

Effective Monitoring for Pro-poor Cluster Development

Guidelines for Practitioners

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Effective Monitoring for Pro-poor Cluster Development

Guidelines for Practitioners

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2012

This technical paper has been produced by the United Nations Industrial Development Organization (UNIDO) under the general guidance of Giovanna Ceglie, UNIDO Representative and Director, UNIDO Regional Office in Egypt, and Natascha Weisert, Industrial Development Officer at the Clusters and Business Linkages Unit of UNIDO, and with the support of Anna Stancher and Clara Höpler, UNIDO Consultants. The authors are thankful to Michele Clara and Johannes Dobinger for their contributions and valuable comments on the draft paper.

Contents

Introduction

These "Monitoring Guidelines" were prepared to support the introduction and use of the UNIDO Monitoring Framework for Cluster Development Initiatives by Project Managers. Their development was inspired by, and based on, the "Standard for Measuring Achievements in Private Sector Development (PSD)" that was published by the Donor Committee for Enterprise Development (DCED). The Framework is used primarily for accountability purposes and will be used by UNIDO Headquarters (HQ), i.e. both the unit chief and project managers.

Step by step, this document walks users of the Framework through the process of implemenation and adapting it to the needs of a specific cluster development project. First, this manual helps its users to decide what should be monitored. By fine-tuning the project's results chain, practitioners are encouraged to clarify the project's objectives and select suitable indicators to measure progress towards expected results along the results chain. The Monitoring Guidelines also support practitioners in identifying and assessing relevant contextual factors that should be monitored throughout project implementation. Moreover, guidance on the selection of appropriate data collection methods and the preparation of the corresponding data collection tools is provided. This manual also suggests standard data collection and reporting frequencies and aims at clarifying roles and responsibilities in the implementation of the framework.

In the annexes, several templates and other practical tools are made available for users. These include a general programme logical framework (log-frame) and a large pool of indicators that project managers can pick and choose from. Guidelines on how to conduct interviews and focus group meetings as well as several sample data collection instruments are also included.

The Monitoring Framework may require adaptations integrating the lessons learned from applying the methodologies and using related tools in cluster development projects. Therefore, this manual should be understood as a living document that will be adapted in line with the changes made to the Framework.

The Monitoring Framework[1]

A monitoring framework is a set of policies, practices and processes supporting the systematic and effective collection, analysis and use of monitoring information. It provides crucial information about the performance of a project or programme and can help project managers and other stakeholders answer the essential questions of whether promises were kept and objectives met.

A good results-based monitoring framework can be extremely useful as a planning, management and a motivational tool. It helps focus people's attention on realizing outcomes that are important to the organization and its stakeholders, and provides an impetus for establishing strategies to achieve them.

Once targets are established and the project staff is working towards their realization, the monitoring framework provides managers and project staff with timely information on the progress made towards the achievement of project objectives. Thereby, it helps to identify early on any weaknesses that require corrective action. The Monitoring Framework is thus essential to improve interventions and maximize the likelihood of success. It also aids in validating the theory of change guiding the intervention and helps to verify its appropriateness and adequacy to produce the changes the intervention is actually aimed at.

A good M&E system also helps identify promising interventions so that they can potentially be replicated elsewhere. Having data available about how well a particular project, practice, programme, or policy works provides useful information for formulating and justifying budget requests. It also allows for a judicious allocation of scarce resources to the interventions that will provide the greatest benefit.

The Monitoring Framework has clearly defined areas where consistency is expected across projects—the CORE system—and other areas where flexibility is encouraged. The CORE system is not expected to supply all the information needs at different levels of an organization, but will define the minimum expectations. To adapt the Monitoring Framework to the needs of a specific cluster development project, the following four elements of the Monitoring Framework need to be specified and fine-tuned:

- What results are being monitored? Which indicators can be used to assess whether these results have been achieved? What context variables influence the project's success?
- How is the data collected? What data collection methods are suitable and which tools are available?
- When and how often should data be collected?
- Who is responsible for collecting, aggregating, analysing and reporting the monitoring data? Who is the data collected for and who needs what kind of information?

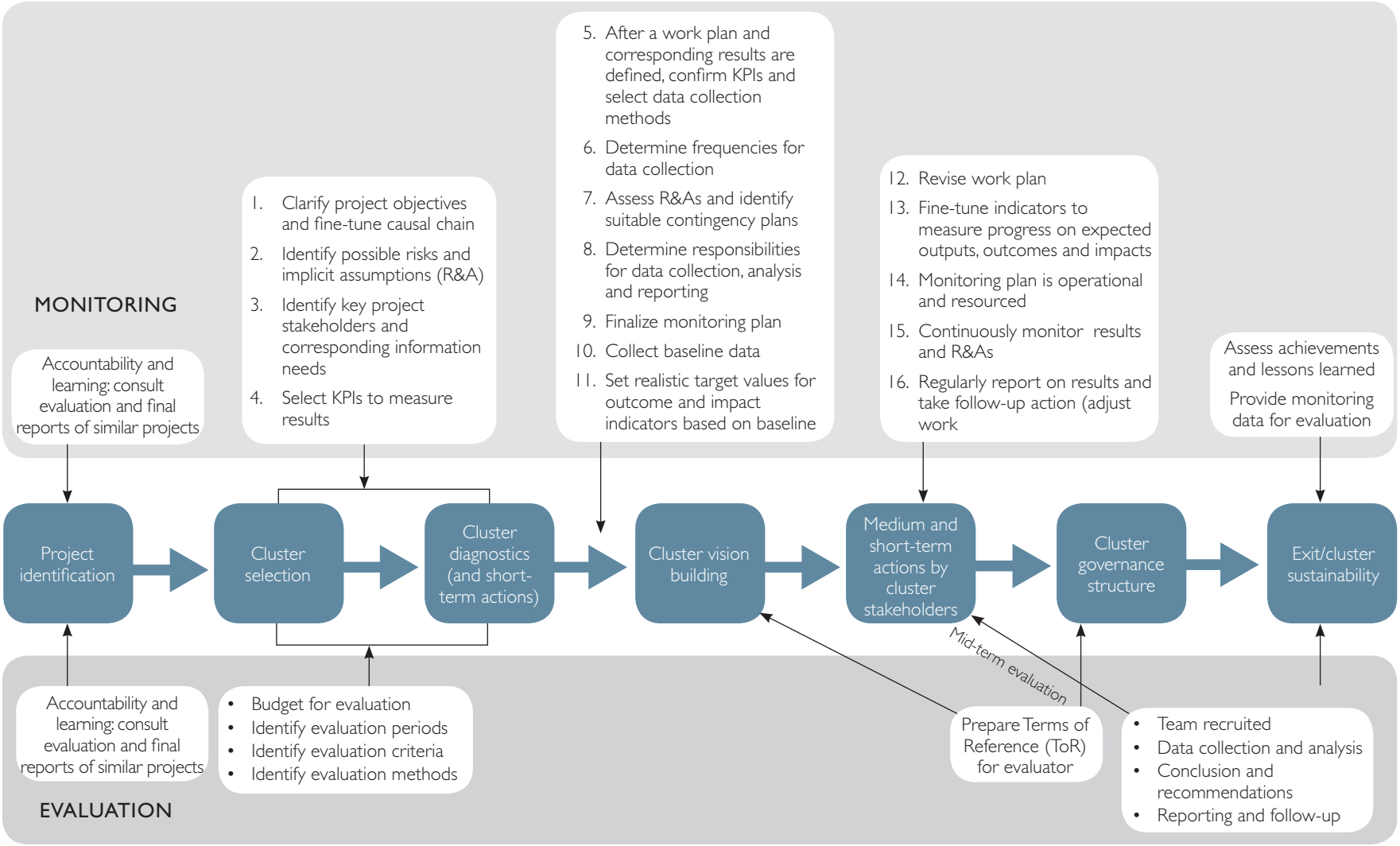
[1]The introduction to the Monitoring Framework is based on the International Programme for Development Evaluation Training (2007): "Module 4: Building a Results-based Monitoring and Evaluation System".

Steps for adapting the Monitoring Framework to your project

Throughout the lifespan of a project, several activities related to its monitoring need to be undertaken. The timeline sketched below presents an overview of activities related to monitoring and evaluation that need to be carried out in line with the DCED "Standard for Measuring Achievements in Private Sector Development". The monitoring activities are registered in the upper part of the graph above the timeline and listed here below. Focusing on monitoring only, this reference guide is structured following the timeline and explains steps 1 to 11 and step 16 in detail.

1. Clarify project objectives and fine-tune results chain
2. Identify possible risks and implicit assumptions (R&A)
3. Identify key project stakeholders and corresponding information needs
4. Select appropriate key performance indicators (KPIs) to measure results
5. Select data collection methods
6. Determine frequencies for data collection
7. Assess R&As and identify suitable contingency plans
8. Determine responsibilities for data collection, analysis and reporting
9. Finalize the monitoring plan
10. Collect baseline data
11. Set realistic target values for outcome and impact indicators based on baseline
12. Revise work plan
13. Fine-tune indicators to measure progress on expected outputs, outcomes and impacts
14. Monitoring plan is operational and resourced
15. Continuously monitor results and R&As
16. Regularly report on results and take follow-up action (adjust work plan/ Monitoring Framework)

Figure 1. Operationalizing the Monitoring Framework



Step 1. Fine-tune the project's results chain

The management cycle of monitoring and evaluation starts with the drawing of a results chain. The results chain outlines how project activities are linked to the expected outputs and outcomes and contribute to the impact or overall objective (e.g. poverty reduction). The results chain will also make explicit the assumptions underlying the envisaged achievements of the project.

Activities are undertaken by the implementing agency, its field staff or subcontractors and include facilitation of networking activities, capacity-building and advice on strategy formulation. Outputs are their immediate results—the processes, goods and services that these activities produce, for example training manuals, research and assessment reports or strategy documents. Both are directly controlled by the implementing agency. Thus, if you deliver a workshop, outputs also include the knowledge, skills or attitudes that have changed when an individual or group of people participate in your workshop because you control the quality of your intervention. It does not include, however, what the individual group does (or does not do) with the new knowledge, skills or attitudes.

Outcomes are observable changes in the behaviour and operations of social actors that have been influenced, directly or indirectly, partially or totally, intentionally or not, by project activities or outputs. Results at the outcome level require a change in behaviour from the beneficiaries' side. A project can thus only influence outcomes; they are not under control of the implementing agency. In cluster development initiatives, outcomes correspond to joint actions, i.e. activities that are collaboratively designed and executed by cluster stakeholders and aimed at increasing collective efficiency. They fall under three categories:

- Inter-firm collaboration such as such as shared investments, joint sales, joint procurement of inputs, equipment or raw material, joint business ventures and the like.
- Improved market for support services to indicate the establishment of services of improved quality, on the providers´ side, as well as the increased demand and resultant purchases, on the clients´ side. The customization of services includes the updating of vocational training curricula to align them with the skills requirement voiced by cluster firms. It applies to financial services, regulations and policies on savings, loans and collaterals that are introduced to facilitate access by small-scale firms or groups thereof. It also refers to the diversification of service portfolio by business development service (BDS) providers and business membership organizations.
- Business-friendly policy initiatives such as regulations, support schemes or investments in hard infrastructure and basic services that result from private sector advocacy and public–private dialogue.

Impacts refer to the long-term, sustainable changes in the conditions of people and the state of the environment that structurally reduce poverty, improve human well-being and protect and conserve natural resources. Due to the long time-horizon and to increasing influence of a wide range of contextual factors, development interventions can only contribute (partially and indirectly) to these enduring results in society or the environment. In cluster initiatives, medium-term impacts (improved cluster performance) and long-term pro-poor impacts are distinguished below.

Improved cluster performance derives from the concerted efforts of cluster stakeholders that would have otherwise been out of their reach. Cluster performance entails three dimensions:

- Economic aspects such as returns and profits, innovation, sales

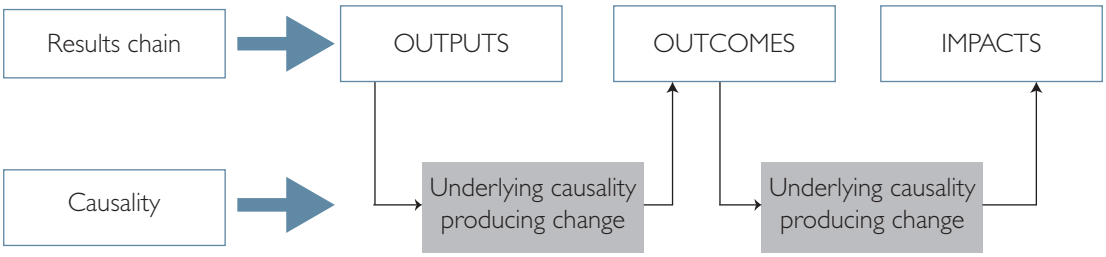
- Environmental aspects that are reflected in more efficient use of energy and environmental resources (water, raw material) and reduced waste and pollution
- Social aspects such as better working conditions, stronger community-business ties and enhanced gender equality at the workplace.

Pro-poor impact is the long-term impact to which the initiative aims to contribute and entails improvements in the capabilities of beneficiaries, including the poor, who participate in or reap the benefit from cluster production activities. These include:

- Economic capabilities such as income and employment
- Human features such as better health and education
- Organizational capabilities such as empowerment and voice
- Protective capabilities which entail security, availability of nutrition and housing for low-income consumers and a healthier working environment.

Figure II below illustrates how an underlying causality is producing a change that can lead to the next result level.

Figure II. The results chain



The result levels in the results chain correspond to the structure of the logical framework. The additional benefit of the results chain lies in revealing the causality underpinning the theory of change.

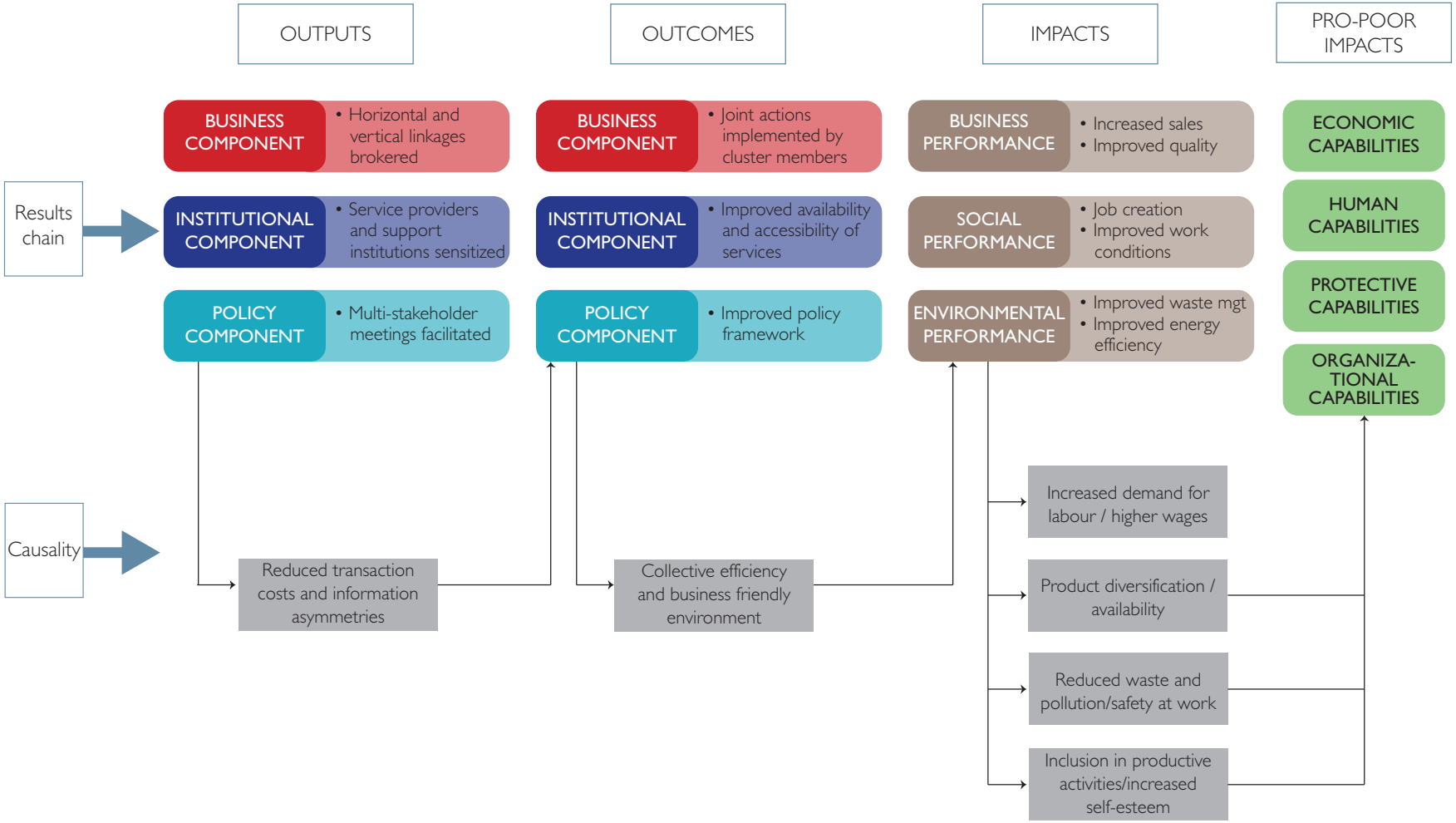
Table 1. Comparing logical framework and results chain

Logical framework	*Results chain*
Long-term development objective	Pro-poor impact
Expected impact	Performing cluster
Outcomes	Joint actions
Activities and outputs	Cluster initiative

As a first step in adapting the Monitoring Framework for a specific intervention, the intervention logic and the resulting results chain need to be clarified. A simplified and general results chain of the cluster development approach is presented below[2] and can be used as a basis to fine-tune the project's results chain.

[2] For a more comprehensive version of the results chain of cluster development projects, refer to the website www.clustersfordevelopment.org

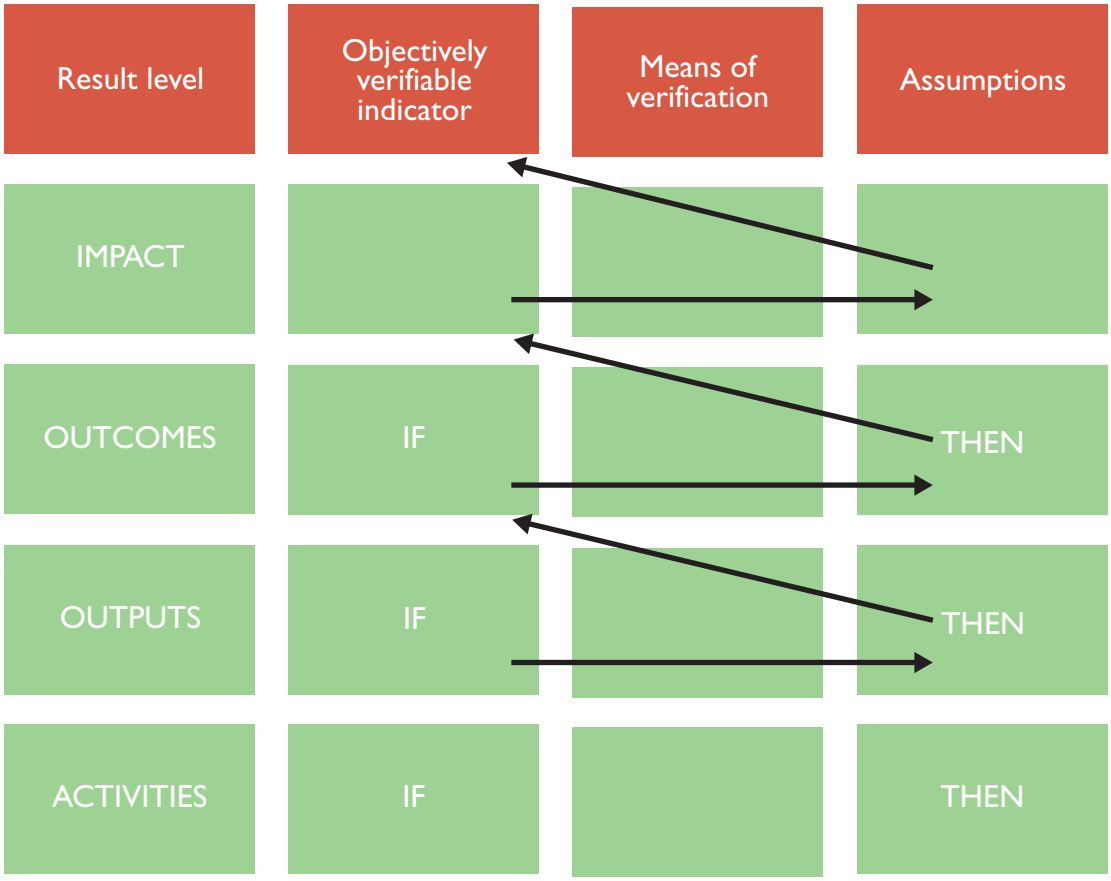
Figure III. Results chain of cluster development initiatives



Step 2. Identify risks and implicit assumptions

A cluster initiative that "does things right" may still fall short of producing the expected results if it fails to consider external factors that can undermine its effectiveness. The shift from one level of causality to the following is affected by the context in which the project operates. The intervention logic is based on a number of assumptions that we have on the projects context and is exposed to a range of risks. Assumptions and risks can be defined as follows: Assumptions refer to external conditions that need to be in place to ensure that (1) planned activities will produce expected results; (2) the cause–effect relationship between the different levels of results will occur as expected. They can thus be understood as a set of "if–then" relationships, which need to hold true for project results to unfold. In other words, the context in which the project is implemented is vital in determining if activities lead to outputs, outputs lead to outcomes and outcomes contribute to impacts. The structure of the logical framework illustrates the role of assumptions in the results chain.

