects in support of developing export consortia. Activities to foster upscaling and local ownership of the CND approach were also included in those projects. Additional elements of the programme were aimed at generating and disseminating knowledge beyond the country level. These “upstream” or “global forum” activities<sup>2</sup> include methodologies (manuals, guidelines, training materials and toolkits), expert group meetings, action-oriented research, international training courses, conferences, and publications. In addition to UNIDO funding, resources were made available especially in the early stages (mid-1990s) mainly by bilateral donors including Austria, Italy, Switzerland, United Kingdom of Great Britain and Northern Ireland and the European Union.

### **1.2. Scope and objectives of the evaluation, including main evaluation questions**

The present thematic evaluation was carried out by a team comprising Johannes Dobinger, Leny van Oyen, and Carlo Pietrobelli (team leader), and took place from September 2008 to July 2009. This evaluation aims at assessing the relevance, effectiveness, efficiency and sustainability of the range of activities covering the implementation of technical cooperation projects as well as upstream work designed to promote clusters and networks (C&Ns), including export consortia, carried out by the UNIDO Cluster and Business Linkages (CBL) Unit.

The present evaluation furthermore provides inputs for discussion of the future UNIDO CND strategy by formulating recommendations to enhance UNIDO

---

<sup>2</sup> Within UNIDO the term “global forum” is used for activities that are carried out at the global or regional level, not relating to a specific technical cooperation project. Examples of such activities are: expert group meetings, conferences, research, and development of methods, guidelines and standards.

contributions to private sector development in general and CND initiatives in particular.

The key evaluation questions are (as explicated in the terms of reference of the present evaluation, cf. annex 1):

*Regarding the design, intervention logic and the underlying theory of change:*

- Are UNIDO CND initiatives based on and consistent with state-of-the-art knowledge about institutional change, small and medium-sized enterprises (SME) development and clusters?
- Is the design of the overall programme and of individual projects consistent with the underlying theory of change?
- Does UNIDO, through its CND initiatives, contribute to the international body of knowledge and does it influence the way in which similar initiatives are planned and implemented by international agencies and donors?
- How does the CND concept fit into the overall technical cooperation framework of UNIDO?

*Regarding the implementation and the results of CND interventions*

- Are individual CND interventions implemented in line with the underlying theory of change?
- What are the main factors that influence the effectiveness of CND interventions (e.g. institutional anchorage, operational anchorage, access to finance, access to non-financial services, exit strategy and local contributions)?
- Are individual CND interventions producing the expected results?
- Are individual CND interventions producing non-intended results?
- How do implementation modalities affect efficiency and results?
- Is the implementation of CND interventions in UNIDO organized in an efficient manner?
- Is the information on CND interventions and their results sufficient and relevant monitoring and evaluation (M&E)?

*Regarding the context of CND interventions*

- Are UNIDO CND interventions relevant and effective in the different socio-economic contexts found in different countries?
- What are the main context factors that influence the relevance of CND interventions?
- How do UNIDO CND interventions relate to other SME support interventions with similar objectives within and outside of UNIDO?

### **1.3. The evaluation approach and methodology**

The present evaluation comprises four interrelated components:

- (a) A number of project evaluations carried out within the framework of the thematic evaluation;
- (b) A review of existing evaluation reports of CND projects;

- (c) A review of programme-level or upstream activities;
- (d) An expert and stakeholder survey.

The information generated by the four components was used to triangulate views and opinions expressed in individual evaluation reports, with a view to identifying common issues that should lead to conclusions applicable to the CND programme as a whole.

In particular, the four components cover:

1. Findings of independent in-depth evaluations of several CND initiatives, themselves the result of field based assessments carried out for the present evaluation<sup>3</sup>:

same as p. 68

Theme	Remarks
Ethiopia	UE/ETH/05/007, US/ETH/05/007 - Unleashing the potential of MSMEs in Ethiopia
India	A considerable number of CND projects has been carried out in India over the last 10 years. The focus of the India review has been on the UNIDO CND interventions as a whole, i.e. analysing the outcomes of UNIDO interventions in terms of institutional change and capacity-building. Several projects have been included in the review, but none of them has been fully evaluated as part of this thematic evaluation. The projects reviewed are:
	US/IND/01/193 - Support to the country effort to promote SME cluster
	US/GLO/04/116 – Thematic cooperation between UNIDO and Swiss agency for development and cooperation in the area of SME cluster development and corporate social responsibility
	US/GLO/02/059 – Thematic cooperation between UNIDO and Swiss agency for development and cooperation in the area of SME networking and cluster development
Morocco	UE/MOR/04/127 - Appui à la création de consortia d'exportation (phase 1) and UE/MOR/07/007 - Renforcement des capacités nationales dans la promotion et accompagnement de consortia d'exportation (phase 2)
Peru	UE/GLO/04/158 – Promotion of SME Export Consortia

For each of these project evaluations, separate evaluation reports are or will become available.

2. Review of existing recent evaluations of UNIDO integrated programmes (IP) or country service frameworks (CSF) containing CND initiatives:

Nicaragua	UE/NIC/05/001 - Strengthening and Dissemination of Cluster Development in Nicaragua; evaluation is carried forward from 2006-2007 work plan
Senegal	EE/SEN/05/002 - Appui aux micro activités économiques urbaines (Composante de Padelu) <sup>4</sup> .
Ecuador	Integrated programme component on CND
Colombia	Integrated programme component on CND
Tunisia	Integrated programme component on CND

3. Review of programme-wide or upstream activities. This included the analysis of the global forum-type activities based on reports prepared by the CBL Unit.

<sup>3</sup> Ms. van Oyen was responsible for the field work in Morocco, Mr. Dobinger in Peru, and Mr. Pietrobelli in Ethiopia and India.

<sup>4</sup> This is one out of several both subsequent and parallel networking projects implemented in Senegal by the CBL Unit

4. An expert and stakeholder survey was carried out (covering experts, donor representatives, technical cooperation agencies) in order to compare the UNIDO approach as compared to other organizations' approaches. An Internet-based survey was sent to 100 CND experts and practitioners, with a satisfactory albeit rather low response rate of 29 per cent. A total of 18 of the respondents are academics; thus, we attach greater relevance to their replies on upstream activities rather than to their response to questions on field-project activities. The survey questionnaire is included as annex 4 to the present document.

The present evaluation has also benefited from several meetings with programme managers of the CBL Unit and staff of the Evaluation Group at UNIDO Headquarters in Vienna and from an initial meeting of the Steering Committee of the evaluation.

# 2

## The nature and context of cluster and networking development initiatives

---

### 2.1. The UNIDO definition and approach to CND<sup>5</sup>

According to UNIDO documents, the CND approach is based on the assumption that MSMEs play a key role in terms of employment and income generation in developing countries.<sup>6</sup> This is true also for developed countries but in developing countries, MSMEs' remarkable development potential often remains untapped, as firms operate in **isolation**, are locked into uncompetitive production patterns and are unable to approach dynamic business partners that could bring in new expertise, know-how and market linkages.

The UNIDO CBL Unit is the main driver of the CND approach in UNIDO. Through its specific technical cooperation projects and a number of global forum activities, it aims at boosting the development of a competitive private sector and contributing to poverty reduction by **building sustainable linkages** among and between SMEs, large(r) scale enterprises and support institutions. Such linkages are expected to enhance enterprise competitiveness through the realization of economies of scale and scope in a sustainable way. Moreover, CBLs are to pave the way to broad-based and inclusive development, thus exerting a potential impact on poverty reduction. This area of business linkages constitutes the core focus of the CBL Unit.

Clusters and networks are different yet related phenomena. UNIDO defines **clusters** as agglomerations of interconnected companies and associated institutions. Firms in a cluster produce similar or related goods or services and are supported by a range of dedicated institutions located in spatial proximity, such as business associations or training and business development service (BDS) providers. Vibrant clusters are typically at the origin of the development of innovative firms that reap the benefits of an integrated support system and dynamic business networks. These definitions are in principle in line with similar concepts in the specialized literature.<sup>7</sup>

---

<sup>5</sup> This section mainly draws on UNIDO documents (UNIDO, 2001; Ceglie and Stancher, 2008) and on selected web pages presenting the activities of the Cluster and Business Linkages (CBL) Unit <http://www.unido.org/index.php?id=5391> (accessed 20.3.2009).

<sup>6</sup> This is confirmed by recent research and empirical evidence from the World Bank (Ayyagari *et al.*, 2003; Kozak, 2007).

<sup>7</sup> A full-fledged cluster is the evolution of inter-firm and inter-institution linkages with various forms of joint actions: such evolution may or may not occur, and most likely it occurs in different ways and to a different extent (Guerrieri *et al.*, 2001; Guerrieri and Pietrobelli, 2004 and 2006).

In turn, UNIDO defines **networks** as alliances of firms that work together towards an economic goal. The networks can be established between firms within clusters but also exist outside clusters and can be horizontal and vertical. Horizontal networks are built between firms that target the same market, such as a group of producers establishing a joint retail shop or different companies each specializing on parts of the process for one common product. Vertical networks are alliances between firms belonging to different stages of the same value chain (buyers and suppliers), leading to supplier development schemes or buyers assisting their suppliers to upgrade.

The main difference between clusters and networks with regard to the related development policies, is that in the network approach the target is a group of enterprises with a common business initiative, whereas in cluster development the target is primarily a set of institutions (business organisations, municipalities, co-operatives, universities, public or private service providers, etc.) that join efforts with enterprises to promote local economic development with emphasis on the core products or services of a given cluster.

The reason why the CBL Unit places specific emphasis on enterprise networks and clusters is because enterprises that are part of such networks are able to improve performance and overcome obstacles resulting from small size and isolation. Among the main benefits that networks are expected to generate are economies of scale and increased negotiation power (reduced costs of raw materials owing to collective purchases, better access to markets that demand higher quality, incorporation of more expensive technologies, easier access to subcontracting relationships with large scale enterprises, etc.), increased capacity for learning and innovation, and increased capacity of strategic management (through reduction of uncertainty).

## **2.2. Methodologies used for CND**

UNIDO technical cooperation and global forum activities in the CND area started with promoting horizontal and vertical networks of SMEs. A specific objective of networking that targets support to export development through export consortia was developed at a later stage. Finally, and based on the lessons learned from networking development, specific support schemes were developed for the promotion of clusters. For all these areas of intervention, methodologies and guidelines have been developed as support tools for project implementers. These methodologies are similar for clusters and networks in so far as they are step-by-step guides that start with a diagnostic and selection phase, then move to trust-building and establishment of a governance structure of the network or cluster and, finally, stimulate joint actions and consolidation of the cluster or network.

### **Nature of intervention**

These methodologies are used in implementing CND support in the client countries. To help trigger a local CND process and to make it sustainable over time, UNIDO works with local institutions and focuses on strengthening their capacity to assume leadership of the process and support cluster firms in their endeavours. Thus, the UNIDO approach consists typically of the following main elements:

- (a) Technical cooperation in formulating and implementing cluster and networking development initiatives that generate **pilot experiences** in the client countries;
- (b) **Upscaling CND efforts** through institutional capacity-building and policy advice for disseminating CND policies on the regional or national scale.

A special form of capacity-building is provision of **indirect cluster and network support** by assisting local authorities in undertaking their own self-initiated CND efforts, by using directly assisted pilot clusters/networks as reference cases (e.g. Cluster Programme in Orissa, India).

Typical activities in CND projects are:

- (a) Carrying out diagnostic studies, including CND mapping (i.e. formulating a taxonomy of existing clusters and networks in a region or country);
- (b) Providing awareness-raising initiatives through seminars and workshops;
- (c) Arranging training for policymakers and cluster development agents (CDAs) involved in CND;
- (c) Organizing study tours for beneficiary firms and staff of institutions involved in CND support;
- (d) Giving advice to firms that form horizontal and vertical networks, clusters and export consortia (e.g. formulating business plans, group coaching);
- (e) Preparing tailor-made methodologies or guidelines for promoting CND in the context of the client country (used in advice/training);
- (f) Monitoring and evaluating networks and cluster development initiatives.

### **Intervention modalities**

Two important characteristics of the UNIDO CND approach should be noted:

First, *technical cooperation projects heavily rely on **local expertise***. Thus, international expertise is used particularly in the start-up phase, and gradually reduced over time. During this phase, CDAs are recruited by UNIDO in consultation with the counterpart institutions; they act as coaches and moderators of CND processes. In most cases CDAs are UNIDO project staff, although in some cases they are counterpart staff, trained by UNIDO consultants.

Secondly, *UNIDO CND initiatives usually focus on **creating social capital*** through awareness-raising, training, advisory services and trust-building.<sup>8</sup> Social capital can be seen as one of the resources utilized in the production process, as

---

<sup>8</sup> "... In such a view, bonding social capital, for example, can provide the glue between groups of entrepreneurs in clusters and networks, and bridging social capital, for example, can serve as a lubricant to stimulate development of new business relationships in value chains." (UNIDO, 2006, "Social capital for industrial development: operationalizing the concept", p.97).

it constitutes an input along with physical and financial capital, human capital and technology. UNIDO CND interventions do not provide financing or fixed assets, but contribute to fostering collective action among enterprises. Human and social capital is therefore created in the process.

### 2.3. The portfolio of CBL Unit activities

Since the mid-1990s, UNIDO has been active in technical cooperation projects based on CND promotion. The portfolio of activities implemented by UNIDO in this field is summarized in table 1. During 16 years (1994-2009), 64 projects were concluded, and to date 18 (see table 1) are still ongoing. The portfolio covers a total allotment of \$31.5 million and expenditures of some \$28.5 million. The average size of a CND project amounts to \$491,613.

Table 1  
UNIDO CND projects: Completed and ongoing (1994-2009)

	No.	Total allotment		Expenditures		Average size (\$)
		(\$)	Percentage	(\$)	Percentage	
Closed projects	46	21 719 655	69.0	21 372 075	76.5	472 166
Ongoing projects	18	9 743 627	31.0	7 154 402	23.5	541 313
<b>Total</b>	<b>64</b>	<b>31 463 282</b>	<b>100.0</b>	<b>28 526 476</b>	<b>100.0</b>	<b>491 613</b>

Source: elaboration from CBL Unit database.

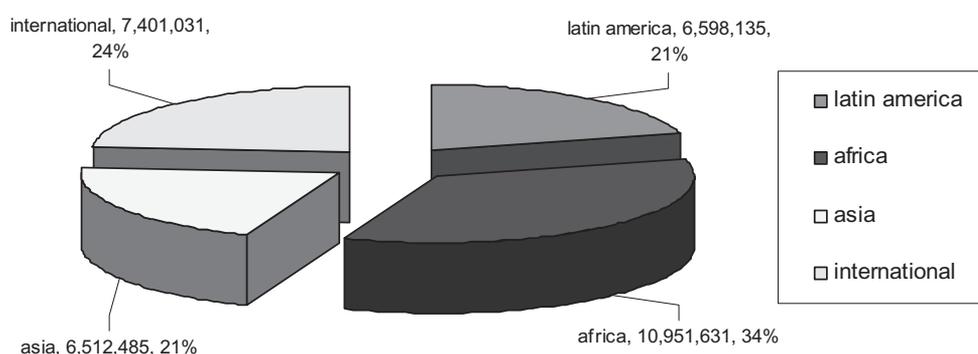
In terms of number of projects and size of funding, most CND projects have been implemented in Africa (35 percent of the allotments), followed by international projects (24 per cent), projects in Asia (21 per cent) and in Latin America (21 per cent).

Table 2  
UNIDO CND projects: by geographical region (1994-2009)

	No.	Total allotment		Expenditures	
		(\$)	Percentage	(\$)	Percentage
Africa	26	10 951 631	34.8	10 200 763	35.8
Asia	12	6 512 485	20.7	5 343 014	18.7
Latin America	19	6 598 135	21.0	6 511 467	22.8
International	7	7 401 031	23.5	6 471 231	22.7
<b>Total</b>	<b>64</b>	<b>31 463 282</b>	<b>100.0</b>	<b>28 526 476</b>	<b>100.0</b>

Source: elaboration from CBL Unit database.

Figure 1  
Geographical distribution of UNIDO projects per allotments, 1994-2009  
(in \$ and percentage)



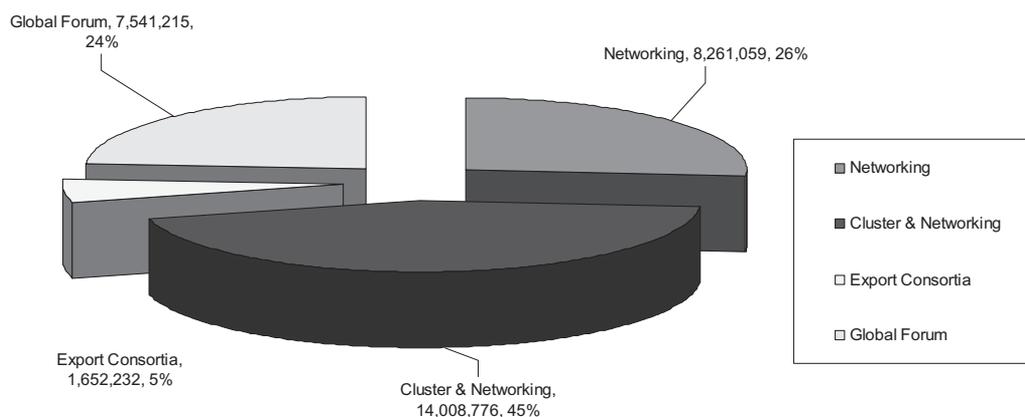
Over time we observe **variations to the theme of business linkages**. Thus, while in the early years most projects were of a networking type (seven in 1997), cluster development projects have later risen in number, with a peak of 10 new projects begun in 2004. Networking projects have also become more important within the overall portfolio. Within networking activities, promotion of export consortia has come to the fore as at the end 1990s, with five projects started in 2004. Global forum activities have absorbed 24 percent of allotments.

Table 3  
**UNIDO CND projects, by approach (1994 – 2009)**

	<i>No.</i>	<i>Total allotment (\$)</i>	<i>Percentage</i>	<i>Expenditures (\$)</i>	<i>Percentage</i>	<i>Average size</i>
Networking and export consortia	28	9 913 291	31.5	9 556 446	33.5	354 064
of which export consortia	6	1 652 232	5.3	1 363 525	4.8	275 372
Cluster and networking	28	14 008 776	44.5	12 364 621	43.3	500 313
Global forum	8	7 541 215	24.0	6 605 409	23.2	942 652
<b>Total</b>	<b>64</b>	<b>31 4632 82</b>	<b>100.0</b>	<b>28 526 476</b>	<b>100.0</b>	<b>491 613</b>

Source: elaboration from CBL Unit database.

Figure 2  
Geographical distribution of UNIDO projects per allotments, 1994-2009  
(in \$ and percentage)



Moreover, although the average size of projects is \$491,613, there is a large variance with only a few large projects and many small ones. In this respect, it is to be noted that just ten projects are larger than \$1 million, and 24 are below \$100,000 (cf. annex 3).<sup>9</sup> The variations of average project size according to geographic location, predominant approach and project status is shown in table 4.

Table 4  
Average value of UNIDO CND projects  
(1994 - 2009)

Description	Average value of projects (\$)
Ongoing	541 313
Closed	472 166
Networking	375 503
Cluster and networking	500 313
Export consortia	275 372
Global forum	942 652
Africa	421 217
Asia	542 707
Latin America	347 270
International	1 057 290
<b>Overall average</b>	<b>491 614</b>

Source: elaboration from CBL Unit database.

<sup>9</sup> Specifically, there are 21 projects above the average, and 57 below.

## 2.4. CND Initiatives within overall UNIDO priorities

According to its *Corporate Strategy and Strategic Long-Term Vision* (UNIDO, 2005), UNIDO works towards contributing to improving the quality of life of the world's poor through sustainable industrial development. The Organization's work is focused on supporting developing countries in building their capacity to produce goods that conform to international standards, and offers training, technology and investment tools to contribute to the development of the competitiveness of their economies. The core focus areas of UNIDO are (a) poverty reduction through productive activities, (b) trade capacity-building, and (c) energy and the environment.

In terms of regional priorities, UNIDO places a special focus on **Africa**, and in particular Sub-Saharan Africa. The promotion of **South-South cooperation** also enjoys privileged attention, with UNIDO facilitating less developed countries to benefit from the experiences of emerging economies.

The UNIDO *Medium-term Programme Framework (MTPF) (2006-2009)* defines the organization's priorities as regards private sector development (PSD) under Service Module 4 (UNIDO, 2005). This module focuses on poverty alleviation through productive activities and trade capacity-building. The first area of focus is intended to – among others – “.. enable SMEs to enhance their collective efficiency through clustering and networking activities”. The second focus area is aimed at facilitating the entry of SMEs into international markets and value chains through the promotion of export consortia, of corporate social responsibility (CSR) and of business partnerships.

In this context, it is stated that “...priority will continue to be given to the SME cluster development program .... to expand it to new countries, and to refine the tools and methodologies used to promote the CND approach. Increased emphasis will be given to the development of rural and artisanal clusters, and to promoting twinning relationships between existing clusters in developed and developing countries. Improved monitoring and evaluation mechanisms will also be introduced, and the scope for using the cluster approach as an improved delivery mechanism for broader SME development projects, e.g. in the fields of CSR compliance, will also be tested. In addition, the prospects for a more effective integration of the UNIDO SME cluster development approach in sustainable local structures will be explored. “

This strategic framework targeted similar initiatives dealing with global forum activities, such as cluster-related global training activities (in cooperation with ILO), the exploration of opportunities for South-South collaboration, and active participation in the Donor Committee for Enterprise Development (DCED) ([www.enterprise-development.org](http://www.enterprise-development.org)).

Thus, the above-mentioned policy documents attest that **CND initiatives are an integral part of the UNIDO vision and priorities** in the technical cooperation efforts of the Organization.

## 2.5. Major changes and trends in framework conditions for CND

There is wide agreement that development of the private sector can contribute to poverty reduction. “The World Bank estimates that 80 per cent of poverty reduction is due to economic growth. It is the private sector that drives the economic growth developing countries need. It is companies that offer people the chance to get a job and earn a living. It is the private sector that creates wealth and helps individuals and nations lift themselves out of poverty. The private sector does not just mean multinational companies. Small firms and enterprising individuals matter just as much.” (Department for Industrial Development (DFID), 2009). This concept has often been stressed by several other international organizations as well as by Governments (e.g. Organization of Economic Cooperation and Development-Development Assistance Committee (OECD-DAC), 2003, OECD, 2007) as well as by UNIDO itself.

However, markets do not often work as expected in the standard paradigm of free competition, and can fail to work as effective signals for resource allocation. As a consequence, private sector development is difficult without policies and institutions adequately remedying **market failures** (Stiglitz, 1989; Chang, 2009). Therefore, the development of the private sector demands carefully designed policies to accompany and foster private firms’ initiatives.

Moreover, the specialized economic literature on clusters and networks has repeatedly stressed that firms, and notably small firms, do not suffer from their smaller size, but rather from **isolation** (Schmitz and Nadvi, 1999; Schmitz, 1995), and this justifies the attention to **linkages** that firms have with other firms and organizations. More specifically, firms often relate to each other horizontally, i.e. with other firms at the same level of the value chain, or vertically, i.e. with buyers and input providers. In the former case, enterprises interact within clusters, whilst in the latter they may participate in value chains, often led by larger firms or buyers, sometimes operating on a global scale. The link with the market is especially relevant, and developing country producers are linked into the global economy in various ways, including as clusters of producers with similar levels of power and by feeding into value chains (Kaplinsky, 2004). It has been observed that operating in clusters and networks might thus importantly enhance small firms’ potential to benefit from interacting with global value chains (Pietrobelli and Rabellotti, 2007). In addition, the flow of knowledge and technology accessible through linkages is also tremendously important for SMEs in developing and developed countries.