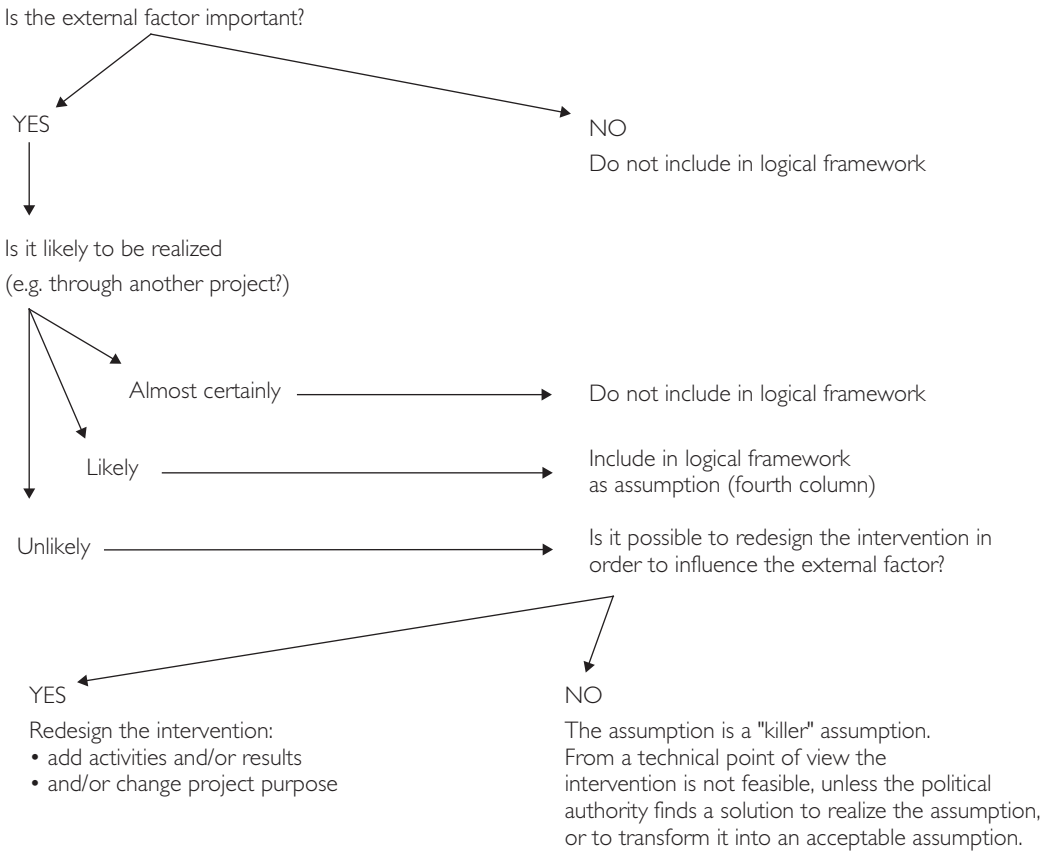
Figure IV. Logical framework structure



Risks, in turn, are changes in the context of implementation that may adversely affect activities and results.

As a consequence, it is crucial to make assumptions explicit and monitor them. If there is a high likelihood that assumptions do not hold or the potential damage to the project of external factors is high, it is vital to introduce mitigation strategies to ensure that the expected effect will ensue. The tool below helps to identify such external factors.

Figure V. Algorithm to assess external factors



The project context in general, and the identified risks and assumptions specifically, will be scrutinized in the course of the cluster diagnostic study.[3] It is important to identify potential risks and implicit assumptions early on and reflect their role in achieving the expected results in the design of the project.

[3]For more information on the cluster diagnositc study, refer to the website: www.clustersfordevelopment.org

Step 3. Identify key project stakeholders and corresponding information needs

To decide what information the monitoring system should be able to provide, it is crucial to identify the information needs of all stakeholders involved in an intervention. Broadly speaking, the Chief of the Cluster and Business Linkages (CBL) Unit of UNIDO HQ, as an example of a senior programme manager, is concerned with more strategic questions related to the relevance, effectiveness and impact of the programme. The Unit Chief thus requires mainly information on outcomes and impacts to *(a)* report to donors and to decide *(b)* whether the project should be continued and *(c)* whether it can be replicated (strategic monitoring). Reporting to the programme manager should not be very detailed but only include a selection of CORE key performance indicators (KPIs) agreed on by the unit. The same CORE KPIs are used throughout the programme so that projects can be compared with each other and results can be aggregated fo the programme.

A project manager is generally concerned with both strategic and technical monitoring. The project manager needs to be informed in greater detail about specific activities taking place and outputs being delivered, in order to decide on implementation strategies and necessary inputs such as human resources that can provide the expertise required at any given point in time (technical monitoring). Strategic reporting to the project manager also needs to be more detailed so that the project manager can provide additional information to donors, if required.

The field staff, in contrast, primarily focus on technical issues and progress on activities and outputs. The international consultant (project coordinator or technical adviser) should be informed about the status of the activities but cannot take any decisions. Based on his/her experience, he/she usually proposes solutions to any challenges that might arise during the implementation. The project manager then takes decisions based on the international consultant's and the technical adviser's input.

Table 2. Decision-making and information needs

Actor	*Criterion*	*Questions*
Unit chief	Relevance	• Is the project relevant in the programme's portfolio? • Is the cluster approach relevant given the current challenges? • Does the approach need to be adjusted? • Should we continue implementing cluster development projects?
	Effectiveness	• Is the project moving towards achieving the desired results? • Are any adjustments required?

Actor	*Criterion*	*Questions*
	Impact	• Are cluster projects making the desired impact?
Project manager	Relevance	• Is the project relevant, given the context? • Should we continue the implementation/implement a second phase?
	Effectiveness	• Is the project successful? • Do our activities and outputs result in the expected outcomes? • What kind of adaptations may be necessary?
	Progress	• Are activities implemented as scheduled? • Are beneficiaries participating as anticipated?
	Effectiveness of technical approach	• Do we need additional technical expertise?
Technical adviser/ Project coordinator/ Cluster development agent	Progress	• Are activities implemented as scheduled? • Are direct beneficiaries participating as anticipated?
	Effectiveness	• Are cluster firms satisfied with the services provided? • Can cluster stakeholders access the services provided?

From the cluster development agent (CDA) level to the unit chief, the level of detail of the reported information decreases as information is reported at increasingly aggregate levels. While CDAs collect data at the individual beneficiary level, they aggregate data at the cluster level before reporting to the technical adviser or project coordinator.

The following tool can help identify the information needs of (additional) stakeholders (including steering committees, beneficiary associations, etc.). Fill out the table below considering the following questions:

1. What stakeholders need to be informed and what information do they need to be provided with?
2. What decision power do they have and what information is required to inform their choices?
3. Who should be kept informed about project status and progress even if they have no decision power?
4. How frequently should each stakeholder be informed?

Table 3. Information needs of different stakeholders

Decision level	*Strategic/Policy*		*Implementing*		*Beneficiary*
Result level	e.g. HQ	e.g. counterpart			
Impact					
Outcomes					
Outputs					
Activities					
Context					

Step 4. Select performance indicators

Performance indicators are at the heart of every Monitoring Framework. They define what data should be collected to measure progress and allow for a comparison between planned and achieved results. Performance indicators are measures that describe how well a programme is achieving its objectives.[4]

The basis of good performance indicators are results statements included in the results chain and the logical framework. These statements should not be too broad or general (such as "improve capacity") and be clear about the kind of change that is expected (situation, condition, attitude, behaviour) and the unit of analysis (individuals, families, groups, communities, regions) that is expected to undergo the expected change.

While result statements specify the objective of an intervention or programme, indicators tell us specifically what to measure to determine whether this objective has been achieved. Indicators are usually quantitative measures but may also be qualitative observations. They define how performance will be measured along a scale or dimension.[5]

A monitoring[6] system tracks progress at each level of the result chain. Based on the result chain elaborated for the project, objectively verifiable indicators (OVI) are defined for planned activities and expected outputs, outcomes and impacts. They are derived from the results chain and are specific to the initiative at stake. Indicators need to be SMART, that is, they need to be:

- S pecific
- M easurable
- A chievable
- R elevant
- T ime-bound

To be as specific as possible, indicators should provide the following information:

- WHAT is changing?
- WHO is concerned?
- HOW MUCH is the (expected) change (present and (target) value)?
- WHERE will the change take place?
- WHEN is the change expected?

For example, "improved cluster performance" is too broad to qualify as a SMART indicator. Instead, the indicator should be as specific as possible:

1. WHAT is changing: income from sales (= quantity × price)
2. WHO is concerned: direct beneficiaries involved in the cluster initiative

[4] United States Agency for International Development's Center for Development Information and Evaluation. (1998). Selecting Performance Indicators (Performance Monitoring and Evaluation TIPS).

[5] United States Agency for International Development's Center for Development Information and Evaluation. (1998). Selecting Performance Indicators (Performance Monitoring and Evaluation TIPS).

[6]

3. HOW MUCH is the (expected) change: 5 per cent increase (as compared to baseline values)
4. WHERE will the change take place: in the total cluster area (including all direct beneficiaries)
5. WHEN is the change expected: by the end of each fiscal year.

The project is thus expecting to contribute to a 5 per cent per annum increase in income from sales for all direct beneficiaries in the cluster area involved in the project. The indicator is: percentage change in income from sales per year for all direct beneficiaries. It must also be made clear how the data should be collected and aggregated (e.g. total sales of all beneficiaries versus average sales).

For any given cluster development project, results are assessed using two sets of performance indicators. First, a set of CORE indicators is used in every cluster development project to allow for a comparison between projects and the aggregation of results on the unit level. This set of KPIs includes at least one KPI for each result level and component (business, institutional and policy component). For these CORE indicators, clear definitions are provided in the KPI sheets (see annex II). To ensure comparability of collected data, the collection method and tool is also predetermined.

Table 4. CORE key performance indicators by result level

OUTPUT LEVEL		
Business side	Scale of business-side facilitation activities	Number of business-side meetings, sensitization events, exposure visits etc. for direct beneficiaries facilitated by CDA in past month
	Contributions of direct beneficiaries	Contributions of direct beneficiaries as a share of total costs for business-side facilitation activities in past month
Institutional side	Scale of facilitation activities aimed at improving access to and availability of (business development) services	Number of service providers sensitized on needs of cluster stakeholders by the CDA in past month
Policy side	Scale of policy-side activities	Number of multi-stakeholder meetings (including representatives of direct beneficiaries and policymakers) facilitated by CDA in past month
OUTCOME LEVEL— JOINT ACTIONS		
Business side	Effectiveness of business-side facilitation activities	Share of cluster firms associated with at least one relevant formal business network (established with the objective of implementing joint actions)
	Level of involvement	Share of direct beneficiaries involved in joint actions

Institutional side	Quality of (BD) services	Percentage of direct beneficiaries satisfied with quality of services accessed from (BDS/training/financial) service providers within the past six months
	Accessibility of (BD) services	Percentage of cluster stakeholders who have accessed selected relevant services (BDS, training, financial) within the past six months
		Percentage of cluster stakeholders with unmet demand for selected relevant services
Policy side	Cluster involvement in policy initiatives	Number of proposals for new laws/regulations/amendments/ codes prepared with significant contribution from cluster actors and presented to policymakers within the past six months
	Quality of policy Initiatives	Satisfaction rate of direct beneficiaries with proposed policy changes (use scale)
IMPACT LEVEL—IMPROVED CLUSTER PERFORMANCE		
Business	Product diversification	Product diversification (number of variations/adaptations to specific market/target group) developed/launched by direct within the past six months
	Sales	Percentage change in income from sales realized by direct within the past six months
	Productivity gains	Percentage change in direct beneficiaries' production costs per unit of output within the past six months
Environmental	Waste management	Share of direct beneficiaries with non-hazardous waste disposal system/practices in place
Social	Social performance	Improvement in perception of working and living conditions of workers (improved housing, food quality, off times/working hours) (use scale) due to project intervention
SUSTAINABILITY		
Social capital and trust	Participation	Share of (lead) firms participating in at least 75 per cent of multi-stakeholder activities initiated by cluster (members)
	Representation	Perception that own business interests are represented in those cluster fora (steering committee/cluster governance body/ business association (chose appropriate forum) (use scale)
	Reciprocity	Cluster stakeholders' perception that all stakeholders benefit equally from cluster activities (use scale)
	Trust	Stakeholders' perception of ability to communicate openly with fellow cluster entrepreneurs/in cluster fora (use scale)
		Stakeholders' attitude towards sharing business sensitive information (as measured by scale rating different levels of sensitive information)
Capacity for innovation	Capacity for innovation	Number of new/adapted products launched by cluster within the past six months
	Net business birth rate:	Number of new start-ups generated minus number of businesses closed in cluster area within the past twelve months

PRO-POOR IMPACT		
Economic dimension	Income	Percentage change in income (disaggregate by different stakeholder groups—see PRO-POOR sheet) within the past twelve months
	Employment	Net job creation (jobs created minus jobs lost)(disaggregate by different stakeholder groups—see PRO-POOR sheet) within the past twelve months
Human dimension	Education	Number of cluster entrepreneurs who have completed an entrepreneurial skills training (including management, coordination, strategy development, quality management, financial management) within the past twelve months
		Number of cluster workers who have completed technical/ vocational skills training within the past twelve months

In addition, the project manager identifies additional performance indicators that are suited to assess progress towards the objectives of the specific project in question. Based on the results chain, the project manager formulates SMART indicators to assess progress on outputs, outcomes and impacts. Suitable indicators can be selected from a pool of indicators in annex III.

For instance, if "improvements in the quality of the cluster products" are a primary objective of the intervention, the project manager can select a suitable indicator—depending on the product and the context of the project:

- Share of cluster firms that started using new production equipment within the past six months
- Incident of production interruption due to faulty equipment within the past six months
- Share of cluster firms satisfied with main input materials (quality/availability) used for production within the past six months
- Rate of customer returns per 1,000,000 produced goods
- Rate of in process rejections per 1,000,000 produced goods
- Quality standards—share of products for which relevant quality standards have been identified and adopted (specify)
- Quality standards—share of cluster firms whose products are tested regularly (at least 1x/yr) by a neutral quality testing authority
- Quality standards—share of products meeting quality standards
- Quality standards—share of firms who have earned nationally/internationally recognized quality certification
- Percentage change of retail price for product (also compare with similar product of competitor) within the past twelve months
- Current profit margin of the one product with largest contribution to sales revenue of cluster firms.

The choice of the appropriate indicator will depend on:

- What factor influences the result? Is it better inputs, better machinery, better production processes, better skilled labour, etc.?
- Where can we observe a change most directly? In the production process, at the final product, at the final customer?
- If direct measures are not available or cannot be measured frequently enough, one or several proxy indicators might be appropriate. Proxy measures are indirect measures that are linked to the result by one or more assumptions; e.g. assets instead of income; if the quality cannot be assessed directly, a useful proxy indicator can be a change in customer satisfaction or change in price obtainable at the local market.
- What kind of data can be obtained in a timely way and at a reasonable cost and at a quality that is sufficiently reliable as a basis for decision-making?

Step 5. Select data collection methods

Once it is clear what data are needed, suitable methods to collect the monitoring data can be selected. To begin with, possible sources of secondary data should be considered since available data is faster, less expensive and easier to collect. Secondary data can be available from a wide range of sources including:

- Industry reports
- Census data
- Agency records (including budget documents, reports to the public or funding agencies).

However, since secondary data will in most cases concern not only the direct beneficiaries of the cluster development project but entire countries, regions or sectors, it will be difficult to attribute any changes observable in the data to the intervention. However, any available secondary data could be used to describe the context of the intervention and compare changes observable at the direct beneficiary level with changes observable in the country or sector as a whole.

A wide range of methods can be used to collect primary data. Depending on the kind of data that is needed—qualitative or quantitative—different methods and corresponding instruments are available.

Table 5. Data collection methods and corresponding instruments

	Data collection method	*Data collection instrument*
Qualitative data	Semi-structured/key informant interview	Questionnaire with open questions/ interview guide
	Focus group discussion	Meeting agenda and notes
	Direct observation	Notes, camera, checklist
Quantitative data	(Sample) survey	Questionnaire
	Record keeping	Forms, notes
	Voting during group discussion	Forms, meeting notes

While qualitative methods answer questions such as "What?", "Why?" and "How?" and thereby provide more detailed information about attitudes, behaviours, beliefs and perceptions, quantitative methods answer questions such as "How many?", "How often?" and "How much?" and can thus only quantify expected results, rather than provide entirely new information. Monitoring uses primarily quantitative information, but also qualitative information to support them. In most cases, a combination of qualitative and quantitative data is recommended.

Table 6. Comparing characteristics of qualitative and quantitative data collection methods

Qualitative data collection methods	*vs.*	*Quantitative data collection methods*
• Less structured • Useful when it is not clear what should be measured • Can provide "rich data" (can go into depth during the data collection) • Tools are easier to develop • Data are labour-intensive to collect and challenging to analyse • Usually generate longer reports		• More structured • Attempt to provide precise measures • Tools are harder to develop • Data are easier to analyse (using statistical analysis) • Useful when it is clear what should be measured

The choice of methodologies for baseline collection, monitoring progress, and for evaluating results and attribution is determined by the size and nature of the initiative. Smaller projects will use simpler methodologies, while large interventions need more substantial tools in order to provide convincing evidence of impact. Annex V provides an overview on frequently used primary data collection methods, explaining each method and its benefits and drawbacks.

Step 6. Determine frequencies of data collection and reporting

As a next step, data collection and reporting periods are determined. In general, the higher the results level, the more time is required to observe any changes. Thus, the frequency of data collection is decreasing from activities to impacts. While activities and outputs are continuously recorded throughout implementation, data is aggregated on a quarterly (or monthly) basis for reporting purposes. Data on the outcome and impact level is collected and reported at regular but less frequent intervals, as suggested below.

Table 7. Determine frequencies of data collection and reporting

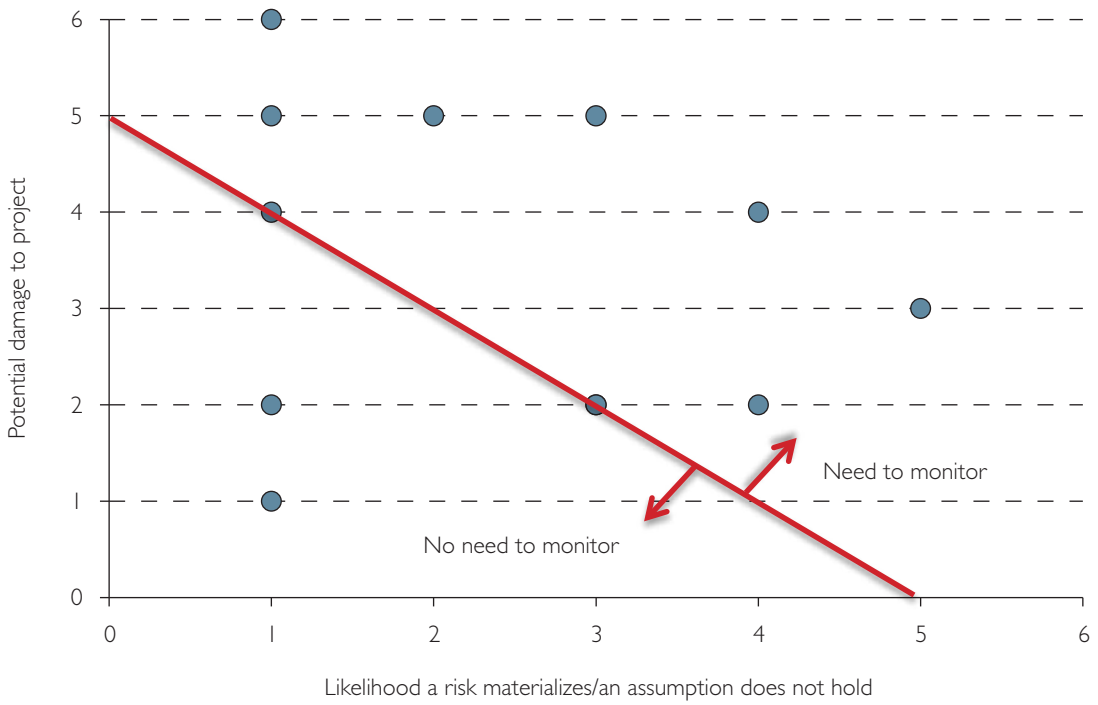
Result level	*Frequency of data collection and analysis*	*Frequency of reporting*
Impact	Every 12 months	
Outcomes	Every 6 months	
Outputs	Continuously	Quarterly
Activities	Continuously	Quarterly

Step 7. Assess risks and assumptions and identify suitable contingency plans

During the diagnostic study (which is an integral part of UNIDO's cluster development programme), the project context will have been scanned and the identified risks and assumptions will have been scrutinized so that more information is available to assess the potential damage of these external factors to the project and their potential to become manifest. Both assumptions and risks that could adversely affect the project's success need to be monitored throughout the initiative in order to make sure that the project is progressing in the right direction. To allow for a tracking of changes in the project context, indicators are thus formulated also for risks and assumptions.

The tool below illustrates how to identify the context variables that need to be monitored continuously and for which SMART indicators need to be formulated. Along two axes, contextual factors are marked in the graph based on *(a)* the likelihood that a risk event will occur or an assumption does not hold and on *(b)* the potential damage to the project. Only where the combined rate of both likelihood and potential damage is high, external factors need to be observed throughout the intervention. In annex IV, an overview of the assumptions and risks that are most common among cluster initiatives is presented. It does not provide a rigorous listing, but rather serves as a guideline for their identification. The relevance of each of these context variables should be assessed for a specific intervention using the risks and assumptions assessment tool included in annex IV.

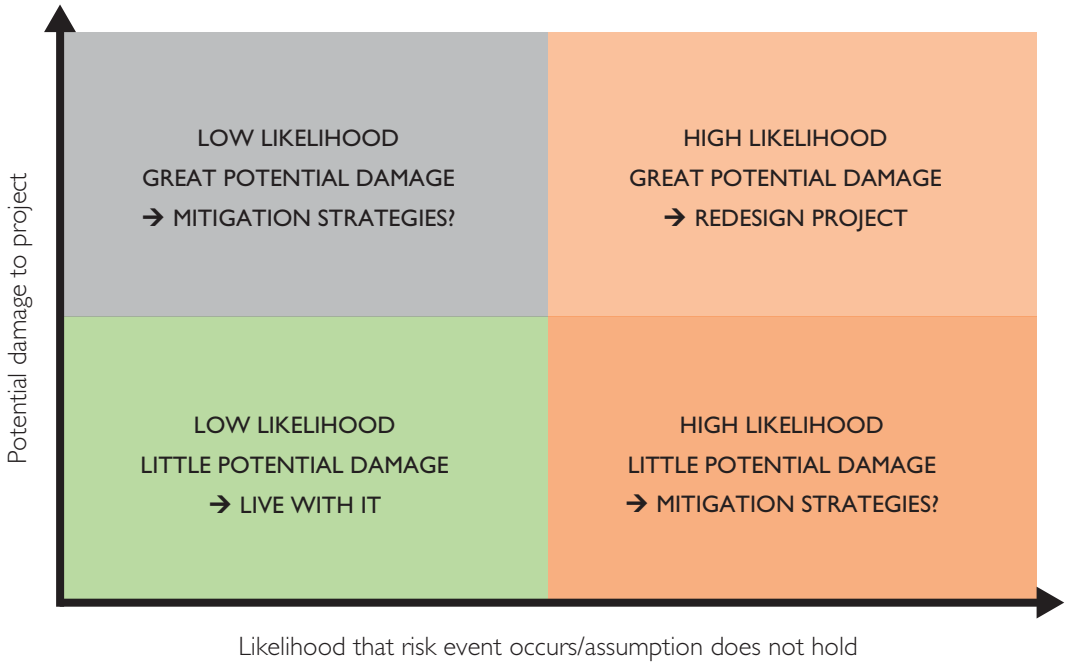
Figure VI. Risks and assumptions assessment tool



Once risks and assumptions are assessed, appropriate mitigation strategies are identified. Following the same logic as above, the identified risks and assumptions are allocated in different segments, each representing different combinations of levels of likelihood and

potential damage. Where both likelihood for a contextual factor to kick in and the potential damage to the project are high, the project should be redesigned to directly address those factors that are likely to affect the project's success. In other words, contextual factors become part of the intervention logic for which specific activities, outputs and outcomes are formulated.

Figure VII. Develop mitigating strategies



Step 8. Determine responsibilities for data collection, analysis and reporting

Responsibilities for data collection, aggregation, analysis and reporting are usually split between different actors involved in the implementation of cluster development initiatives and depend on available resources and capacities. In a typical UNIDO project, the project manager (PM) is responsible for the design of the survey instruments that are used for monitoring purposes since it is primarily the PM for whom the data is collected. Therefore, the PM needs to make sure that all information he/she requires for management decisions will be collected. All other staff, cluster development agent (CDA), M&E officer (where available), project coordinator (PC) or technical adviser (TA), contribute with their experience and /or knowledge of the cluster.

Responsibilities for data collection and aggregation lie in the field. Depending on the size of the cluster and the available capacities, the CDA or M&E officer are in charge of data collection and aggregation; where several CDAs are involved in a project, the aggregation at the cluster level is carried out by the project coordinator or technical adviser. Similarly, the analysis of the monitoring data is done by the CDA or M&E Officer and the technical adviser/project coordinator.

Based on the monitoring data, the project manager takes decisions to steer project activities. The technical adviser/project coordinator and the CDA can of course suggest alternative courses of action.

Table 8. Roles and responsibilities in monitoring

TASK / ROLE	*Design of survey instruments*	*Data collection*	*Data aggregation*	*Data analysis*	*Decisions*
Responsibility	PM	M&E Officer, CDA	M&E officer, CDA, TA/PC	M&E officer, CDA, TA/PC	PM
Support/ contribution	TA/PC, M&E officer, CDA	TA/PC	PM	PM	TA/PC, CDA

PM: Project manager, TA: Technical adviser, PC: Project coordinator, CDA: Cluster development agent

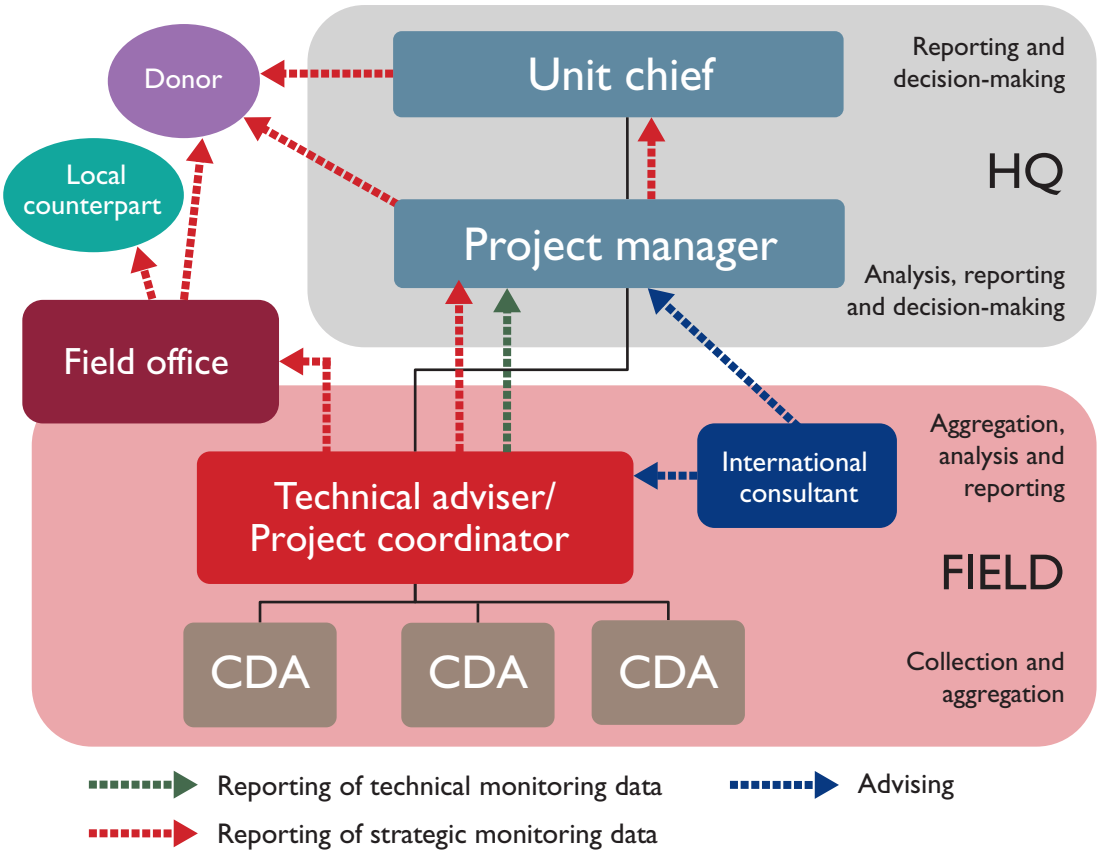
Where several data collection instruments are used, it is possible that tasks are split differently for practical or other reasons. Fill out the table below for each data collection instrument that you are planning to use.

Table 9. Assign roles and responsibilities in monitoring

Responsibility / *Data/ data collection tool*	*Design of survey instrument*	*Data collection*	*Data aggregation*	*Data analysis*	*Reporting*
Business level data					
Focus group discussion					
Service provider survey					

The diagram below outlines the division of labour as well as reporting lines in a typical UNIDO cluster development project.

Figure VIII. Reporting lines and decision-making



Step 9. Finalize the monitoring plan

The monitoring plan systematically summarizes all elements of the monitoring system, specifying:

- Selection of indicators to assess progress towards expected results and monitor changes in the project context (WHAT?)
- Data collection instruments and methods of data aggregation and analysis (HOW?)
- Frequency of data collection (WHEN?)
- Responsibilities for data collection, aggregation, analysis and reporting (WHO?).

A sample monitoring plan is included below.

The data collection plan following thereafter provides an overview of all data collection instruments to be used for the monitoring of a project and specifies when these data need to be collected and by whom. It was prepared for a sample project that focused on automotive cluster development in Serbia.

Table 10. Sample monitoring plan

WHAT?		*For WHOM?*	*WHEN?*	*HOW?*	*WHO?*		
Result level	Key performance indicators (KPIs)	Decision maker(s)	Frequency	Data collection method/tool	Person responsible for data collection	Format and frequency of reporting	Responsible person for aggregation
Impact	• Quality • Product diversification • Income from sales • Productivity gains • Waste management practices • Perception of social performance	• Unit chief • PM • External stakeholders	Annually	Bi-annual business survey	CDA/M&E officer	Baseline and annual progress report	Technical adviser/ project coordinator
Outcome	• Level of involvement of direct beneficiaries in joint actions • Contributions of direct beneficiaries to joint actions • Accessibility of (BD) services	• PM • External stakeholders	Every 6 months	Bi-annual business survey	CDA/M&E officer	Bi-annual progress report	Technical adviser/ project coordinator
Activities and outputs	• Number of events facilitated by CDA • Contributions to CDA facilitated activities made by direct beneficiaries	• CDA • PM	Continuous collection/ quarterly reporting	Record keeping	CDA	Quarterly progress report	Technical adviser/ project coordinator

R&A (context)	*Assumptions:* • Raw material supply is not constrained • Literacy levels in the cluster are sufficiently high to allow for participation in training activities *Risks:* • Socially segmented society hinder collaboration among cluster stakeholders or groups thereof. • Reservations against collaboration cannot be overcome. • Firms' production capacity cannot be expanded due to constraints, such as unavailability of resources (financial, natural, human)	CDA PM	Annually	tbd	CDA/M&E officer	Annual progress report	Technical adviser/ project coordinator

Table 11. Sample data collection plan

Tool	Purpose	Responsibility					Frequency	Timeline							
		Design of survey instrument	*Data collection*	*Data aggregation*	*Data analysis and reporting*	*Reporting to*		*July*	*August*	*September*	*October*	*November*	*December*	*January*	*February*
Record keeping	CDA keeps track of: • Services identified for inclusion in database • Service providers sensitized • Participation at networking events • Participation in capacity-building work-shops and seminars • Contacts made and followed up with • Memorandums of Understanding (MoUs)/ partnership agreements signed • Joint projects with national stakeholders, international clusters/ organizations or R&D institutions	CDA	CDA	CDA	CDA	PM	continuous								
	Ivana (CDA for business linkages) keeps track of: • Meetings with companies facilitated • MoUs/strategy plans formulated • Joint projects identified/ in preparation/implemented	Ivana	Ivana	Ivana	Ivana	(Dejan) PM	continuous								
	Kaizen trainers keep track of: • Trainings delivered • Time spent on different areas • Participation and committment at the company level • Implementation of Kaizen principles at the shop floor level	PM/ M&E officer	Kaizen trainers	Ivana	Ivana	(Dejan) PM	continuous								

Employee survey	Collect data on: • Employees' understanding of and appreciation for Kaizen principles and the resulting changes at the shop floor	PM/ M&E officer	Kaizen trainers	Ivana	Ivana	(Dejan) PM	Quarterly								
Biannual business level survey	Collect data on: • Performance of cluster firms (triple bottom line) with a focus on productivity, quality and sales • Access to and demand for (BD) services	PM/ M&E officer	Kaizen trainers	Kaizen trainers	M&E officers (Ivana/ Dejan)	PM	Every six months								

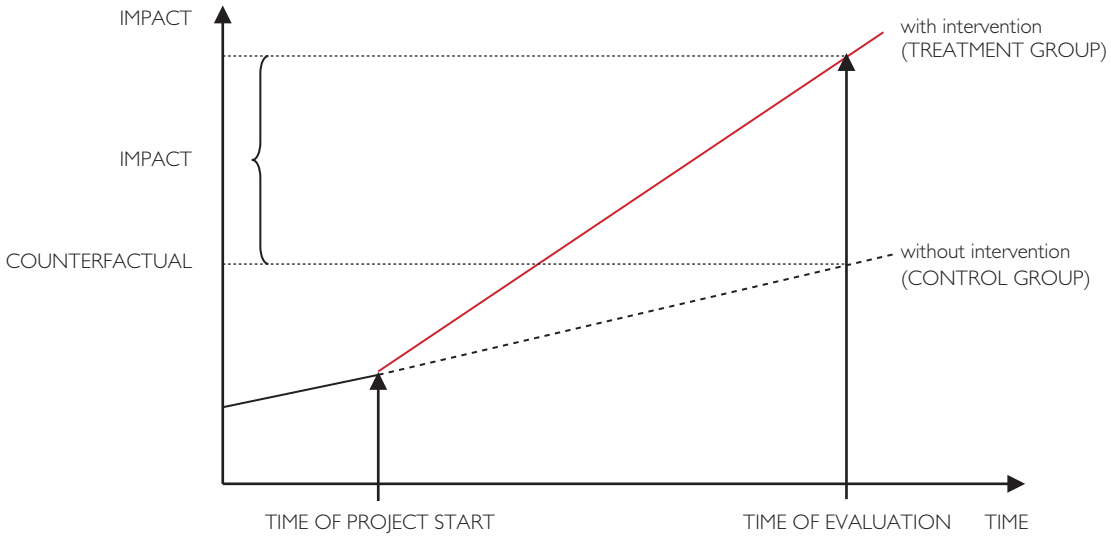
Step 10. Collect baseline data

Establishing a baseline is crucial to understanding where we stand at present with respect to the results the project is aiming to achieve. Without knowing the pre-intervention status, it is almost impossible to make any projections. Baseline data is thus essential to set realistic targets and eventually compare key performance indicators with pre-intervention levels. It also helps to better understand the target population and adapt intervention strategies accordingly. The baseline thus provides two types of data: *(a)* current levels of outcome and impact indicators that are expected to change due to the project and *(b)* data describing the beneficiary and his/her background and context (e.g. socioeconomic data) that could influence the impact the programme has on its beneficiaries.

Impact evaluation

Baselines also present an opportunity to collect data from a control group, i.e. entrepreneurs who are not directly targeted by the intervention. Where resources are scarce and the intervention has to be limited to a small group of the target population, eligible entrepreneurs can be (randomly) selected into a treatment group that will be directly involved in the project and a control group that will be—at most—indirectly affected. A comparison between the direct beneficiaries of the treatment group and the control group over the lifespan of the intervention can yield deeper insights into the impact of the project that can be attributed to the intervention.

Figure IX. Double difference: comparing before and after and with and without intervention



Without a control group, we only know the beneficiaries' situation before and after the intervention, but we cannot estimate the counterfactual, i.e. the situation of the beneficiaries at the time of completion of the project in the absence of the intervention. Without a control group, it is difficult to estimate that situation, since we cannot assume that the

situation of the entrepreneurs would have remained stable in the absence of the programme. Contextual factors, such as the overall economic situation, government policies, or climatic conditions have influenced incomes, productivity levels and employment in the meantime. In contrast, where data from a control group is collected before and after the implementation of a project, the control and treatment group can be compared in an impact evaluation exercise both before and after the intervention.

Step 11. Set realistic target values

Once suitable indicators have been selected, appropriate target values against which achieved results can be assessed are chosen for each of them. Since setting realistic target values requires profound knowledge of the cluster and experience in cluster development, targets should be set collaboratively by the project manager, the technical adviser/project coordinator and the cluster development agent. Targets should be achievable but challenging enough to encourage the best efforts from all involved. For output and outcome level indicators, targets will depend mostly on the characteristics of the cluster, such as size, scattering/distribution of the cluster members, features of the sector and some cultural features of the cluster population. Impact level indicators, such as income from sales, productivity, or quality require a baseline value on the basis of which forecasts can be made and targets set.

Targets can either be formulated as absolute values or as a percentage change. In both cases, the timeframe for reaching the specified targets must be indicated. The example below can illustrate this point.

Table 12. Set realistic targets

Indicator	*Baseline value*	*1-year target*	*2-year target*	*3-year target*
Diversification: number of new/adapted products launched in past 12 months	0	5	10	25
	0	n/a	+100%	+250%

Step 12 to Step 15: Revision of work plan and KPIs and operationalization of the monitoring plan

Steps 12 to 15, as shown in the graphic on page 4, were covered in the previous sections of this publication. In a nutshell, the work plan should once again be revised to ensure that the project objectives reflect the identified views and objectives of the cluster stakeholders and contribute to the cluster's long term vision (Step 12). As activities and expected results become more precise and the indicators used to assess if and to what extent project objectives have been met, they also need to be revisited for adjustment and fine-tuning (Step 13). All experts in charge of M&E activities need to understand their roles in the overall M&E process and have to be provided with the necessary means, including both financial and non-monetary resources (training, time, support staff, etc.) to be able to assume their responsibility (Step 14). Throughout the implementation phase, data on the project activities undertaken and results achieved is collected. Information on the project context (risks and assumptions) is also gathered in regular intervals (Step 15).

Step 16. Report on results

Throughout the intervention and after its completion, all decision makers, in particular the project manager, need to be informed about the progress of ongoing project activities and the results achieved. Reporting requirements and formats ultimately depend on the information needs of the decision maker, the format and structure should thus suit the main interests and preferences of the target audience. The higher in the chain of command, the less detailed the information should be.[7]

In general, large amounts of data are not useful and should only be provided for reference purposes. It is crucial to know what information decision makers need. Key performance indicators should be presented and compared with previous periods (through the use of information generated by the baseline study) and targets set.[8] Narrative summaries are important to explain underperformance or deviations from the plan and provide some qualitative information. Where the monitoring data highlights problem areas, recommendations for corrective action should be elaborated. Several options and scenarios on their implications should be developed to then choose the best way forward.

The following contents are suggested as minimum requirements for reporting purposes on project implementation:

Quarterly progress reports

- Short narrative of activities
- Output level KPIs

Bi-annual progress report

- Short narrative of activities
- Output and outcome level KPIs
- Short analysis
- Conclusions and recommendations

Annual progress report and end-of-project report

- Focus and rationale of the programme
- Direct assistance to the cluster
  - History and current status of the cluster
  - Cluster selection
  - Key actors and their linkages
  - Major problems
  - Vision for the cluster
  - Implementation strategy
  - Current status—progress report
    - Methodology

[7] See also Step 3: Identify key project stakeholders and corresponding information needs.

[8] For more guidance on data aggregation and presentation refer to annex VI: Guidelines on survey development, interviewing and focus group discussions.

  - Findings (outcomes, impacts, risks and assumptions)
  - In-depth analysis
- Conclusions, recommendations and way forward

WORD OF CAUTION: Data should be handled with care; data on individual beneficiaries or stakeholders should not be made public. Reports should only included data that are aggregated at the cluster or network level or disaggregated for other subgroups of interest (women, poor, etc.). Progress reports should only be disseminated once agreed by the project team and/or stakeholders.

Bibliography

Becattini, G.; M. Bellandi, L. De Propis (2009). *A Handbook of Industrial Districts*, Edward Elgar, Cheltendam, United Kingdom.

Donor Committee for Enterprise Development (2011). Why have a standard for measuring results? Progress and plans of the donor committee for enterprise development, available at www.enterprise-development.org/download.aspx?id=1734

Programme for Development Evaluation Training (2007). IPDET Handbook, the World Bank and Carleton University International, Washington, D.C.; available at www.theworldbank.org/ieg.ipdet/modules/html

Kusek, Jody Zall and Rist, Ray (2004). *Ten Steps to a Results-Based Monitoring and Evaluation System;* The World Bank, Washington, D.C.

Nadvi, K. and Schmitz, H. (1999). Clustering and Industrialisation: Introduction, World Development. *World Development* 27*,* No. 9, pp. 1503–1514.

OECD (2001). DAC Guidelines on Poverty Reduction, Paris, OECD.

OECD (2004). Accelerating Pro-Poor Growth through Support for Private Sector Development. OECD, Paris.

Schmitz, H. (1997): Collective Efficiency and Increasing Returns, Cambridge Journal of Economics, University of Sussex, Brighton; revised version in *Cambridge Journal of Economics*, Vol. 23, No. 4, pp. 465-83, 1999.

Taylor-Powell, Ellen and Renner, Marcus (2003). Analyzing Qualitative Data; available at http:/learningstore.uwex.edu/pdf/G3658-12.pdf.

United States Agency for International Development's Center for Development Information and Evaluation (1998). Selecting Performance Indicators (Performance Monitoring and Evaluation TIPS.)

White, A. (1999). Sustainability and the Accountable Corporation: Society's Rising Expectations of Business, *Environment*, Vol. 41, No. 8, pp. 30-43.