Approaches encouraging PSD have evolved over the years and since the 1990s, PSD support has increasingly included a focus on the issue of linkages. Earlier programmes (in the 1980s) often focused on providing finance and support services to individual businesses with an implicit or explicit subsidy. Aid was often also tied to goods and services from companies in the donor countries. This did not help wider market development in financial services or in business support services. In the 1990s, when concerns increased about the importance of poverty reduction, support to micro-, small- and medium-sized enterprises (SMEs) focused more on market development of business development services and microfinance became a central theme. More recent PSD thinking has focused on the market system as a whole and on the overall business environment. This has

led to programmes that support the improvement of the business climate through regulatory reforms and enhancing market functioning (e.g. The World Bank “Doing Business” initiative).

The issue of linkages has also gained remarkable support, as shown by the work of DCED that for thirty years has been a constant factor in fostering coordination among donors engaged in private sector development and promoting the debate on approaches. That non-governmental organization (NGO) began its work by stressing the strategic role played by SME development. Currently, it is focusing on the following themes: business environment, **linkages and value chains** (including clusters and networks), measuring and reporting results, PSD in conflict-affected environments, public private partnerships (PPPs), the Paris Declaration and donor coordination, and BDS.

The Internet-based survey (cf. annex 4) carried out for the present evaluation confirmed that, according to most experts surveyed, “there is demand for cluster and networking development initiatives in developing countries” – rating it 3.25 on a scale of 1 to 4.

The clear **focus on linkages and on cluster development**, as proposed by the UNIDO CBL Unit, **has therefore been fully consistent with the prevailing approach to PSD**, addressing rightly the challenges posed by the global context for enterprise competitiveness and poverty reduction.

In the light of the above-mentioned trend and demand for CND support, the issue of financing merits some attention at this point. UNIDO - as a technical cooperation agency and not a donor - relies on donors for funding its technical cooperation, which is developed based on the request of client countries. The move towards increased budget support by donors (basket funding in selected sectors) rather than funding individual projects through bi- and multilateral channels, affects to some extent the opportunities for securing donor funding for, inter alia, CND projects. In other words, notwithstanding the past and current portfolio of CND projects, the ability of UNIDO to further expand the outreach of its interventions, both at the country level and upstream, might be limited by a reduced availability of funding for project-type official development assistance..

## **2.6. Characteristics and comparison of approaches to CND of other organizations: why is the UNIDO approach special?**

Cluster and network development approaches have flourished among donors and international organizations during the past decade. However, same (or similar) terminology that describes CND processes often hides remarkable differences in concepts, in focus, and in actual design and implementation approaches. Table 5 below compares the approaches followed by those donors/international organizations that are most actively involved in CND-related support. This comparison was based on documents and reports obtained from the websites of those organizations. It is to be emphasized that table 5 does not profess to offer a complete description of all the characteristics of such programmes, nor to benchmark or comparatively assess them in detail. The comparison certainly cannot represent a comprehensive in-depth analysis of all the actors involved, as e.g., only the United States Agency for International Development (USAID) is

included among the listed bilateral donors, and the content of programmes could not be double-checked with relevant parties. However, for our present purpose to illustrate the position of UNIDO in the CND field the research was used to single out some of the main characteristics of the approach followed by UNIDO in comparison with other organizations' approaches.

Clusters and networks are of interest to economic policymakers, donors and international organizations because they are phenomena that generate **collective efficiency** through the (complex) equilibrium between competition and cooperation, that is itself the result of external economies<sup>10</sup> and joint actions (Schmitz, 1995). However, while the former - external economies - occur automatically and are associated to productive agglomeration, the latter - joint actions - are more difficult to achieve, but in turn are found to typically produce the greatest benefits. Moreover, bottlenecks might hamper cluster and network performance<sup>11</sup> and the advantages offered by joint actions are harder to obtain in these "imperfect" circumstances. The UNIDO CND approach aims at making joint actions easier and thus contributes to achieving the intended benefits of such actions.

Based on the provisional comparison summarized in table 5, the following features of the UNIDO CND approach stand out:

- The **geographical focus** of UNIDO interventions is clearly **more at the local level** (as opposed to country or regional levels) than is for most other actors in this field. The Inter-American Development Bank (IADB) approach appears the nearest to UNIDO in this regard;
- UNIDO CND programmes are usually not part of a larger, encompassing programme to support PSD (other than being implemented within the context of a UNIDO country programme or country cooperation framework). Rather, they are often "stand alone" projects, that sometimes later evolve into upscale country-wide or regional efforts including policy design at the country level. In contrast, for example the World Bank often uses CND projects either as a small element of a much larger programme or project to promote policy reform and improve the regulatory framework and the investment climate in recipient countries, or as a cross-cutting instrument encompassing a variety of interventions. An approach similar to that of the World Bank is practiced by the European Union. This reflects the difference between the approach of large donors and smaller executing agencies such as UNIDO;
- While the driver in UNIDO CND interventions is essentially local, i.e. targeting the development of local clusters and networks, other organizations aim at improving the business environment for firms and clusters of firms by also fostering business linkages with foreign entities

---

<sup>10</sup> External economies happen outside the control of a company and will result in a reduction in costs and increases in productivity. For example, before the invention of the automobile, the only way to move heavy freight across a land was rail. When heavy freight was eventually transported by large trucks, companies were able to make shipments across large distances to more remote locations. All companies benefited from this new technology, which was outside of their control.

<sup>11</sup> Several authors have proposed different classifications of clusters, to include for example "survival" clusters (Altenburg and Meyer-Stamer, 1999) or more advanced clusters related to the operations of transnational companies (TNCs) (Rasiah, 1994).

(e.g. USAID). In the case of UNIDO, the linkage with foreign firms is mainly pursued in the context of export consortia-related support, manifested through linkages sought with the UNIDO investment promotion and partnerships efforts;

- UNIDO projects tend to be **financially much smaller** than CND projects carried out by most other organizations. Indeed, UNIDO depends on willingness by donors to finance its activities to a larger extent than the other organizations included in the comparison;
- UNIDO and the Multilateral Investment Fund (MIF) of IADB are the only organizations considered in the comparison that attach **central emphasis to creating and improving social capital**;
- The core of UNIDO activities aimed at social capital development is specifically oriented towards establishing **a governance framework within the assisted clusters**; this is a key to the success as well as to the sustainability of the joint actions promoted among firms and with institutional partners. The strategy deployed to foster the emergence of cluster governance is aimed at generating a representative, legitimate and open discussion and a decision-making forum. Thus it goes hand in hand with the empowerment of local actors (from the public and private sectors) and with investments in human resource development, which are both instrumental in ensuring wide and full participation of cluster stakeholders in the governance framework.
- Most organizations **work with existing clusters and networks**, rather than aiming at creating new ones. The selection of clusters to support may involve prioritizing various criteria that range from the existence of enterprises engaged in informal networking to attempts to engage in collective activities (nascent cluster or network), existing investment opportunities and potential for export performance, to employment creation and more social objectives. Particularly in the case of UNIDO, the choice to focus on existing clusters and networks stems from the following considerations: (a) the opportunity to foster greater private sector ownership as compared to the establishment of new clusters, which is often public-sector driven; and (b) the opportunity to generate an impact on PSD with a limited amount of funding and to mobilize existing (local) financial and institutional resources.
- Although all organizations use CND programmes as tools to promote PSD and competitiveness, **many of them – like UNIDO - are also pursuing additional development-related objectives through the CND approach**, such as poverty reduction, CSR, and environmental management (including energy efficiency and cleaner production).<sup>12</sup> All UNIDO CND programmes adhere to the principle of **non-substitution** of public and private sector functions and roles. The focus of pilot interventions is on providing incentives to and creating capacities within the public and private sector to play more effective roles in CND and provide efficient and effective services to enterprises. Thus, a typical CND initiative supports local, regional and national institutions to which tools

---

<sup>12</sup> UNIDO has developed specific tools to maximize the poverty reduction impact of cluster initiatives through the analysis of pilot level interventions that produced guidelines, tools and technical papers to facilitate their dissemination and replication (e.g. project TF/IND/04/X48 in India).

and methodologies are transferred (e.g. local Government, NGOs, chambers of commerce, business networks and associations of producers, universities and training institutes, regional and local economic development agencies), provides services to cluster firms, facilitates and ultimately enables the assumption of leadership of the cluster development process by the concerned local public and private stakeholders;

- As stated earlier, a distinctive feature of UNIDO CND initiatives is the **catalytic approach**. This refers to the capacity to leverage local resources and facilitate access to existing support schemes, to enable cluster stakeholders to identify shared interest to effect structural change, and to collectively voice their needs.

#### Salient points in chapter 2

- To exploit the advantages of collective efficiency, UNIDO has developed and follows an approach to promote the development of clusters and networks that aims at fostering joint actions among SMEs including linkages with relevant public and private institutions in their proximity. This approach is in line with the academic discussion on cluster and network development, as well as with the experiences/lessons learned on the ground by CND practitioners.
- Since 1994, the UNIDO CBL Unit portfolio of activities has included 64 initiatives for a total allotment of more than \$30 million. **During that time the UNIDO approach has evolved from placing emphasis on horizontal networks to a set of specialized interventions (cluster-type interventions, vertical networks, export consortia).**
- The UNIDO approach differs from most other donors' programmes in terms of **size of intervention and focus on social capital**. The small size favoured by UNIDO affects the scope and explains why UNIDO CND interventions are usually based on a pilot logic, i.e. they demonstrate the viability of clusters and networks and aim at promoting changes in the institutional environment needed to facilitate the emergence of vibrant clusters, rather than aiming for direct impact at the macro level (see next chapter); the small size of projects is also related to the focus on "soft interventions", i.e. the creation of social capital instead of using larger scale interventions to upgrade infrastructure and invest in technology.

Table 5

## Main characteristics of cluster and network development programmes of selected international organizations

	UNIDO	USAID	WORLD BANK	EUROPEAN UNION- Europe Aid	CORPORACIÓN ANDINA DE FOMENTO	MULTILATERAL INVESTMENT FUND (IADB)	ASIAN DEVELOPMENT BANK
<b>Geographical reach of the cluster</b>	Local level	Country level. Often a national counterpart in the private sector or its representative associations	Country level. Usually the counterpart is the host-country government that assumes a larger role in the actual organization and implementation	Country level.	Regional -local level.	Local level	Regional level, special focus on City Cluster concept within Asian countries.
<b>Main driver: Cluster element of a larger encompassing PSD programme –or a stand-alone project</b>	Development of local networks and clusters. Rather stand alone projects - often with later effort to upscale in-country and to other countries/regions and/or design policy	Improve business environment for firms and clusters. Foreign driver: foster collaborations & business opportunities with US companies. Private-Public Partnerships (PPP) also with foreign actors	Often used as a cross-cutting instrument, a small part of a much larger project to promote policy reforms and improve regulatory framework including investment climate	Often elements of a larger encompassing programme aiming at wide economic and state reforms. Foreseen in <i>Country Strategy Papers</i>	Implemented as stand alone projects	Mainly stand-alone projects	an element of the country's urban-led development strategy
<b>Selection mechanism of clusters</b>	In agreement with local counterpart, combining a supply-driven selection with partner countries' demands	Investment opportunities must exist to start a cluster project in sectors to sustain economic growth	Call for tenders. Tendency to invest in areas with greater potential returns or where clusters already operate.	Competitive mechanism. Usually local development agencies help in cluster selection	In collaboration with local institutions. Investments in already existing clusters/networks	Demand from the region and its experience with promising pilot initiatives. Competitive mechanisms sometimes applied	Competitive mechanisms consider economic growth potential, diffusion to other clusters, feasible financing instruments, and cooperative governance
<b>Funding (average project size) (\$)</b>	\$350,000, with notable variance across projects	From \$1 to 10 million	Large (on average \$5 million)	From \$ 5 to 10 million	On average \$00,000 (rarely they exceed US\$ 1-2 million)	From \$0.5 to 3.5 million of grants per project, that need to be matched by local counterparts.	From \$5 to 10 million
<b>Social capital: a central concept in the approach?</b>	Yes. Specific capacity-building to improve the "social capital" and institutional environment	No. Efforts to start a shared process to define clusters' common interests, strategic vision and action plan	Measures targeted to social capital are only a small component of the programme	No. But one target is to develop an organisational pattern that is conducive to cluster development.	No. Close concepts are: "promotion of entrepreneurial capacity" and "improvement of business climate"	Yes. Efforts to raise awareness of the importance of co-operation and local networks of firms	No. Yet many programmes for institutional strengthening and the creation of a shared vision within the cluster
<b>Activities: Mainly "soft" or "hard" interventions</b>	Mostly soft interventions	Both	Both. Soft interventions more important as focus shifts towards LED	Mainly "hard" interventions i.e. infrastructure	Mainly targeted to soft interventions e.g. TA	Both	Special attention to hard interventions, i.e. infrastructure in cities
<b>Duration (private sector involvement and cost-sharing)</b>	3-5 years Yes, private sector also shares costs, but programmes always through Government.	5-10 years	5-10 years	On average 5 years	2-3 years	2-5 years	5-10 years
<b>Interventions directly geared towards poverty reduction</b>	Yes, sometimes	Poverty reduction rather a consequence of the programme	Private sector co-financing is demanded, not known how much it cofinances in fact	On average private sector co-finances 20%	Private sector contributes on average up to 20-30%	Aim to work with private sector. Local counterparts co-finance 50%	No. Poverty reduction is not the first aim
<b>Additional issues addressed (e.g. CSR, energy eff., environment)</b>	sometimes CSR, energy efficiency, environment	CSR and environment, but main aim is PSD	CSR and clean energy	No. General aim is PSD	Environment protection	Clean production/energy and CSR.	Strong focus on cleaner production

For sources, see annex 5.

# 3

## Assessment

---

### 3.1. Design, programming and planning

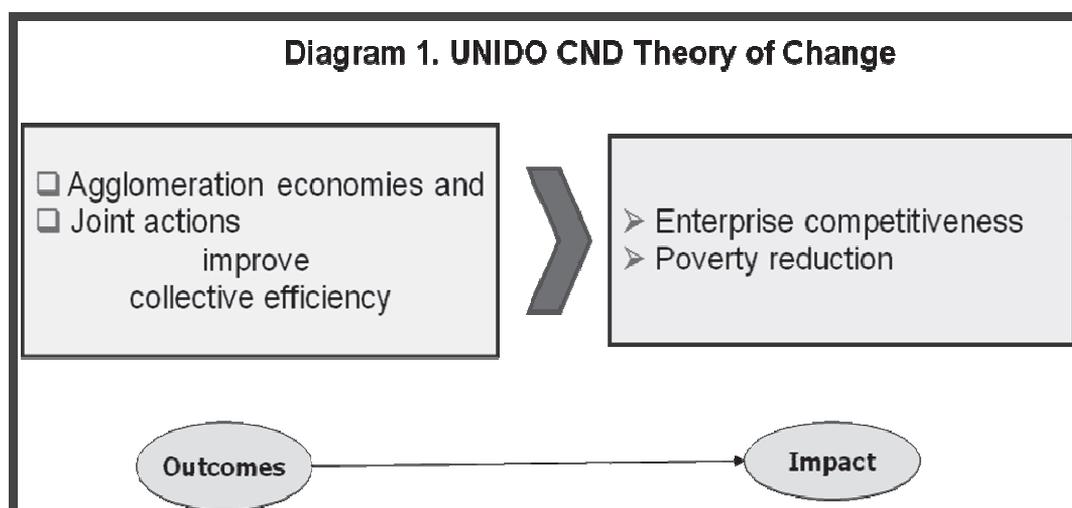
- *Is the design of the overall programme and of individual projects consistent with the underlying theory of change?*

Clusters and networks can be major sources of productivity improvements, owing to the agglomeration economies<sup>13</sup> they allow, which are external to the firms but internal to the group of firms concentrated in a specific geographical location (UNIDO Industrial Development Report, 2009). In addition to the external economies offered by agglomeration, effective clusters and networks make joint actions easier, and these in turn further contribute to firm performance. However, agglomeration economies and joint actions often cannot easily develop owing to various problems, including lack of awareness of their potential advantages, inter-firm and inter-organization asymmetries in capacity, information and power, lack of governing mechanisms, “rules of the game” and resulting opportunistic behaviour.

These issues - that prevent the potential benefits from clusters and networks to materialize - are central to the theory of change that forms the conceptual basis of UNIDO CND interventions. This **theory of change** is illustrated in diagram 3, which shows that agglomeration economies and joint actions improve collective efficiency, and this in turn leads to more competitive enterprises, especially SMEs, which are expected to contribute to poverty reduction.

---

<sup>13</sup> The term **economies of agglomeration** is used in urban economics to describe the benefits that firms obtain when locating near each other. This concept relates to the idea of economies of scale and network effects. Simply put, as more firms in related industries cluster together, costs of production might decline significantly (firms have competing multiple suppliers, greater specialization and division of labour result). Even when multiple firms in the same sector (competitors) cluster, there might be advantages because that cluster attracts more suppliers and customers than a single firm could alone. Cities form and grow to exploit economies of agglomeration.



**Intervention logic** – i.e. the strategy reflected in the design of projects and programmes that is followed by the CBL Unit in most of its CND interventions at country level - is sketched in figures 4. and 5 that show how the country level interventions fit into the overall UNIDO CND programme. Following this intervention logic, the country-level projects (including CND pilots and upscaling) at the country level and the activities and outputs at programme level need therefore to be closely related and mutually consistent.

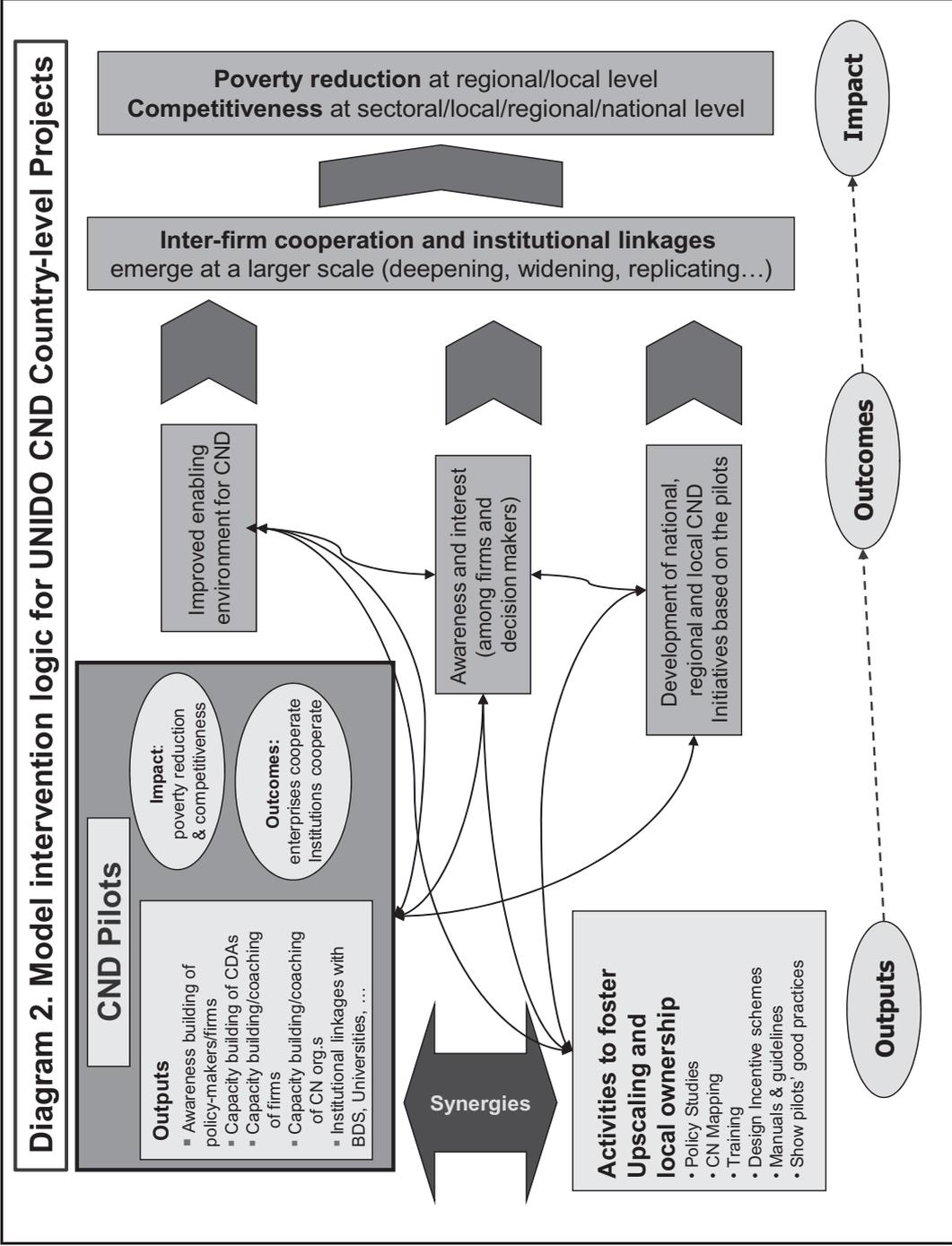
The project and programme logic was deduced *ex-post* and reconstructed by the evaluators based on findings from various project evaluations and the information available on upstream or programme evidence. This logic is often only implicit and seldom fully expressed in project documents. The core elements of this strategy are country-level projects that include (embedded) CND pilot interventions as well as additional activities to foster upscaling and ownership of the CND approach at the national level beyond the pilot localities.<sup>14</sup>

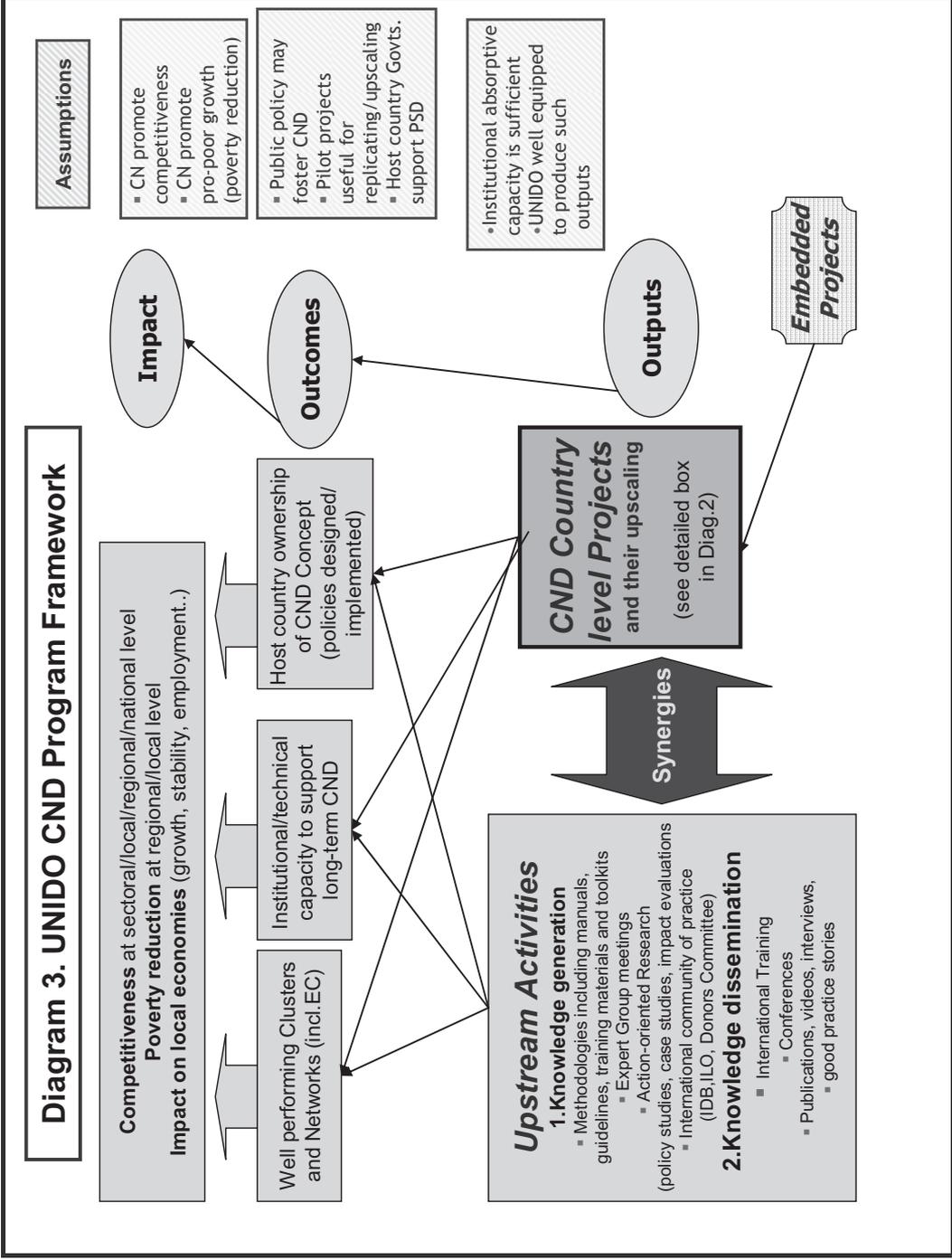
At the country level a CND project usually aims simultaneously at supporting specific clusters to promote their competitiveness and reduce poverty (*impact*) via better inter-firm and inter-institutional cooperation (*outcomes*) (figure 4). Project activities typically include awareness-building on the part of policymakers/firms, capacity-building of CDAs, capacity-building and coaching of firms and local institutions, fostering institutional linkages with BDS providers, universities, and other local organizations.