Annexes

Annex I. Programme log-frame

	NARRATIVE SUMMARY	KPIs (PROXIES)	Means of verification (MOV)	RISKS AND ASSUMPTIONS
(LONG TERM) PRO-POOR IMPACT	Improvements in the cluster performance have contributed to improvements in the economic, human, organizational and protective capabilities of local stakeholders (cluster entrepreneurs, local suppliers and farmers, workers, job-seekers, consumers) Employment opportunities are created in the cluster; incomes are not only rising but also getting more reliable and stable. Investments in basic services such as health and education lead to improved access to and increased effectiveness of education and a reduction of the incidence of preventable diseases. Workers, entrepreneurs, women, suppliers and other population groups in the cluster are forming associations to stand up for their rights and take the lead in addressing social issues. Incomes are increasing for both male and female workers and entrepreneurs and the income gap is diminishing. Women represent a growing share of both workforce and membership in associations. Women increasingly benefit from training. Cluster firms invest in health facilities and provide a safer and healthier work environment, resulting in fewer work-related injuries and illnesses.	ECONOMIC DIMENSION: Income: • Percentage change in income Employment: • Net job creation: number of jobs created minus number of jobs lost	Household survey, Biannual business-level survey	
		HUMAN DIMENSION: Education: • Number of poor entrepreneurs/workers/job seekers who have participated in (technical/vocational/management) training Health: • Number of work-related accidents/illnesses reported per month	Household survey, Biannual business-level survey	
		ORGANIZATIONAL DIMENSION: Empowerment and voice: • Percentage increase in perception of self-esteem • Number of associations established to voice concerns, stand up for own rights and take lead in addressing social issues	Household survey, Biannual business-level survey	
		PROTECTIVE DIMENSION: Healthier working environment: • Number of latrines per 100 workers • Amount of protective gear (safety gloves/goggles) per 100 workers	Household survey, Biannual business-level survey	

IMPACT: IMPROVED CLUSTER PERFORMANCE	NARRATIVE SUMMARY	KPIs (PROXIES)	Means of verification (MOV)	RISKS AND ASSUMPTIONS
	Cluster firms exhibit improvements in economic, environmental and social performance as cluster efficiency is increased by engaging in joint activities.	KPIs to measure economic performance (proxy): • Income from sales (percentage change in income from sales in the past six months) • Diversification/Innovation (number of adapted products/new productions launched in the past six months) • Productivity gains: (percentage change in direct beneficiaries' production costs per unit of output in the past six months)	Biannual firm-level survey, Focus group meetings	Assumptions: • Women entrepreneurs and other poor stakeholders have control over their profits and have the freedom to decide on re-investments and spending. • Taxes that private companies pay are used by governments to increase the delivery of basic services such as health and education • Investment levels to enter in the business or expand activities are not too high or risky to be borne by entrepreneurs who have limited asset endowments • Trade policies and regulations support the effectiveness of joint purchase and marketing practices • Higher productivity in cluster firms leads to an increase in purchase of inputs, technology or support from local rather than external or foreign providers • Suppliers and farmers are knowledgeable about the requirements set by cluster firms and are able to upgrade their production according to changing specifications. • Institutional support is available and accessible to upgrade suppliers' production and meet quality standards. Risks: • The growth of over-achieving firms roots out employment and self-employment opportunities in less competitive or informal businesses in the cluster • Poor health and living conditions or negative environmental externalities from production process reduce the productivity of local stakeholders and their capacity to take on full-time jobs • Technological upgrading and resulting increase in productivity lead to increase in unemployment for unskilled labour
		KPIs to measure environmental performance (proxy): • Improved waste management (share of direct beneficiaries with non-hazardous waste disposal systems in place)		
		KPIs to measure social performance (proxy): • Improvement in perception of working and living conditions of workers (improved housing, food quality, off times/working hours) (use scale) due to project intervention.		
	Sustainability: Cluster firms exhibit an increased capacity for innovation that allows for sustainable increases in cluster performance	KPIs measuring capacity for innovation: • Number of new/adapted products launched by cluster members in the past six months • Net business birth rate: number of new start-ups generated in cluster area minus number of businesses closed in the past twelve months	Record keeping, Biannual business-level survey, Focus group meetings	

Business component

	NARRATIVE SUMMARY	KEY PERFORMANCE INDICATORS (KPIs)	Means of verification (MOV)	RISKS AND ASSUMPTIONS	CUTTING ACROSS RESULT LEVELS
OUTCOME: JOINT ACTIONS	(Key) Cluster stakeholders are involved in and committed to an increasing number of joint activities that increase cluster efficiency Quality of collaboration increases along with the trust levels among cluster stakeholders as they are prepared to take increasing levels of risk when engaging in joint activities	Involvement in and intensity of collaboration: • Increased number of joint actions within the past six months • Increased share of [key] cluster stakeholders involved in joint activities within the past six months Commitment: • Increased aggregate contributions to joint actions within the past six months Quality: • Increased maximum level of risk taken by cluster stakeholders engaging in joint activities within the past six months as measured by scale describing joint activities and their respective risk levels	Meeting notes, Record keeping, Biannual business-level survey	Assumptions: • The regulatory system in the country is supportive of lasting contractual arrangements • Cluster firms are able to comply with norms and standards on products • Raw material supply is not constrained • Providers of machinery, technical assistance and specialized services are available to support innovations • A share of profit is reinvested Risks: • Contractual arrangements cannot be enforced • Stringent market regulations cut off cluster production from established markets • Emergence of competition or stronger players reduce market opportunities for cluster members • Firms' production capacity cannot be expanded due to unavailability of resources (financial, natural, human) • Suppliers have low bargaining power or weak representation and thus are unable to negotiate higher prices • Investment levels to enter in the business or expand activities are too high and risky to be borne by entrepreneurs who have limited asset endowments • Entrenched routines and crystallized production practices hinder innovation at the firm level	Assumptions: • Basic services and utilities are available locally or can be provided Risks: • The critical mass of the cluster shrinks/the sectoral specialization is lost

	NARRATIVE SUMMARY	KEY PERFORMANCE INDICATORS (KPIs)	Means of verification (MOV)	RISKS AND ASSUMPTIONS	CUTTING ACROSS RESULT LEVELS
SOCIAL CAPITAL AND TRUST	Trust among cluster stakeholders improves as they feel that their interests are represented and they can rely on each other Cluster stakeholders gradually share more information on marketing strategies, production costs, technology, etc.	Representation: • Perception that own interests are represented (using scale) Reciprocity: • Perception that all cluster members benefit equally or receive support from other cluster members if needed Trust: • Perception of ability to communicate openly • Attitudes towards sharing information with fellow cluster stakeholders	Mini-survey, Biannual business-level survey		
ACTIVITIES AND OUTPUTS	Cluster stakeholders are sensitized on the TBL approach and its application Awareness-raising and training events are facilitated by the CDA CDA facilitates network meetings and handholds business networks in their activities Cluster governance system is established	Scale of activities: • Number of meetings, awareness raising events, exposure visits, etc. facilitated • Number of horizontal/vertical networks established Depth of networks: • Increase in share of target cluster firms involved in horizontal/vertical networks Perception of quality of cluster services: • Improvements in perception of quality of CDA services (use scale)	Record keeping Direct observation, Record keeping, meetings Mini-survey among cluster stakeholders	Assumptions: • Sufficient funds are available locally or can be mobilized from local sources in order to finance the endeavours of networked firms and stakeholders • Literacy levels in the cluster are sufficiently high to allow for participation in training activities Risks: • Socially segmented society hinders collaboration among cluster stakeholders or groups thereof. Reservations against collaboration cannot be overcome. • The emergence of a strong and exclusionary leadership leads to a concentration of benefits in the hands of a few, while a majority of cluster stakeholders is prevented from access to services and/or business opportunities. • Lack of cooperative laws impedes formalization of activities	

Institutional component

	NARRATIVE SUMMARY	KPIs (PROXIES)	Means of verification (MOV)	RISKS AND ASSUMPTIONS	
				DIRECT BENEFICIARIES	INDIRECT BENEFICIARIES
OUTCOME—IMPROVED MARKET FOR SERVICES	Accessibility of and demand for services is rising and customers are increasingly willing to pay.	Availability of services: • Number of new/customized services in cluster Accessibility of services: • Share of cluster firms with access to relevant services • Percentage of cluster stakeholders with unmet demand for services Quality of services: • Satisfaction with selected services	Business-level survey, Biannual service provider survey	Risks: • Newly trained or re-trained people are absorbed by firms that do not operate in the cluster • Local institutions and service providers prefer to cater to non-cluster clients Assumptions: • Services provided by local institutions remain accessible and available for cluster firms, above other potential clients	Assumptions: • Service providers monitor market trends and upgrade services according to changing demand

	NARRATIVE SUMMARY	KPIs (PROXIES)	Means of verification (MOV)	RISKS AND ASSUMPTIONS	
				DIRECT BENEFICIARIES	INDIRECT BENEFICIARIES
ACTIVITIES AND OUTPUTS	Service providers are sensitized on needs of cluster stakeholders	Scale of CDA services: • Number of service providers sensitized on needs of cluster stakeholders	Record keeping	Assumptions: • Local institutions have sufficient resources (human and financial) and the mandate (including sufficient degree of autonomy from central administration) to introduce changes in service portfolio	
	Service providers have received support in the development of new services or customization of services and their policies on service provision	• Number of service providers supported in development of new/customized services • Number of provider–user meetings facilitated (within the past six months)		Assumptions: • Institutional management is ready to invest in the building up and maintaining of new services • Public support schemes are available/can be mobilized • Potential client base is sufficient to justify changes in service portfolio • Institutions have staff with relevant managerial/ technical competences for service development and provision Risks: • Past instances of failed collaboration between cluster firms and institutions works against collaboration • Shifts in priorities within local institutions reduce commitment to service provision to the cluster • Institutions interrupt operations in the cluster due to policy shifts	Assumptions: • Over time an increase in the volume of business for cluster firms will increase the demand for services Risks: • Turnover of specialized/trained staff undermines capacity of the institutions to provide service

Policy component

	NARRATIVE SUMMARY	KPIs (PROXIES)	Means of verification (MOV)	RISKS AND ASSUMPTIONS	
				DIRECT BENEFICIARIES	INDIRECT BENEFICIARIES
OUTCOME—IMPROVED BUSINESS ENVIRONMENT	Public–private dialogue has resulted in a business friendlier policy framework. Private sector advocacy initiatives have triggered support schemes or investments in hard infrastructure and basic services	Improved business environment: • Number of new policies enacted PPPs: • Number of ongoing public private partnerships investing in infrastructures and services • Volume of p-p investments • Public contribution to p-p investments	Chamber of Commerce, Meeting minutes, Cluster management, Local authorities	Assumptions: • Institutions have technical and financial capacity to enforce policies Risks: • Corruption eats away benefits in changes in the policy framework • Business elite captures benefits of policy reforms	Assumptions: • Policy improvements and regulations addresses the need of stakeholders beyond the cluster
OUTPUT AND ACTIVITIES	Local authorities and policy makers are sensitized on needs of cluster stakeholders Multi-stakeholder meetings and public-private dialogue has been facilitated by the CDA Policy makers have received advice and support on the design of business-friendly policies	Multi-stakeholder dialogue: • Number of multi-stakeholder meetings facilitated • Number of new laws/ regulations/amendments/ codes drafted with significant contribution from cluster actors • Number of procedures/ policies/practices recommended for improvement or elimination	Record keeping, Meeting minutes, Information provided by cluster management and local authorities	Assumptions: • Policy framework allows to form professional associations • Leadership skill and self-esteem are sufficient to allow participation and decision making processes • Local institutions have the funds and the mandate in order to introduce policy changes • Local or central government allows for participation of private sector representative in decision-making processes • Scale of potential beneficiaries, users of services, is sufficient to justify policy initiative Risks: • A tradition of conflictive relations between firms and support institutions works against public private dialogue • Rotation of political leadership undermines progress in public-private negotiations	

Annex II. CORE key performance indicators (KPIs)—standardizing application using KPI sheets

Output indicators

	1. Key performance indicator
	Scale of business-side facilitation activities carried out by the CDA in the past month—number of business-side meetings, sensitization events, exposure visits, etc, for direct beneficiaries facilitated by the CDA in past month
	2. Definition/Variable that needs to be assessed/operationalized
	Facilitation activities are carried out by the CDA with the objective of fostering networks between businesses of a cluster and sensitizing direct beneficiaries on the potential benefits of collaboration Activities include: • Sensitization and awareness-raising events • Facilitation and handholding of business networks and their activities • Study trips and exposure visits
	3. What to measure
	Number of all facilitation activities mentioned under (2) and facilitated by the CDA
BUSINESS COMPONENT	**4. Unit of measure:**
	Number
	5. Level of measurement
	The indicator will be measured at the level of the cluster development agent (CDA). The CDA will be keeping track of all business-side facilitation conducted
	6. Explanation
	The "scale of business-side facilitation activities" only captures the level of activity, rather than the quality (which is captured by a separate indicator). The scale of business-side facilitation activities is expected to rise in the first months of a cluster development project. Over time, the CDA's involvement is expected to decrease and give way to the cluster members' self-initiated activities (joint actions). A limited scale of facilitation activities in the first year may indicate that the CDA has not been able to gain the direct beneficiaries' trust. If CDA activities decrease without joint activities increasing or even decreasing, more involvement from the part of the CDA may still be needed
	7. Data collection methods and tools and sources of verification
	Data collection method: record keeping at the level of the CDA who registers all business-side facilitation events conducted in a month Data collection tools: sheet to fill out "Record of activities" Sources of verification: list of signatures/present of cluster members to the facilitation meetings
	8. Process of data aggregation
	CDA (technical adviser/M&E officer where appropriate) aggregates at the cluster level all activities facilitated in the past month

BUSINESS COMPONENT

1. Key performance indicator

Contributions of direct beneficiaries as share of total costs for business-side facilitation activities

2. Definition/Variable that needs to be assessed/operationalized

Contributions include all expenditures—both financial and in kind (such as transportation costs, expenditures on accommodation etc.)—that direct beneficiaries incur when participating in business-side facilitation activities carried out by the CDA

3. What to measure

All contributions made to facilitation activities implemented in the past month

4. Unit of measure

Percentage of costs borne by direct beneficiaries (in local currency)

5. Level of measurement

The indicator will be measured at the level of the cluster development agent (CDA). The CDA will be keeping track of all expenses incurred and all contributions made by cluster firms

6. Explanation

An increase in the share of costs covered by the direct beneficiaries reflects their increased interest in and commitment to the cluster development initiative and enhanced trust in the fellow cluster members. Over time, the share of costs borne by direct beneficiaries is thus expected to rise

Total costs of facilitation activities may be difficult to calculate as many stakeholders contribute in kind by providing meeting facilities or offering their services for free or at a reduced price. The costs of facilitation activities born by the UNIDO project, however, should be known. Therefore, only the UNIDO costs are used as a basis for calculation

7. Data collection methods and tools and sources of verification

Data collection: the CDA keeps record of all expenditures incurred by the project for the realization of facilitation activities and the contributions made by the direct beneficiaries

Sources of verification: receipts, invoices, own calculations

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates at the cluster level:

1. Expenditures incurred by the project for the realization of facilitation activities carried out in past month
2. Contributions made by direct beneficiaries for the participation in facilitation activities carried out in past month
3. Adds up UNIDO costs plus direct beneficiaries' contributions
4. Expresses direct beneficiaries' contributions as percentage of total (UNIDO plus contributions)

INSTITUTIONAL COMPONENT

1. Key performance indicator

Number of service providers sensitized on needs of cluster stakeholders by the CDA in past month

2. Definition/Variable that needs to be assessed/operationalized

Service providers include both public support institutions and private (profit-oriented) companies that provide business development, training, financial and other services that are relevant for the development of the cluster and its member firms

Sensitization meetings with services providers are carried out by the CDA with the objective to raise the service providers' awareness about the cluster producers' need for (customized) services and the potential business opportunities resulting from catering to the cluster producers and developing new or adapted services for them

3. What to measure

Number of all new service providers the CDA sensitized in past month

4. Unit of measure:

Number

5. Level of measurement

The indicator will be measured at the level of the cluster development agent (CDA). The CDA will be keeping track of all service providers sensitized

6. Explanation

The objective of sensitization events with service providers is to introduce service providers (that currently operate outside of the cluster area and/or cater to different clients) to the activities of the cluster and its members so that they can assess the potential business opportunities resulting from developing special services and products adapted to the needs of the cluster stakeholders or making their range of products and services available in the cluster area (e.g. by opening a local branch). The number of service providers the CDA has met with for this purpose is a proxy for how actively the CDA is pursuing the activities described above

The number of new service providers sensitized per month is expected to increase in the first months of a cluster development project. As service providers start to develop and launch services adapted the cluster needs, the CDA's involvement is expected to decrease. Low numbers of sensitized service providers in the first year may indicate that the CDA has not been able to attract sufficient interest. Alternatively, it could mean that cluster firms can already access all services they require. If CDA activities decrease despite limited availability and accessibility of services, more involvement from the part of the CDA may still be needed

7. Data collection methods and tools and sources of verification

Data collection: records kept by CDA

Means of verification: meeting notes, minutes, list of participants with their signatures

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates at the cluster level number of service providers sensitized in the past month

POLICY COMPONENT

1. Key performance indicator

Number of multi-stakeholder meetings facilitated by CDA in past month

2. Definition/Variable that needs to be assessed/operationalized

Multi-stakeholder meetings are facilitated by the CDA with the objective of fostering dialogue between representatives of the cluster networks and policymakers (and service providers, if appropriate) to initiate improvements in the policy framework and/or public services and infrastructure

3. What to measure

Number of meetings described above (2) facilitated in the past month

4. Unit of measure

Number

5. Level of measurement

The indicator will be measured at the level of the cluster development agent (CDA). The CDA will be keeping track of all multi-stakeholder meetings conducted.

6. Explanation

The objective of public–private dialogue is to advise and support policymakers in the design of new policies, regulations and support schemes that are support the efforts of the cluster firms. Multi-stakeholder dialogues can also aim at advocating public investment in basic infrastructure and utilities

The number of multi-stakeholder meetings facilitated by the CDA is expected to increase in the first months of a cluster development project. As policymakers respond to the cluster members' proposals and the policy framework is getting business friendlier and/or investments in infrastructure are made, the CDA's involvement is expected to decrease. Low numbers of multi-stakeholder meetings in the first year may indicate that the CDA has not been able to mobilize policymakers sufficiently. Alternatively, it could mean that neither the policy framework nor the local infrastructure requires any improvements for cluster firms to improve their collective efficiency. If CDA activities decrease in spite of insufficient infrastructure or an unfavourable policy framework, more involvement from the part of the CDA may still be needed

7. Data collection methods and tools and sources of verification

Data collection: records kept by CDA

Means of verification: meeting notes, minutes, list of meeting participants with their signatures

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates number of multi-stakeholder events facilitated in past month at the cluster level

Outcome indicators

BUSINESS COMPONENT

1. Key performance indicator

Share of direct beneficiaries who are members of a formal and operational network

2. Definition/Variable that needs to be assessed/operationalized

Networks can be considered formal if they have

- A selected leadership and
- A vision or objective that the members agree upon

Networks can be considered operational if they meet regularly, i.e. at least once per month

3. What to measure

Share of direct beneficiaries who are members of a network satisfying above criteria

4. Unit of measure

Percentage of direct beneficiaries

5. Level of measurement

All direct beneficiaries

6. Explanation

The share of direct beneficiaries who are members of a formal and operational network is used as a proxy to indicate how effective the CDA has been in getting cluster members to understand the potential benefit of collaboration and join forces by building formal and operational networks with the objective of engaging in joint actions

The number of networks and its members is expected to increase in the first 1–2 years of a cluster development intervention and stagnate thereafter. A target value for the number of networks will depend considerably on the total size of the cluster, the number of and variation among direct beneficiaries. This indicator needs to be considered in combination with the level of involvement, since membership in a network does not necessarily translate into involvement in joint actions. Low levels of both KPIs coupled with high numbers of business-side meetings facilitated by the CDA may be an indicator of insufficient trust among cluster stakeholders or a lack of shared interests

7. Data collection methods and tools and sources of verification

Data collection: biannual business level survey (triangulate using records on creation and membership of networks)

Sources of verification: membership records

8. Process of data aggregation

CDA (or technical adviser/M&E officer where applicable) aggregates business data at the cluster level bi-annually

BUSINESS COMPONENT

1. Key performance indicator

Level of involvement—Share of cluster stakeholders involved in at least one joint action within the past six months

2. Definition/Variable that needs to be assessed/operationalized

Joint actions are facilitated by the cluster initiative but depend on decisions taken by the beneficiaries. They are collaboratively designed and executed by cluster stakeholders. On the business side, joint actions include inter-firm collaborations such as such as shared investments, joint sales, joint procurement of inputs, equipment or raw material, joint business ventures and the like. As a measure for the level of involvement of direct beneficiaries, the share of direct beneficiaries involved in such joint actions is used. Any direct beneficiary who over the course of the past six months has been involved in the design and execution of any such activity, i.e. contributes (financial and/or HR) resources to that activity, can be considered involved

3. What to measure

Number of all direct beneficiaries involved in at least one joint action within the past six months as a percentage of total number of direct beneficiaries

4. Unit of measure

Percentage of direct beneficiaries

5. Level of measurement

All direct beneficiaries

6. Explanation

The level of involvement will tell us to what extent direct beneficiaries are taking advantage of established networks to engage in joint actions. Successful networking is expected lead to increased levels of engagement. Benefits resulting from joint activities among participating cluster firms are expected to attract further participants thus further increasing the level of involvement. Low levels of involvement may indicate that barriers prevent some beneficiaries from participation. Here, a more detailed analysis should be carried out to verify which cluster firms participate in joint actions. If the same cluster members are repeatedly excluded from participation, potential barriers to participation (such as insufficient access to capital, exclusion from communication channels, low levels of trust, etc.) may be present

7. Data collection methods and tools and sources of verification

Data collection method: Interviews with direct beneficiaries

Data collection tool: bi-annual business level survey

8. Process of data aggregation

Business level data is aggregated and analysed by CDA (technical adviser/M&E officer where applicable)

INSTITUTIONAL COMPONENT

1. Key performance indicator

Availability of business development (BD) services—number of new/customized services offered within the past six months by BD/training/financial service providers who have been sensitized on the needs of the cluster firms by the CDA

2. Definition/Variable that needs to be assessed/operationalized

New or customized services are developed by service providers that have been sensitized on the needs of the cluster firms by the CDA to improve availability and accessibility of services for cluster firms. All services that have been developed with contributions from the CDA or the cluster firms and which are relevant for the development of the sector and the businesses should be included. Services that always need to be adapted to the client's needs (such as some technical training) or services that are by its nature customer-specific (such as consulting services) may be difficult to distinguish from new/adapted services. Where considerable input was provided by the CDA and/or cluster firms, the service can be considered customized

3. What to measure

Number of new/adapted services

4. Unit of measure

Number

5. Level of measurement

The indicator will be measured at the level of the cluster development agent (CDA). The CDA will be keeping track of all new/adapted services offered.

6. Explanation

Following the sensitization activities by the CDA, service providers are expected to adapt existing services and develop new services that meet the specific needs of the cluster members. The number of new or adapted services offered within the past six months, is thus expected to increase in the first 1–2 years. Over time, multiplier-effects are expected, meaning that not only the sensitized institutions but also other service providers are expected to be attracted by the potential business opportunities that can be realized in the cluster. The total number of available services is thus expected to further increase. However, the number of new/adapted services launched bi-annually is expected to stagnate or even decrease after the first two years. When the market for services is saturated this indicator will be 0. If only few (business development) services are provided in the area in spite of intensive sensitization activities, and where an unmet demand for services (see accessibility of services) persists while the number of new/adapted services is 0, the CDA needs to assess barriers to entry and reasons for the limited attractiveness of service providers to cater to cluster members

7. Data collection methods and tools and sources of verification

Data collection: the CDA keeps records on number of new/adapted services (triangulate using service provider's Who and What)

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates data bi-annually at the cluster level

INSTITUTIONAL COMPONENT

1. Key performance indicator

Quality of business development (BD) services—share of direct beneficiaries satisfied with quality of services accessed from by BD, training, or financial service provider within the past six months

2. Definition/Variable that needs to be assessed/operationalized

Satisfaction with the quality of selected (BD/training/financial) services is rated by direct beneficiaries who have accessed those services using a scale from 1 (very poor quality), 2 (insufficient), 3 (satisfactory), 4 (good) to 5 (excellent). The share of direct beneficiaries who rate quality either 4 or 5

3. What to measure

Share of direct beneficiaries rating quality "4" or "5"

4. Unit of measure

Percentage of direct beneficiaries

5. Level of measurement

Cluster stakeholders who have accessed selected (BD) services

6. Explanation

An increase in the number of customized services should be accompanied by improvements in the quality of the services accessed by the cluster firms

7. Data collection methods and tools and sources of verification

Data collection method: interviews with direct beneficiaries

Data collection tool: bi-annual business-level survey administered by CDA or M&E officer

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates data bi-annually at the cluster level. This indicator can be disaggregated for different services that are rated separately and aggregated for all selected relevant services. For the aggregation, different weights can be assigned to different services, reflecting their respective importance in contributing to the sector's and the businesses' development

INSTITUTIONAL COMPONENT

1. Key performance indicator

Accessibility of (BD) services—unmet demand for services

2. Definition/Variable that needs to be assessed/operationalized

Percentage of cluster stakeholders with unmet demand for selected relevant services. Unmet demand refers to the need for specific services that cannot be met because *(a)* the required service is not offered in the cluster area; *(b)* the price charged for It exceeds the direct beneficiary's financial capacity; or *(c)* the cluster firm cannot fulfil the formal requirements to access the service (e.g. business registration, collateral for credit, etc.)