The blend of project activities usually differs, depending upon whether the emphasis is on networks or clusters. The starting point of projects also remarkably differs. Thus, network-promoting projects begin at the company group level and then gradually involve institutions. Cluster interventions often begin working with the institutions and progress to work directly with enterprises. To achieve this aim,

<sup>14</sup> The term upscaling is often used by UNIDO and by other organizations with different meanings. Here we define upscaling as replications and extensions of pilot experiences – in distinct geographic regions or in related thematic issues, including support to policy design and implementation, often with (national and local) Governments, as well as to strengthen local ownership of the approach.

cluster committees are often created; these communities usually include representatives of all the institutions involved, including enterprises, cooperatives and other enterprise networks. Thus, in both types of intervention the establishment of a governance mechanism is central. While network governance mechanisms are made up of enterprises (entrepreneurs), cluster governance structures (i.e. the cluster committees) are typically made up of representatives of institutions (including business organizations).





Outcomes stated in project documents often include an improved enabling environment for CND, awareness and interest among firms and decision-makers, and development of national, regional and local CND initiatives based on the pilots. To achieve these outcomes, activities foreseen to foster upscaling and local ownership typically include studies on CND policies at the national or regional level, C&N mapping, training of additional CDAs and of policymakers, design of incentive schemes, drafting and dissemination of manuals and guidelines, showcasing pilots' good practices.<sup>15</sup>

Synergies and coherence between the pilot initiatives and the opportunity for learning, replication and also mainstreaming in local government policies, are essential for the sustainable impact of a CND project.

Country-level projects represent a core component of the overall **UNIDO CND Programme framework**, which is described in figure 5. CND country-level projects interact dynamically with and benefit from a variety of upstream activities that are not primarily directed towards country-level objectives but contribute to achieving the overall programme goals. Such **upstream** activities include **knowledge generation** and **dissemination** activities. Among the former are methodologies, including manuals, guidelines, training materials and toolkits, expert group meetings, action-oriented research (policy studies, case studies, impact evaluations, and efforts to create an international community of practice - e.g. with (DCED, IADB, ILO,). Among the latter are international training courses, conferences, publications, videos, interviews, and good practice case studies.

Overall, the **outcomes** expected from the CND programme are:

- Well performing clusters and networks (including export consortia)
- The existence of institutional and technical capacity to support long-term CND
- Host country ownership of the CND concept, with appropriate policies designed and implemented

In turn, the **development objectives** of the programme are:

- Improved competitiveness at sectoral/local/regional/national levels
- Poverty reduction at regional/local levels
- Impact on local economies (e.g. growth, stability, employment)

Overall, **the intervention logic of most CND projects is found to be in line with the theory of change** and the overall UNIDO CND Programme Framework.

It is important to emphasize that, for the CND programme to produce results, a number of generic assumptions need to be met. These assumptions (i.e. necessary conditions) are briefly summarized in figure 5. More specifically, it is assumed that clusters and networks promote competitiveness and pro-poor growth (poverty reduction). The necessary conditions for a positive outcome include: (a) public policies that can foster CND (e.g. no strong barriers exist for

---

<sup>15</sup> "Institutional capacity-building and policy advice for the dissemination of cluster development policies at regional or national scale." <http://www.unido.org/index.php?id=5403> accessed 24.3.2009.

joint actions that public policy cannot overcome); (b) pilot projects are useful for replicating/upscaling; and (c) host country Governments support PSD, since CND is an approach to economic development that depends on the possibility of private enterprises to develop and to become active participants of the development process. In turn, for outputs to translate into the envisaged outcomes, sufficient institutional absorptive capacity of counterpart organizations is required, as well as the capacity of UNIDO to produce outputs of good quality (e.g. manuals that are well adapted to the country context, CDAs that are well trained).

The assumptions are important for CND programme design in two ways. First, assumptions help to capture the specific country CND context when a country-level CND intervention is designed. Secondly, at the programme level, the assumptions help to verify whether a given programme needs to respond to changes in the global context regarding economic development and international development cooperation. With regard to the latter aspect, the expert survey (cf. annex 4) indicated that most of the above-mentioned generic assumptions at the programme level are also shared by the experts surveyed for this evaluation. Thus, for example, on a scale of 1 to 4, respondents assigned an average value of 3.22 to the realism of the assumption that “Public policy can facilitate cluster development”, 3.16 to the hypothesis that “Clusters promote competitiveness”, 3.09 to the assumption that “Demonstration of cluster work is an effective tool for replication and upscaling, and 3.06 to the assumption that “Clusters can promote pro-poor growth”.

In summary, **the core elements of the UNIDO CND strategy** are twofold: (a) the use of **CND pilot projects to directly support selected clusters and networks in order to then upscale them** and contribute to strengthening local ownership, and (b) the **interactions between the country-level projects and upstream activities at the programme level**. Given this setup, continuous feedback and interaction between the country and the upstream levels foster the coherence of CND interventions and are essential ingredients for CND programme success.

In most of the projects reviewed, the design included specific provisions for upscaling pilot experiences such as capacity-building in counterpart institutions, and training future CDAs. However, although occasionally pilot cases were well analysed, and user-friendly case studies had been prepared, these case studies are not very detailed in terms of providing practical advice on what works and what does not work in specific circumstances. They mainly represent useful tools to raise awareness, but rarely contained a critical assessment of cluster/network performance, making it difficult to utilize the lessons drawn for future replication in other locations. However, effective transfer of lessons learned and good practices have been fostered by means of using consultants across projects (including former or current UNIDO CDAs) or linking project staff to competence centres on cluster development established as a result of previous CND projects (e.g. the MSME Foundation in India). The lessons learned and the practical implications proposed were in some cases useful at the local level, but much more difficult to apply at the policy level.

Another weak point is the often not sufficiently exploited potential to use CND pilots effectively through direct involvement (training on the job) of counterpart staff in generating showcases. However, a good practice example for application of this potential can be observed in the CND projects in Orissa State (India) and

Nicaragua, where UNIDO project staff established pilot experiences and, at the same time, trained and supported counterpart staff to create their own pilot CND interventions (so-called direct and indirect CND pilots).

Thus, the not yet fully effective utilization of CND pilots represents **a commonly found weakness that seems to be rooted in project design**, where only in rare cases specific activities for the effective utilization of pilots are included and where often the role of counterparts in upscaling is only vaguely defined. Thus, **the pilot logic of projects is often only implicit**, i.e. seldom fully expressed in project documents. The present evaluation clearly reflects an ex-post analysis and portrait, and acknowledges the difficulty of planning and executing such approaches on an ex-ante basis, owing to the need to reflect different interests in actual projects – including donors' interests. Nevertheless, in designing projects and interventions, it would still be advisable that all components are described in the overall programme logic. Thus, all interventions should have their role explicitly spelled out within the overall programme logic.

The reason why pilots were not always effective tools for wider outcomes and impact might be found in the sequence of interventions, as well as in the synergies and coherence between pilot-projects and upscaling initiatives. These might be improved with a phased approach.<sup>16</sup> To illustrate this with an example from another field (environment), the Global Environmental Facility (GEF) defines its approach to act as a catalyst and uses a phased approach to programme its cooperation activities as follows:

- 1st phase: foundational and enabling activities, focusing on policy, regulatory frameworks and national priority setting and relevant capacity
- 2nd phase: projects that focus on demonstration, capacity development, innovation, and market barrier removal
- 3rd phase: projects with high rates of co-funding, catalysing investments or implementing a new strategic approach at a national level.

Therefore, a more explicit and planned approach to phasing could also be explored with respect to CND initiatives. For example: to begin with working at a policy level followed by developing and implementing demonstration projects, or the reverse, beginning with demonstration projects, while already explaining the overall programme logic, and later focusing on policy and diffusion.

At the level of knowledge-generation activities, the weak linkages in project design between pilot projects and upscaling has been addressed in practice through the systematization of project experiences oriented to upscale project activities (India and Nicaragua) Case studies and (positive and negative) lessons learned from institutional capacity-building and policy advice have been codified and are used to inform the design of new projects (e.g. in the second phase of the CND projects in Ethiopia, Islamic Republic of Iran). These experiences should be further

---

<sup>16</sup> The evaluation team is aware of the fact that in many cases more dominating barriers exist, such as uncertainty of sufficient funding and resource constraints of counterparts. However, whenever such constraints exist, a consistent approach to design should help make these barriers transparent from the beginning, helping thereby to develop alternative strategies and intervention modes.

**extended and strengthened, so that the activities to create and disseminate knowledge provide additional insights on how to upscale project activities** with the aim of supporting recipient countries' Governments to mainstream the approach into their policies, and consequently design and implement specific policies in the field of CND.

### **Salient points on design:**

- The theory of change on which the CND approach is based centres on the benefits of agglomeration economies and joint actions. UNIDO CND interventions at the country level and the global UNIDO CND programme are largely in line with this theory of change
- The UNIDO CND interventions follow essentially a pilot logic, i.e. they help to establish well functioning clusters and networks to demonstrate the benefits of CND. This pilot logic is not always explicit ex-ante in the interventions' design and in the overall programme logic
- The design of CND interventions at the country level does not always make effective use of the pilots through inclusion of outputs/activities that intend to utilize pilots for capacity-building and policy advice in the country/elsewhere
- Activities should be further extended and strengthened to create and disseminate knowledge on moving project activities upstream with the aim of supporting recipient countries' Governments in mainstreaming the approach into their policies

### **3.2. Implementation**

- Are individual CND interventions implemented in line with the underlying theory of change?
- How do implementation modalities affect efficiency and results?
- Is the information on CND interventions and their results sufficient and relevant (M&E)?

During implementation, the largest share of financing goes into downstream activities, while upstream activities (research and international training) have received only about 12 percent of total allotments.<sup>17</sup> However, additional upstream activities have been funded in several instances by devoting part of the country-level project resources to action-oriented research, development of methodologies and of case studies, etc.

---

<sup>17</sup> In tables 6 and 7 an effort was made to classify projects between the two main groups (i.e. downstream and upstream) on the basis of the categories used in the CBL Unit Database. The classification needs to be interpreted with some flexibility and caution, as some subcategories might overlap.

Table 6  
**UNIDO CND projects: Upstream vs. downstream activities (1994-2009)**

	No.	Total Allotment (\$)	Percentage	Average size
Downstream Preparatory assistance, Pilot projects, upscaling, policy development, cluster twinning	61	27 800 600	88.0	455 748
Upstream Research, training, evaluation	9	3 662 682	12.0	406 965
<b>Total</b>	<b>70</b>	<b>31 463 282</b>	<b>100.0</b>	<b>449 475</b>

Source: elaboration from CBL Unit database.

The largest share of resources is split between pilot projects (49.4 per cent) and projects directly targeting upscaling, local ownership at the national level, and policy development (37.4 per cent) (cf. table 7). While upscaling projects are less numerous, they are financially larger. Projects explicitly targeting research and action-oriented research have attained a sizable 11.4 percent (\$3.6 million) of total allotments. The remaining allocation of resources fell to preparatory assistance and others.

Table 7  
**UNIDO CND projects, by project type  
 (1994-2009)**

Project type	No.	Total allotment (\$)	Percentage	Average. size
Pilot project	32	15 540 769	49.4	457 081
Upscaling	18	10 830 711	34.4	601 706
Policy development	4	937 033	3.0	234 258
Preparatory assistance	7	492 087	1.6	70 298
Research	4	3 592,631	11.4	898 158
Others*	5	70 051	0.2	23 350
<b>Total</b>	<b>70**</b>	<b>31 463 282</b>	<b>100.0</b>	<b>449 475</b>

Source: elaboration from CBL Unit database.

Apart from the analysis of the portfolio in terms of project types, the evaluation team made an effort to obtain an overview of overall project performance. To this end, available evaluation reports and preliminary assessments from field visits

were analysed in great detail and projects were rated against standard evaluation criteria (cf. table 8). The selection does not claim to be representative of the entirety of UNIDO CND interventions. Moreover, in this evaluation exercise, projects are compared not only with their stated objectives, as expressed in project documents, but also with the overall country-level project and CND programme intervention logic described in Section 3.1 (cf. figures 3 - 5). The assessments reflect the subjective views of the evaluators on the available evaluation reports, which make the projects comparable only to a limited extent. Indeed, what is of interest here is the overall trend as regards the various evaluation dimensions, not the performance of specific projects.

Table 8  
Evaluation dimensions of selected projects<sup>18</sup>

<i>Criteria</i>	<i>Colombia</i>	<i>Ecuador</i>	<i>Ethiopia</i>	<i>India</i>	<i>Morocco</i>	<i>Nicaragua</i>	<i>Peru</i>	<i>Senegal</i>	<i>Tunisia</i>	<i>Average</i>
Design	2	3	2	4	4	4	2	4	4	3.22
Relevance	4	4	4	4	4	3	4	4	4	3.89
Efficiency	2	3	4	4	4	3	3	3	4	3.33
Effectiveness	3	3	4	4	4	3	3	3	3	3.33
Impact	0	0	0	3	0	0	0	0	0	0.33
Sustainability	4	2	3	4	3	2	1	0	2	2.33

Source: Evaluation Team review of individual evaluation reports.

The overall assessment of the projects was very positive, especially in terms of relevance, efficiency and effectiveness. A low rating for the criterion impact does not mean that impact was low, but that most evaluations do not report on impact in a detailed manner (in many cases no systematic monitoring, including establishment of appropriate baselines, is carried out at the impact level; in other cases it is simply too early to assess impact). It should also be noted that impact in this context refers to a comprehensive assessment of impact of CND interventions (including intended and unintended effects and including effects in terms of poverty reduction and competitiveness) *and not* to anecdotal evidence of impact at the level of CND pilots. In general, reporting on impact had a positive effect on the competitiveness dimension in most projects. The criterion concerning sustainability appears to be the most variable across the various projects.

These results are also confirmed by the evidence drawn from the survey. UNIDO CND projects were assessed by the experts on a scale of 1 to 4 as being highly relevant to UNIDO objectives, experience and capabilities (2.64), to the country's needs (2.47) and to the enterprises' needs (2.53). The difficulty to measure and evaluate impact is confirmed by the same experts surveyed, who remarked that the monitoring and evaluation (M&E) system has been one of the weakest areas in these projects (2.07) .

**Clusters vs. networks.** A conceptual distinction between networks and clusters has often been stated in programme documents and methodological papers (e.g. in UNIDO 2001 and thereafter). In these documents, UNIDO proposes to follow

<sup>18</sup> The following rating scale was used: (0) Too premature to assess (or not known); (1) Seriously deficient, not in line with programme intervention logic (including design, implementation and results); (2) Not sufficiently in line with programme intervention logic; a few positive aspects, but outweighed by negative aspects; (3) On balance in line with programme intervention logic; positive aspects outweighing negative aspects; (4) Highly satisfactory: fully in line with programme intervention logic.

different – although related – methodologies for cluster and for network development (cf. section 3.1). UNIDO texts explicitly mention that “networks perform the role of building blocks in cluster development” (UNIDO PSD Toolkit <http://www.unido.org/psd-toolbox> accessed 25 May 2009). Moreover, it has also been acknowledged that, in fact, these are two different stages in the sequence of project support involving business linkages (UNIDO 2003:27). Thus, most projects typically begin by promoting joint actions between firms (*network* development), and then turn to local economic development strategies by both private and public sector actors (*cluster* development). However, in project documents and project planning **such differences have rarely been expressed, and in actual implementation they have not played an important role.**

For example, UNIDO and the federal and state Governments of India use the concept of clusters, including enterprise networks. Similarly, in Ethiopia, the UNIDO project refers to clusters as entities made of several hundred firms, with activities geared towards participants voluntarily choosing to participate. In reality, **when implementing projects the difference is often diluted to a continuum of different cases, sharing some central elements** that are present in various degrees and with different relevance in each instance (e.g. linkages, trust and social capital, governance mechanisms, inter-firm linkages, a relevant role of local public and private organizations).

Indeed, a strategy of how to deal with different forms of clusters would have been necessary in Ethiopia, given the remarkable variances that developed throughout the clusters in the country. To this end, **some flexibility in the CND approach is usually justifiably applied in project implementation, where context-specific differences are rightfully taken into account.** In contrast, in Nicaragua the continued presence of UNIDO and the sequence of CND projects resulted in a shift from a clear emphasis on networks to an explicit one on clusters. In this case distinct methodologies were developed to guide future work on networks on the one hand and clusters on the other.

Therefore, **this stated difference between clusters and networks** – and the ensuing support methodologies - **has not always been followed through in project documents or in actual implementation.** Although awareness of minor differences tends to be shared by most actors and CND specialists, possible **confusion related to terminology should be avoided.** UNIDO should clarify the issue and ensure coherence among principles, methodologies and actual practices.

Most CND projects (cf. table 2) have been implemented in Africa (34 percent of the allotments) followed by international projects (24 per cent) and Asia and Latin America (21 per cent each). This emphasis on Africa, where most of the poorest countries of the world are, is in line with UNIDO priorities as regards poverty reduction. However, within Africa the distribution of UNIDO CND activities is far from even, as only two countries (Senegal and Morocco) absorb most of the CND initiatives (see annex 3).

### **Salient points on implementation**

- The analysis in section 3.1 showed that, overall, UNIDO CND interventions are designed in line with the theory of change of CND. In several cases the

design did not explicitly reflect the overall pilot logic inherent in the programme. However, with regard to implementation the project evaluations analysed in the present thematic evaluation suggest that the use of upstream resources (e.g. for CND methodologies, study tours, international trainings, case studies) has contributed to a rather homogenous implementation practice of UNIDO CND projects. Thus, individual CND interventions have mostly been implemented in line with the underlying theory of change, and weaknesses in design did not necessarily translate into poor project results.

- For example, cases of good functioning of pilot logic and effective upscaling are provided by various CND projects in India and Morocco. In those projects, upscaling was made easier by the strong commitment of policy-makers - including the main counterpart institutions - who actively promoted and diffused the methods and tools developed with local experts (see section 3.5, Sustainability, on the MSME Foundation).
- However, little is known about the actual impact of CND interventions beyond the direct effects at the pilot-project level; this is caused by weaknesses in the M&E system applied for CND.

### 3.3. Relevance

- *Are UNIDO CND interventions relevant and effective in the different socio-economic contexts found in different countries?*
- *What are the main context factors that influence relevance of CND interventions?*

The evaluation of relevance assesses whether projects were appropriate to Governments and counterparts, to target groups, and to UNIDO (the last assessment took into consideration if they were consistent with the UNIDO mandate, corporate strategy and core competencies).

**The relevance of UNIDO CND initiatives to developing countries is generally high.** CND project **objectives (poverty reduction, competitiveness)** have generally been **in line with government priorities** aiming to promote micro and small-sized enterprises (e.g. in India, Ethiopia), exports (e.g. in Ecuador, Colombia, Peru, Morocco) and economic decentralization (e.g. in Ethiopia, Senegal). In some cases project counterparts have found export consortia to be more relevant to the competitiveness aspect than for poverty reduction (e.g. in Peru).

**Institutional outcomes** (capacity-building, enabling environment for CND) are also **mostly found to be relevant**. Official counterparts were typically involved in project design and implementation, thereby raising project relevance and local ownership of the approach. The experts' survey confirms that "project stakeholders were adequately involved in project design and implementation" (2.80 on a scale from 1 to 4). However, there was not always sufficient absorptive capacity in the institutions involved. In at least one specific case (Nicaragua), institutional instability and frequent turnover among the national counterpart staff significantly undermined the possibility to generate lasting ownership of the

approach at the highest policy level. However this situation was counterbalanced by establishing a network of partnerships with local institutions that had significantly higher absorption capacity and stability. That network became the spearhead for disseminating the cluster approach at the regional level.

Project-level evaluations confirmed that **CND interventions were also relevant for target beneficiaries at the local level**, helping to address fundamental challenges facing local entrepreneurs, business organizations, and local Governments. At the target-group level, CND interventions are addressing a commonly found need for enterprises to associate with others to achieve common goals. In many cases the evaluations identified a high degree of ownership within target groups, even to the extent that project staff ceased to be the main driving force for joint actions after a relatively short period of time. In this respect CND interventions seem to have a remarkably high degree of relevance for beneficiaries.

**CND interventions are relevant to UNIDO**, since the objectives of those interventions (poverty reduction, competitive industry) are covered by the Organization's mandate and the corporate priorities, as reflected in its long-term vision statement and the current MTPF. In particular, the projects' objectives are in line with the UNIDO aim of "...promoting the creation of wealth and tackling poverty alleviation through manufacturing".

However, in several cases CND interventions did not have a clear focus on industry. In Nicaragua, for example, the focus of recent cluster interventions was more on agriculture than on industry. In Peru, several export consortia were active in tourism rather than industry. In turn, the focus on industry was clear in Ethiopia, notwithstanding that country's clear agricultural base.

**Action-oriented research has also been a relevant activity when positioning UNIDO upstream work vis-à-vis** other development actors. The experts surveyed confirmed that it has been one of the main achievements of UNIDO CND activities (2.97 on a scale of 1 to 4). According to the same source, "UNIDO, through its CND initiatives, contributes to the international body of knowledge and influences the way similar activities are planned and implemented by international agencies and donors" (2.91), and "UNIDO CND initiatives are based on, and consistent with state-of-the-art knowledge about institutional change, SME development and clusters" (2.94). For example, these initiatives appear to be largely consistent with value chain approaches (3.09).

#### **Salient points on relevance**

- The experts and stakeholders surveyed at the field level consider capacity-building and training activities (3.03), and policy advice to Governments and counterpart organizations (3.09) to be the most important lines of activity of UNIDO CND interventions.

#### **3.4. Effectiveness and impact**

- *Are individual CND interventions producing the expected results?*
- *Are individual CND interventions producing non-intended results?*

- *What are the main factors that influence effectiveness of CND interventions (e.g. institutional anchorage, operational anchorage, access to finance, access to non-financial services, exit strategy and local contributions)?*

The **development objectives** of the country-level CND projects, as well as of the overall CND programme include: (a) competitiveness at sectoral, local, regional, national level, (b) poverty reduction at regional/local level, and (c) meso/macro effects on the local economies in terms of socio-economic growth, stability, and employment.