3. What to measure

Direct beneficiaries as share of total number of direct beneficiaries who are unable to access services for reason mentioned above (2)

4. Unit of measure

Percentage share of direct beneficiaries

5. Level of measurement

All direct beneficiaries

6. Explanation

With an increase in the number of services provided in the cluster, the share of cluster stakeholders with an unmet demand for services is expected to decrease. This indicator should be disaggregated for selected services that are considered relevant by the CDA and the cluster members. In addition, this question can also be asked in general terms to detect any potential need for additional services that have not yet been considered

As mentioned under (2), there are three main reasons for unmet demand mentioned: *(a)* the service is not yet offered in the cluster (compare with availability of services), *(b)* fares for the service are too high for cluster members to take advantage of the offer (compare with accessibility of services—dissatisfaction with price) or *(c)* the cluster firm cannot fulfil the formal requirements to access the services

If fees are too high, support schemes or subsidies may be required to ensure greater accessibility for cluster firms. If services are not offered in the cluster area or formal requirements prevent direct beneficiaries from accessing them, service providers need to be sensitized to improve accessibility of their services. Alternatively, cluster firms may need support in fulfilling the required formalities

7. Data collection methods and tools and sources of verification

Data collection method: interviews with direct beneficiaries

Data collection tool: Bi-annual business-level survey administered by CDA or M&E officer

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates data bi-annually at the cluster level

POLICY COMPONENT

1. Key performance indicator
Cluster involvement in policy initiatives
2. Definition/Variable that needs to be assessed/operationalized
Number of proposals for new laws/regulations/amendments/codes prepared with significant contribution from cluster actors and presented to policymakers within the past six months
3. What to measure
All new laws/regulations/amendments/codes prepared with significant contribution from cluster actors and presented within the past six months
4. Unit of measure
Number
5. Level of measurement
The indicator will be measured at the level of the cluster development agent (CDA). The CDA will be keeping track of all recommendations for new laws/regulations/amendments/codes proposed
6. Explanation
Public–private dialogue aims at advising and supporting policymakers in the design of new policies, regulations and support schemes. Policymakers are thus expected to respond to the cluster members' proposals and enact new laws/regulations/amendments/codes in order to improve the policy framework for cluster members. Once the policy framework is getting business friendlier and/or investments in infrastructure are made, the CDA's involvement is expected to decrease. Where recommendations are not adopted by policymakers, more lobbying may be required. However, external factors (e.g. elections resulting in changes in the administration) may play an important role
7. Data collection methods and tools and sources of verification
Data collection: the CDA keeps records of all new laws/regulations/amendments/codes enacted.
8. Process of data aggregation
CDA (technical adviser/M&E officer where appropriate) aggregates data bi-annually at the cluster level.

POLICY COMPONENT

1. Key performance indicator
Quality of policy initiatives
2. Definition/Variable that needs to be assessed/operationalized
Satisfaction rate of direct beneficiaries with proposed policy changes (use scale)
3. What to measure
Satisfaction with proposed policy changes
4. Unit of measure
Rate on scale from 1 to 4
5. Level of measurement
Direct beneficiaries
6. Explanation:
Following public–private dialogue policymakers are expected to respond to the cluster members' proposals and enact new laws/regulations/amendments/codes in order to improve the policy framework for cluster members. To assess whether the proposed changes reflect the expectations of the cluster members, direct beneficiaries are asked to rate the proposed changes (both enacted and not yet enacted regulations should be considered) using a scale from 1 to 4, with 1 meaning "I am very dissatisfied with the proposed changes", 2 "I am rather dissatisfied with the proposed changes", 3 "I am rather satisfied with the proposed changes", 4 "I am very satisfied with the proposed changes". Where the majority of cluster stakeholders is unsatisfied with the proposed changes, additional multi-stakeholders may be required to fine-tune policy advice
7. Data collection methods and tools and sources of verification
Data collection method: group discussion with cluster representatives involved in preparing proposals for new laws/regulations/amendments/codes. Data collection tool: meeting notes and guidelines
8. Process of data aggregation
CDA (technical adviser/M&E officer where appropriate) aggregates data bi-annually at the cluster level using the mean of satisfaction rates

Impact indicators

BUSINESS COMPONENT

1. Key performance indicator

Product diversification

2. Definition/Variable that needs to be assessed/operationalized

Average number of variations/adaptations to specific market/target group developed/launched by direct beneficiaries within the past six months

3. What to measure

Number of new/adapted products (see (2)) launched by direct beneficiaries within the past six months

4. Unit of measure

Number

5. Level of measurement

All direct beneficiaries

6. Explanation:

As a consequence of joint activities such as the generation and sharing of market knowledge, investments in new production equipment, the joint sourcing of better quality inputs, joint marketing and sales activities, cluster firms are expected to adapt their range of products to the preferences of local, national and even international buyers. Over time, the number of adapted or newly developed products is expected to rise in the first 2–3 years and stagnate or rise only with access to new markets thereafter. Adaptations include aspects of quality, design, functionality, etc

7. Data collection methods and tools and sources of verification

Data collection method: interviews with direct beneficiaries

Data collection tool: bi-annual business-level survey administered by CDA or M&E officer

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates data annually at the cluster level.

BUSINESS COMPONENT

1. Key performance indicator

Percentage change in income from sales generated within the past twelve months

2. Definition/Variable that needs to be assessed/operationalized

Income from sales includes all income generated by selling all products and by-products that are produced and sold as a part of the cluster firms' core business. This excludes income from other business activities that cannot be considered the core business of the cluster such as renting houses

3. What to measure

Percentage change in income from sales generated by all direct beneficiaries from selling products as described above (2) over the past twelve months with respect to previous reporting period

4. Unit of measure

Percentage change

5. Level of measurement

All direct beneficiaries

6. Explanation

As a consequence of joint activities such as the generation and sharing of market knowledge, investments in new production equipment, the joint sourcing of better quality inputs, joint marketing and sales activities, cluster firms are expected to increase their incomes from sales. Increases can be due to increased turnover (quantity sold), higher prices that can be charged thanks to improvements in quality, or a combination of the two. Increases in income from sales are expected to be high in the first 2–3 years and decrease or rise only with access to new markets thereafter. Negative growth rates (i.e. reduced income from sales) can be caused by external shocks such as economic or political crisis. Where sales are decreasing in the absence of such shocks, the possible roots of the problem (reduced quality, emergency of competitors, reduced maximum production capacity due to broken machinery, etc.) should be identified and addressed

7. Data collection methods and tools and sources of verification

Data collection method: interviews with direct beneficiaries

Data collection tool: bi-annual business-level survey administered by the CDA or M&E officer

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates data annually at the cluster level

BUSINESS COMPONENT

1. Key performance indicator

Productivity gains—change in production costs per unit of output in past 12 months

2. Definition/Variable that needs to be assessed/operationalized

Production costs per unit of output are the total costs of production (including fixed costs for production facilities, utilities and employees as well as variable costs such as input materials, day labour, etc.) divided by the number of units produced

3. What to measure

Percentage change in direct beneficiaries' production costs per unit of output within the past six months

4. Unit of measure

Percentage change

5. Level of measurement

All direct beneficiaries

6. Explanation

As a consequence of joint activities such as investments in new production equipment, joint training, innovation or production, cluster firms are expected to increase their productivity as measured by the change in the unit production costs of a selected product. As products may change considerably over the course of the intervention, the choice of the product is crucial. To allow a consistent comparison of production costs across time, costs should always refer to the production of the same (variation of a) product

Increased productivity can be the result of time savings due to rationalization or better trained employees. Improvements can also result from a better utilization of input materials and the resulting reduction in waste accruing from the production process. Improvements in productivity are expected to materialize 1–2 years after implementation of productivity measures (such as those mentioned above) and decrease thereafter. Negative growth rates (i.e. a reduction in productivity) could be due to bottlenecks in labour, inputs or limited functionality of the production equipment and should be addressed. Increased per unit production costs could, however, be also a result of the quality improvements, that is, if more expensive inputs of higher quality are used or the production process has changed. An assessment of the change in productivity measured in the change in production costs may be difficult in that case; alternatively, labour productivity (i.e. man–hours per specified output unit) could be used

7. Data collection methods and tools and sources of verification

Data collection method: interviews with direct beneficiaries

Data collection tool: bi-annual business-level survey administered by the CDA or M&E officer

8. Process of data aggregation

CDA (technical adviser/M&E officer where appropriate) aggregates data annually at the cluster level

BUSINESS COMPONENT

1. Key performance indicator
Waste management—share of direct beneficiaries with non-hazardous waste disposal system/practices in place
2. Definition/Variable that needs to be assessed/operationalized
Non-hazardous waste disposal systems or practices are all practices that are not hazardous for workers in the production facility or settlers in the vicinity of the production facility, because waste is collected from the production site rather than dumped on the street
3. What to measure
Share of direct beneficiaries with non-hazardous waste disposal system/practices in place
4. Unit of measure
Share of direct beneficiaries
5. Level of measurement
All direct beneficiaries
6. Explanation
As a result of awareness-raising activities, cluster firms are expected to attach greater importance to the waste produced during the production process. As a minimum requirement, cluster firms are expected have some kind of system in place to take care of their waste rather than just dump it on the street. Realistically, a sophisticated waste disposal system including segregation, recycling, etc. will not be feasible (at least not in the beginning) The share of cluster firms with non-hazardous waste disposal systems is expected to increase steadily. Where many cluster firms have no waste disposal system in place, additional awareness raising or even some sort of penalties should be considered
7. Data collection methods and tools and sources of verification
Data collection method: interviews with direct beneficiaries and observation to confirm statements made by cluster firms Data collection tool: bi-annual business-level survey administered by the CDA or M&E officer and notes taken by observer
8. Process of data aggregation
CDA (technical adviser/M&E officer where appropriate) aggregates data annually at the cluster level

BUSINESSS COMPONENT

1. Key performance indicator
Social performance—share of cluster workers who think that their working and living conditions have improved in the past twelve months
2. Definition/Variable that needs to be assessed/operationalized
Depending on the scope of the activities, working and living conditions may include housing, food quality, offtimes/ working hours
3. What to measure
Share of cluster workers who think that above mentioned (2) conditions have improved in the past twelve months
4. Unit of measure
Share of cluster workers
5. Level of measurement
Cluster workers (Indirect beneficiaries)
6. Explanation
As a result of awareness-raising activities, association building and investments in safety gear, sanitary infrastructure etc., workers' perception of their own working conditions is expected to improve. In addition, perceptions of living conditions are also expected to improve as a result of higher wages, better access to education, training and medical services, as well as better hygiene at the work place. Improvements are expected within a couple of months after cluster firms introduce relevant measures. Where satisfaction levels are low or decrease, the source of discontent needs to be identified. Perceptions on various aspects of working and living conditions can be assessed. For aggregation purposes, report on the share of cluster workers who think that at least 75 per cent of selected relevant aspects have improved
7. Data collection methods and tools and sources of verification
Focus group discussion
8. Process of data aggregation
CDA (technical adviser/M&E officer where appropriate) aggregates data annually at the cluster level

Annex III. General pool of indicators for cluster development projects

Output indicators

POOL OF KEY PERFORMANCE INDICATORS BY RESULT LEVEL					
OUTPUTS	Topic	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE ?
BUSINESS SIDE	Scale of business-side facilitation activities	Number of business-side meetings, sensitization events, exposure visits, etc., for direct beneficiaries facilitated by the CDA in the past month	CDA	RK	C
	Contributions of direct beneficiaries	Contributions of direct beneficiaries as a share of total costs for business-side facilitation activities in the past month	DB	RK/BLS	C
		Percentage change in contributions made by cluster firms to implementation of business-side facilitation events in past month (include in kind contributions such as transportation costs)	DB	RK/BLS	
	Accessibility of CDA by cluster stakeholders	Perception of cluster stakeholders that CDA visits cluster regularly (using scale)	DB	MN/BLS	
		Share of cluster stakeholders who know how to contact CDA	DB	!!!	
	Quality of CDA services	Percentage change in perception of quality of CDA services (using scale)	DB	BLS	
INSTITUTIONAL SIDE	Scale of facilitation activities aimed at improving access to and availability of (BD) services	Number of service providers sensitized on needs of cluster stakeholders	SP	RK	C
		Number of service providers supported in design of new/customized services within the past month	SP	RK	
		Number of provider–user meetings facilitated in past month	DB	RK	
		Share of direct beneficiaries involved in designing/customizing services for cluster stakeholders within the past month	DB	RK	

POOL OF KEY PERFORMANCE INDICATORS BY RESULT LEVEL					
OUTPUTS	Topic	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE ?
POLICY INITIATIVES	Scale of policy-side facilitation activities	Number of multi-stakeholder meetings, sensitization events, etc., facilitated by the CDA within the past month	CDA	RK	C
	Cluster involvement of policy initiatives	Share of direct beneficiaries involved in multi-stakeholder dialogue within the past month	DB	RK	

CDA = Cluster development agent; DB = Direct beneficiary; SP = Service provider; RK = Record keeping; BLS = Business level survey; MN = Meeting notes

Outcome indicators

OUTCOME— JOINT ACTIONS	Indicator (Group)	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE/SUSTAIN-ABILITY ?
BUSINESS SIDE	Effectiveness of facilitation activities	Number of formal operational networks established within the cluster within the past six months	DB	RK+BLS	
		Share of cluster firms who are a member of a formal and operational network	DB	RK+BLS	C
		Contributions to relevant networks and associations (membership fee etc.) made within the past six months	DB	RK+BLS	
		Share of producers in cluster area who are directly involved in cluster activities facilitated by the CDA	DB	RK	
	Scale of joint actions	Average number of joint actions implemented by direct beneficiaries within the past six months	DB	BLS	
		Number of business networks that have undertaken at least 3 joint actions within the past three months	DB	RK+BLS	
	Level of involvement	Share of cluster stakeholders involved in at least 1 joint action within the past six months	DB	RK+BLS	C
	Commitment	Aggregate value of contributions to joint actions implemented by cluster stakeholders (purchases/ innovations etc.) within the past six months	DB	BLS	
		Resources mobilized by cluster stakeholders within the past six months to realize joint actions	DB	BLS	
		Expectation to engage in joint actions with cluster stakeholders within the next twelve months	DB	BLS	S
	Quality of involvement	Maximum level of risk taken by cluster stakeholders engaging in joint activities within the past six months as measured by scale describing joint activities and their respective risk levels	DB	RK+BLS	
	Subcontracting	Number of currently operational subcontracting arrangements in/catering to cluster firms	DB	BLS	
		Share of cluster firms (direct beneficiaries) subcontracting services/production of semi-final products	DB	BLS	
		Number of subcontracting agreements direct beneficiaries entered into within the past six months	DB	BLS	

Risk Level 1	Risk Level 2	Risk Level 3
Joint participation in trade fair	Activities involving sharing information on competitive business aspects (processing techniques, markets, prices)	Joint saving (not refundable in case cluster member leaves association)
Activities involving sharing information on pre-competitive activities	Joint sales (orders)	Joint R&D
Joint training initiated and financed by beneficiaries	Joint saving (refundable should cluster members leave association)	Joint investment
Joint input procurement		Joint retail point

OUTCOME—JOINT ACTIONS	Indicator (Group)	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE/SUSTAIN-ABILITY ?
INSTITUTIONAL SIDE (BD)S	Institutional strengthening of cluster	Number of cluster members	CG/CDA	RK	
		Number of cluster members paying full membership fee	CG/CDA	RK	
		Number of services provided by cluster	CG/CDA	RK	
		Number of services accessible through cluster	CG/CDA	RK	
		Number of Memorandum of Understanding (MoUs)/partnership agreements signed with national stakeholders and support institutions/universities or R&D institutions/international clusters and organizations	CG/CDA	RK	
	Availability of services	Number of service providers operational in cluster (differentiate by relevant service)	SP	SD (SP-WW)	
		Number of new/customized services offered in cluster within the past six months by service providers who have been sensitized on the needs of the cluster firms by the CDA	SP	SPS+ SP-WW	
		Number of employees in support institutions delivering support services (that are relevant to the cluster)	SP	SPS	
	Demand for services	Percentage change in aggregate expenditures on relevant selected services by cluster firms	SP	BLS	
		Share of direct beneficiaries who have accessed each relevant selected service within the past six months	DB	BLS	C
	Accessibility of services	Costs of selected services as a percentage of average monthly sales (if profits available)	DB	BLS	
		Percentage of relevant service price subsidized (by public entities or private sector —subsidy could go to service provider or directly to service client -> collect data from both sides)	DB+SP	SPS+BLS	
		Percentage of direct beneficiaries with unmet demand for relevant services—service is not available within cluster, service is too expensive, cluster firms cannot fulfil formal requirements to access the service	DB	BLS	C
		Number/share of cluster firms (direct beneficiaries) unsatisfied with price for BDS			
	Quality of services	Satisfaction rate with selected (BD) services accessed by cluster firms within the past six months (using scale)	DB	BLS	
		Percentage of direct beneficiaries satisfied with quality of selected relevant services accessed from by BD, training, or financial service provider within the past six months	DB	BLS	C

OUTCOME—JOINT ACTIONS	Indicator (Group)	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE/SUSTAIN-ABILITY ?
TRAINING SERVICES	Availability of training services	Total number of different courses offered relevant to cluster provided by above training providers	SP	SP-WW	
		Number of new/improved courses relevant to cluster offered within the past six months by training providers who have been sensitized on the needs of the cluster firms by the CDA	SP	SPS	
	Demand	Share of cluster entrepreneurs/workers of direct target firms who completed training in management, accounting, budgeting, financial management ,etc., within the past six months	DB	BLS	
		Share of entrepreneurs/production workers of direct target firms who received relevant technical training within the past six months	DB	BLS	
		Share of cluster firms (direct beneficiaries) who took part in exchange programmes with universities that are relevant to cluster within the past six months	DB	BLS	
	Accessibility	Share of training fee borne by cluster firm (disaggregate for types of training and specify duration of training as appropriate)	DB	RK+ BLS	
		Share of training fee paid by trainee (as share of total costs of training)	DB	RK+ BLS	
		Fee for one day training as a percentage of one-month income (of the one paying for training)	DB	SPS+BLS	
		Number of scholarships granted by year for cluster relevant capacity-building programmes	SP	SPS+ BLS	
		Number of scholarships for cluster relevant capacity-building programmes funded by private sector	SP	SPS+ BLS	
		Government support (subsidy) for development and operation of cluster-relevant capacity-building programmes (as a percentage of total costs)	SP	SPS	
	Effectiveness	Share of cluster firms (direct beneficiaries) satisfied with training quality	DB	BLS	
		Labour productivity of trainees as compared to other (non-trained) workers	DB	BLS	

FINANCIAL SERVICES	Availability	Number of (micro)finance institutions (banking, saving, credit, insurance) operational in cluster that are accessible for cluster firms	SP	SP-WW	
		Number of new/customized financial services for cluster entrepreneurs/workers /business networks (banking, saving, credit, insurance) offered by service providers sensitized to the needs of the cluster firms	SP	SP-WW	
		Number of non-financial services offered for finance customers (e.g. financial literacy, development of business plans)	SP	SP-WW	
	Demand	Average volume of loans accessed by cluster firms within the past six months	DB	BLS	
		Share of cluster firms who have opened a bank/savings account within the past six months	DB	BLS	
		Share of entrepreneurs/firms/workers insured (disaggregate for health or other relevant issues)	DB	BLS	
	Sustainability of financial services	Number of entrepreneurs/workers who asserted a claim from insurance providers within the past six months	DB	BLS	
		Average working capital currently held by cluster firm (direct beneficiary)	DB	BLS	S
		Total working capital currently available to direct beneficiaries	DB	BLS	
	Accessibility of financial services	Share of direct beneficiaries who have accessed financial services within the past six months (banking, credit, insurance, other)	DB	BLS	
		Average effective interest rates for loans granted to direct beneficiaries within the past six months	SP	SPS	
		Effective costs of specific banking service as a percentage of average monthly income of entrepreneurs/workers	DB	BLS	
		Effective costs of insurance as a percentage of average monthly income of entrepreneurs/workers	DB	BLS	
	Sustainability	Percentage of cost recovery of operational costs from client fees over the past six months	SP	SPS	S
		Government support (subsidy) for development and operation of financial services (as percentage of total costs)	SP	SPS	S
	Poverty relevance	Percentage of poor stakeholders with access to financial services	B	HS	
		Percentage of poor stakeholders with unmet demand for relevant financial services	B	HS	
		Percentage of poor stakeholders able to pay the full price of the relevant financial service	B	HS	
		Percentage of poor stakeholders receiving subsidies to access financial service	B	HS	
		Number of financial service providers specialized on targeting the poor	SP	SPS	

OUTCOME—JOINT ACTIONS	Indicator (Group)	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE/SUSTAIN-ABILITY ?
Specialization	Level of specialization within cluster	Number of material suppliers in/catering to cluster	SP	SP-WW	
		Number of equipment suppliers in/catering to cluster	SP	SP-WW	
		Number of BDS suppliers in/catering to cluster	SP	SP-WW	
		Number of (wholesale) buyers in/catering to cluster	SP	SP-WW	
		Number of transport service providers	SP	SP-WW	
		Number of spare parts and maintenance providers in/catering to cluster	SP	SP-WW	
		Number of firms conducting assembly in/catering to cluster	SP	SP-WW	
		Number of packaging providers in/catering to cluster	SP	SP-WW	
POLICY INITIATIVES		Number of proposals for new laws/regulations/amendments/codes drafted with significant contribution from cluster actors and presented to policy makers within the past six months	CG	CM	C
		Number of new laws/regulations/amendments/codes enacted with significant contribution from cluster actors i within the past six months	CG	CM	
		Number of procedures/policies/practices recommended for improvement or elimination within the past six months	CG	CM	
		Number of procedures/policies/practices improved or eliminated within the past six months	CG	CM	
		Number of entities that implemented recommended changes within the past six months	CG	CM	
	Quality of policy initiatives	Satisfaction rate of direct beneficiaries with proposed policy changes (use scale)	CG	BLS	