Systematic information on effectiveness - and especially on the impact of UNIDO CND activities - is extremely scarce. In a few cases, projects have established a monitoring system that provides comprehensive information on the different dimensions of CND results described above. The experts' Survey also acknowledged this weakness (cf. table 8). Most of the evidence provided is anecdotal and based on case studies. Thus, where information on effectiveness and impact exists, it is related only to the micro level (cluster and networking pilot projects). No impact evaluation has been carried out to assess the results of CND at the meso or macro levels.

The effect **on competitiveness at the pilot project level has generally been positive**, and in some instances this has also had an effect on poverty reduction. Illustration of this effect can be seen in projects in India, Colombia, Morocco and Nicaragua.

**The impact at the country-project level cannot be documented with certainty.** Evidence for macro impact at the macro level cannot be demonstrated by citing pilot cases. If there is a very good policy environment backed with sufficient funding for CND, supported by a good counterpart capacity and interest together with a high level of awareness, then impact at the macro level *might* materialize. However, up to the present there is no clear data to argue that successful projects have translated into impact at the country level.

Effectiveness in the delivery of project outputs requires assessment with reference to the **main outputs** of the projects, namely: trained people, manuals and methodologies, functioning enterprise networks, combined with governance mechanisms in place. Manuals were produced as a result of rationalization efforts during and soon after project implementation in India, Nicaragua, Morocco, and elsewhere. In several countries, CND-related policy documents have been produced.

Several project evaluations have shown that **the effectiveness of the projects under observation has been generally high at the pilot level. Evidence** on the degree of effectiveness with regard to institutional outcomes (capacity-building, enabling environment for clusters and networks) is less systematic, but reveals **several clear cases where significant institutional outcomes were achieved.** For example, in 2009 the Indian State of Orissa endorsed the UNIDO approach to CND and mainstreamed it into its policies ("*Orissa MSME Development Policy Draft, 2009*"). Effectiveness in terms of institutional outcomes has also been high in Colombia and Morocco, where local funds were created to finance CND programmes tendered by the respective ministries of foreign trade and managed

by the respective Association of Exporters in cooperation with other business support institutions. In Ecuador, the CND project has led the municipality of Atuntaqui to mainstream cluster and network development principles into its private sector development strategy. In Ethiopia, the operational counterpart FeMSEDA (Federal Micro and Small Enterprises Development Agency) is adopting the cluster approach widely, in an effort to disseminate it far beyond the UNIDO project outreach. In Senegal, one of the main government strategies for private sector development (the “Stratégie de Croissance Accélérée”) has become operational via a cluster approach, and the Government subsequently requested UNIDO assistance in focusing the strategy on a cluster perspective

**The effectiveness at the level of CND pilots has been influenced by several factors**, notably by active involvement of local stakeholders in design and implementation. A solid institutional anchorage has helped, especially at the local level, whilst at the national level such anchorage has been sometimes weaker (e.g. in Ecuador, Nicaragua, Peru, Senegal, Tunisia).

In some instances **access to non-financial services has also helped** to improve effectiveness of CND interventions. For example in Ethiopia, national and local branches of public organizations support SMEs (FeMSEDA and ReMSEDA (Regional Micro and Small Enterprises Development Agency) and also offer a large variety of training and technical services. In Ecuador, chambers of industry and a local University offer computer-aided design (CAD) services for garment producers that were included in CND interventions.

On the basis of the evaluation reports, it can be stated that the **effectiveness and impact of CND projects is strongly influenced by the local context in several ways**. In particular:

- The existence of a stable and supportive local and/or national government has been very important in most cases
- The existence of effective business support organizations with a tradition of effective and quality support services for local firms has also enhanced effectiveness and impact
- The productive specialization of supported clusters and networks in dynamic sectors (i.e. those enjoying comparative advantage and growth trend/potential) has also influenced the results of the CND programme on competitiveness of firms and clusters, although the selection of clusters and networks to support has often followed a supply-driven approach (see below)
- The existence of large (national/foreign) firms already active in the country/region and which offer the opportunity to develop and/or deepen a value chain approach has been exploited to a variable extent in the projects under review
- Whenever a policy for CND already existed in national/local policies, the effectiveness and impact of UNIDO CND projects was magnified. For example, the continued UNIDO presence in the field of CND projects in

India powerfully interacted with local policy-making, thus influencing Indian policy agenda and improving the results.

An additional factor that has influenced effectiveness of UNIDO CND interventions has been **the catalytic nature of those interventions**. The limited resources of CND projects were invested in spearheading a process of support to local economic development. An important element of the action plans developed by cluster and/or network stakeholders was exemplified by improved **access to other sources of support** (government incentive schemes, other donors' support programmes) that allowed leveraging financial resources and exploiting complementarities. This has occurred frequently in India – where leveraging occurred on the numerous programmes financed by the Government - and in Nicaragua, where substantial foreign aid flows has been enjoyed during the years under review.

CND projects can produce unintended results, and show varying degrees of inclusiveness. Thus, among the possible **unintended (including negative) results** of CND projects are; crowding out non-beneficiaries, creating or raising inequalities and disparities among local firms, favouring only the subset participating in the project (resulting in an *elite group*), and the lack of outreach and diffusion of these activities to other firms, networks, and regions. This was not readily observed in the projects reviewed, but that could be a result of a lack of appropriate and rigorous monitoring and evaluation tools. Thus, such risks have not been taken seriously into consideration, although they are considered to be risks that CND projects might face. This possibility points to the need to **develop appropriate tools to also monitor unintended negative results (and to foresee the possible necessary corrections) as well as to be aware of unintended positive results as potential source of learning**.

Likewise, with the assumption that **inclusiveness and outreach** to non-participants is an implicit objective of CND interventions (given the aim of upscaling), an **explicit strategy to ensure widest outreach** is an element of the CND approach that appears to be missing. However, some elements of inclusiveness are part of the typical CND project, e.g. the focus on improving availability of support services and fostering transparent functioning of business membership organizations. These generate benefits for all cluster stakeholders beyond the direct beneficiaries of technical cooperation

Concurrently, the principle of inclusiveness demands established criteria in order to be able to select and support clusters and networks. The criteria used are generally based on the homogeneity and capabilities of potential members as well as on their degree of (financial) commitment to undertaking joint actions. These elements also reflect the need to provide successful showcases within the life span of the project to facilitate the buy-in of institutional support needed to ensure project upscaling. Where poverty reduction considerations prevail (as in Chanderi and Orissa States in India), the establishment of networks is clearly driven by criteria of inclusiveness and empowerment - particularly of the poorest and marginalized or discriminated segments among the cluster stakeholders (scheduled castes, women, etc.).

The need to select a limited number of clusters and networks on which to work is justified in UNIDO policy documents on the basis of the cost of launching a CND

project, of supporting the implementation of an action plan, and of monitoring the process (UNIDO & MSME Foundation, 2006). According to that document, one should aim at generating a visible impact at the cluster level, maximizing the scope for learning and for spillover effects. The final cluster selection *should hinge on* the presence of SMEs, employment and export potential (if export development is indeed the purpose of the intervention), and the criterion of viability should dominate the selection. Thus, growth prospects, effective government policies, and specialization in higher end markets are all relevant criteria (UNIDO & MSME Foundation, 2006).

**The selection of which C&Ns to support has often followed a bottom-up and demand-driven approach** that has influenced the results and (likely) impact of many projects.<sup>19</sup> In other words, the implicit assumption has often been that once social capital is improved so as to capture the local externalities available and to promote joint actions (thereby increasing the overall level of collective efficiency), then the network and cluster will necessarily be successful. Yet, there are many forces at play at the level of the sector that determine competitiveness, and they might counteract and annihilate results of CND initiatives. These forces include macroeconomic factors (e.g. unfavourable business environment, unfavourable macro policies, exchange rate management), country level and sector level determinants of competitiveness and comparative advantage. Comparative advantages can include a framework for international trade set by multilateral and bilateral negotiations and international market conditions (e.g. the sudden emergence of extremely competitive producers in other countries).

Although broadly animated by the purpose of ensuring maximum impact and sustainability of the initiative, the selection process of C&N has not always prioritized criteria of competitiveness and market potential. Such criteria have been blended with other, more poverty-oriented considerations (such as employment potential in the short term, level of skills required in the production process that allows for the engagement of poorly educated people, concentration of the poor in certain geographic areas, etc.). These criteria reflect the need and mandate to target specific poverty nodes in a country or region and produce, at least in the short term, a visible impact in terms of employment and income generation.

The selection of which C&N to support must thus **encompass considerations of the production-side, including the emerging trends in markets and technologies**, as well as **dynamic strategic** considerations. These include the trend in international demand, consideration of market access obstacles and opportunities derived from international and bilateral negotiations, and the distribution of rents across value chains and areas of international specialization. Appropriate tools need to be used for this purpose.

---

<sup>19</sup> Selection of clusters occurs as follows (abridged from the UNIDO PSD Toolbox [http://www.unido.org/psd-toolbox/index.php?cn\\_pr01](http://www.unido.org/psd-toolbox/index.php?cn_pr01) accessed 25 May 2009): "A judicious selection based on the cluster's importance, promotability, viability, and sustainability helps to ensure an effective and wide-reaching impact. This ensures that available resources are concentrated on clusters where the approach has the greatest likelihood to be a success by contributing to the profitability of the SMEs, the revitalisation of systemic interactions, the dissemination of best practices, etc. Follow these steps for your cluster selection: (i) Identification of clusters in a country, (ii) Creation of country cluster table and map, (iii) Preliminary selection and shortlist of clusters, (iv) Formulation of final selection criteria, (v) Collection of primary data, and (vi) Final selection of clusters."

- *Is the information on CND interventions and their results sufficient and relevant (M&E)?*

In spite of the positive assessments of the results of pilot projects and country level projects, **very few evaluation reports include systematic information on impact**, and mainly rely on anecdotal evidence, as indicated above (cf. section 3.2). This is confirmed by the results of the experts' survey, where it was noted that the M&E system is one of the weakest areas in CND projects (2.07 on a scale of 1 to 4).

**In no case was a rigorous cost-benefit analysis of the project attempted**, meaning that the outcomes and impacts vs. the costs of the interventions were not measured. Unless adequately remedied, this is a serious problem that might hinder the further dissemination and adoption of the UNIDO CND approach at the policy level. Regrettably, this is often a problem with other development interventions, and is not unique to UNIDO. Proper and rigorous methods to appraise the social welfare impact of development projects are necessary and such methods are recommended to be widely applied.

**An appropriate assessment of results (outcomes and impacts) requires proper M&E tools.** As CND projects aim at working on two different but parallel and simultaneous levels, they pose special problems for M&E. Indeed, CND typically encompasses direct interventions at the level of specific/selected clusters (with pilot projects), and indirect interventions at the policy level, providing Governments with policy advice and technical cooperation on how to design and implement a given CND policy (upscaling).

In light of this peculiarity, the criteria to assess CND success need to be adapted. As UNIDO pilot projects in this field often also function not only as eye-openers, but are especially useful for their potential in inducing structural change (rather than for the immediate specific results they might bring), M&E tools should thus reflect the nature of these project objectives. This deficiency was acknowledged by the CBL Unit on repeated occasions. For example, the Expert Group Meeting on *CND with Special Emphasis on Monitoring And Evaluation Issues* (2002) concluded that: "The success of UNIDO's efforts in this field should be measured in terms of (i) the number of entrepreneurs entering into cooperative efforts..... , (ii) the impact of this enhanced cooperation on their businesses ..... , (iii) the positive changes in the institutional and business environment; and (iv) *in terms of the changes that it helps bring about (an impact that is likely to be especially long-term in nature)*. ((UNIDO, 2003: 25, emphasis added). It is thus clear that **M&E has been weak with regard to point (iv)**, and the existing tools have not succeeded in convincingly measuring effectiveness and impact in terms of structural long-lasting changes in attitudes and behaviour.

However, it should be noted that the CBL Unit is aware of this weakness and has been working towards an improved systematic M&E system for all CND interventions. This effort is based on state-of-the-art know-how on measuring performance of PSD-related interventions. While the new M&E system has not yet been effectively applied, it will be an important step towards a fully fledged CND

programme. It represents a good practice that, once tested, is expected to be replicated by other UNIDO branches.

### **Assessment of the effectiveness and impact of upstream activities**

The **quality of upstream activities has been good**, as reflected in publications known internationally and based on and consistent with state-of-the-art knowledge about institutional change, SME development and clusters. According to the Internet-based survey [reference] and as already indicated, “UNIDO, through its CND initiatives, contributes to the international body of knowledge and influences the way similar activities are planned and implemented by international agencies and donors” (2.91 on a scale of 1 to 4). Moreover, UNIDO CND initiatives are based on and consistent with state-of-the-art knowledge about institutional change, SME development and clusters” (2.94). They proved effective to put UNIDO on the map of CND activities, and contributed to make CND a relevant issue in policies and strategies to support private sector development.

### **Salient points on effectiveness and impact**

- The results on competitiveness at the pilot project level have generally been positive, and in some instances the projects also had an effect on poverty reduction
- The longer-term impact at the project and country level, however, cannot be documented with certainty in most cases. So far, data on this are scarce
- The degree of effectiveness is less systematic with regard to institutional outcomes (capacity-building, enabling environment for clusters and networks). However, there are several clear cases where significant institutional outcomes were achieved, for example in India, Colombia, Ecuador, Ethiopia, Morocco and Senegal
- The effectiveness at the level of CND pilots has been influenced by several factors, notably by the active involvement of local stakeholders in design and implementation, and by the catalytic nature of CND interventions, which resulted in an improved access of target groups to other sources of support
- An appropriate assessment of results (outcomes and impacts) requires proper M&E tools. CND projects pose special challenges for M&E as they aim to work at two different but parallel and simultaneous levels: direct interventions with pilot projects, and indirect interventions at the policy level, for upscaling
- The selection of which C&N project to support has often followed a bottom-up and demand-driven approach, and this has influenced the results and (likely) impact of many projects. Considerations of the emerging trends in markets and technologies, as well as dynamic and strategic considerations should also be encompassed in C&N selection.

### 3.5. Efficiency

- *Is the implementation of CND interventions in UNIDO organized in an efficient manner?*

The assessment of efficiency is a measurement of the achievement of project and programme objectives, outcomes and outputs, as compared with the inputs, costs, and implementing time that were invested. More specifically, in the analysis of efficiency one needs to separate the assessment of the efficiency of implementation (procedures, delays therein etc.) from the assessment of the efficiency of the project approach (acting as a catalyst, with a relatively small budget size compared to results achieved, etc.).

**The efficiency of most CND interventions has been sufficient in terms of implementation, and high in terms of the efficiency of the project approach (catalytic approach, good quality of results with small financing).**

#### (a) Efficiency of implementation

One remarkable dimension of efficiency has been related to the ability of project managers to consolidate highly motivated and well qualified teams of local professionals and establish good interaction with international experts. **The proper blend of local and international experts** (with the latter gradually withdrawing) **has been noteworthy**, and has produced efficient results extending after the projects were closed, with local professionals continuing in the field and offering a remarkable scope for sustainability of the UNIDO CND approach in the country.

In India, this approach took the form of a specialised foundation (cf. Section 3.5, Sustainability, for details). The development of the foundation has had unambiguous merits: it has increased efficiency by blending local and international expertise, it has helped to deepen local ownership, and it has enhanced sustainability, making the UNIDO exit strategy feasible. Those developments notwithstanding, the foundation could also turn into a partner for subcontracting in a similar way that the National Cleaner Production Centres (NCPCs) are used by UNIDO as a conduit for local implementation of cleaner production projects.

In terms of **implementation efficiency**, CND programmes demand frequent and fast decision-making, flexibility to tailor activities to the results of diagnostic studies and potential adjustments of the same that are based on progress of activities. Specific activities cannot be known beforehand, and need to be defined during the process of support itself with the involvement of many different stakeholders and experts. The typical UNIDO agency execution mode, combined with a high degree of centralization of authority, i.e. more at the headquarters level than in the field, has caused in some cases burdensome administration of projects resulting in delays (as reported by several interviews with project staff during the field missions). For example, interviews with Indian counterparts confirmed the need to streamline the decision-making and administrative processes and related approvals in the implementation of UNIDO CND projects, which could thus lead to improved efficiency in project implementation.

In response to that need, the UNIDO Regional Office in India adopted a specific procedure to overcome or alleviate these problems, namely by opening local bank

accounts for projects far away from the capital. Project staff involved and representatives of the field office have reported that this model has helped to improve efficiency of project implementation. However, streamlining administrative processes can only partly address efficiency problems. The rules and procedures of a United Nations agency will probably always represent a barrier to efficiency when it comes to flexible recruitment of local staff or purchase of local supplies. In line with the principles of the Paris Declaration there is a need to look for opportunities to make best use of country systems wherever they are available so they can be used, based on agreed-upon principles of responsibility and accountability.

In this regard efficiency problems need to be looked at in the context of long-term partnership of UNIDO with the recipient country. The longer and the more successful such a partnership is, the more the capacities of counterparts and local partners should be utilized to take over the responsibility for CND initiatives. The role of UNIDO could then change over time by reducing its direct responsibility for project implementation (thereby also reducing the obstacles affecting efficiency mentioned above) and simultaneously increasing its role in providing policy advice, M&E and quality assurance. This might imply supporting strategic projects with smaller budgets that focus on core issues.

Several options of alternative implementation modalities need to be analysed. Typically UNIDO does not apply national execution modalities, as the United Nations Development Programme does. However, in several cases UNIDO could operate through subcontracts with counterpart organizations, through which the majority of project activities can be delegated, with only a reduced set of activities organized from Headquarters. However, such a mode of operation requires adequate capacities of counterparts and compliance with a set of fiduciary standards (especially those related to procurement and contracting). Such operation modes have been or are already being applied by UNIDO through projects of the Environmental Management Branch (especially those on Persistent Organic Pollutants and Cleaner Production). A further facilitating factor would be the possibility to invest more in codifying approaches, case studies and lessons learned as well as in developing methodological tools - particularly the M&E framework - that could be transferred to local counterparts.

### **(b) Efficiency of approach**

An additional **element of high efficiency** has been described as the **catalytic approach**. In most instances, the projects evaluated did not have a large financial size, and mainly covered technical cooperation including training. Thus, in many instances the projects offered instead a “change agents” role to local actors that stimulated behavioural and institutional change. That kind of change is mostly dependent upon the action of local actors and not on the project itself. In the context of UNIDO projects in Nicaragua and also those in India and Ethiopia, such a catalytic approach (i.e. the rule of “*no-protagonismo*”) has prevailed with UNIDO playing the role of *catalyst* in at least two possible ways:

- It enhanced and organized local actors’ access to additional resources (e.g. government support schemes or donors’ development cooperation programmes);

- It introduced the idea of effecting a structural change at the local level by helping local actors to visualize the benefits that could be derived from sharing a vision and putting into practice a joint action plan that would begin by developing and implementing cooperative actions and eventually lead to structurally changing local habits and practices.

A further dimension of efficiency is the extent of **coordination** that could be achieved both **externally** – e.g., with other United Nations and donors initiatives – and **internally** with UNIDO itself. **Very few examples of cooperation of CND interventions with other UNIDO programmes, including those at the UNIDO Headquarters level, were observed**, with very few projects having sub-allotments for implementation by other UNIDO services. Notable exceptions are: the EU-funded project in Uruguay that was implemented in cooperation with the UNIDO Trade Capacity-building Branch; the Cluster Twinning project in India; as well as efforts in Morocco to create linkages with UNIDO investment promotion activities in that country.

In India, the CSF failed to achieve a better coordinated provision of services by UNIDO, and in many instances project development occurred directly between UNIDO Headquarters staff and Indian counterparts, without involvement of the regional office (UNIDO, 2007). This approach limits opportunities to ensure synergy with other UNIDO interventions in the country.

Indeed, **the potential to increase efficiency by coordination of CND activities with other UNIDO services has not been sufficiently exploited**. Often projects are not sufficiently cooperative, although sharing common elements (e.g. same counterparts, same beneficiaries). Thus, for example, cluster experiences and tools might help the work of other branches and, in turn, technical inputs from other branches might be relevant for enterprises and institutions in a CND project. In fact, the level of **integration of UNIDO services has been very low**, with very few examples of cooperation despite a very high potential for synergies and cooperation.

**Coordination with other United Nations and non-United Nations entities exists in several cases, but could be further developed** at either the country level or in upstream activities. To illustrate, UNIDO has been an active partner in DCED and has maintained close partnerships with IADB (leading to joint CND projects) and with ILO (leading to joint implementation of CND training courses at Turin).<sup>20</sup>

The UNIDO CBL Unit has built up a long experience of supporting a bottom-up approach to detecting needs and consequently developing strategies and action plans to address those needs, and of orchestrating and coordinating specific initiatives and support schemes (cf. figure 6). These are important elements of many - if not most - technical cooperation interventions of UNIDO.

---

<sup>20</sup> A spur to inter-agency coordination has come with the requirements of the Spanish Fund for the Achievement of the Millenium Development Goals through joint formulation and implementation of project proposals by teams of United Nations agencies. In this framework, the CND programme is participating in nine inter-agency projects.

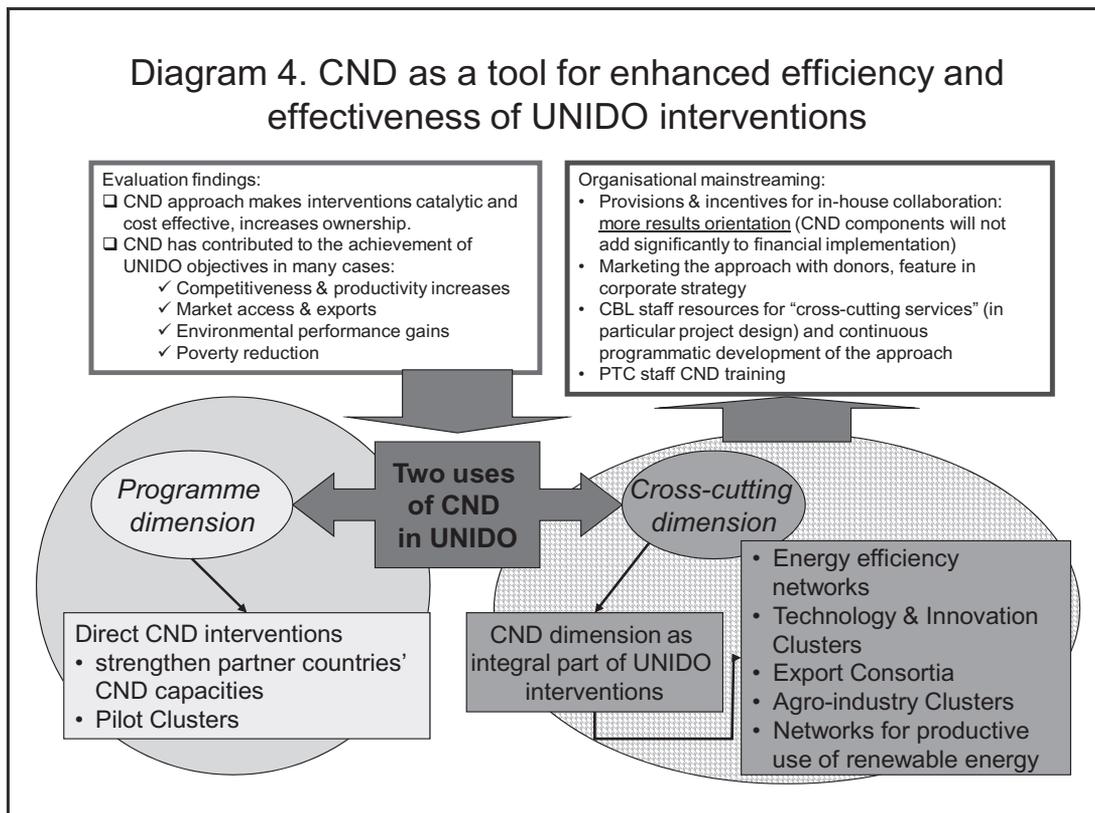
Thus, in addition to direct CND interventions that are aimed at strengthening partner countries' CND capacities and implementing pilot clusters, there is **potential for using CND as a cross-cutting approach, thus *mainstreaming* the CND approach into several programmes of UNIDO through**, for example:

- Providing incentives for in-house collaboration, to encourage a more results-orientated approach (e.g. de-emphasizing importance of financial implementation)
- Marketing the approach among donors and featuring the same in the UNIDO corporate strategy
- Employing CBL Unit staff resources for cross-cutting services (in particular for project design) (cf. figure 6)
- Continuous programmatic development of the approach
- CND training for UNIDO project managers

Mainstreaming the CND approach could be applied to a variety of UNIDO interventions: energy efficiency networks, networks for productive use of renewable energy, technology and innovation clusters, export consortia (this is an example of CND approach already now being applied to the trade capacity-building programme of UNIDO) and agro-industry clusters. Participatory cluster governance and social capital formation provide a good potential for increasing efficiency and effectiveness in many UNIDO interventions. These two elements alone might justify the efforts needed to mainstream the CND approach into UNIDO technical cooperation practice.

In India, a recent initiative of the UNIDO regional office to create an integrated cluster development programme is expected to foster the integration of various technically specialized UNIDO services (e.g. cleaner production, energy efficiency, total quality management, support to the leather industry) through the characteristic UNIDO CND approach.

Diagram 4. CND as a tool for enhanced efficiency and effectiveness of UNIDO interventions



### 3.6 Sustainability

**Fostering cooperation among enterprises is often a drawn-out process because** new attitudes might clash with entrenched habits. In this respect, CND projects do not need large-scale budgets, but rather continuous funding over a long period to ensure support in the successive stages of cluster and network creation and development. Thus, in applying CND it is preferable to ensure continuity with initial modest financing rather than with intermittent financing and corresponding activities. CND projects are often initiated with the limited funds available, and success depends on securing follow-up funding. If successive funding does not materialize, the original ambition might be too challenging for the planned duration, with substantial results expected too soon (cf. project EE/SEN/05/002 - Appui aux micro activités économiques urbaines (Composante de Padelu), Section 3.1). However, keeping the CND support process ongoing for the time needed to obtain qualitative results is often more important than maximizing the number of clustered firms or of consortia supported.

**The existence of an exit-strategy** – i.e. a strategy to prepare the smooth continuation of activities after the end of a UNIDO project – **has often improved sustainability**. This occurred, for example: in Colombia, where the Federation of Small Businesses was in charge of receiving, assessing and financing additional CND projects after the end of UNIDO interventions; in Ethiopia, where an ongoing project, in agreement with the Ethiopian Government, has decided that FeMSEDA will take over and extend the CND activities currently carried out by the UNIDO project; and in India, where some States have endorsed the UNIDO approach to

CND and mainstreamed it into their policies, (cf. project in Orissa State (*Orissa MSME Development Policy Draft*, 2009)).

In India, sustainability of UNIDO CND interventions has been enhanced by the creation and activities of the **Foundation for MSME Clusters**. **The Foundation, which represented a major innovation in UNIDO presence in the country, was initially a UNIDO Focal Point Office in Delhi, staffed with qualified CDAs trained by UNIDO. At the suggestion of the** Ministry of Small Scale Industries, Government of India ([www.msme.foundation.org](http://www.msme.foundation.org)), the Focal Point was converted into a foundation based on a UNIDO initiative and concept. Operations began in 2006, and the Foundation is now financially self-sustainable.<sup>21</sup>

Over the years, the Foundation has become **a useful repository of knowledge and practices on CND**. It prepared a cluster development methodology on behalf of UNIDO that was reported to be relevant for all countries where UNIDO works, although its most widespread use has been within the Indian context (UNIDO and MSME Foundation, 2006). Its application by the Government of India was observed in the CDA training programme that is currently being used by staff of the Entrepreneurship Development Institute of India, Ahmedabad (EDII), and the National Institute for MSMEs (NIMSME), both trained by UNIDO to further undertake CDA training programmes. The methodology is gradually being further developed on the basis of the original methodology document. In addition, these institutes have conducted training programmes for a total of some 800 candidates in the use of CDAs ([www.nimsme.org](http://www.nimsme.org)).

The Foundation also represents a useful form of a gradual exit strategy for UNIDO, thus leaving ownership of the UNIDO approach with local organizations and ensuring better sustainability of CND approaches and practices in the recipient country.

A different kind of long-term **impact** (and hence a sign of sustainability) has been observed **at the country programme level**, where UNIDO CND activities have helped to influence and shape the host (partner) country's policies in this field. This impact has been especially **strong in India**, where the interest for cluster development policies has been mounting during the past decade, and multiple Government of India entities (federal and state) are actively engaged in designing and implementing policy schemes.

---

<sup>21</sup> UNIDO currently represents only a small share of the Foundation's portfolio of activities (some 5 per cent in 2008).

**BOX 1. The “Programme” of UNIDO CND initiatives in India:  
Planning, design and strategies**

The total engagement of UNIDO in India has amounted to some \$6.5 million over more than a decade. A central feature of such operations has been their continuity for more than a decade. Continuity has also been achieved through the stability of Indian counterparts - the Department of Industrial Policy and Promotion (DIPP) has been the gate for all UNIDO projects in the field. - of the Steering Committee of UNIDO CND activities in India. UNIDO’s continued role as an executing agency of several CND projects were financed in parallel by different donors (i.e. DFID, Italy, Switzerland, UNDP), typically involving the same core group of experts to facilitate the transfer of experience and the gradual learning and evolution of activities.

In addition, a major force behind the establishment of a proper “programme” was the **continuous focus of UNIDO activities in driving efforts towards the creation of a proper methodology for CND**. To this aim, the MSME Foundation prepared a CND in cooperation with UNIDO staff to be used in other countries where UNIDO works (MSME Foundation, 2006). At that time UNIDO had already completed several years of project work in Latin America. This methodology is being used in training programmes for CDAs, and has inspired several Government of India schemes.

By and large the India CND programme has had a stronger emphasis on poverty alleviation than most of the UNIDO CND initiatives outside India, which have focused primarily on competitiveness. The backbone of the UNIDO CND intervention logic in India was a strategy of moving from the participatory implementation of pilot projects to up-scaling CND through improved enabling environments (e.g. policies, incentives) and strengthened counterpart capacities. Thus, this is in line with the general intervention logic of the global UNIDO CND programme..

The UNIDO CSF evaluation (UNIDO, 2007) arrived at a number of important conclusions with regard to the CND programme in India:

- Major outcomes include improved Government support to SMEs based on the UNIDO CND methodology and poverty alleviation in some pilot cases (Chanderi, and Orissa State)
- The CND programme developed over the past decade represents the UNIDO flagship programme in India, and has also significantly shaped India’s policy environment towards MSMEs
- A remarkable feature of the CND programme in India is the effective combination of direct assistance with support to capacity-building for replication.

**The progression of the UNIDO CND approach applied in India**

The evolution of UNIDO CND programme has been based on learning by doing from the feedback by local and government institutions during and after project implementation. Initially UNIDO expended most of its efforts in raising awareness. Over time, through the implementation of concrete projects, new methods and tools were explored, gradually tested and structured systematically through methodologies and case studies. Policy advice was continuously offered to the Federal Government of India and to individual States with remarkable success. More recently, UNIDO started experimenting with the suitability of including in its cluster development programme several priority themes, such as poverty reduction, CSR, energy efficiency, and twinning different clusters – the last element being used to exploit the potential for collaboration and exchange of experiences.

In sum, **the UNIDO approach to CND in India has undergone a clear, progressive process** and can be considered **a testing ground** for other developing countries.

A continued presence of UNIDO CND interventions in the country with a sequence of activities and their evolution over time, together with the efforts to learn from past experiences and adapt the approach to country circumstances, coupled with continued collaboration with local (policy) counterparts, are all factors that can contribute not only to sustainability, but also to efficiency, effectiveness and impact of CND interventions. This has been shown by the UNIDO experience in India (cf. box 1).

**UNIDO CND activities in India have clearly had several features of a real integrated programme.** Even if they had not been conceived ex-ante as a programme, they have been very consistent with local priorities and approaches.

**BOX 2. Some highlights from interventions in Senegal and Morocco**

In the case of **Senegal**, there has been a series of UNIDO CND projects (sequentially and parallelly implemented), funded by different donors. The presence of active and competent local teams (national project experts and a supportive UNIDO office) has played an important role in mobilizing donors' interest at the country level. The support has been adapted to the local priorities, guided also by the priorities of the respective donors, and has resulted in a range of business linkage efforts across the country in rural and urban/semi-urban settings. Results have been encouraging, although time will tell if and how improvements in terms of institutional anchorage will result in continuation of CND-type support despite the absence of project funding.

The networking intervention in **Morocco** covered support to the development of export consortia and benefited from the active commitment and involvement of a range of core partners (public and private sector institutions including sector associations), and was guided by the Ministry of Foreign Trade. Results exceeded project objectives in terms of the number of export consortia (15 created; three in the process of formal establishment and another six under preparation as at end October 2008) and showed also a certain geographic and sectoral diversification, even though two thirds are operating in the textile/clothing and food-processing sectors. On average, consortia bring together three to seven enterprises, with some including competitors but with many consisting of enterprises with complementary activities. A vast range of awareness-building activities has taken place, including efforts in which the national/local partners take the lead. The dedicated Support Fund put in place by the Government of Morocco is a strong indication of interest and ownership. Among the key issues being addressed in the current phasing-out stage is the current small number of CDAs. In addition, there is a need for refinement of the performance monitoring system.

# 4

## Conclusions and Recommendations

Main Conclusion	Recommendation	Responsibility
<b>DESIGN</b>		
<p><b>1. Pilot logic:</b> the pilot logic of CND interventions has often been left “hidden” and made explicit in terms of reference and project documents only occasionally. The synergies and coherence between the pilot initiatives and the additional upstream activities to replicate and mainstream in local government policies are essential for the sustainable impact of a CND project, and need to be made explicit in project design. Not all elements contained in the full programme logic (pilots, capacity-building, policy, replication) need to be addressed by each UNIDO intervention. But the overall programme logic should be made clear from the outset and each project should be positioned within the overall programme logic.</p>	<p>It is recommended that UNIDO (at the project-level) ensure that the pilot logic is made explicit in project documents. <b>At the project-level:</b></p> <ul style="list-style-type: none"> <li>• Project documents should explicitly indicate how the upscaling/replication process is planned, including an exit strategy</li> <li>• The use of pilot cases should be planned more explicitly: they will need to be analysed and case studies prepared that throw light on what works and what does not work, lessons need to be extracted to serve as reference for policymakers and practitioners in the process of replication;</li> <li>• Counterpart staff should be involved in the work done in cluster and network pilots as much as possible (training on the job). This should be made part of the project design (defining concrete commitments of the counterparts).</li> <li>• Activities to disseminate the know-how generated in pilots (involving public and private institutions) should be foreseen in project documents; to that end dissemination campaigns with leading entrepreneurs of successful C&amp;N should form part of the design of projects.</li> </ul>	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>

Main Conclusion	Recommendation	Responsibility
	<p><b>At the upstream level, UNIDO should further pursue and deepen action-oriented research</b>, exchanges of experiences and of good practices, training, <b>specifically focused on upscaling strategies</b>, i.e. how to use pilot projects as useful elements of a strategy to disseminate these practices and mainstream the CND approach into the partner governments' policies. In this regard, a phased approach might be considered (see reference in chapter 3.1).</p>	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>
<p>2. In UNIDO programme documents and methodological papers it is often stated that there is a conceptual and methodological <b>distinction between networks and clusters</b>. However, <b>this stated difference has not always been followed through in project documents or in actual implementation</b>.</p>	<p><b>UNIDO should clarify this issue and ensure coherence between principles and methodologies and actual practices</b>. This should apply to project documents at the pilot project-level, and to upstream activities, methodologies, action-oriented research. Different options could be assessed by the CBL Unit, as follows:</p> <ul style="list-style-type: none"> <li>• Accept that the borderline between networks and clusters – while clear in theory - is often more vague in actual practices</li> <li>• Use only one term (e.g. clusters) and develop different categories or types</li> <li>• Use the term “cluster” for all CND interventions, but explain in the CND strategy that there are different entry points (bottom up through networking, top down through cluster governance, with varying roles and emphasis of firms and institutions).</li> <li>• Use (different) terms with corresponding definitions</li> </ul>	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>

Main Conclusion	Recommendation	Responsibility
<p>3. <b>M&amp;E systems need to be improved</b> to allow measurement of effects in terms of the <b>dual objectives of most CND programmes</b> (i.e. directly operating at a cluster and network level with pilot activities and fostering the conditions for structural change and upscaling. Therefore M&amp;E systems need to monitor the effects of pilot activities as well as those of upscaling activities. In this respect, M&amp;E systems need to assess and measure the socio-economic performance of clusters (impact in terms of poverty and competitiveness), and <b>also the potential they generate for future structural change</b> (institutional outcomes, capacity-building effects, enabling environment)</p>	<ul style="list-style-type: none"> <li>• It is recommended to <b>develop and test innovative indicators and means of verification that allow capturing CND effects at both levels of intervention</b> (pilot activities and upscaling).</li> <li>• It is recommended that donors actively support this effort and <b>agree to appropriate budgets for monitoring systems in the projects to assess</b> not only the socio-economic performance of clusters but <b>also the potential they generate for structural change.</b></li> <li>• M&amp;E systems should include adequate human resources for M&amp;E activities. A case of good practice is the Nicaragua project, where a dedicated M&amp;E officer was part of the project team. This approach should be followed wherever possible.</li> </ul>	<ul style="list-style-type: none"> <li>• CBL Unit</li> <li>• Donors</li> </ul>
<b>EFFECTIVENESS, IMPACT AND SUSTAINABILITY</b>		
<p>4. <b>The potential of vertical linkages</b> (with larger firms or buyers), - backward and forward - has not been explored systematically in all CND projects.</p>	<p>UNIDO should guide project teams to <b>always explore and possibly develop the potential offered by vertical linkages in design and implementation.</b> This should include the analysis of trends in international demand, consideration of market access obstacles and opportunities derived from international and bilateral negotiations, and the distribution of rents across value chains and areas of international specialization. A stronger value chain approach would not contradict but rather deepen the cluster and network approach.</p>	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>

Main Conclusion	Recommendation	Responsibility
<p>5. <b>Inclusiveness and outreach</b> to those who do not directly participate in UNIDO interventions (i.e. to other firms, networks, regions) is an implicit objective of CND interventions. Achieving this objective is related to a strategy of setting clear rules on whether a network is open to anybody - based on clear procedures and criteria (e.g. quality standards, membership fee, etc.) - or whether participation is left at the discretion of members. This also applies to the criteria for selecting and supporting networks and clusters and to the upscaling strategy. These aspects should be part of the methodology that UNIDO uses.</p>	<p>UNIDO and partner Governments should undertake explicit efforts <b>to design and follow up an explicit strategy to ensure widest outreach</b>. Thus:</p> <ul style="list-style-type: none"> <li>• The CBL Unit should ensure that a strategy is developed that sets clear rules on whether a network is open or whether openness is left to the discretion of members. This strategy should be included in CND project documents and given due consideration in project implementation.</li> <li>• The CBL Unit should ensure that the criteria for selection and supporting networks and clusters are defined in project documents and are consistently applied during implementation.</li> <li>• Donors and partner Governments should periodically verify that these criteria are considered and implemented.</li> </ul>	<ul style="list-style-type: none"> <li>• UNIDO Management</li> <li>• CBL Unit</li> <li>• Donors</li> <li>• Partner Governments</li> </ul>
<p>6. <b>South-South cooperation</b> initiatives have been very relevant and effective (e.g. in Ethiopia and in India). UNIDO can add value by facilitating the transfer of expertise between developing countries.</p>	<p><b>UNIDO should sustain and explore further the potential of CND initiatives for South-South cooperation.</b></p>	<ul style="list-style-type: none"> <li>• UNIDO Management</li> <li>• CBL UNIT</li> <li>• Donors</li> <li>• Partner Governments</li> </ul>
<p>7. Overall, the CBL Unit has been very active in analytical work, producing a significant number of relevant publications on CND related issues. However, <b>the action-oriented research that aims at developing the CND approach further in the direction of upscaling activities</b> and adapting the approach to the emerging needs of developing countries has not yet been given sufficient attention and resources.</p>	<ul style="list-style-type: none"> <li>• The CBL Unit should develop dedicated global forum projects</li> <li>• Such global projects should contain elements of action-oriented research and should be directed toward specific themes with the aim of developing appropriate methodologies for innovative themes that will be addressed through CND. They should also <b>specifically address issues of upscaling CND</b>.</li> <li>• Such global projects and other upstream work should</li> </ul>	<ul style="list-style-type: none"> <li>• CBL Unit</li> <li>• Donors</li> </ul>

Main Conclusion	Recommendation	Responsibility
	<p>be linked to the national projects e.g. by providing training to all staff of country-level cluster initiatives, and allowing for learning of lessons from such projects.</p> <ul style="list-style-type: none"> <li>• <b>Donors should fund upstream projects focused on upscaling and policy-level activities</b> in order to strengthen the leading role of UNIDO in CND.</li> </ul>	
<p>8. The strategic element of <b>time and continuity</b> is essential for the impact and sustainability of CND projects. In this respect, CND projects do not need large-scale budgets, but rather continuous funding over a period of time to ensure support in the various stages of network creation and development. Keeping the CND process ongoing and obtaining qualitative results is often more important than maximizing the number of firms or of consortia supported. Along these lines, a <b>continued presence of UNIDO CND interventions in a country</b>, with a sequence of activities and their evolution over time, together with learning and adaptations of the approach to the country circumstances, has remarkably helped in several instances.</p>	<p>UNIDO, donors, and partner Governments <b>should not initiate CND projects unless there is a good probability of ensuring a continuity of funding and therefore presence. Realistic time frames for this type of intervention should be jointly set.</b> While the actual duration of an intervention depends upon the state of development of CND initiatives in a particular country/region, the development of a phased approach to CND interventions (as part of the programme definition) would facilitate adaption of CND projects and their expected duration to the specific needs of partner countries.</p>	<ul style="list-style-type: none"> <li>• UNIDO Management</li> <li>• CBL Unit</li> <li>• Donors</li> <li>• Partner Governments</li> </ul>
<p>9. Well-functioning networks and clusters alone might not resist adverse market demand and structural conditions. In fact, the <b>selection of C&amp;Ns to support</b> has often followed a bottom-up and demand-driven approach, and this might be an important barrier to the impact of projects. The selection should <b>also include consideration of the emerging trends in markets and technologies, as well as dynamic strategic considerations</b> (e.g. trends in</p>	<p>It is recommended that UNIDO <b>develop criteria, tools and methodologies to provide guidance to recipient countries and regions on their selection of C&amp;Ns for intervention in light of strategic considerations such as:</b></p> <ul style="list-style-type: none"> <li>• Trends in international demand and comparative advantages</li> <li>• Potential for industrialization (manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• CBL Unit in collaboration with other UNIDO Services</li> </ul>

Main Conclusion	Recommendation	Responsibility
international demand, market access obstacles and opportunities related to international and bilateral negotiations, the distribution of rents across value chains and areas of international specialization).	industry linkages) <ul style="list-style-type: none"> <li>• Potential for poverty alleviation</li> </ul>	
<p>10. CND projects might produce <b>unintended results</b> such as crowding out non-beneficiaries and increasing local inequalities. This was not observed, owing probably to the lack of appropriate tools to observe such results. However, awareness of such risks needs to be taken into account as CND projects might confront them</p>	It is recommended that monitoring tools also capture the measurement of potential <b>unintended results</b> to enable assessment of such effects and invoke necessary corrections.	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>
<b>EFFICIENCY</b>		
<p>11. The UNIDO CND approach is a very efficient approach to achieving local economic development effects. Most UNIDO CND projects do not provide direct financial and equipment support, but provide technical cooperation to local actors in the form of change agents. These agents stimulate behavioural and institutional change and also contribute to enhancing and organizing local actors' access to additional resources. This has been described as a <b>catalytic approach</b>, or the principle of "<i>no-protagonismo</i>".</p>	UNIDO should <b>continue to promote a catalytic approach in all its CND interventions</b> . The catalytic approach <b>should be described explicitly and become a core element of the CND strategy</b> . That element should be explicitly included in project documents	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>
<p>12. A strong <b>need to coordinate and integrate CND activities with other UNIDO services</b> has been observed. Indeed, in several developing countries the UNIDO CBL Unit has built up expertise in supporting a bottom-up identification of needs and in orchestrating and coordinating specific initiatives and support schemes for <b>local economic development</b>. This expertise</p>	<ul style="list-style-type: none"> <li>• UNIDO should use the experience and the methods developed by the CBL Unit to support bottom-up, locally driven processes of <b>local economic development</b>. This should be achieved by <b>incorporating horizontal CND components in country and integrated programmes and/or using the CND approach to develop integrated projects and</b></li> </ul>	<ul style="list-style-type: none"> <li>• PTC Management</li> <li>• CBL Unit</li> </ul>

Main Conclusion	Recommendation	Responsibility
<p>could benefit other programmes or service modules of UNIDO. That expertise notwithstanding, there is room for CND interventions to benefit from expertise and experiences available in other branches/departments.</p>	<p><b>programmes.</b></p> <ul style="list-style-type: none"> <li>• It is recommended to further develop the approach currently tested in the integrated cluster development programme in India and to present experiences and lessons from this programme to UNIDO management after two years into implementation.</li> <li>• It is recommended that the <b>CBL Unit systematically explore and exploit ways to benefit from other UNIDO services.</b></li> </ul>	
<p><b>13. CND strategy: the UNIDO CND approach has been applied in many countries in a largely coherent manner.</b> There is not only strong in-house expertise but also a good potential for applying the approach in other countries. <b>However, the design of the CND programme of UNIDO still lacks some important features of a full-fledged programme.</b> For example, project documents often do not have a common strategy base, global forum activities are not effectively related to technical cooperation (normative function), and there is no programme-wide M&amp;E system that is applied to all projects.</p>	<p><b>UNIDO should invest resources in developing a full-fledged CND programme defined in a document that provides guidance to project managers, project staff, stakeholders and implementation partners.</b> The programme document should among others:</p> <ul style="list-style-type: none"> <li>• Be used as a guide to developing individual interventions, whether it is concerned with technical cooperation or global forum activities</li> <li>• Provide guidance on expected outcomes, typical outputs and activities, indicators for impact and outcomes, M&amp;E systems (including baseline, etc.)</li> <li>• Establish criteria for pilot cluster selection</li> <li>• Provide guidance on upscaling strategies and methodologies</li> <li>• Describe risks and possible unintended effects of CND interventions</li> <li>• Serve as a communication tool vis-à-vis donors and partner agencies</li> </ul>	<ul style="list-style-type: none"> <li>• CBL Unit</li> </ul>

# 5

## Lessons learned

---

1. The UNIDO CND programme has been characterized by a continuous effort to develop and refine intervention methods, grounded in theories pertaining to business linkages but, equally important, in a detailed understanding of “what works” based on field-level project experience.