SUSTAINABILITY: SOCIAL CAPITAL AND TRUST	Participation	Share of (lead) firms participating in multi-stakeholder activities	DB	BLS	
	Coordination	Cluster stakeholders agree on short-term/long-term objectives of cluster associations	DB	BLS	
		Local umbrella organization has taken over coordination of cluster activities (yes/no) [Business plan or operational strategic plan avaialble and resourced.]	CG	BLS	
	Representation	Cluster stakeholders' perception that own business interests are represented in cluster fora (steering committee/cluster governance body/business association choose appropriate forum) (use scale)	DB	BLS	C
	Reciprocity	Cluster stakeholders' perception that all stakeholders benefit equally from cluster activities (use scale)	DB	BLS	C
	Solidarity	Share of cluster stakeholders who say they would certainly support other stakeholders if needed (labour, money, advice, etc.) (use scale 1 "certainly not" 2 "unlikely" 3 "probably yes" 4 "certainly yes" can be disaggregated for different kinds of support such as advice, money, use of production or storage facilities, borrow input material, machinery or labour)	DB	BLS	
		Cluster stakeholders' expectation to receive support from other stakeholders if needed (labour, money, advice, etc.) (use scale)	DB	BLS	
	Trust	Perception of stakeholders of ability to communicate openly (use scale)	DB	BLS	C
		Stakeholders' attitude towards sharing information (as measured by scale rating different levels of sensitive information) -> ASK: would you charge information on xyz with each kind of information being associated with a different risk level ?	DB	BLS	C
SUSTAINABILITY	Capacity for innovation	Number of new/adapted products launched by cluster firms within the past six months	DB	BLS	C
		Investments in R&D, training and market research by direct beneficiaries within the past six months	DB	BLS	
		Number of patents and copyrights for new products earned by cluster stakeholders within the past six months	DB	BLS	
	Net business birth rate	Number of new start-ups generated minus number of enterprises shut down in cluster area within the past twelve months (compare overall local economy with sector of cluster)	CA	RK	C
		Number of new enterprises attracted by cluster within the past twelve months	CA	RK	

CDA = Cluster development agent; DB = Direct beneficiary; SP = Service provider; CG = Cluster governance body; RK = Record keeping; BLS = Business level survey; MN = Meeting notes; SPWW = Service provider who and what; SD = Secondary data; SPS = Service provider survey; HS = Household survey impact indicators

Impact indicators

IMPACT—CLUSTER PERFORMANCE	Indicator Group	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE?
DCED STANDARD	Scale	Number of enterprises that benefited from the project activities (define benefit: involvement vs. financial benefits related to increased sales or profits) within the past six months	B	RK	C
	Net Income	Additional income or percentage increase accrued to target enterprise as result of programme per six months	DB	BLS	
	Net additional jobs created	Net additional, full-time equivalent jobs created in target enterprises or cluster as a result of the programme (net = jobs created minus jobs lost)	B	BLS +SPS	
ECONOMIC PERFORMANCE	Quality	Share of cluster firms (direct beneficiaries) that started using new production equipment within the past six months	DB	BLS	
		Incident of production interruption due to faulty equipment within the past six months	DB	BLS	
		Share of cluster firms (direct beneficiaries) satisfied with main input materials (quality/availability) used for production within the past six months	DB	BLS	
		Rate of customer returns per 1,000,000 produced goods	DB	BLS	
		Rate of in process rejections per 1,000,000 produced goods	DB	BLS	
		Quality standards—share of products for which relevant quality standards have been identified and adopted (specify)	DB	BLS	
		Quality standards—share of cluster firms whose products are tested regularly (at least once a year) by a neutral quality testing authority	DB	BLS	
		Quality standards—share of products meeting quality standards	DB	BLS	

ECONOMIC PERFORMANCE	Quality (cont.)	Quality standards—share of firms who have earned nationally/internationally recognized quality certification	DB	BLS	
		Percentage change of retail price for product (also compare with similar product of competitor) within the past twelve months	DB	BLS	
		Current profit margin of the single product with largest contribution to sales revenue of cluster firms	DB	BLS	
	Marketing	Number of media appearances of what or whom? (press, radio, TV, excluding marketing and brochures) within the past six months	DB	RK+BLS	
		Number of cluster firm/cluster association web page views within the past six months [depending on project context and objectives. choose appropriate option: web pages by individual cluster firms, associations or joint cluster web page]	DB	TBD	
		Expenses in advertising incurred by cluster firms within the past six months (as percentage of income from sales)	DB	BLS	
	Product diversification	Product diversification (number of variations/adaptations) to specific market/target group launched by direct beneficiaries within the past six months	DB	BLS	C
		Customer satisfaction with customized products produced by cluster firms (use scale) within the past six months [only if cluster firms conduct survey among customers]	DB	BLS	
	Distribution and market access	Number of new markets accessed by direct beneficiaries within the past six months (depending on project context and objectives pm needs to define market as country/region/target group)	DB	RK+BLS	
		Share of target markets (identified by CDA/PM or cluster firms) that cluster firms currently cater to (at least one delivery within the past six months)	DB	RK+BLS	
		Market share (percentage of total yearly sales volumes, including competitors) held by cluster firms	DB	2D+ BLS	
		Change in number of intermediaries to reach main final customer	DB	BLS	

IMPACT—CLUSTER PERFORMANCE	Indicator Group	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE?
ECONOMIC PERFORMANCE	Sales	Total aggregate income from sales realized by direct beneficiaries within the past twelve months	DB	BLS	
		Percentage change in income from sales realized by direct beneficiaries within the past twelve months	DB	BLS	C
		Percentage change in production volumes realized by direct beneficiaries within the past twelve months (number of pieces or other appropriate unit)	DB	BLS	
		Percentage change of monthly volume/value of orders received by direct beneficiaries (for volumes use number of pieces or other appropriate unit)	DB	BLS	
		Number of new sales contracts/new (large scale) customers signed by direct beneficiaries within the past twelve months	DB	BLS	
		Number of regular customers that direct beneficiaries cater to (define what considers regular depending on project context)	DB	BLS	S
		Percentage of direct beneficiaries' income from sales attributable to regular customers	DB	BLS	S
	Management	Number of direct beneficiaries with accounting system in place (at time of interview)	DB	BLS	
		Number of firms with operational business plans (at time of interview)	DB	BLS	
	Profit/Returns	Net profits (= revenue minus costs minus taxes) within the past twelve months	DB	BLS	
		Capital accumulation (percentage increase in capital accumulation in cluster within the past twelve months)	DB	BLS	

ECONOMIC PERFORMANCE	Productivity gains	Percentage change in output per unit of main input within the past twelve months	DB	BLS	
		Percentage change in labour productivity within the past twelve months (total output satisfying quality requirements/total number of employee hours)	DB	BLS	
		Percentage change in production costs per unit of output within the past twelve months attributable to cluster initiative	DB	BLS	C
		Percentage change in production time per unit of output within the past twelve months attributable to cluster initiative	DB	BLS	
		Total output capacity (maximum volume that can be produced by direct beneficiaries with current machinery (not considering potential labour bottlenecks) per month)	DB	BLS	
	Raw material supply	Quality of inputs (average percentage of main inputs rejected by direct beneficiaries in past month) [specify input for specific project]	DB	BLS	
		Share of suppliers delivering satisfactory quality to direct beneficiaries	DB	BLS	
		Share of direct beneficiaries that perceive (newly developed/adapted inputs) better suited to local conditions and requirements (to be rated = perception of suitability of number of newly developed/ adapted inputs)	DB	BLS	
		Number of times direct beneficiaries had to interrupt production due to faulty input material within the past twelve months	DB	BLS	
		Percentage change in six-month average price that direct beneficiaries had to pay for main input within the past twelve months (use six-month average and compare with twelve months ago) [specify input and unit for specific project]	DB	BLS	
		Percentage change in six-month average lead time for delivery of crucial input material to direct within the past twelve months	DB	BLS	
		Reliable delivery of inputs for cluster production (percentage of deliveries delayed within the past six months)	DB	BLS	
		Reliable quality of inputs for cluster production (percentage of rejections within the past six months)	DB	BLS	
		Percentage of firms satisfied with availability of input material	DB	BLS	
		Number of times production has to be interrupted due to unavailability/late delivery of input within the past twelve months	DB	BLS	

IMPACT—CLUSTER PERFORMANCE	Indicator Group	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE?
ECONOMIC PERFORMANCE	Supply chain management	Number of integrated products (number of products offered as package with up or downstream services such as packaging, transportation, insurance, financing schemes, etc.) launched by direct beneficiaries input within the past twelve months	DB	BLS	
		Direct beneficiaries exhibit improved storage management/facilities—number of weeks per year the final product is available for sale in satisfactory quality	DB	BLS	
		Direct beneficiaries exhibit improved storage management/ facilities—number of weeks per semester (31 weeks) the input material is available for production in satisfactory quality	DB	BLS	
		Percentage reduction in storage expenses for direct beneficiaries input within the past twelve months	DB	BLS	
		Average degree of capacity utilization of direct beneficiaries input within the past twelve months	DB	BLS	
		Average stock turnover of direct beneficiaries input within the past twelve months	DB	BLS	
		Number of logistical processes improved by direct beneficiaries input within the past twelve months (jointly or individually)	DB	BLS	
		Percentage change in expenses incurred for transportation input within the past twelve months	DB	BLS	
		Share of direct beneficiaries with modern production system (TQM, 5S, lean manufacturing, just in time)	DB	BLS	

ECONOMIC PERFORMANCE	Human resources	Average turnover of high-level employees in the past twelve months within cluster firms	DB	BLS	
		Share of cluster firm employees who completed specialized training relevant for cluster production	DB	BLS	
		Percentage change in wage bill of cluster firms	DB	BLS	
		Availability of trained personnel for cluster firms/pool of potential candidates: average number of days cluster firm requires to find skilled person to fill a position	DB	BLS	
		Skill level of available candidates/number of days on-the-job training that is required for newly hired personnel	DB	BLS	
		Absenteeism rate: [(number of instances[2] x number of days]/total number of employees	DB	BLS	
ENVIRONMENTAL PERFORMANCE	Waste management and recycling	Percentage reduction of waste volumes per 100 units produced (differentiate between solid waste/ hazardous waste/land-filled waste/recyclable waste where appropriate) in the past twelve months	DB	BLS	
		Share of cluster firms (direct beneficiaries) adopting "in-house" segregation of waste at production	DB	BLS	
		Share of cluster firms (direct beneficiaries) adopting "in-house" recycling of waste materials	DB	BLS	
		Share of input materials used in production process that is produced in recycling process	DB	BLS	
		Percentage reduction of packaging material per 100 units produced in the past twelve months	DB	BLS	
		Share of direct beneficiaries with non-hazardous waste disposal system/practices in place	DB	BLS	C
		Share of direct beneficiaries collaborating with recycling firm (collaboration could entail: delivery of recycled input materials, collection of segregated waste, support in establishment/improvement of waste disposal system)	DB	BLS	
		Share of direct beneficiaries sourcing recycled materials	DB	BLS	
		Share of direct beneficiaries who have improved level of waste management (as described by scale)			
		Percentage change in level of waste management (use scale describing waste management practices listed above)	DB	DO + BLS	

IMPACT—CLUSTER PERFORMANCE	Indicator Group	Indicator/Proxy	LEVEL OF MEASUREMENT	DATA COLLECTION TOOL	CORE?
ENVIRONMENTAL PERFORMANCE	Water management	Water use per 100 units (type of units?) of final product (six-month average)	DB	BLS	
		Percentage change in average water use per output unit (linked to cluster) within the past twelve months	DB	BLS	
		Water reused (reintegrated into production process after initial use) as share of total water within the past six months	DB	BLS	
		Share of cluster firms (direct beneficiaries) with water treatment in production facilities	DB	BLS	
		Quality of sewage water (total emissions (per year)/emitters per litre of sewage water/emitters per output unit)	DB	DO/BLS	
	Energy	Energy used per 100 units produced (sixmonth average) (specify unit)	DB	BLS	
		Percentage change in energy used/production unit within the past six months	DB	BLS	
		Renewable energy as share of total energy used within the past six months	DB	BLS	
		CO_2 equivalent emissions per year within the past six months (per 100 units of final product)	DB	BLS	
	Material use	Tons of finished product as ratio of primary raw material input (six-month average) per cluster	DB	BLS	C

SOCIAL PERFORMANCE	Social performance	Current poverty rate—current share of cluster entrepreneurs/workers below poverty line	B	HS	
		Net additional jobs created linked to cluster: number of jobs created minus number of jobs within the past six months	B	BLS	
		Percentage change of (hourly/weekly/monthly/per piece) pay received by cluster entrepreneurs/ workers within the past six months	DB	BLS	
		Regularity of cluster entrepreneur/worker incomes (reduced seasonality), percentage variation from average monthly incomes	B	FGD	
		Number of firms providing benefits for employees (insurance, health services, introduction of ID cards)	DB	BLS	
		Number of work related accidents/illnesses reported per month	DB	BLS	
		Share of cluster workers who think that working and living conditions (housing, food quality, off times/ working hours) have improved in the past twelve months	B	FGD	C

CDA = Cluster development agent; DB = Direct beneficiary; SP = Service provider; CG = Cluster governance body; RK = Record keeping; BLS = Business level survey; DO = Direct observation; MN = Meeting notes; SPWW = Service provider Who and What; SPS = Service provider survey; FGD = Focus group discussion; HS = Household survey; DCED = Donor committee on enterprise development

Pro-poor impact indicators

PRO-POOR IMPACT	Indicator group	Indicator/Proxy	Poor entrepreneurs (DDB)	Poor workers, job seekers	Consumers	Poor farmers/ suppliers	Community	Women (disaggregate figures)
ECONOMIC DIMENSION	Income	Percentage change in income since inception of cluster initiative	C	C		C		C
		Regularity of cluster entrepreneur/worker incomes (reduced seasonality) percentage variation from average monthly incomes						
		Share of cluster firms (direct beneficiaries) paying their workers at least minimum wages						
	Employment	Net additional jobs created linked to cluster: number of jobs created minus number of jobs lost within the past twelve months	C	C		C		C
		Percentage change in number beneficiaries with job in cluster/source of regular income linked to cluster						
HUMAN DIMENSION	Education	Number of cluster entrepreneurs who have completed a training in entrepreneurial skills (including management, coordination, strategy development, quality management, financial management)	C					C
		Number of cluster workers trained in technical/vocational skills		C				C
		Number of cluster workers trained in quality management issues						
		Share of firms providing training opportunities for workers (free of charge)						
		Share of graduates from vocational schools employed in cluster						

HUMAN DIMENSION	Health	Number of cluster workers trained in health issues, incl. handling of hazardous material, use of protective gear, etc.						
		Percentage change in number of work related accidents/illnesses reported per month						
		Number of health service staff/100 workers or inhabitants						
		Number of sources of clean water/100 inhabitants						
		Total share of cluster stakeholder sensitized on hygiene issues						
		Share of cluster firms (direct beneficiaries)/cluster inhabitants with access to electricity grid and sewage systems						
ORGANIZATIONAL DIMENSION	Empowerment and voice	Percentage change in perception of self-esteem (use scale)						
		Number of associations established since inception of cluster project						
		Share of cluster stakeholders represented in labour unions, business or other associations						
		Number of initiatives addressing social issues originating from associations lead by cluster stakeholders						
		Number of firms with anonymous complaint mechanism for staff, consumers and supplies						
		Average number of workers/consumer/supplier complaints (specify: harassment, payments, working hours, working conditions, discrimination, etc.)						
PROTECTIVE DIMENSION	Better access to products and services	Share of cluster stakeholders with access to insurance/microfinance						
		Share of cluster stakeholders with access to electricity grid						
		Share of cluster stakeholders with better access to products and services (use scale to measure own perception of stakeholders)						
		Share of cluster stakeholders who perceive services and products better customized to their needs (use scale)						
	Housing	Share of cluster firm providing/improving housing for workers						
		Percentage increase in quality of stakeholders' housing (use scale going from mud house with plastic/grass roof to brick house with running water and WC)						

PRO-POOR IMPACT	Indicator group	Indicator/Proxy	Poor entrepreneurs (DDB)	Poor workers, job seekers	Consumers	Poor farmers/ suppliers	Community	Women (disaggregate figures)
PROTECTIVE DIMENSION	Working environment	Share of cluster firms (direct beneficiaries) providing (improved) sanitation facilities for workers						
		Number of latrines/100 workers						
		Share of firms providing work-related medical check ups (free of charge)						
		Number of sources of clean water/100 workers						
	Safety and work regulations	Number/share of firms respecting legislation on minimum wages						
		Share of firms with policy on working hours and holidays						
		Number/share of firms paying social contributions to workers						
		Paying injury compensation to workers						
		Firms allowing for maternity leaves						
		Share of cluster firms (direct beneficiaries) employing child labour						
		Percentage change in children employed (technological upgrading reduces need for/increases productivity of manual labour)						
		Share of firms with health and safety regulation in place						
		Amount of protective gear (safety goggles/masks/gloves (whatever applicable)/100 workers						
		Number of work processes considered physically strenuous/hazardous						
		Number of work related accidents/illnesses reported per month						
		Share of cluster firm providing/improving quality of meals in canteen						

External CSR	Scale	Number of ongoing CSR initiatives financed by cluster firms (direct beneficiaries)						
	Involvement	Share of cluster firms (direct beneficiaries) involved in CSR initiatives						
GENDER	Equal opportunities	Perception that men and women benefit equally from programme (scale)						
	Distribution of power	Perception that the distribution of power between men and women has changed (scale)						
		Perception that gender gap has been reduced?						

Annex IV. Risks and assumptions assessment tool

	Result level	Risks/Assumptions	Risk assessment tool RATE LIKELIHOOD Risks: rate likelihood to happen from very low (0) to very high (5) Assumptions: rate likelihood assumptions hold from very likely (0) to very unlikely (5) RATE POTENTIAL DAMAGE rate potential damage to project from very low (0) to very high (5)	Rating of likelihood of R&A	Rating of potential damage	Monitor those R&A where likelihood + potential damage > 5
BUSINESS COMPONENT	CROSS CUTTING	A	Basic services and utilities are available locally or can be provided within the lifespan of the project			
		R	The critical mass of the cluster shrinks/the sectoral specialization is lost over time due to migration or inter-generational shift from cluster production to economic activities that are perceived as more profitable			
	Outcomes	Risks	New market regulations (e.g. trade agreements) introduce stringent criteria that cut off cluster production from established markets			
			Increase in competition in the market or emergence of stronger players that capture high market shares results in shrinking market opportunities for established products			
			Firms' production capacity cannot be expanded due to constraints, such as unavailability of resources (financial, natural, human)			
			Entrenched routines and crystallized production practices hinder innovation at the firm level			
		Assumptions	The regulatory system in the country is supportive of lasting contractual relationships and issues such as a weak legal system, corruption, and high costs do not jeopardize them			
			Cluster firms are able to comply with norms and standards on products/production to ensure the marketability of production			
			Raw material supply is not constrained			
			Providers of machinery and technical assistance and specialized services are available to support innovations of products and services			
			A share of profit is reinvested rather than used for individual consumption so that increasing returns to firms fuel a sustainable expansion of production			

	Result level	Risks/Assumptions	RATE LIKELIHOOD Risks: rate likelihood to happen from very low (0) to very high (5) Assumptions: rate likelihood assumptions hold from very likely (0) to very unlikely (5) RATE POTENTIAL DAMAGE rate potential damage to project from very low (0) to very high (5)	Rating of likelihood of R&A	Rating of potential damage	Monitor those R&A where likelihood + potential damage > 5
BUSINESS COMPONENT	Outputs	Risks	Socially segmented society hinders collaboration among cluster stakeholders or groups thereof. Reservations against collaboration cannot be overcome			
			The emergence of a strong and exclusionary leadership leads to a concentration of benefits in the hands of a few, while a majority of cluster stakeholders is prevented from access to services and/or business opportunities			
			Lack of cooperative laws impedes formalization of activities			
		A	Sufficient funds are available locally or can be mobilized from local sources in order to finance the endeavours of networked firms and stakeholders			
			Literacy levels in the cluster are sufficiently high to allow for participation in training activities			
INSTITUTIONAL COMPONENT	Outcomes	R	DB: newly trained or re-trained people are absorbed by firms that do not operate in the cluster			
			DB: local institutions and service providers prefer to cater to non-cluster clients			
		A	DB: services provided by local institutions remain accessible and available for cluster firms, above other potential clients.			
			IB: service providers monitor market trends and upgrade services according to changing demand			
	Outputs	Risks	DB: past instances of failed collaboration between cluster firms and institutions works against collaboration			
			DB: political disputes between private and public sector stakeholders reduce propensity to collaborate			
			DB: eligibility criteria or prices for services are biased against vulnerable groups			
			DB: no support schemes or dedicated funds are available to subsidize service access for poor stakeholders			
			DB: shifts in priorities within local institutions reduce commitment to service provision to the cluster			
			DB: institutions interrupt operations in the cluster due to policy shifts			
			IB: turnover of specialized/trained staff undermines capacity of the institutions to provide service and specialized expertise cannot be attracted by support institutions			

INSTITUTIONAL COMPONENT	Outputs	Assumptions	Local institutions have sufficient resources (human and financial) and the mandate (including sufficient degree of autonomy from central administration) in order to introduce changes in service portfolio			
			DB: committed institutional management is ready to invest own resources in the building up and maintaining of new services and developing a market for the service			
			DB: public funds or support schemes are available/can be mobilized to finance new services			
			DB: scale of potential client base for new services is sufficient to justify changes in service portfolio			
			DB: institutions have staff with relevant managerial and technical competences who can be assigned to service development and provision (to ensure that changes suggested by TA can be implemented)			
			IB: over time an increase in the volume of business for cluster firms will increase the demand for services			
POLICY COMPONENT	Outcomes	R	Corruption eats away benefits in changes in the policy framework			
			Business elite captures benefits of policy reforms			
		A	DB: Policy improvements and regulations addresses the need of stakeholders beyond the cluster			
			IB: institutions have technical and financial capacity to enforce policies			
	Outputs	Risks	A tradition of conflictive relations between firms and support institutions (e.g. public–private disputes, etc.) works against public–private dialogue			
			Rotation of political leadership undermines progress in public–private negotiations			
		Assumptions	Policy framework allows the forming of or joining professional associations			
			Leadership skill and self-esteem are sufficient to allow participation and decision-making processes			
			Local institutions have the funds and the mandate (including sufficient degree of autonomy from central administration in order to introduce policy changes)			
			Local or central government allows for the participation of private-sector representatives in decision-making processes			
			Representative institutions allow for the membership and participation of vulnerable stakeholders on an equal basis with better-off stakeholders			
			Scale of potential beneficiaries, users of services, is sufficient to justify policy initiative			

Annex V. Overview on frequently used primary data collection methods[a]

Method	*Description*	*Example*	*Requirements*	*Pros*	*Cons*
Record keeping	Field staff keeps records of activities undertaken, stakeholders involved and outputs produced	Number of producer–supplier meetings facilitated in the past month	• Data collection forms	• Simple to administer • Continuous data collection	• Does not provide information about (quality of) results • Focus on inputs, activities and outputs
Direct observation	• Observe behaviour or practices (e.g. at shop floor) • Structured: checklist vs. unstructured: take notes of everything that may be of interest	Are workers using protective gear at the shop floor?	• Checklist of focus areas to assess or behaviour to look out for	• Collect data on behaviour rather than self-reported behaviour • Verify statements made in interviews	• Behaviour is influenced by observation • One-time observation may not give an accurate picture • Observer bias (people see things differently) • Time consuming
Structured interviews	Precisely worded questions that are answered in numerical terms or with a range of predetermined answers that interviewee can select from (scale, yes/no) producing quantitative data	Business level survey: Have you been involved in any joint actions within the past six months? How many joint purchases have you undertaken within the past six months?	• Precisely worded and field-tested questionnaire • Representative sample of interviewees • Interviewers familiar with the project and the questionnaire • Capacity to undertake some statistical analysis	• Easy and faster to complete • Precise answers • More efficient when working with large numbers of people • Simple statistical analysis	• Harder to develop • Risk to miss out something which cannot be captured by closed-ended questions • People may not accurately recall their behaviour or may be reluctant to reveal their behaviour

[a]This section is based on International Programme for Development Evaluation Training (2007): "Module 8: Data collection methods".