Initially in India and in Nicaragua, where some of the earliest CND interventions took place, the idea was to explore and apply successful experiences observed in “industrial districts” in Italy and Germany in a developing country context. However, it was soon acknowledged that few policy lessons could be drawn from such experience (Humphrey and Schmitz, 1995), which had often arisen from spontaneous inter-firm joint actions and relationships with local organizations. It was realised that other practices in developing countries had much more to offer. Therefore, appropriate tools needed to be developed to support clusters in developing countries where the starting conditions were radically different from those obtaining in industrial countries. To this end, methodologies were developed (UNIDO-MSME Foundation, 2006; Nicaragua Paso a Paso, 2006), that were later applied in other developing countries.

Thus, the persistent focus of CBL Unit activities has been on developing a proper methodology for CND on the basis of learning from project implementation, action-oriented research (focused on pilot projects rather than on their upscaling) and appreciative theorizing. This process entails continuous feedback from initial project implementation to methodological fine-tuning at a later stage. This approach has produced remarkable methodological progress, has influenced policies in several developing countries, and has multiplied the effect of relatively small projects.

- **Lesson:** efforts to combine project implementation, action-oriented research, codification of methodologies and lessons learned - and knowledge management in general - allow for continuous upgrading of approaches and contribute to positioning UNIDO in specialized fields of technical cooperation. Applying this methodology across the board is expected to be beneficial for UNIDO. The need for dedicated funds to support these interrelated activities should be also taken into consideration.

2. UNIDO CND projects are generally smaller in budget terms than similar projects of many other international organizations and donors, foresee a relatively long presence in the partner country, and do not involve investments in physical infrastructure. These investments usually require larger financing and also generate the risk of replacing the efforts expected from the benefiting enterprises

themselves and/or from their local support environment. In several instances, CND projects have been highly efficient in pursuing a “catalytic approach”, that is they acted as “change agents” to local actors, by stimulating behavioural and institutional changes and by mobilizing resources made available through the local government and other support organizations. Projects thus enhanced and facilitated local actors’ access to additional resources, and they fostered the idea of effecting a structural change at the local level, helping local actors to conceptualize the benefits of a shared vision and action plan, of developing and implementing joint actions, and of changing local habits and practices.

- **Lesson:** Projects helping to effect structural changes with relatively small budgets can be very cost-effective tools if they are designed with a catalytic focus, and with an active involvement and commitment of the relevant counterparts. As the process of effecting structural changes and fostering business linkages is not fast and short, such projects do not necessarily require large-scale budgets but at least adequate and continuous funding over a significant period of time to ensure the requisite support during the successive stages of such a lengthy processes.

3. CND projects tend to be ‘stand alone’, with limited linkages with other types of support interventions provided within the context of the UNIDO mandate. In this respect, opportunities for combined and mutually reinforcing support to groups of enterprises are missed, because organizational units often operate in isolation albeit pursuing - from different angles - the same overall objectives of competitiveness improvement and/or poverty reduction. Somewhat paradoxically, an approach that is focused on joint actions is insufficiently applied to intra-UNIDO operations, notwithstanding attempts in this regard through the Integrated Programme approach.

- **Lesson:** The CND approach has a good potential for linking more explicitly closely related concepts, all aimed at enterprise support and capacity-building, applied by different organizational units/branches within UNIDO. CND is a mode of implementation that can help strengthen other interventions, such as enterprise upgrading and cleaner production. Similarly, other types of experience and expertise available in UNIDO (such as sector-specific know-how) can be used in expanding/deepening CND support at the country level. This untapped potential of the CND approach should be further explored.

## Annex 1

### Terms of reference

#### Independent Thematic Evaluation of the UNIDO Cluster and Networking Development Initiatives

October 2008

#### I. Background and overview

##### Origin and context of Cluster and Networking Development (CND) Initiatives at UNIDO

UNIDO has been implementing technical assistance projects based on a cluster and network development approach since the mid 90s. The approach is built on the following four assumptions:

- that clustering and networking among enterprises promotes enterprise competitiveness,
- that public policy can help to facilitate clustering and networking,
- that clusters and networks contributes to pro-poor growth; and
- that initiatives targeting groups of enterprises are more cost-efficient and cost-effective than those targeting individual enterprises.

A fifth (albeit implicit) assumption is that UNIDO is competent and well equipped to promote cluster and networking development (CND).

In the countries depicted in the map below, UNIDO has adopted (countries in yellow and blue) or is about to adopt (countries in red) this approach as one of its strategies for contributing to the development of small- and medium-scale enterprises in developing countries, as a means of promoting sustainable and equitable growth. CND initiatives in UNIDO include export consortia.



The main driver of CND initiatives within UNIDO is the Cluster and Business Linkages Unit, which operates within UNIDO's Private Sector Development Branch. This unit implements technical assistance projects with an explicit Cluster and Networking approach. The main elements of the Unit's work are:

- Clusters
- Networks, Export Consortia and Supplier Development
- Private Public Partnership
- Corporate Social Responsibility

The CBL Unit implements CND mainly through the following lines of activities:

- Technical assistance projects:
  - Technical guidance and advice on project formulation, management, evaluation
  - Capacity-building and training activities (training of trainers and training for final beneficiaries: entrepreneurs, BDS, policy-makers, academia)
  - Operational tools (analysis, management, evaluation)
- Development of Methodologies, Manuals, Training Kits
- Expert Group Meetings and Joint Learning programmes
- Global training courses (Turin) and regional ones
- Action-oriented research
- On-line Policy Tool Box

This thematic evaluation will focus on the work of the CBL Unit related to Clusters, Networks and Export Consortia, including the lines of activities listed above (i.e. projects and upstream work).

In addition to the projects with an explicit "Cluster" approach, a number of UNIDO projects use similar intervention methods, clustering groups of enterprises together and linking them with support institutions and public sector entities (e.g. SME project in Argentina, Energy efficiency in handtool sector in India, Cleaner production projects applying "interactive learning" or "Ecoprofit" methods in Colombia). The evaluation will also look into how far such initiatives are consistent with the "official" UNIDO CND approach and whether there is a potential to enhance performance of many interventions by making wider/better use of CND tools throughout UNIDO.

Evidence from project evaluations suggests that the UNIDO CND activities have good potential for up-scaling and continuous methodological development.

UNIDO management has expressed interest in a thematic evaluation of CND initiatives in UNIDO.

### **The objectives of UNIDO CND initiatives**

UNIDO CND initiatives are implemented through technical cooperation projects. The objectives of these projects are defined in the corresponding project documents and they usually are defined in response to the specific country context. Hence, the objectives may differ from project to project in their concrete

formulation. However, the UNIDO CBL Unit formulated a set of expected outputs, outcomes and impacts, which are representative for all CND initiatives<sup>22</sup>:

The assistance within UNIDO CND initiatives is delivered to (output):

- a) strengthen the capabilities of local stakeholders (firms and institutions),
- b) promote networks of local stakeholders;
- c) improve business environment and BDS market.

In order to (outcome) enable the stakeholders to:

- a) organize and manage joint actions;
- b) develop a self-sustaining governance system

With the objective of (impact):

- a) promote an innovate/competitive private sector, and
- b) reduce poverty

Furthermore, the CBL Unit has undertaken considerable efforts to establish a M&E system that allows to measure the performance of UNIDO CND initiatives against the above mentioned objectives. While this system is yet work in progress, the examples of indicators for outputs, outcomes and impacts given below, will be a useful reference for the thematic evaluation:

a) Output indicators:

Business networks:

- Number and type of networks (horizontal/vertical, formal/informal etc.)
- Number and type of firms in a network
- Network is trained on modern technology/production processes/ investment opportunities, accessing market opportunities/ trends,
- Network has access to technical and financial services

Capabilities of training institutions:

- Number of trained people that master new competences per assisted institution
- Type of competences/knowledge(e.g. Cluster development approach, technical skills, use of training equipment etc.)
- Tools and services developed in collaboration with the institution (curricula, training courses, training packages)

Cluster governance system:

- Number and type of members
- Competences transferred to the members (leadership, strategic thinking etc)
- Linkages promoted with relevant support institutions within and outside the cluster

b) Outcome indicators:

- Joint actions developed by the networked firms including: joint purchase/retail; establishment and use of joint facilities; joint purchase and use of technology; inter-firm specialization; supplier quality/reliability; collective brands; joint investments; joint product design; joint participation in fairs; buyer provided assistance etc..

---

<sup>22</sup> Taken from a presentation of the CBL unit, May 2008

- New services/training used : Number of beneficiaries/stakeholders using the services; Frequency of use of the service, Match between demand and supply
- Credit extended to the cluster: typology and number of beneficiaries
- Public policies in support of cluster development, govt financial allocation for cluster development
- Governance system:
  - Functioning and features of the governance system: regular meetings, representatives of all categories of stakeholders (public and private sector), degree of formalization, procedures for decision making, linkages to service providers, frequency of interaction with policymakers
  - Compliance with technical norms and standards;
  - Length and nature of buyer/supplier contracts;
  - Organisation of joint events/dissemination of information: by what institution/what kind of information/ number of beneficiaries
  - BMOs and other private sector associations: representativeness of decision making procedures and type of leadership
  - Collective diagnosis capacity, planning and monitoring capacity, sustainability

c) Impact indicators:

- Cluster competitiveness: Turnover of joint business ventures; Increase in income; Equipment modernization; New skills generated in the cluster; Increase in sales/exports; New investment as a result of credit inflow; Value addition; New products and services; New markets catered
- Poverty reduction: employment generation and employment conditions (CSR practices, labour standards, working conditions); participation of women and marginalized stakeholders as a share of a network employees, as BDS clients etc.; participation and voice mechanism for the poor; income generation for the poor (of both entrepreneurs and workers); provision of basic services and infrastructure; access to product and basic services for vulnerable groups, e.g. cost of products and services, number and type of public services etc.; vulnerable groups with access to credit; environmental sustainability of the economic activity (respect of standards, energy efficiency, use of recyclable materials, effluents treatment etc.)

## II. Objectives and scope of the evaluation

This evaluation aims at answering a number of key questions, which will shed light on the relevance, effectiveness, efficiency and sustainability of these activities. It will furthermore provide inputs for the discussion of UNIDO's future CND strategy by formulating recommendations to enhance UNIDO contributions to private sector development in general and CND initiatives in particular. Hence the purpose of the evaluation is twofold:

Contribute to organizational learning by identifying strength and weaknesses of UNIDO CND initiatives with a view to enhance performance of projects and upstream activities and by providing inputs for the discussion of the future UNIDO CND strategy

Contribute to accountability by providing evidence of the achievements of the UNIDO CND initiatives.

The focus of the evaluation will be on the work of the CBL Unit, particularly on Clusters, Networks and Export Consortia including the implementation of technical cooperation projects and upstream work such as methodologies, international trainings, research, tool kits, etc.

### **III. Key evaluation questions**

The key evaluation questions are:

*Regarding the design, intervention logic and the underlying theory of change:*

- Are UNIDO CND initiatives based on- and consistent with state-of-the-art knowledge about institutional change, SME development and Clusters?
- Is the design of the overall programme and of individual projects consistent with the underlying theory of change?
- Does UNIDO, through its CND initiatives, contribute to the international body of knowledge and does it influence the way similar initiatives are planned and implemented by international agencies and donors?
- How does the CND concept fit into the overall technical cooperation framework of UNIDO?

*Regarding the implementation and the results of CND interventions*

- Are individual CND interventions implemented in line with the underlying theory of change?
- What are the main factors that influence effectiveness of CND interventions (e.g. institutional anchorage, operational anchorage, access to finance, access to non-financial services, exit strategy and local contributions)?
- Are individual CND interventions producing the expected results?
- Are individual CND interventions producing non-intended results?
- How do implementation modalities affect efficiency and results?
- Is the implementation of CND interventions in UNIDO organized in an efficient manner?
- Is the information on CND interventions and their results sufficient and relevant (M&E)?

*Regarding context of CND interventions*

- Are UNIDO CND interventions relevant and effective in the different socio-economic contexts found in different countries? Is the model flexible enough to address different cultural sensitivities?
- What are the main context factors that influence relevance of CND interventions?
- How do UNIDO CND interventions relate to other SME support interventions with similar objectives within and outside of UNIDO?

Besides providing an important part of the evidence base of the thematic evaluation, the review of individual projects/countries (Ethiopia, Morocco, India, Peru) will produce stand alone reports to the stakeholders of these projects. The purpose of

these reviews is to enable the respective Governments, counterparts, donors and UNIDO and other stakeholders to:

- (a) verify prospects for development impact and sustainability, providing an analysis of the attainment of development objectives and project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators. The assessment includes re-examination of the relevance of the objectives and other elements of project design:
  - Implementation approach
  - Country ownership/Driveness
  - Stakeholder participation
  - Sustainability
  - Replication approach
  - Financial planning
  - Cost-effectiveness
  - Monitoring and evaluation
- (b) Enhance project relevance, effectiveness, efficiency and sustainability by proposing a set of recommendations with a view to ongoing and future activities.
- (c) Draw lessons of wider applicability for the replication of the experience gained in this project in other projects/countries.

#### **IV. METHODOLOGY**

##### **The evaluation approach & methodology**

The evaluation will consist of three main components:

- 1) *independent in-depth evaluation of several CND initiatives:*

The evaluations in this component will feed into the thematic evaluation. They will follow the usual UNIDO project evaluation approach, providing information on effectiveness, efficiency, relevance, impact and sustainability of CND interventions. In addition, special attention will be given to validating the programme-inherent intervention logic (intervention theory) and the underlying assumptions (see annex 5). This should help to answer the question in how far the programme theory is relevant and applicable in different socio-economic contexts and whether stakeholders confirm the validity of the intervention logic with view to future impact of CND. Also, the contribution of the UNIDO programme level (or up-stream) activities to achievement of country-level results will be analysed explicitly in each of these evaluations. Where evaluations of CND initiatives exist, they will be used as supportive evidence base. The following individual interventions will be included in the thematic evaluation through dedicated country visits:

Theme	Remarks
Ethiopia	UE/ETH/05/007, US/ETH/05/007 - Unleashing the potential of MSMEs in Ethiopia
India	A considerable number of CND projects has been carried out in India over the last 10 years. The focus of the India review will be on the UNIDO CND interventions as a whole, i.e. analysing the outcomes of UNIDO interventions in terms of institutional change and capacity-building. Several projects will be included in the review, but none of them will be fully evaluated. Some of these projects are:
	US/IND/01/193 - Support to the Country Effort to Promote SME Cluster
	US/GLO/04/116 – Thematic cooperation between UNIDO and Swiss agency for development and cooperation in the area of SME cluster development and corporate social responsibility
	US/GLO/02/059 – Thematic cooperation between UNIDO and Swiss agency for development and cooperation in the area of SME networking and cluster development
Morocco	UE/MOR/07/007 – RENFORCEMENT DES CAPACITES NATIONALES DANS LA PROMOTION ET ACCOMPAGNEMENT DE CONSORTIUMS D'EXPORTATION
Peru	UE/GLO/04/158 – Promotion of SME Export Consortia

Furthermore, existing recent evaluations of UNIDO integrated programmes (IP) or country service frameworks (CSF) containing CND initiatives will be included in a comparative analysis of the different individual interventions. This concerns the following evaluations :

Nicaragua	UE/NIC/05/001 - Strengthening and Dissemination of Cluster Development in Nicaragua; evaluation is carried forward from 2006-2007 work plan
Senegal	EE/SEN/05/002 - Appui aux micro activités économiques urbaines (Composante de Padelu) (see also table 3)
Ecuador	Integrated Programme Component on CND
Colombia	Integrated Programme Component on CND
Tunisia	Integrated Programme Component on CND

## 2) Review of programme-level or up-stream activities

The “UNIDO Cluster Programme” is not (yet) a formal programme, i.e. it does not have a defined structure, budget and fully explicit objectives and strategies. Given UNIDO’s dependence on donor funding, which usually is provided on a project-by-project basis, the programme rather resembles a collection of individual projects. However, over time a considerable effort has been made to learn from experience, to develop methodologies and tools, to provide a forum for CND experts and develop the UNIDO approach further.

This component will analyse available information on these aspects. It will start from the explicit and implicit programme objectives, re-construct (where necessary) the underlying intervention-logic (theory of change). It will then analyse the interaction between project and programme levels. Funds mobilization and implementation modalities are also part of the analysis.

Furthermore, the use of CND within UNIDO will be looked at, recognizing that CND has a potential to be a horizontal tool to be used by all UNIDO Technical

Assistance professional engaged in programmes supporting SMEs (be it for environmental or economic purposes).

### 3) *Expert and stakeholder survey*

An important aspect will be to show how UNIDO's CND initiatives compare with those of other institutions, agencies and donors and whether UNIDO's approach can be regarded state-of-the-art.

The survey will address experts, donor representatives, technical assistance agencies and other relevant stakeholders involved in SME support initiatives.

### **Project level evaluations**

The evaluations will follow UNIDO evaluation guidelines and policies. They will be carried out as as independent in-depth evaluations or independent project reviews, depending on the evaluation requirements stated in the project document. They will apply a participatory approach whereby the UNIDO staff associated with the project are kept informed and regularly consulted throughout the evaluation. The draft reports will be delivered to UNIDO OSL/EVA and circulated to UNIDO staff associated with the projects, including project staff in the countries. Any comments or responses to the draft report will be sent to UNIDO OSL/EVA for collation and onward transmission to the evaluation team leader; he/she will be advised of any necessary revisions.

The findings of the evaluation will be based on the following:

1. A desk review of project documents including, but not limited to:
  - (a) The original project documents, monitoring reports (such as progress and financial reports to UNIDO), output reports (policy studies, manuals and guidelines, sectoral studies, etc.) and, if required, relevant correspondence.
  - (b) Other project-related material produced by the project staff or partners.
2. Interviews with project management and technical support including the UNIDO Project Manager and project staff in the country and administrative staff associated with the project's financial administration if necessary.
3. Interviews with project partners, in particular the main UNIDO counterpart in the country and other members of the project steering committee (if any), local counterparts and partners supporting the individual clusters or networks (provincial governments, chambers, etc.) and the local representation of the donor (if applicable).
4. Interviews and/or a web-based or email survey of users of the project outputs (trainees, entrepreneurs) and other stakeholders involved with this project. The team leader shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organisations.

5. Other interviews, surveys or document reviews as deemed necessary by the evaluator and/or UNIDO EVA.

### **Project level evaluation parameters**

The following is a generic reference framework for the evaluators to be applied for the assessment of individual technical cooperation projects within the thematic evaluation. While all parameters are to be addressed in the evaluation or review reports, the focus in each evaluation will depend on the context of the particular project and on the availability of information.

#### **A. Project Relevance**

*Country socio-economic context.* Is the project relevant under the given socio-economic conditions in the country and the different regions where clusters/networks/export consortia have been supported? Is there a need to intervene at all?

*Country ownership/drivenness.* This is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements. Examples of possible evaluative questions include: Was the project design in-line with the national sectoral and development priorities and plans and free trade agreements? Are project outcomes contributing to national and regional development priorities and plans? Were the relevant country representatives, from government, private sector and civil society, involved in the project? Did the recipient government maintain its financial commitment to the project?

*Relevance to target groups:* relevance of the project's objectives, outcomes and outputs to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity-building and training, etc.).

*Relevance to UNIDO:* In retrospect, were the project's outcomes consistent with the UNIDO mandate, corporate strategy and core competencies? Were they consistent with the overall objectives of the UNIDO CND initiatives?

#### **B. Effectiveness and Impact: attainment of objectives and planned results (progress to date):**

The assessment of project results seeks to determine the extent to which the project objectives were achieved, or are expected to be achieved, and assess if the project has led to any other positive or negative consequences. While assessing the project's outcomes the evaluation will seek to determine the extent of achievement and shortcomings in reaching the project's objectives as stated in the project document and also indicate if there were any changes and whether those changes were approved. If the project did not establish a baseline (initial conditions), the evaluator should seek to estimate the baseline condition so that achievements and results can be properly established (or state simplifying assumptions used). Assessment of project outcomes should be a priority. Outcomes are the likely or achieved short-term and medium-term effects of an intervention's outputs. Examples of outcomes could include but

are not restricted to improved business competitiveness, employment generation, stronger institutional capacities, higher public awareness (when leading to changes of behaviour), and transformed policy frameworks or markets. The evaluation should assess the extent to which the project's objectives were achieved or are expected to be achieved.

Identify the potential longer-term impacts and describe any catalytic or replication effect of the project, both within the project (such as the replication of demonstrations) and outside of the project. Are there lessons and experiences emanating from the project that are replicated or scaled up in the design and implementation of other projects, or replication within the projects. Does the project have a strategy for replication or scale up?

### **C. Assessment of sustainability of project outcomes:**

Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts after the project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits after the project ends.

Four aspects of sustainability should be addressed: financial, socio-political, institutional frameworks and governance, and environmental & social (if applicable). The following questions provide guidance on the assessment of these aspects:

*Financial resources.* To what extent are the outcomes of the project dependent on continued financial support? What is the likelihood that any required financial resources will be available to sustain the project outcomes/benefits once the UNIDO assistance ends (resources can be from multiple sources, such as the public and private sectors, income generating activities, and market trends that support the project's objectives)? Was the project successful in identifying and leveraging co-financing?

*Socio-political:* To what extent are the outcomes of the project dependent on socio-political factors? What is the likelihood that the level of stakeholder ownership will allow for the project outcomes/benefits to be sustained? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project?

*Institutional framework and governance.* To what extent are the outcomes of the project dependent on issues relating to institutional frameworks and governance? What is the likelihood that institutional and technical achievements, legal frameworks, policies and governance structures and processes will allow for the project outcomes/benefits to be sustained?

*Environmental and social.* Are there any environmental or social risks that can undermine the future flow of project benefits?

### **D. Efficiency**

Assesses the achievement of the project's objectives and outcomes as well as the project's outputs in relation to the inputs, costs, and implementing time based on the following questions: Was the project cost-effective? Was the project the least cost option? Was the project implementation delayed and if it was then did that affect cost-effectiveness? The evaluation should assess the

contribution of cash and in-kind co-financing to project implementation and to what extent the project leveraged additional resources.

**E. Assessment of Monitoring and Evaluation Systems:**

- **M&E design.** Does the project have a sound M&E plan to monitor results and track progress towards achieving project objectives? Is the project document and the logical framework useful as a management and M&E tool? Was a baseline study carried out at inception?
- **M&E implementation.** The evaluation shall include an assessment of the quality of project monitoring and (self-) evaluation, including an assessment of risk management based on the assumptions and risks identified in the project document. Are annual project reports complete, accurate and with well justified ratings? Has the information provided by the M&E system been used during the project to improve project performance and to adapt to changing needs?
- **Budgeting and Funding for M&E activities.** Have adequate budget provisions been made for M&E made and have such resources made available in a timely fashion during implementation?

**F. Assessment of processes that affected attainment of project results.**

The evaluation will consider, but need not be limited to, consideration of the following issues that may have affected project implementation and attainment of project results:

- **Quality at entry and implementation approach**  
Was the design consistent with the methodologies, strategies and the overall theory of change of UNIDO CND initiatives?

Were the project's objectives and components clear, practicable and feasible within its timeframe? The evaluation should also assess whether outcomes specified in the project document and/or logical framework are actually outcomes and not outputs or activities.

Were capacities of the executing institutions and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to implementation? Was availability of counterpart resources (funding, staff, and facilities), passage of enabling legislation, and adequate project management arrangements in place at project entry?

Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed. In particular, assess the role of the Steering Committee and how well the management was able to adapt effectively to changes of framework conditions during the life of the project.

Assess the quality and adaptability of project management and the supervision of project activities / project execution arrangements. Did UNIDO staff identify problems in a timely fashion and accurately estimate

their seriousness? Did UNIDO staff provide quality support and advice to the project, approved modifications in time and restructure the project when needed? Did UNIDO provide the right staffing levels, continuity, skill mix, frequency of field visits?