Method	*Description*	*Example*	*Requirements*	*Pros*	*Cons*
Semi-structured interviews	Prepared questionnaire with mostly open-ended questions collect qualitative information	Service provider survey: What is your Perspective on the cluster development project? What kind of changes has your business undergone within the past six months?	• Skilled interviewer who is very familiar with The project • Sufficient time	• Easier to develop • Allow for probes and Clarifications • Broad open-ended questions reduce danger of leaving something out • Provide rich data • Do not filter/ limit responses	• Time-consuming • Harder to analyze • Interviewer bias in interpretation of open-ended responses • Recall/ self-reported behaviour may be different from actual behaviour • Data not comparable
Focus group discussion	Qualitative research methodology in which small homogeneous groups of people are brought together to informally discuss specific topics under the guidance of a moderator	What challenges to the success of your business do you foresee in the next coming months and what could be done to address them?	• Moderator to facilitate the dialogue and explore reasons and feelings behind those differences • Script • A set of open-ended questions • Trust and confidential setting • (Audio recorder)	• Contextualize survey data • Understand setting • Uncover meanings, beliefs and motivations • Test questions to develop survey tool • Quick and easy • Flexibility: allows for changes in process and questions	• Limited number of participants may not be representative • Potential influence of moderator or dominant group members • Risk of bias in interpretation of results

Annex VI. Guidelines on survey development, interviewing and focus group discussions[a]

How to design a questionnaire

1. Prepare an *introduction and closure* for the interview, explaining the purpose of the interview, how and why respondents were selected and close by asking whether they have questions or comments, thank you and follow-up.

2. *Formulate questions*: the information required for the key performance indicators will guide the formulation of questions: e.g. as an indicator for access to services: "share of direct beneficiaries who have accessed each relevant selected service within the past six months"

   (a) First determine which services are considered relevant

   (b) Ask for each service separately: Have you or your company accessed/used any banking services within the past six months?

   (c) Additional open-ended questions can be included to put questions into context and loosen up the interview process.

3. *Include skip patterns*: if the interviewer has not accessed the relevant service within the past six months, any further questions on that particular service (concerning price, satisfaction, etc.) are not applicable and should be skipped. Also, if no relevant services were accessed within the past six months, it is not necessary to ask for each service separately. Ask: have you accessed any services such as (banking, insurance, certification, consulting, training, etc.) within the past six months? If no, skip to …

4. *Formulate answer codes*: for each structured question, possible answers are pre-determined with the available answer codes, which can be either

   (a) Yes or no

   (b) A scale (e.g. from 1–4)

   (c) Single-choice answer codes where only one option can be true

   (d) Or multiple-choice answers.

For both single and multiple choice questions, be sure to include "other (specify)" to be able to capture answers that were not considered.

5. *Sequencing*: before asking about controversial matters (such as feelings and conclusions), first ask about some facts. With this approach, respondents can more easily engage in the interview before warming up to more personal matters. Intersperse fact-based questions throughout the interview to avoid long lists of fact-based questions, which tends to leave respondents disengaged. Ask questions about the present before questions about the past or future. It is usually easier for them to talk about the present and then work into the past or future.

[a]This section is based on International Programme for Development Evaluation Training (2007): "Module 8: Data collection methods".

6. *Wording*: questions used in surveys should always be worded in simple terms used in the language that is commonly spoken. Questions should not be written in an academic or formal language style.

7. *The flow*: read through the questionnaire and make sure the sequence of questions and skips flows.

8. *Translate the survey*: a person who knows both languages and is familiar with the purpose of the questions should do the first translation. A person who was not involved in designing the questionnaire should do a back-translation. This helps avoid contaminating the interpretations with prior knowledge.

9. *Field Testing*: once the survey is agreed upon, it should go through a field or pilot test with a small number of subjects. Based on the results of the field test, revisions may be needed. If the first field test suggests many changes, another field test may be needed, covering some or all of the survey.

(a) Are all parts of the survey consistent?

(b) Are there areas that ask the same question?

(c) Are the questions suitable to collect the information looked for?

(d) Are all major activities accounted for?

(e) Are there any questions that are not relevant?

(f) Are the questions well understood? Is the wording clear?

(g) Does the question allow ambiguous responses?

(h) Are any answer codes missing?

(i) Are the skip codes correct?

How to conduct a survey

Interviewers should possess the ability to:

- Engage and encourage people to share views
- Start and maintain discussions with strangers
- Refrain from expressing own opinions
- Maintain confidentiality
- Speak clearly
- Read/write/speak in the language of data collection
- Deal with difficult people.

They also suggest that people who conduct interviews should have the following kinds of knowledge:

- An understanding of the purpose of the evaluation and the specific evaluation questions
- Familiarity with the data collection technique and their role in it (previous experience is preferable).

Do not ask them for information that requires them to go to a file or other source. If you must do this, you need to let them know in advance so the material can be assembled before the survey administration.

The number of interviewers required will depend upon many things:

- Type and length of the survey instrument
- Number of people from whom you need to collect data and their schedules
- How difficult it is to reach people
- Overall timelines of your evaluation.

Once you have selected your data collectors, you need to establish a protocol to help maximize the consistency of data collection. Porteous et al. suggest that your protocol include the following:

- A description of the programme and respondents
- A clearly stated purpose of data collection and of the data collection tool
- How to introduce and explain the tool
- How to record answers
- An outline of what the data collector is supposed to do, when, why, where, with whom, and how
- Who to refer the respondent to if the subject matter is upsetting
- How to answer questions respondents ask.

Respect their privacy. Treat surveys confidentially and have procedures in place to assure privacy. Make sure you can ensure confidentiality. Never promise confidentially unless it can be absolutely delivered.

Respect respondents' time and intelligence.

Tell them how they were selected and why their participation is important.

Do no harm: keep responses confidential. For example, in your report, use aggregate responses; and assign an identification number to the data and destroy the link to the person's name.

How to conduct a focus group meeting

Step 1: Clarify the research question(s)

Step 2: Develop your protocol (moderator's guide)

- The moderator's guide must provide a structure to the session that will direct the group toward exploring the key issues, and provide for the collection of relevant and unbiased data. A focus group session does not consist of the moderator going around the room and asking each person to respond to each question. That style of questioning is more like a survey and will not produce the same quality of data as a focus

group. The questions during a focus group should inspire each person to ponder how they feel, what they believe, and what they think. Then you can explore the complexities for each response.

- The moderator guides the process, keeps the group focused, makes sure everyone has the opportunity to voice their views and ensures that a few people do not dominate the conversations.
- Phase I: Preamble or opening statement
  - puts participants at ease
  - the moderator explains the purpose, how participants were selected
  - the moderator provides ground rules ("what is said in this room stays in this room", "there is no such thing as a wrong comment", "no criticism of others is permitted.") and explains the process.
- Phase II: Introductions and warm-up
  - participants relate experience and roles to the topic
  - the moderator stimulates group interaction and thinking about the topic.
- Phase III: Main body of group discussion
  - The moderator asks a few open-ended questions
    - from broad conceptualization to more precise questions and end
    - from least threatening to most threatening questions
    - from the simplest to the most complex questions
    - clarifies the concepts to be explored.
- Phase IV: Closure
  - key themes are summarized and refined
  - theories, impressions and hunches are presented to group members for reaction
  - participants are invited to provide a round of final comments and/or insights – "key lessons learned"
  - participants are thanked.
- Guidelines
  - avoid vague, confusing wording
  - ask one question at a time
  - avoid assumptions that are leading or misleading.
  - avoid questions that introduce bias into the thinking of the respondents, skewing the responses.
  - avoid supplying alternative responses
  - make it interesting.

Step 3: Invite participants

- Small groups (6–12 people)
- The composition of people in a focus group depends upon the purpose and context of the focus group. Some focus groups are homogeneous; others are diverse. Participants should reflect diverse constituencies and diverse views.

- you may need to use homogeneous groups, because:
  - » mixing gender or race may be an issue
  - » mixing social class may be an issue
  - » mixing manages with staff may be an issue
  - » mixing clients with staff may be an issue
- cultural norms are important.

Step 4: Arrange for facilities and logistics:

- Most focus group discussions last about 1–2 hours. If the discussion is longer, plan in lunch and coffee breaks
- Neutral, easily accessible location and comfortable, safe surroundings
- Refreshments are essential
- Monetary incentives may be used
- Transportation and/or childcare arrangements are often needed
- Audio/video recorder
- Name tags.

Step 5: Hire and brief moderator and observers

- Taking notes on a laptop computer can speed up the initial data analysis and report writing. If you are not using audio or video taping, it is strongly recommended that you have two note-takers to document the sessions. The moderator should not have to take notes. This takes the pressure off the moderator, so the moderator can concentrate on one thing—ensuring that participants answer the research questions.
- Specify moderation technique that should be used by skilled moderator (or facilitator.)
  - be familiar with the script, rather than reading it, so the session appears conversational
  - make sure everyone is heard, rather than allowing one or two persons to dominate the discussion, by:
    - » asking "what do other people think?"
    - » stating "We have heard from a few people; do others have the same views or different views?"
  - manage time, closing off discussion, and moving to the next topic when appropriate
  - set ground rules, such as:
    - » there is no such thing as a wrong comment
    - » no criticism of others is permitted.
  - say as little as possible, letting conversation flow across the table with minimal direction
  - keep personal views outside the room
  - use active listening

  - accept all views while managing differences of opinion:
    - » "So, we have different perspectives."
  - probe for elaboration.
- Note takers (take notes, manage the audio taping and handle whatever comes up) and the moderator must pay attention to both the content and process of the group discussion
- Paying attention to content involves:
  - lines of argument
  - specific responses to questions
  - deeper meanings
  - novel ideas.
- Paying attention to process involves observing and understanding the process and possibly manipulating it. Moderators need to be aware of:
  - Non-verbal cues among group members
  - conflicts
  - coalition-building
  - scapegoating
  - participation levels, etc.
- Sessions are tape-recorded and ideally, a verbatim transcript is prepared for each focus group

Step 6: Debrief observers and record additional information

- After each focus group, when the data are fresh, the moderator writes impressions immediately. The write-up should include all of the major issues and major points of the discussion. It can also capture anything unusual that happened during the focus group.
- You need to share insights generated during the focus group with observers, project managers and other interested parties and record additional information not openly discussed (impressions, conclusions, etc.) for use in the next step.

Step 7: Analyse your data

- If the focus group has worked well, it will produce a mountain of words and ideas. These are qualitative data that require special analytical techniques.

Step 8: Present your findings

- Report findings in a way that is meaningful and useful to others, particularly to the project manager.

All questions are open-ended, moving from an easy, conversational question to the more serious questions, and ending with a summary and wrap-up questions that allow for impressions to be corrected if necessary, and any additional comments and ideas to be recorded.

Data aggregation, presentation and analysis

Quantitative data are usually collected at the level of the CDA (activities and outputs) or at the direct beneficiary level (outcomes and impacts). Business level data collected from direct beneficiaries can be aggregated on the village, network, or cluster level. Project managers are primarily interested in cluster level data; where great variation exists within the cluster, disaggregating the data for regional, gender or other subgroups may be useful to analyse the effects the intervention has on different constituent parts (see below for more information on disaggregation). Core performance indicators can also be aggregated at the programme level.

Company level data can be analysed and presented in different ways. The most frequently used methods, the mean, (cumulative) frequency and proportion, are illustrated below.

Table 1. Calculating mean, (cumulative) frequency and proportions

Satisfaction level	*Frequency*	*Cum. Freq.*	*%*	*Cum. %*
Very satisfied (4)	6	6	30%	30%
Rather satisfied (3)	10	16	50%	80%
Rather unsatisfied (2)	4	20	20%	100%
Very unsatisfied (1)	0	20	0%	100%
TOTAL	20		100%	
MEAN	3.1			

Mean: average satisfaction level of all interviewed direct beneficiaries: 3.1

Cumulative frequency or *proportion* (*share/percentage*): 16 direct beneficiaries (80%) are satisfied (very satisfied or rather satisfied)

When reporting means, also provide the range, which consists of the minimum (here: 2) and the maximum value (here: 4).

Other examples:

Using means:

- Average number of joint actions direct beneficiaries were involved in, within the past six months
- Average value of contributions to joint actions carried out within the past six months

Using shares (per cent):

- Share of direct involved in at least one joint action within the past six months
- Share of direct beneficiaries who accessed [selected relevant service]
- Share of direct beneficiaries who would share information on buyers.

Note: Where multiple answers are allowed (e.g. What type of events do you participate in?) the total may exceed 100 per cent (unless each interviewee has only participated in one event or fewer).

Table 2. Totals for multiple-choice questions cannot be calculated

Type of event	*Frequency*	*%*
Producer meetings	16	80%
Producer–supplier meetings	10	50%
Exposure visits	20	100%
Producer–service provider meeting	0	0%
TOTAL	n/a	n/a

Where only one option is allowed (e.g. Why didn't you participate in any event?) the total should add up to 100%.

Table 3. Totals for single-choice questions should be 100 per cent

Reason	*Frequency*	*%*
No events took place	6	30%
I was not invited	10	50%
Too busy	4	20%
Not expected to be useful	0	0%
TOTAL	20	100%

Using addition/(total) numbers:

- Number of events facilitated in past month
- Number of media appearances within the past six months
- Total number of new products launched by cluster producers within the past 12 months
- Total aggregate income from sales generated by direct beneficiaries within the past 12 months.

Using percentage change:

- Change in income from sales within the past 12 months
- Change in labour productivity within the past 12 months.

Using ratios:

- Rate of customer returns per 1,000,000 produced goods [parts per million (ppm)]

- Absenteeism rate: [(number of instances)^2 x (number of days absent)]/total number of employees
- Number of latrines/100 workers.

As indicated previously, behaviour, attitudes and results may vary considerably by gender, location or other variable. Disaggregating indicators by such variables may shed light into how differently subgroups of the target population can be affected by an intervention. Disaggregated by gender, the table below summarizes the reasons given by interviewees for not participating in any CDA-facilitated activities.

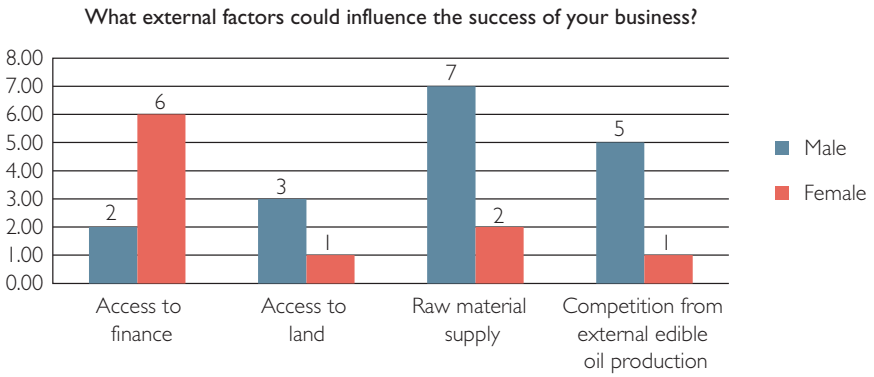
Table 4. Disaggregation by gender

Reason	*Males*	*%*	*Females*	*%*	*TOTAL*	*%*
No events took place	0	0%	2	40%	2	20%
I was not invited	0	0%	2	40%	2	20%
Too busy	3	60%	0	0%	3	30%
Not expected to be useful	2	40%	1	20%	3	30%
TOTAL	4	100%	5	100%	10	100%

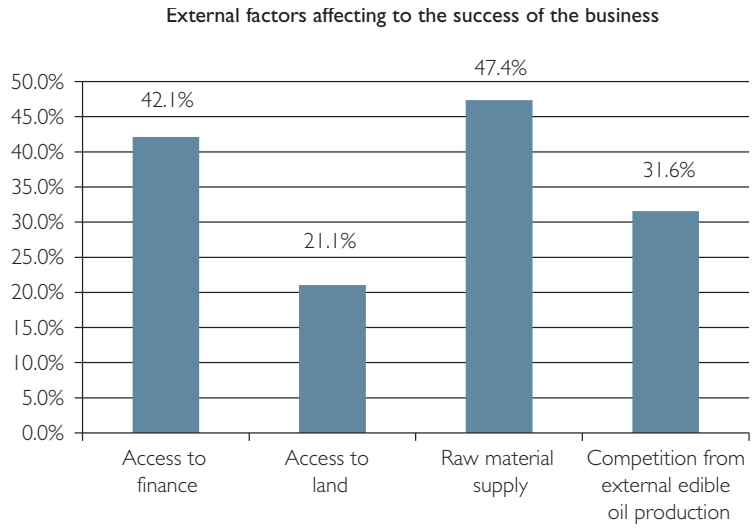
The above example illustrates how disaggregation by sex can highlight a gender divide. Depending on their sex, beneficiaries state different reasons for their absence at cluster events. While males in this case chose not to participate in the events because they were either too busy (60 per cent) or did not expect the events to be useful (40 per cent of all males who did not participate at any event), it seems as if female beneficiaries were insufficiently informed about the activities offered by the CDA. Eighty per cent of the females who did not attend any events were not aware of any activities or did not think they were invited. These results may be an indication of an inadequate information policy of the CDA.

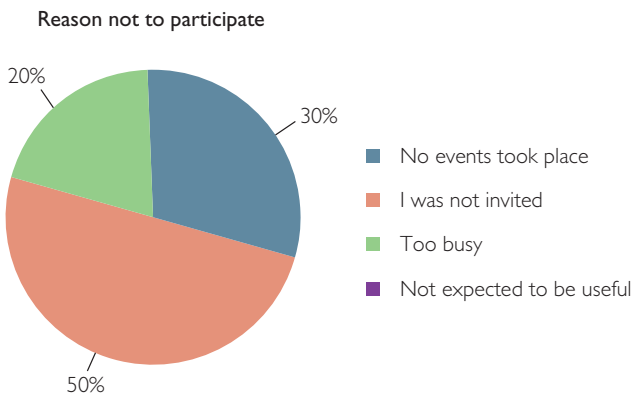
In addition to tables, important indicators or remarkable findings can also be presented graphically, using pie charts, bar diagrams, or graphs illustrating change over time. Below are some examples:

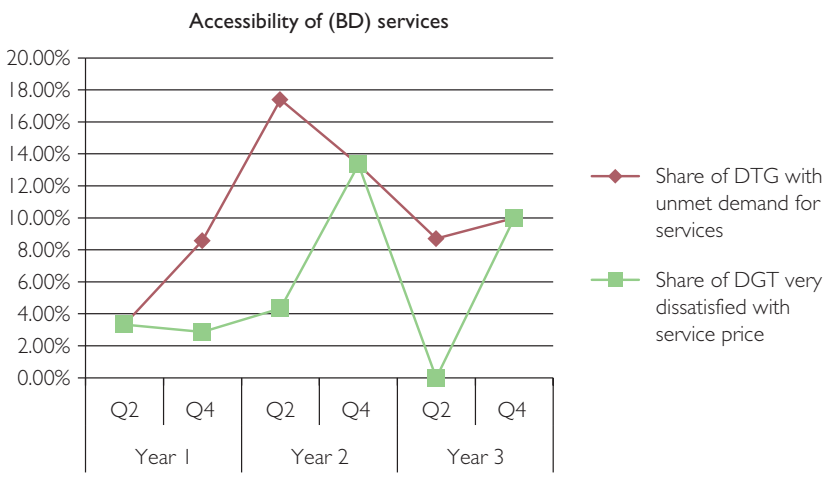
Figures I-IV: Presenting data: pie charts, bar diagrams and line graphs



Figures I-IV: Presenting data: pie charts, bar diagrams and line graphs (continued)

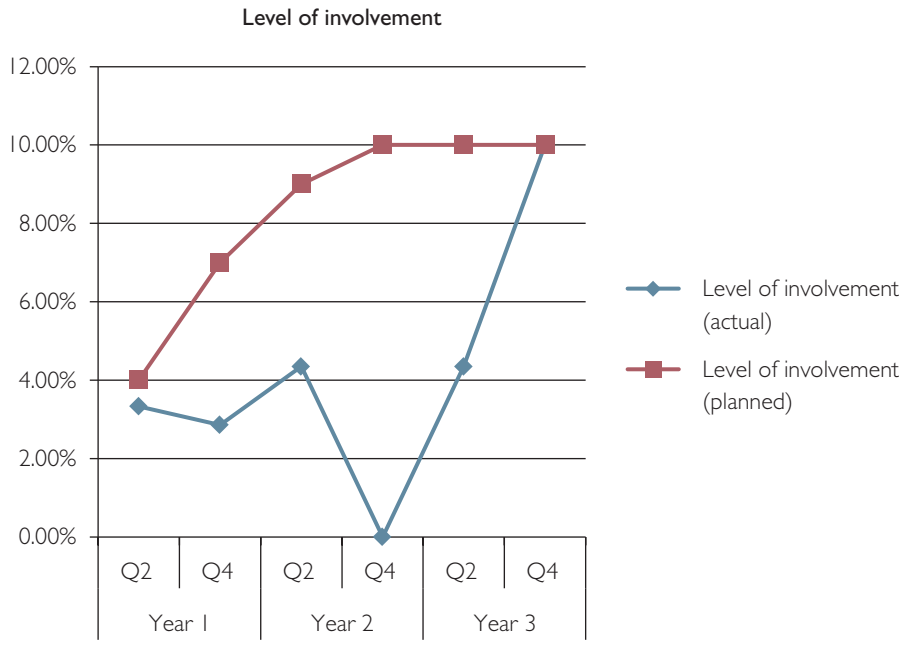






In the analysis, current results have to be compared with previous periods and target values to determine if the project is progressing as anticipated.