- **Stakeholder involvement**

Did the project involve the relevant stakeholders through information sharing, consultation and by seeking their participation in project's design, implementation, and monitoring and evaluation? For example, did the project implement appropriate outreach and public awareness campaigns? Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the design, implementation and evaluation of project activities? Specifically the evaluation will:

- Assess the mechanisms put in place by the project for identification and engagement of stakeholders and establish, in consultation with the stakeholders, whether this mechanism was successful, and identify its strengths and weaknesses.
- Assess the degree and effectiveness of collaboration/interactions between the various project partners and institutions during the course of implementation of the project.
- Assess the degree and effectiveness of various public awareness activities.

- **Financial planning**

Did the project have the appropriate financial controls, including reporting and planning and including information on additional resources mobilised, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds.

## **V. Evaluation Team and Timing**

The evaluation team will be composed of an international expert on cluster and networking acting as team leader, one international evaluation consultant with experience in evaluation and private sector development and one staff member of UNIDO Evaluation Group. Furthermore national consultants will be recruited by UNIDO in the countries visited by the evaluation team. The tasks of international consultants are specified in the job descriptions attached to these terms of reference in annex 3.

UNIDO evaluation group will be responsible for the quality control of the evaluation process and report. It will provide inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, ensuring that the evaluation report is useful for UNIDO in terms of organisational learning (recommendations and lessons learned) and its compliance with UNIDO evaluation policy and these terms of reference.

Members of the evaluation team must not have been directly involved in the design and/or implementation of the programme/projects.

The UNIDO country offices concerned will support the evaluation team. However, all evaluation interviews will be carried out independently, i.e. in absence of project staff. Donor representatives from the bilateral donor representations will be briefed and debriefed.

### **Timing**

The evaluation is scheduled to take place in the period June 2008 to March 2009. The field mission for the evaluation will be spread over this period and should be finalized by December 2008.

## **VI. REPORTING**

The report should be brief, to the point and easy to understand. It must explain; the purpose of the evaluation, exactly what was evaluated and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination.

Evidence, findings, conclusions and recommendations should be presented in a complete and balanced manner. The evaluation main report shall be written in English and follow the structure given in annex 1, while the reports on individual projects shall follow the structure outlined in annex 2.

***Review of the Draft Report:*** Draft reports submitted to UNIDO Evaluation Group are shared with the corresponding Programme or Project Officer for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report.

***Quality Assessment of the Evaluation Report:*** All UNIDO evaluations are subject to quality assessments by UNIDO Evaluation Group. These apply evaluation quality assessment criteria and are used as a tool for providing structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality (annex 4).

## Annex 2

### List of documents and references used

- Altenburg T. and Meyer-Stamer J. (1999), "How to Promote Clusters: Policy Experiences from Latin America", *World Development* Vol.27 No.9: 1693-1713.
- Ayyagari, M., T. Beck, and Asli Demirguc-Kunt (2003) "Small and medium enterprises across the globe: A new database", World Bank Policy Research Working Paper 3127.
- Ceglie G. and Stancher A., 2009, "The industrial district model in the development strategy of international organizations: the example of UNIDO", forthcoming in Becattini (ed.) *Handbook of Industrial Districts*.
- Ceglie, G. and Dini, M.(1999). "SME Cluster and Network Development in Developing Countries: The Experience of UNIDO." *Private Sector Development Branch*, Vienna, 2001.
- Chang H.J., 2009, "Industrial Policy: Can We Go Beyond an Unproductive Confrontation?", Plenary Paper for ABCDE (Annual World Bank Conference on Development Economics), Seoul, South Korea, 22-24 June.
- DFID (2005). *Making Market Systems work better for the poor. An Introduction to the concept*. Available at: [www.dfid.gov.uk](http://www.dfid.gov.uk)
- Giuliani E., Pietrobelli C., Rabellotti R., 2005, "Upgrading In Global Value Chains: Lessons From Latin American Clusters", *World Development*, Vol.33(4), pp. 549–73.
- Government of India, 2008, *National Employment Policy*, 1<sup>st</sup> draft, 1 August 2008.
- Guerrieri P. and Pietrobelli C., 2004, "Industrial Districts' Evolution and Technological Regimes: Italy and Taiwan", *Technovation*, 24: 899–914.
- Guerrieri P. and Pietrobelli C., 2006, "Old and New Forms of Clustering and Production Networks in Changing Technological Regimes: Contrasting Evidence from Taiwan and Italy", *Science, Technology and Society*, vol.11, no.1 Jan-June.
- Guerrieri P., Iammarino S., Pietrobelli C., 2001, *The Global Challenge to Industrial Districts: SMEs in Italy and Taiwan*, Cheltenham, UK and Lyme, US: Edward Elgar
- Humphrey J. and Schmitz H., 2002. 'How Does Insertion in Global Value Chains Affect Upgrading in Industrial Clusters?', *Regional Studies*, 36(9), pp. 1017-1027.
- Humphrey J., Schmitz H., 1995, *Principles for promoting clusters and networks of SMEs*. UNIDO, Vienna.
- Ketels, C.H.M. and Memedovic, O. (2008) 'From clusters to cluster-based economic development', *Int. J. Technological Learning, Innovation and Development*, Vol.1, No.3, pp.375-92.
- Kozak M., 2007, "Micro, Small, and Medium Enterprises: A Collection of Published Data", IFC, Washington D.C., updated 26.01.2007, [http://rru.worldbank.org/Documents/other/MSMEdatabase/msme\\_database\\_0706.xls](http://rru.worldbank.org/Documents/other/MSMEdatabase/msme_database_0706.xls)
- Lund-Thomsen P. and Nadvi K., 2008, "Global Value Chains, Local Clusters and Corporate Social Responsibility: A Comparative Assessment of the Sports Goods Clusters in Sialkot, Pakistan and Jalandhar, India", mimeo for UNIDO, September.
- Marshall, A., 1990, *Industry and Trade*, London, Macmillan
- MSME Foundation, 2007, *Policy and Status Paper on Cluster Development in India*, New Delhi, November, [www.msme.foundation.org](http://www.msme.foundation.org)
- MSME Foundation, 2008, *Cluster Development and Poverty Alleviation*, New Delhi, May, [www.msme.foundation.org](http://www.msme.foundation.org)

- Nadvi K. and Barrientos S. (2004): *Industrial Clusters and Poverty Reduction*. UNIDO. Vienna.
- OECD, 2007, *Innovative Cluster Policies*, OECD Paris.
- Oyelaran-Oyeyinka B. and McCormick D. (2007): *Industrial Clusters and Innovation Systems in Africa*, United Nations University Press.
- Pietrobelli C. and Rabellotti R., (2007) *Upgrading to Compete. Global Value Chains, SMEs and Clusters in Latin America*, Cambridge Ma.: Harvard University Press, <http://www.hup.harvard.edu/catalog/PIEUPG.html>
- Pietrobelli C. and Rabellotti R., 2004 “Upgrading in Clusters and Value Chains in Latin America. The Role of Policies” Sustainable Development Department Best practices series; MSM-124, January, [http://www.iadb.org/sds/publication/publication\\_3586\\_e.htm](http://www.iadb.org/sds/publication/publication_3586_e.htm) and in Spanish (February 2005, [http://www.iadb.org/sds/mic/publication/publication\\_159\\_3586\\_s.htm](http://www.iadb.org/sds/mic/publication/publication_159_3586_s.htm) )
- Pietrobelli C. and Sverrisson Á. , 2003, *Linking Local and Global Economies: The Ties that Bind*. London and New-York: Routledge.
- Reserve Bank of India, 2008, “Master Circular - Lending to Micro, Small & Medium Enterprises (MSME) Sector”, RBI/2008-09/ 41 - July 1, 2008.
- Schmitz H. and Nadvi K. (1999). Clustering and Industrialization: Introduction. *World Development*, 27(9), pp. 1503-14.
- Schmitz, H. (1995) “Collective efficiency: Growth path for small-scale industry”. *Journal of Development Studies* 31 (4), 529-66.
- Stiglitz J.E., 1989, Markets, market failures, and development, *The American Economic Review*, Papers and Proceedings.
- UNIDO, 2005, “End of project report. Thematic Cooperation between UNIDO and SDC in the Areas of SME Networking and Cluster Development”.
- UNIDO, 2008, “End of Project Report. MSME Cluster Development Programme in the State of Orissa, India”.
- UNIDO, 1995, “Principles for Promoting Clusters & Networks of SME”, *Small and Medium Enterprises Programme, Discussion Paper*, No. 1
- UNIDO, 1996, “General Review Study of Small & Medium Enterprise (Sme) Clusters In India”, United Nations: New Delhi.
- UNIDO, 1999, “SME Cluster and Network Development in Developing Countries: the Experience of UNIDO”, *Private Sector Development Branch, Working Paper* No.2
- UNIDO, 2000, “Cluster Development and Promotion of Business Development Services (BDS): UNIDO’s Experience in India”, *Private Sector Development Branch, Working Paper*, No. 6.
- UNIDO, 2001, “Development of SMI Clusters and Networks in Nicaragua. US/NIC/97/209. Report of the joint in-depth evaluation mission”, Office of Internal Oversight and Evaluation, United Nations Vienna.
- UNIDO, 2001, “Development of cluster and networks of SME. The UNIDO Programme.” *Private Sector Development Branch*, Vienna, 2001.
- UNIDO, 2003, “Expert Group Meeting on Cluster and Network Development with Special Emphasis on Monitoring And Evaluation Issues”, Report by J. Dawson and P. Paris, edited by G. Ceglie, SME Branch, Vienna.
- UNIDO, 2005, “Evaluación del Programmea Integrado para el desarrollo de industrias competitivas capaces de integrarse tanto en mercados locales como internacionales, Colombia. Informe de la misión conjunta de evaluación”, November, OCG/EVG/R.6, United Nations Vienna.
- UNIDO, 2005, “Evaluation Independante du Programme Intégré en Tunisie, YA/TUN/05/003”, December, OCG/EVG/R.10, United Nations Vienna.
- UNIDO, 2005, “Medium-term Programme Framework, 2006-2009”, Revised Proposals of the Director-General, June, United Nations Vienna.

- UNIDO, 2005, "Private Sector Development: The Support Programmes of the Small and Medium Enterprises Branch", *SME Technical Working Papers Series*, No. 15, by Wilfried Luetkenhorst, Director, Small and Medium Enterprises Branch, UNIDO
- UNIDO, 2005, "UNIDO Strategic Long-term Vision Statement, Report by the Director-General", June, Vienna.
- UNIDO, 2006, "Social capital for industrial development: operationalizing the concept", Vienna.
- UNIDO, 2007, "Integrated Programme of UNIDO and the Islamic Republic of Iran. Independent review report", October, United Nations Vienna.
- UNIDO, 2007, "*India Country Service Framework. Independent evaluation*", United Nations Vienna.
- UNIDO, 2008, "Evaluación Independiente de los proyectos: Fortalecimiento y Difusión del Desarrollo de Conglomerados en Nicaragua (UE/NIC/05/001) - Fortalecimiento y Difusión del Desarrollo de Conglomerados en Nicaragua – Creación de capacidades y "Cluster-to-Cluster" (UE/NIC/05/003). Informe de la misión conjunta de evaluación", July, United Nations Vienna.
- UNIDO, 2008, "Independent Thematic Evaluation of the UNIDO Cluster and Networking Development Initiatives. Evaluation of the UNIDO Project: Promotion of Export Consortia (Peru component), Project Number: UE/GLO/04/158", United Nations Vienna, October.
- UNIDO, 2008, "Programme Intégré de l'ONUDI au Senegal. Compétitivité et densification du tissu productif fondé surUnited Nationspartenariat efficace Etat-Secteur privé. Final draft du rapport d'évaluation", June, United Nations Vienna.
- UNIDO, 2008, *Country Programme of Cooperation between the Republic of India and UNIDO 2008-2012. Towards inclusive growth: Strengthening the competitiveness and productivity of industrial enterprises*, New Delhi, April.
- UNIDO, 2009, "Evaluation Report. Unleashing the Potential of MSMEs in Ethiopia (UE/ETH/05/007)", June, United Nations Vienna.
- UNIDO, 2009, "Independent Thematic Evaluation of the UNIDO Cluster and Networking Development Initiatives in Morocco. Project UE/MOR/04/127 : Appui à la création de consortia d'exportation - Project UE/MOR/07/007 : Renforcement des capacités nationales dans la promotion et accompagnement de consortia d'exportation", February, United Nations Vienna.
- UNIDO, 2009, "Independent Thematic Evaluation of the UNIDO Cluster and Networking Development Initiatives in India", June, United Nations, Vienna.
- UNIDO and MSME Foundation, 2006, *Making Clusters Work. UNIDO Methodology*, MSME Foundation, New Delhi.

## Annex 3

### Database of CBL Unit projects (1994-2009)

	Project No(s).	year (start )	Country	Region	Predom. Approach	Type	Total Allotment US\$	Status	Actual expenditures US\$
	NTJAM94002	1994	Jamaica	LA	N	Pilot project	33,769	closed	33,768.6
	NCSEN9501D	1995	Senegal	AF	N	Prep. Assistance	40,799	closed	40,799.4
consider as one project	DGMAL96001	1996	Malaysia	ASIA	N	Upscaling	266,495	closed	266,494.9
	NUMAL96001	1996	Malaysia	ASIA	N	Policy dev.	57,000	closed	57,000.0
consider as one project	DGSEN97003	1997	Senegal	AF	N	Pilot project	265,648	closed	262,709.9
	NCSEN97003	1997	Senegal	AF	N	Pilot project	163,768	closed	163,768.2
consider as one project	DPJAM97001	1997	Jamaica	LA	N	Pilot project	996,127	closed	996,417.2
	NTJAM97001	1997	Jamaica	LA	N	Pilot project	90,150	closed	90,150.2
	USNIC97209	1997	Nicaragua	LA	C&N	Pilot project	1,369,157	closed	1,369,157.0
	NTMEX97004	1997	Mexico	LA	N	Prep. Assist.	216,152	closed	216,151.9
	NCELS99008	1999	El Salvador	LA	N	Policy dev.	80,033	closed	80,033.3
	USSEN00066	2000	Senegal	AF	N	Pilot project	268,044	closed	268,043.9
	SFNIR01F01	2001	Nigeria	AF	C&N	Pilot project	355,826	closed	355,826.3
	UCCOL01090	2001	Colombia	LA	C&N	Pilot project	174,995	closed	174,994.6
	DPSEN02008	2002	Senegal	AF	N	Upscaling	625,000	closed	628,860.0
	USSEN02122	2002	Senegal	AF	N	Evaluation	19,987	closed	19,986.8
	SFECU02A01	2002	Ecuador	LA	C&N	Pilot project	249,000	closed	241,014.6
	USECU02D75	2002	Ecuador	LA	C&N	Pilot project	137,000	closed	134,863.2
	USNIC02057	2002	Nicaragua	LA	C&N	Pilot project	443,495	closed	443,495.0
	USCOL03007	2003	Colombia	LA	N	Pilot project	105,000	closed	88,232.5
	SFIND04002	2004	India	ASIA	N	Policy development	700,000	ongoing	649,353.0
	UEGLO04121	2004	International	Internat.	C&N	Research	32,186	closed	32,413.0
	UENIC04057	2004	Nicaragua	LA	C&N	Pilot project	250,311	closed	250,311.1
	UESEN04014	2004	Senegal	AF	N	Upscaling	227,652	closed	228,237.9
	UESEN04115	2004	Senegal	AF	N	Upscaling	270,673	closed	277,979.8
	EESEN05002	2005	Senegal	AF	N	Upscaling	1,600,136	closed	1,585,975.5
	UEETH05007	2005	Ethiopia	AF	C&N	Pilot project	923,300	ongoing	831,199.4
	UENIC05001	2005	Nicaragua	LA	C&N	Upscaling	1,766,332	closed	1,725,427.6
	UENIC05003	2005	Nicaragua	LA	C&N	cluster twinning	205,542	closed	196,844.7
	DGSEN06005	2006	Senegal	AF	N	Policy dev.	100,000	closed	100,804.5
	DGSEN07001	2007	Senegal	AF	N	Prep. Assist.	131,579	closed	131,432.3
consider as one project	SFCOL06B02	2006	Colombia	LA	N	Prep. Assistance	17,000	closed	17,021.5
	XPCOL06B01	2006	Colombia	LA	N	Pilot project	19,240	closed	20,422.8
	XPGLO06016	2006	International	Internat.	GF	Research	135,096	ongoing	135,101.9
	XPSEN06003	2006	Senegal	AF	N	Upscaling	46,321	closed	45,447.8
	YASEN06004	2006	Senegal	AF	N	Upscaling	142,808	closed	143,169.0
	UESEN07004	2007	Senegal	AF	C&N	Upscaling	703,123	ongoing	442,832.5
	UESEN07005	2007	Senegal	AF	C&N	Upscaling	237,104	ongoing	139,744.1
	XPBOL07001	2007	Bolivia	LA	C&N	Prep.	32,528	ongoing	29,345.1

						Assistance				
		XPRLA07003	2007	Latin America	LA	GF	Research	136,972	ongoing	139,047.2
		XPSEN07003	2007	Senegal	AF	N	Upscaling	142,430	closed	145,413.0
		USRLA08005	2008	Latin America	LA	GF	Training	35,398	ongoing	27,542.9
		USIND01193	2001	India	ASIA	C&N	Upscaling	1,180,800	closed	1,145,132.0
consider	as	TFIND04048	2004	India	ASIA	C&N	Upscaling	1,105,567	closed	1,065,131.0
one		TFIND03A02	2003	India	ASIA	C&N	preparatory	39,614	closed	39,614.0
		TEIND04A01	2004	India	ASIA	C&N	cluster twinning	241,328	ongoing	359,734.0
consider	as	USGLO04116	2004	International	Internat.	GF	Research	1,555,400	ongoing	1,370,035.0
one							Pilot in Asia			
		USGLO02059	2002	International	Internat.	GF	Research	1,153,300	closed	1,005,342.0
							Pilot in Asia			
		SFTHA02001	2002	Thailand	ASIA	C&N	Training	14,666	closed	14,667.0
		USCMB03005	2003	Cambodia	ASIA	C&N	Prep.	14,415	closed	14,416.0
							Assistance			
consider	as	USPAK01099	2001	Pakistan	ASIA	C&N	Pilot project	235,000	closed	228,873.0
one		SFPAK04002	2004	Pakistan	ASIA	C&N	Pilot project	123,894	ongoing	99,621.0
		XPPAK04066	2004	Pakistan	ASIA	C&N	Pilot project	49,644	closed	43,744.0
		XPPAK06003	2006	Pakistan	ASIA	C&N	Pilot project	373,782	ongoing	362,122.0
consider	as	SFIRA05002	2005	Iran	ASIA	C&N	Pilot project	282,998	ongoing	128,570.0
one		SFIRA05102	2005	Iran	ASIA	C&N	Pilot project	70,796	ongoing	68,378.0
		TEVIE08003	2009	Vietnam	Asia	C&N	Pilot project	1,019,915		70,895.0
		US/GLO/95/144	1995	International	Internat.	GF	Pilot Project	2,657,739	closed	1,857,739.00
							Research			800,000.00
consider	as	DGMAG97007	1997	Madagascar	AF	N	Pilot project	1,480,454	closed	1,480,453.98
one		NUMAG97007	1997	Madagascar	AF	N	Pilot project	154,794	closed	154,793.94
		USIND97148	1997	India	ASIA	C&N	Upscaling	608,899	closed	608,898.91
		USMOR00142	2000	Morocco	AF	C&N	Pilot project	723,000	closed	706,871.75
		UEMOR04161	2004	Morocco	AF	C&N	Upscaling	411,230	closed	399,555.68
consider	as	UEMOR04126	2004	Morocco	AF	C&N	Pilot project	407,696	closed	401,130.99
one		UEMOR0412A	2004	Morocco	AF	C&N	Upscaling	120,124	closed	134,290.09
		USMOR0212A	2002	Morocco	AF	C&N	Upscaling	6,914	closed	6,913.83
consider	as	UEMOR04127	2004	Morocco	AF	EC	Pilot project	281,656	closed	269,654.53
one		UEMOR07007	2007	Morocco	AF	EC	Upscaling	646,215	ongoing	378,757.76
		UEGLO04158	2004	International	Internat.	GF	Pilot project	1,078,529	ongoing	634,913.00
							Research			450,000.00
		UEGLO09011	2004	International	Internat.	GF	Upscaling	722,888	ongoing	122,097.78
		TEJOR04A01	2004	Jordan	ASIA	EC	Pilot project	127,672	ongoing	120,370.72
		UEARG0412B	2004	Argentina	LA	EC	Pilot project	62,929	ongoing	62,494.42
		UETUN04045	2004	Tunisia	AF	EC	Pilot project	302,742	ongoing	302,764.20
		UEURU04A06	2004	Uruguay	LA	EC	Pilot project	177,005	ongoing	174,731.89
		TERAF07C01	2007	Senegal	AF	EC	Pilot project	54,013	ongoing	54,751.24
		XAEGY03645	2003	Egypt	AF	Cluster & Networking	Pilot project / cluster mapping	57,953	closed	57,953
		USZIM04117	2004	Zimbabwe	AF	Cluster & Networking	Pilot project / preparatory assistance	40,642	closed	40,642
		XPGLO06004	2006	International	International	Global Forum	Research	65,893	closed	63,590
<i>Total (64 projects)</i>								31,463,282		28,526,476.7

## ANNEX 4

### **Expert and stakeholder survey on UNIDO cluster and network initiatives in developing countries**

On behalf of UNIDO I am leading a team that is conducting an **Independent Thematic Evaluation of UNIDO Cluster and Networking Development (CND)** initiatives. This brief survey is part of the evaluation, and will collect the opinions of experts, donor representatives, technical assistance agencies and other relevant stakeholders involved in SME support initiatives.

We contact you because we believe you are familiar with UNIDO approach to Cluster and Networking Development or similar initiatives of other agencies. We would very much appreciate your professional input, which would not take more than 15 minutes of your time. **Please return your reply not later than 10 May 2009.**

**This evaluation aims** at answering a number of key questions to shed light on the relevance, effectiveness, efficiency, impact and sustainability of these activities. It will furthermore provide inputs for the discussion of UNIDO's future CND strategy by formulating recommendations to enhance UNIDO contributions to private sector development in general and CND initiatives in particular.

Replies will be dealt with confidentiality (anonymously).

The results of this Evaluation will be published and made available in due course on the UNIDO webpage ([www.unido.org](http://www.unido.org)).

I thank you in advance for your collaboration and support.

Prof. Carlo Pietrobelli  
Director of CREI, University of Roma Tre, Italy  
[c.pietrobelli@uniroma3.it](mailto:c.pietrobelli@uniroma3.it)  
<http://host.uniroma3.it/docenti/pietrobelli/>  
Leader of UNIDO Cluster and Networking Evaluation Team

15 April 2009

1. Project implementation in the field, and in particular:
  - Capacity-building and training activities
  - Cluster Development Agents' (CDA) activity
  - Diagnostic studies
  - Policy advice (to governments, organizations)
2. Development of Methodologies for analysis, management, evaluation
  - Manuals
  - Training Kits
  - On-line Policy Tool Box
  - Expert Group Meetings and Joint Learning programmes
  - Global training courses (ILO Turin) and regional ones
3. Action oriented research

What do you consider **important lines of UNIDO CND activities** ? (rate 1 - low - to 4 - high -)

The UNIDO CND approach is based on a number of general assumptions. Please rate on a scale from 1 to 4 to what extent you consider the following assumptions to be realistic:

- Public policy can facilitate Clusters development
- Demonstration cases of Cluster work are effective tools for replication and up-scaling
- Institutional capacity for CND programmes can be created
- Clusters promote competitiveness
- Clusters can promote pro-poor growth

What do you consider the **main achievements of UNIDO CND initiatives in developing countries**? Pls. rate the importance of each of the following on a scale from 1 to 4:

- Well performing Clusters
- Well performing Networks of enterprises
- Sufficient institutional capacity to support long term development of Clusters and networks
- Ownership of the CND concept at national level (including policies and incentives)
- Others, pls specify:

**How do UNIDO CND initiatives relate to those of other institutions, agencies and donors** active in similar interventions? Please rate from 1 to 4:

- Does UNIDO, through its CND initiatives, contribute to the international body of knowledge and does it influence the way similar initiatives are planned and implemented by international agencies and donors?
- Are UNIDO CND initiatives based on- and consistent with state-of-the-art knowledge about institutional change, SME development and Clusters?
- Are UNIDO CND initiatives consistent with value chain approaches?

In your opinion, can the UNIDO CND approach be utilised to further the following development-related objectives (rate from 1 to 4):

- Poverty reduction

- Corporate Social Responsibility
- Energy-efficient and environmentally-sustainable practices
- Gender equality
- others, pls. specify:

Do you think there is demand for Cluster and Networking Development initiatives in developing countries? (rate from 1 to 4)

Do you think there is a need for adjustment of the approach currently followed by UNIDO? (rate from 1 to 4).

**Project level evaluation parameters**

In case you have had direct experience with UNIDO CND projects in developing countries please rate the following project-level evaluation dimensions of UNIDO CND projects on a scale from 1 to 4 (1 lowest, 4 highest):

**Project Relevance**

- to the country/region needs,
- to the enterprises' needs,
- is the CND approach relevant to be implemented by UNIDO - and consistent with UNIDO's objectives, experience and capabilities -?

**Effectiveness and Impact** of project: Have objectives and planned results been obtained?

**Assessment of sustainability and replicability of project outcomes**

Your assessment of **Efficiency** of project activities

Your assessment of **Monitoring and Evaluation Systems**: are they adequate?

Were project **stakeholders adequately involved** in the project design and implementation?

Your assessment of **financial size of UNIDO CND projects**: are the financial resources foreseen at a project level sufficient?

Is the time frame of programmes suitable for the proposed objectives (long term vs. short term) ?


Finally, we would like to “pick your brains” with regard to possible improvements of UNIDO CND Initiatives. We would appreciate your comments on the following three questions:

What do you consider the main **strengths** of UNIDO approach to CND? Pls. explain briefly:

What do you consider the main **weaknesses** of UNIDO approach to CND? Pls. explain briefly:

Do you have any **suggestions or recommendations** for UNIDO's CND programme? Pls. explain briefly:

**INFORMATION ON THE RESPONDENT**

You define yourself as part of :

- academia
- donors
- practitioners
- UNIDO project staff
- other

Thank you very much !!

---

## Annex 5

### Sources for comparison of CND approaches of various organizations

Sources: Authors' assessments on the basis of following documents:	
<b>USAID</b>	
USAID web site <a href="http://www.usaid.gov/">http://www.usaid.gov/</a>	
Promoting Competitiveness in Practice An Assessment of Cluster-Based Approaches Prepared for The U.S. Agency for International Development Washington, DC November 17, 2003 This report was prepared by The Mitchell Group <a href="http://www.bsknowledge.org/dyn/bds/docs/254/USAID-Mitchell-Clusters.pdf">www.bsknowledge.org/dyn/bds/docs/254/USAID-Mitchell-Clusters.pdf</a>	
<b>WORLD BANK</b>	
WORLD BANK web site on LED <a href="http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTURBANDEVELOPMENT/EXTLED/0,,contentMDK:20185186-menuPK:399161-pagePK:148956-pPK:216618-theSitePK:341139,00.html">http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTURBANDEVELOPMENT/EXTLED/0,,contentMDK:20185186-menuPK:399161-pagePK:148956-pPK:216618-theSitePK:341139,00.html</a>	
<b>EUROPEAN UNION - Erupe Aid</b>	
Europe Aid External Cooperation Programs European Commission <a href="http://ec.europa.eu/europeaid/index_en.htm">http://ec.europa.eu/europeaid/index_en.htm</a>	
Delegation of European Commission in Paraguay- Bilateral projects 200.40.135.80/c/document_library/get_file?folderId=25&name=TdR++EU++DIR+03+07+.pdf -	
<b>CORPORACIÓN ANDINA DE FOMENTO</b>	
CAF - PAC <a href="http://pac.caf.com/interna.asp?pg=11">http://pac.caf.com/interna.asp?pg=11</a>	
<b>MULTILATERAL INVESTMENT FUND</b>	
MIF web site <a href="http://www.iadb.org/mif/home/index.cfm?language=English">http://www.iadb.org/mif/home/index.cfm?language=English</a>	
La experiencia de los proyectos de integración productiva. Un instrumento para el desarrollo del sector privado, Fondo Multilateral de Inversiones <a href="http://forito.fundes.org/images/Cadenas%20de%20Valor_Claudio%20Cortellese_FOMIN%20Panel1.pdf">http://forito.fundes.org/images/Cadenas%20de%20Valor_Claudio%20Cortellese_FOMIN%20Panel1.pdf</a>	
Competitive regional clusters. National Policy approaches, OECD Reviews of Regional Innovation, 2007 <a href="http://www.unescap.org/tid/lanet/migt/gmscb_regionalclusters.pdf">http://www.unescap.org/tid/lanet/migt/gmscb_regionalclusters.pdf</a>	
<b>ASIAN DEVELOPMENT BANK</b>	
City Cluster Development. Toward an Urban Led Development Strategy for Asia. Asian Development Bank, K. Choe and A. Laquian, 2008 <a href="http://www.adb.org/Documents/Books/Urban-Development-Series/2008/default.asp">http://www.adb.org/Documents/Books/Urban-Development-Series/2008/default.asp</a>	
ADB Website <a href="http://www.adb.org/">http://www.adb.org/</a>	
<b>Other sources</b>	
The Cluster Policies White Book, Thomas Andersson, Sylvia Schwaag Serger, Jens Sörvik, Emily Wise Hansson, IKED, 2004, International Organization for Knowledge Economy and Enterprise and Development <a href="http://www.iberpymeonline.org/Documents/TheClusterPolicies.pdf">www.iberpymeonline.org/Documents/TheClusterPolicies.pdf</a>	
Competitive Regional Clusters: National-Regional Policy Approaches, Karen Maguire, OECD 2007 <a href="http://www.oecd.org/dataoecd/34/22/38653705.pdf">www.oecd.org/dataoecd/34/22/38653705.pdf</a>	
Summary report of the focus group on clusters, Theo J.A. Roelandt, Pim den Hertog, OECD, <a href="http://www.oecd.org/dataoecd/56/47/2369025.pdf">www.oecd.org/dataoecd/56/47/2369025.pdf</a>	

## Annex 6

### Overview of CND upstream activities

(prepared by the UNIDO CBL Unit)

The Cluster and Network Development programme is engaged in a variety of upstream activities. Some are pursued in a systemic fashion and on regular basis while other are more *ad hoc* activities. Below a list of upstream activities is provided which differentiates between:

- **Knowledge generating activities** with the objective to codify experiences and lessons learned derived from field level activities as well as to feed new inputs into project activities.
- **Knowledge disseminating activities** meant to disseminate the approach and experiences to project beneficiaries and to the public at large.

#### Knowledge generating activities

1. Formulation of **methodologies and training materials**: these knowledge resources serve the purpose to systematize the experience gathered through project implementation and train field-level staff (cluster development agents) as well as other stakeholders and beneficiaries (intermediary institutions, policymakers). They cover the entire project cycle from selection through diagnostic, action planning and implementation to monitoring and evaluation. In some cases they come with learning material such as case studies, instructions for group works, PPT presentations. Always, they are complemented by operational tools such as scorecards for M&E data collection, templates of questionnaires, checklists of variables etc. So far, the following methodologies have been formulated and used for training:
  - o Manual para la Organización y Desarrollo de Redes Empresariales Horizontales (drafted in 2005 and updated in 2007). A methodology for the development of horizontal networks based on UNIDO's experience in Nicaragua in English and Spanish (an abridged version is available on line <http://www.unido.org/index.php?id=5414>).
  - o Manual de la Metodología de Desarrollo de Redes de Abastecimiento (2002), drafted by Paul Davidson (UNIDO Consultant), Luis Adolfo Medal, Griselda Soto (UNIDO field staff). A methodology for the development of vertical networks based on project experience in Nicaragua.
  - o Guide to Export Consortia (available in French, English, and Spanish - <http://www.unido.org/index.php?id=5876>). A methodology for the development of export consortia with case studies and tools, formulated in 2003 by UNIDO in collaboration with Federexport.
  - o Manual de Formación para Promoción, Desarrollo y Gestión de Consorcios de Exportación (2008 forthcoming, by Carlos Lopez – UNIDO consultant). A collection of operational tools and learning material based on the practical experience of the UNIDO export consortia projects in Latin America.
  - o Paso a paso. Desarrollo de Sistemas Productivos Territoriales basados en Conglomerados (latest version 2006 – available on line in the PSD Toolbox, section on SME clusters in Spanish <http://www.unido.org/psd-toolbox/index.php>). Training package on cluster development based on project experience in Nicaragua, prepared by Marco Dini (UNIDO consultant) and field staff of the UNIDO office in Nicaragua.
  - o CDA Training Manual for Sfurti. A training package on cluster development prepared by the MSME Foundation (New Delhi) for use in India (available on line, in the PSD Toolbox, section on SME clusters in English <http://www.unido.org/psd-toolbox/index.php>).
  - o Forthcoming is a “Training Kit for Cluster Development” that aims to combine lessons learned and good practices for project implementation from different projects.

It also reflects recent experiences in the implementation of pro-poor CND projects. The learning material is being formulated in collaboration with ILO-ITC Turin.

Starting from this training material, each project team adapts the methodology to the context of implementation and formulates a training package that will be used locally or nationally e.g. the training manual for cluster development in Amharic formulated in Ethiopia (these activities are undertaken in the framework of technical assistance).

2. **EGM** (expert group meetings) to foster experience and knowledge sharing between country teams and UNIDO Headquarters. This type of activity was most frequently run in the earlier stage of the CDN programme, while the methodologies and approach were being developed. Among them:
  - **Expert Group Meetings on Export Consortia:** benchmarking of international experience is one of the pillars of the UNIDO export consortia programme. Several country papers were prepared, with UNIDO support, by the participants in these meetings. A comprehensive document describing the various national export consortia programmes and incentive schemes was prepared by UNIDO as well as a paper comparing export consortia with other SME networks for market access. The two EGM that have been organized so far are:
    - **Olbia, Italy, September 2005:** organized in cooperation with FEDEREXPORT (the Italian Federation of Export Consortia) and ICE (the Italian Institute for Foreign Trade). It was attended by more than 50 representatives from 18 developed and developing countries.
    - **Rabat, Morocco, May 2007:** organized in cooperation with the Moroccan Ministry of Foreign Trade, it was addressed to representatives of the Agadir Agreement signatory countries (Morocco, Tunisia, Jordan and Egypt). More than 100 participants attended the meeting.
  - An **Expert group meeting on cluster and network development with special emphasis on monitoring and evaluation issues** was held in Delhi from 9 - 14 December 2002 as a first step towards the development of guidelines on how to assess the impact of a cluster programme.

Presently, feedback from project site to the Headquarters is ensured through field visits from staff members and on-distance regular interaction with field staff.

More recently the unit has organized an EGM on the Training Kit for Cluster Development – December 2007 - with the objective to review the training package and integrate recommendations of the participating experts.

Members of the Unit also regularly participate in EGMs organized by other UNIDO programmes such as the EGM on Innovation Systems in Practice, October 2007; the EGM on Gender 2008. These have the objective to advance UNIDO's strategies on hot topics of the development debate.

3. **Action-oriented research:** In the early stage of development of the CND programme, collaboration was sought with academia and leading researchers in order to identify good practices and establish a framework for the delivery of assistance to clusters and networks. The result of this collaboration led to the formulation of the following papers (available on line <http://www.unido.org/index.php?id=5402>):
  - Principles for promoting clusters & networks of SMEs (Humphrey, Schmitz 1995).
  - Industrial Clusters and Networks: Case Studies of SME Growth And Innovation (Nadvi 1995)
  - The Italian SME Experience and Possible Lessons for Emerging Countries (Patrizio Bianchi, Lee M. Miller, Silvano Bertini 1997)
  - Expert group meeting on cluster and network development with special emphasis on monitoring and evaluation issues (2003)..
  - More recently: technical paper on export consortia – lessons learned and case studies – formulated in collaboration with ALTIS (2008)They also includes case studies formulated by the Unit, such as:
  - Real service centers in Italian industrial districts Lessons learned from a comparative analysis by Michele Clara

- PROMOSEDIA Marketing support – Furniture by Michele Clara 1998
- Effluents treatment plants - Nove and Arzignano: Leather and Ceramics by Michele Clara 1998
- ENEA - Programmes of R&D support to SMEs by Michele Clara 1998
- Quality consortia - Parma and San Daniele: food processing by Michele Clara 1999
- CITER - Infocenter knitwear and textile by Michele Clara 1999

**More recently, in collaboration with Swiss Development Cooperation, the CND programme has undertaken a stream of research addressing topics new to the cluster approach (e.g. gender, microfinance, CSR, poverty) and aimed at informing the formulation and implementation of CDN projects. Among these:**

- Industrial clusters and poverty reduction (Nadvi, Barrientos 2004 <http://www.unido.org/index.php?id=5415>)
- Forthcoming: Global Value Chains, Local Clusters and Corporate Social Responsibility: A Comparative Assessment of the Sports Goods Clusters in Sialkot, Pakistan and Jalandhar, India (Nadvi, Lund-Thomsen)

A draft paper on “CSR perceptions and activities of SMEs in geographical clusters” has been developed based on a survey by O.Panfil and A. Sachdeva (UNIDO consultants) and will be soon available.

An assessment of the performance of several export consortia is currently being undertaken in cooperation with ALTIS (Alta Scuola Impresa e Società), a business school of Università Cattolica di Milano (Milan, Italy) and a technical paper will be prepared before the end of the year.

4. Formulation of **End of Project Reports** that serve the purpose to codify lessons learned. An end of project report is available for each completed project. EPR are shared with donors and local counterparts and feed into the formulation of knowledge dissemination tools (e.g. case studies).
5. Participation in an **international community of practice**: This is a network recently constituted by IDB-ILO-UNIDO with the objective to foster inter-agency learning and improve on the respective approaches. Dialogue among representatives of the UNIDO CND programme, the IDB programme “integración productiva” and the ILO Local Economic Development programme is ongoing and takes places on an almost regular basis. Under this framework, joint knowledge disseminating activities are also undertaken e.g.:
  - Joint organization of and participation in international conferences (the 2007 IDB-ILO-UNIDO Conference in Washington on small firm competitiveness)
  - Joint training delivery (e.g. UNIDO-ILO-IDB training in Chile for representatives of Chile Emprende, private sector and NGOs representatives - 2008).
 Moreover, the establishment of this community of practice is also paving the way for greater collaboration in project formulation and implementation (e.g. on-going joint project formulation ILO-BID-UNIDO for a regional training programme on cluster and LED in Latin America).
6. Participation in **networks of donors** e.g. the Donor Committee where CBL staff co-chaired the working group on Business Linkages and Value Chains (<http://www.enterprise-development.org/page/linkages-value-chains>) for a period of two years in view of the track record of UNIDO in the field of implementing cluster development projects.

<b>Knowledge disseminating activities:</b>
--

1. **Training delivery** on the CND approach: Training is delivered regularly at the global level in collaboration with the ITC-ILO and at the regional level. With regard to global level training on cluster development and on export consortia development was delivered on a yearly basis in collaboration with ILO-ITC Turin, in 2004, 2005 and 2006 More recently, UNIDO has participated in the ILO-ITC Summer Academy 2008 and will participate in the ILO Inter-Agency Conference on Local Economic Development 2008. A recent development of this

inter-agency collaboration is the attempt to deliver training workshops that combine elements of the UNIDO cluster approach with the ILO LED approach. At the regional level, training is delivered upon request, such as it is the case for:

- Trinidad y Tobago training on SME Cluster and Network Development: Principles and Practice 2007
- Taller sobre desarrollo de cluster, Dominican Republic, November 20-24 2006.
- Training programme organized jointly by UNIDO and UNESCWA, which was held at UNESCWA HEADQUARTERS in Beirut on 5-19 March 2004 for practitioners from Syria, Lebanon, Jordan and Morocco.
- Industrial Development Planning by Local Governments: Cluster-Based Development Approach Policy Seminar organized by the Asian Development Bank Institute on March 14 – 19 in Tokyo, Japan for senior civil servants from Cambodia, Kazakhstan, Lao PDR, Mongolia, Myanmar, Uzbekistan and Vietnam.
- 8-day learning course on "Enhancing Entrepreneurship in the Great Mekong Subregion" organized by the Mekong Institute in the Khon Kaen Province (Thailand) on 3 - 10 December 2007, for 30 participants from Yunnan of China, Cambodia, Lao PDR, Vietnam, Myanmar and Thailand.
- Training programme on "SME Cluster and Network Development in South Africa: Principles and Practice" organized in collaboration between UNIDO and the Department of Trade and Industry (Government of South Africa) in Pretoria (South Africa) on 18-22 August 2008 for 30 practitioners from the Export Promotion Councils.
- Training programme on "Globalization and SMEs: The Italian Experience" under the framework of the Programme "Capacity-building Programme for Diplomats in the Third Millennium" organized by UNDESA in Rome in Rome in March 2001 for 27 participants from the Arab region.

Also upon request, staff of the CND programme participates in training workshops organized by other agencies involved in local development. Among these:

- AFD Workshop on Cluster development Marseille June 2008
- Fundacion Universidad Rey Juan Carlos - Madrid, delivery of a presentation on cluster development in the framework of the Aranjuez Summer Courses, July 2008

2. **Participation in international conferences:** CND staff actively participates in international and national partners events related to small enterprise, cluster development or private sector development. Among these:

- Third Annual Meeting of Global Network of EXIM Banks and Development Finance Institutions (G-NEXID) technical seminar on "SMEs: The Driving Force of the Global Economy", held in UNCTAD, Geneva 2008
- The Competitiveness Institute (TCI) *Pan African Competitiveness Forum* - Addis Ababa 2008;
- TCI conference *CLUSTERS: Meeting the challenge of globalization* in Capetown 2008;
- IDB *Foromic* on micro-enterprise and poverty reduction in Paraguay 2008;
- UNIDO-WTO conference on AfT in Kigali 2008;
- BID conference *Knowledge and Learning from Experience the Value Chain and Cluster Projects* 2007
- International Conference on Strengthening Regional Cooperation for Managing Globalization organized by UNESCAP in Moscow on 28-30 September 2005

3. **Publications:** these are brochures, technical papers and working papers as well as case studies that document project activities, services provided and draw lessons learned. Papers are available at <http://www.unido.org/index.php?id=5415> and include:

- Better access to growth. Mainstreaming gender in cluster development. 2007
- Approaches to SME networking for market access (2007)
- Combining strengths. Synergies between cluster development and microfinance. 2005

- SME cluster and network development in developing countries: the experience of UNIDO 1999
- Cluster development and BDS promotion: UNIDO experience in India 2000
- Supporting underperforming SME clusters in developing countries lessons and policy recommendations from the UNIDO cluster programme in India
- Development of Clusters and Networks of SMEs
- Export Consortia: a Tool to Increase SME Exports

Case studies are formulated in the form of brief fact sheets as well as more comprehensive studies detailing project activities and results. When possible, data are updated after project completion. Some are available on line (<http://www.unido.org/index.php?id=5412>) others are integrated in the Training Kit or intended for internal use. On-line documents are the following:

- Upscaling cluster development for poverty reduction in Orissa, India.
- Network and cluster development in Nicaragua
- Forging competitive linkages in the apparel cluster of Atuntaqui, Ecuador
- Stimulating SME environment in Senegal
- Reducing poverty through productive activities The UNIDO experience in the handloom cluster of Chanderi.

Moreover, shorter contributions on the CDN experience are provided on request to magazines, publications and handbooks, e.g.:

- contribution to the World Bank tool kit on clusters 2008;
  - case story on the Chanderi cluster – 2006 - and contribution on the UNIDO cluster approach and the Ecuador project - 2008 - to CORPORAID;
  - chapter on The Industrial district model in the experience of international organizations contributed to the Bellandi-Beccattini Handbook on Industrial Districts forthcoming in 2009;
  - chapter on Politiche per la promozione di cluster d'impresa nei Paesi in via di sviluppo . Il dibattito internazionale e l'esperienza UNIDO. Contributed to the Di Tommaso, Giovannelli: Nazioni Unite e Sviluppo Industriale in 2006
  - Introducción to the Di Maria, Micelli: Sistemas Locales en las Redes Internacionales de Producción 2006.
4. **Videos** portraying project level experiences have been prepared on a number of projects and are disseminated also in the framework of training events and conferences. Most are available online at: <http://www.unido.org/index.php?id=5410> and include:
- 1 Video on Nicaragua cluster programmema
  - 1 Video on gender and cluster development in Chanderi – India
  - 2 Videos on cluster and poverty reduction in (respectively) Barpalli, India, and Baripada, India
  - 1 Video on cluster programme in Ecuador
  - 1 video on Export Consortia in Morocco
  - 1 video on the UNIDO cluster development programme in India
  - 1 Video on Export Consortia in Peru (forthcoming)
  - 1 video on Project in Senegal (forthcoming)

5. **Interviews:** CDN staff has recently taken part in an Austrian radio programme on clusters and interviewed by Mesopartner for the LEDcast on LED (see <http://www.unido.org/index.php?id=5410>)

6. **On line knowledge resources:** the Unit website and the PSD Toolbox collect a number of case studies, methodologies, videos and other knowledge tools that can be accessed by the widest public and are constantly updated. These are accessible at:

- Cluster and network: [www.unido.org/clusters](http://www.unido.org/clusters)
- Export consortia: [www.unido.org/exportconsortia](http://www.unido.org/exportconsortia)  
Toolbox: <http://www.unido.org/psd-toolbox/>

## Annex 7

### List of tables/illustrations

#### List of tables

<b>No.</b>	<b>Title</b>	<b>Page</b>
Table 1	UNIDO CND projects: Completed and ongoing (1994-2009)	19
Table 2	UNIDO CND projects: by geographical region (1994-2009)	19
Table 3	UNIDO CND projects, by approach (1994 – 2009)	20
Table 4	Average value of UNIDO CND projects (1994 - 2009)	21
Table 5	Main characteristics of cluster and network development programmes of selected international organizations	26
Table 6	UNIDO CND Projects: Upstream vs. downstream activities (1994-2009)	37
Table 7	UNIDO CND projects, by project type (1994-2009)	37
Table 8	Evaluation dimensions of selected projects	38

#### List of figures and diagrams

<b>No.</b>	<b>Title</b>	<b>Page</b>
Figure 1	Geographical distribution of UNIDO projects per allotments, 1994-2009 (in \$ and percentage)	20
Figure 2	Geographical distribution of UNIDO projects per allotments, 1994-2009 (in \$ and percentage)	21
Diagram 1	UNIDO CND theory of change	29
Diagram 2	Model intervention logic for UNIDO CND country-level projects	31
Diagram 3	UNIDO CND programme frame work	32
Diagram 4	CND as a tool for enhanced efficiency and effectiveness of UNIDO interventions,	52

#### List of boxes

<b>No.</b>	<b>Title</b>	<b>Page</b>
Box 1	The “Programme” of UNIDO CND initiatives in India: Planning, design and strategies	53
Box 2	Some highlights from interventions in Senegal and Morocco	55



**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria

Telephone: (+43-1) 26026-0, Fax: (+43-1) 26926-69

E-mail: [unido@unido.org](mailto:unido@unido.org), Internet: [www.unido.org](http://www.unido.org)