Figure V. Comparing planned and actual results



This Monitoring Framework focuses on quantitative data expressed in key performance indicators (KPIs). Qualitative data collected in focus group discussions, with open-ended questions in interviews or unstructured observation, are only recommended to support and explain some of the quantitative information collected.

Qualitative data require different and often time-consuming analysis techniques.[a] Content analysis is a frequently used technique to analyse any kind of narrative (i.e. non-numerical) data. First, themes or patterns such as ideas, concepts, behaviour or attitudes are identified and organized into coherent categories (and subcategories). Then the data is labelled and categorized by reading through it several times, revealing patterns and connections both within and between categories. Depending on the focus of the analysis, different nuances of the same ideas, the relative importance of certain themes or the relationship between categories may be of interest. Some topics, for instance, may always appear together, suggesting a correlation or even a causal relationship. A matrix of categories can help to illustrate relationships between categories.

Tayler, Powell and Renner (2003) recommend anyone analysing qualitative data to ask him or herself the following questions:

- How do themes relate and what information supports the resulting interpretations?
- What answers counter the prevailing themes and what do these answers suggest?

[a]For more information on qualitative analysis techniques, refer to e.g. Tayler, Powell and Renner (2003): *Analyzing qualitative data*. Madison: University of WI-Extension.

The interpretations and conclusions that can be drawn are the most important result of analysis. What can be learnt from the data, what is new and where else could these findings be applicable? What information can explain patterns that are observable in the quantitative data? What information is most relevant for the people involved in the project implementation and what would the project manager be most interested in? What implications do the findings have for the continuation of the project?

Annex VII. Sample data collection instruments

SAMPLE FORMS FOR RECORDS KEEPING

Project Name:_____ last update:_____ by:_____

Events

Date	Type of Event	Business / Service / Policy Side	Purpose	Number of Participants	# of key participants partici-pating	List of participants (where useful)	absent cluster stakeholders	reason for absance (if known)	Decisions / Learning	Follow-up	Next Meeting Date and Location	
21-Feb-11	Service Provider Sensitation	Service	introduce cluster initiative, provide info on market opportunities for service providers, assess interest of service providers to collaborate with cluster firms	3 representatives of financial institutions	3	Opportunity International Microfinance Ltd.	-	-	-			
1-Mar-11	Buyer Supplier Meeting	Business	allow producers to receive feed-back on prices and quality, improve negotiation skills and learn about market requirements	50 artisans 3 buyers					• need to develop IT skills to maintain direct contact with buyers • need for training to improve quality of products	• identify possible training providers • identify potential source of funding to finance training		

Project Name:_____ last update:_____ by:_____

Networks and Associations

		Membership		Membership Status					
Type	Purpose	Requirements	Services / Activities	Q4 2010	Q1 2011				
Producer Network	* improve negotiating power * increase efficiency	* similar skill level * membership fee		25 small scale producers	29 small scale producers				
Joint Liability Group	* access to finance	* committment to joint liability * regular savings	* inter-lending * financial literacy training	350 artisans associated in 30 JLGs					

Project Name:_____ last update:_____ by:_____

Policy Initiatives

			Actors involved			Status			
Subject	Objective	Content of proposed regu	Business Side	Institutional Side	Policy Side	recommended	drafted	signed	enacted
Business Registration	# facilitate registration procedures # provide incentives to formalize businesses		* 6 cluster producers * 2 suppliers	-	* ministry of economic development	10-Mar-11			

Project Name:_____ last update:_____ by:_____

Joint Actions

			Currency: INR	Actors involved					
Date	Type	Detailed description	Value of joint action	Business Side	Institutional Side	Policy Side	Level of Risk		
10-Mar-11	Joint Purchase	joint purchase of 10 tons of input material à 30 INR	300	* 4 cluster producers	-	-			

BIANNUAL BUSINESS-LEVEL SURVEY

Introduction:
We would like to thank you for taking the time to answer our questions. We are conducting this interview on behalf of the UNIDO CBL unit to better understand the outcomes of your initiative. In particular, we want to know if the activities we are carrying out in the scope of this project are producing the expected results and how we could improve the initiative to better suit our beneficiaries' needs and achieve greater impact.
Our interview will take approx. 30 min and include questions about your business, your involvement in the cluster initiative and your collaboration with other companies in the cluster. Your information will be kept confidential and only reported as group data. The data will be used only to assess the quality and progress of our work and will not influence your eligibility to participate in any activities or benefit from the project.

Sect	#	Question	Answer Codes	Skip Code
I		INTERVIEW		
	I 1	Interviewer Name: _____		
	I 2	Interview Date (DD/MM/YYYY): _____ Time: _____		
	I 3	Interview Location: _____		
A		RESPONDENT DATA		
	A 1	Respondent Name: First Name_____ Surname:_____		
	A 2	Respondent Age		
	A 3	Respondent Sex	male ..1 female ..0	
	A 4	Name of Firm		
	A 5	Business Activity		
	A 6	Year of establishment	Year: _____	
	A 7	Number of employees: _____ Number of family members working in facility: _____		
B		MEMBERSHIP IN NETWORKS AND ASSOCIATIONS		
	B 1	Are you a member any network or association?	yes ..1 no ..0	if no skip to C
	B 2	What kind of networks or associations are you a member of? [CIRCLE ALL THAT APPLIES]	**B 3** What is your monthly contribution to these associations? Sectoral Association ..1 _____ Birr Business Association ..2 _____ Birr Self-Help-Group ..3 _____ Birr Joint Liability-Group ..4 _____ Birr Producer Cooperative ..5 _____ Birr Women's Association ..6 _____ Birr Other (Specify) _____ ..7 _____ Birr	if not member of sectoral association skip to C
	B 4	Would you say that all members of the sectoral association agree on the short-term and long-term objectives of the cluster?	no ..1 partly ..2 mostly ..3 yes ..4	
	B 5	Do you think your own business interests are represented in the association?	no ..1 partly ..2 mostly ..3 yes ..4	
	B 6	Do you think all actors benefit equally from being a member?	no ..1 partly ..2 mostly ..3 yes ..4	

BIANNUAL BUSINESS LEVEL SUREY

Sect	#	Question	Answer Codes	Skip Code
B	7	Would you say that members help each other, when needed. Would you also provide support and advice to other members?	no ..1 partly ..2 mostly ..3 yes ..4	
B	8	Would you say you (can) communicate openly with the other members of your association?	no ..1 partly ..2 mostly ..3 yes ..4	
B	9	Would you share information regarding: [READ ALL OPTIONS, CIRCLE ALL THAT APPLIES]	production processes ..1 input materials ..2 buyers ..3 price information ..4 other (specify): _____ _____ ..5	
C		PARTICIPATION IN MEETINGS AND EVENTS		
C	1	How many meetings and other events facilitated by the CDA have you participated in, in the past 6 months?	Number: _____	if 0 skip to 8
C	2	What kind of activities have you been involved in in the past 6 months? [CIRCLE ALL THAT APPLIES]	producer meetings ..1 producer - supplier meetings ..2 exposure visits ..3 producer - service provider meeting ..4 technical training ..5 leaderhip training ..6	
C	3	What financial contributions did you make to the activities you participated in? 1. producer meetings 2. producer - supplier meetings 3. exposure visits 4. producer - service provider meeting 5. technical training 6. leaderhip training	 Birr: _____ Birr: _____ Birr: _____ Birr: _____ Birr: _____ Birr: _____	
C	4	What in kind contributions did you make to the activities you participated in?	specify event (using code): ___ in kind contribution: _____ _____s pecify event (using code): ___ _____ _____	
C	5	How useful were these events for your business?	entirely useless ..1 rather useless ..2 rather useful ..3 entirely useless ..4	 if 1 or 2 skip to 7
C	6	Why did you find the events you participated in useless? What would you change?		

BIANNUAL BUSINESS LEVEL SUREY

Sect	#	Question	Answer Codes	Skip Code
C	7	What are the concrete outcomes from participating in the events mentioned above?		skip to 8
C	8	Why didn't you participate in any events?	no events took place in past 6 months ..1 I was not invited to participate at any events ..2 I was too busy to participate ..3 I did not think the events offered would be useful ..4 other (specify) _____ ..5	
C	9	In general, how satisfied are you with the services and activities offered by the CDA?	1. entirely unsatisfied ..1 2. rather unsatisfied ..2 3. rather satisfied ..3 4. entirely satisfied ..4	
D		INVOLVEMENT IN JOINT ACTIONS		
D	1	Were you engaged in any joint action in the past 6 months?	yes ..1 no ..0	if no skip to 32
D	2	Were you engaged in any joint purchases in the past 6 months? If yes, how many?	yes ..1 number :_____ no ..0	if no skip to 8
D	3	Specify the three most important joint purchases in past 6 months.	1._____ _____ 2._____ _____ 3._____ _____	
D	4	What was the respective total value of the three most important joint purchases?	1._____ 2._____ 3._____	
D	5	What was your contribution to the three joint purchases?	1._____ 2._____ 3._____	
D	6	How many entrepreneurs were involved in these three joint purchases?	1._____ 2._____ 3._____	
D	7	Would you say that your business has benefited from these joint purchases?	yes ..1 no ..0 from some of the joint actions only ..2	

BIANNUAL BUSINESS LEVEL SUREY

Sect#	Question	Answer Codes	Skip Code
D 8	Were you engaged in any joint promotional activities in the past 6 months? If yes, how many?	yes ..1 number :_____ no ..0	if no skip to 14
D 9	Specify the the three most important promotional activities in past 6 months.	1._____ _____ 2._____ _____ 3._____ _____	
D 10	What was the respective total expenditures on the three most important joint promotional activities?	1._____ 2._____ 3._____	
D 11	What was your contribution to these joint promotional activities?	1._____ 2._____ 3._____	
D 12	How many entrepreneurs were involved in these promotional activities?	1._____ 2._____ 3._____	
D 13	Would you say that your business has benefited from these joint promotional activities?	yes ..1 no ..0 from some of the joint actions only ..2	
D 14	Were you engaged in any joint sales in the past 6 months? If yes, how many?	yes ..1 number :_____ no ..0	if no skip to 20
D 15	Specify the three most important joint sales in past 6 months.	1._____ _____ 2._____ _____ 3._____ _____	
D 16	What was the respective total value of the three most important joint sales?	1._____ 2._____ 3._____	
D 17	What was your share of income from the joint sales?	1._____ 2._____ 3._____	
D 18	How many entrepreneurs were involved in the three joint sales?	1._____ 2._____ 3._____	

BIANNUAL BUSINESS LEVEL SUREY

Sect #	Question	Answer Codes	Skip Code
D 19	Would you say that your business has benefited from these joint actions?	yes ..1 no ..0 from some of the joint actions only ..2	
D 20	Were you engaged in any joint investments in the past 6 months? If yes, how many?	yes ..1 number :_____ no ..0	if no skip to 26
D 21	Specify three most important joint investments in past 6 months.	1._____ _____ 2._____ _____ 3._____ _____	
D 22	What was the respective total value of the three most important joint investments?	1._____ 2._____ 3._____	
D 23	What was your contribution to the joint investments?	1._____ 2._____ 3._____	
D 24	How many entrepreneurs were involved in the three joint investements?	1._____ 2._____ 3._____	
D 25	Would you say that your business has benefited from these joint actions?	yes ..1 no ..0 from some of the joint actions only ..2	
D 26	Were you involved in any other joint actions? If yes, how many?	yes ..1 number :_____ no ..0	if no skip to 32
D 27	Specify three most important other joint actions in past 6 months.	1._____ _____ 2._____ _____ 3._____	
D 28	What was the respective total value these other three most important joint actions?	1._____ 2._____ 3._____	
D 29	What was your contribution to the joint action?	1._____ 2._____ 3._____	

BIANNUAL BUSINESS LEVEL SUREY

Sect #	Question	Answer Codes	Skip Code
D 30	How many entrepreneurs were involved in these three joint actions?	1._____ 2._____ 3._____	
D 31	Would you say that your business has benefited from these joint actions?	yes ..1 no ..0 from some of the joint actions only ..2	
D 32	Do you expect to engage in any joint actions in the next 6 months?	certainly yes ..1 probably yes ..2 probably not ..3 certainly not ..4 I don't know ..88	if 3, 4 or 5 skip to E
D 33	How many joint activities are already planned for the next 6 months?		
D 34	Specify three most important planned joint actions in past 6 months.	1._____ _____ 2._____ _____ 3._____	
D 35	What is the expected respective total value these planned joint actions?	1._____ 2._____ 3._____	
D 36	What is your expected contribution to these joint actions?	1._____ 2._____ 3._____	
D 37	How many entrepreneurs are expected to be involved in these three joint actions?	1._____ 2._____ 3._____	
E	BUSINESS PERFORMANCE		
E 1	How satisfied are you with the performance of your business in the past 6 months?	1. very unsatisfied ..1 2. rather unsatisfied ..2 3. rather satisfied ..3 4. very satisfied ..4	if 1 or 2 skip to 3
E 2	Why were you not satisfied? What would you like to improve?		
E 3	Would you say, your business has undergone any important changes (in terms of production, sales, profits, etc.) since the last time you were interviewed / since inception of the project?		
E 4	Have you launched any new or customized products in the past 6 months?If yes, how many? Describe.	yes ..1 no ..0	if no skip to 6

BIANNUAL BUSINESS LEVEL SUREY

Sect #	Question	Answer Codes	Skip Code
E 5	How many new / adapted products have you launched in the past 6 months? Describe breifly.		
E 6	List three most important products you generate most income from.	1._____ 2._____ 3._____	
E 7	How much have you produced of these products, in the past 6 months? [USE UNIT CODES: 1= KG, 2=Metric Ton; 3=Liter; 4=pieces]	1._____ Unit ____ 2._____Unit ____ 3._____Unit ____	
E 8	How much have you sold of these products, in the past 6 months? [USE UNIT CODES: 1= KG, 2=Metric Ton; 3=Liter; 4=pieces]	1._____ Unit ____ 2._____Unit ____ 3._____Unit ____	
E 9	What are the UNIT prices you obtained for each of these products? [USE UNIT CODES: 1= KG, 2=Metric Ton; 3=Liter; 4=pieces]	1._____/ Unit ____ 2._____/ Unit ____ 3._____/ Unit ____	
E 10	Thinking about all products you sell, what is the income from sales your enterprise has generated in the past 6 months?		
E 11	What were your net profits in the same period, this means your income from your business once all expenditures on labor, input material, equipment and other infrastructure such as electricity and rent are accounted for?		
E 12	[VERIFY:] This means, on average, your monthly income was….		
E 13	How many different buyers do you sell your products to?		
E 14	How many of these buysers place orders on a regular basis?		
E 15	What is the total volume of orders placed by these buyers? [USE UNIT CODES: 1= KG, 2=Metric Ton; 3=Liter; 4=pieces]	1._____/ Unit ____ 2._____/ Unit ____ 3._____/ Unit ____	
E 16	How satisfied, do you think, are your customers with the quality of your products?	very unsatisfied ..1 rather unsatisfied ..2 rather satisfied ..3 very satisfied ..4 I don't know ..88	
E 17	Out of 1000 units produced, how many are rejected be the buyers on average?		
E 18	What input materials do you need for your production processes?	1._____ _____ 2._____ _____ 3._____	
E 19	What does the production of 1 [UNIT] of each product cost? (including costs for input materials, labour and any other costs))	1._____ 2._____ 3._____	

BIANNUAL BUSINESS LEVEL SUREY

Sect#	Question	Answer Codes	Skip Code
E 20	How much time does the production of one [UNIT] take? [USE UNIT CODES: 1= hours, 2=days; 3=weeks]	1._____ Unit ____ 2._____Unit ____ 3._____Unit ____	
F	SOCIAL PERFORMANCE		
F 1	How many people are currently working for you?		
F 2	On average, how many hours do they work per week?		
F 3	How many new workers have you employed in the past 6 months?		
F 4	How many workers left your enterprise in the past 6 months?		
F 5	How much do your workers make? [differentiate between different kind of workers or skill levels] 1. specify worker_____ 2. specify worker_____ 3. specify worker_____	[USE UNIT CODES: 1= hour, 2=day; 3=week; 4=month] 1._____/ Unit ___ 2._____/ Unit ___ 3._____/ Unit ___	
F 6	Do you offer any benefits in addition to the pay mentioned above? [Circle all options that apply]	no benefits ..0 insurance ..1 health checks ..2 ID cards ..3 housing ..4 food ..5 formal training ..6 other (specify) _____ ..7	
F 7	How many latrines / toilets are available at the work promises for the workers' use? _____		
F 8	Do you provide any safety gear to your workers?	yes ..1 no ..0	 if no skip to 10
F 9	How much of the following safety gear do you provide?	goggles __ masks __ gloves __ other (specify) _____ __	
F 10	How safe do you think is the work environement of your employees?	1. very safe ..1 2. rather safe ..2 3. rather unsafe ..3 4. very unsafe ..4 5. I don't know ..5	if 1 skip to 12
F 11	Are you planning to work on improving working conditions?	yes ..1 no ..0	 if no skip to 0
F 12	What measures are you planning to take?		

BIANNUAL BUSINESS LEVEL SUREY

Sect	#	Question	Answer Codes	Skip Code
G		ACCESS TO SERVICES		
G	1	Have you accessed any of the following services in the past 6 months? [READ OPTIONS, CIRCLE ALL THAT APPLY AND SPECIFY BRIEFLY]	none ..0 banking, insurance & financial ..1 services ..2 training services ..3 quality assurance ..4 certification ..5 legal councelling ..6 fiscal councelling ..7 management consulting ..8 market information ..9 promotion .10 R&D .11 Information Technology (IT) other (specify) .12	**service provider:** _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Service Code	(2) How much did you spend on these services (Birr)	(3) this means, you spent … % of your annual income on...	(4) did you consider the price for [...] 1=extremely high, 2=rather high, 3=fair 4=rather low, 5=very low	(5) Did you pay the full price or receive any discounts? 1= free, 2= reduced price, 3= full price, 4= I don't know (if 3 or 4 skip to next service)	(6) kind of discount 1= through B/S Association, 2=project; 3= government; 3= one-time discount; 5= other	(7) specify discount Birr / %
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

G 8	Thinking about the quality of the services offered: How would you rate the quality of the services? [ONLY READ OUT THE SERVICES ACCESSED BY THE RESPONDENT] [use scale: 1 = very unsatisfied 2 = rather unsatisfied 3 = rather satisfied 4 = very satisfied]	[use scale: 1 - 4] banking, insurance & financial ___ services ___ training services ___ quality assurance ___ certification ___ legal councelling ___ fiscal councelling ___ management consulting ___ market information ___ promotion ___ R&D ___ Information Technology (IT) ___ other (specify) _____ ___	
G 9	[CROSSCHECK WITH G1] Have you accessed training services in the past 6 months?	yes ..1 no ..0	if no skip to 15

BIANNUAL BUSINESS LEVEL SUREY

Sect#	Question	Answer Codes	Skip Code
G 10	What kind of training services have you accessed?	Management ..1 Marketing ..2 Accounting ..3 Quality ..4 Productivity ..5 Technical skills ..6 Group Leadership ..7 other (specify): _____	
G 11	What share of your employees have received a management, marketing or accounting training in the past 6 months?	Management_____% Marketing _____% Accounting _____% Quality _____% Productivity _____% Technical skills _____% Group Leadership _____% other (specify): _____ _____%	
G 12	If you needed a loan, who would you approach?	family & friends ..1 informal money lender ..2 microfinance institution ..3 bank ..4 other (specify) _____ ..5	
G 13	[CROSSCHECK WITH G1] Have you accessed financial, banking or insurance services in the past 6 months?	yes ..1 no ..0	
G 14	What kind of financial services? [CIRCLE ALL THAT APPLY]	saving ..1 credit ..2 insurance ..3 other (specify): _____ _____ ..4	if no credit skip to 22
G 15	What was the total amount of loans taken out?	Amount _____	
G 16	What interest rates do you have to pay for your loan?	_____% p.a.	
G 17	What other fees did you have to pay?		
G 18	What is the repayment period? [USE UNIT CODES: 1 = weeks, 2 = months, 3= years]	_____ Birr / unit ___	
G 19	Amount currently outstanding		
G 20	Are any payments overdue? If yes, how much?	yes ..1 Amount _____Birr no ..0	
G 21	Why are your re-payments delayed?	poor financial planning ..1 unexpected reduction in Income	
G 22	Are there any services that you require for your business, but cannot access?	yes ..1 no ..0	if no skip to H

BIANNUAL BUSINESS LEVEL SUREY

Sect	#	Question	Answer Codes	Skip Code
G	23	Which ones? [READ OUT OPTIONS AND CIRCLE ALL THAT APPLY]	banking, insurance & financial services training services quality assurance certification legal councelling fiscal councelling management consulting market information promotion R&D Information Technology (IT) other (specify) _____	..1 ..2 ..3 ..4 ..5 ..6 ..7 ..8 ..9 .10 .11 .12
G	24	Why can't you access those services?	the service is not provided anywhere in the cluster area the service is too expensive I cannot fullfill formal requirements to access service other (specify) _____	..1 ..2 ..3 ..4
H		CONTEXT		
H	1	What external factors could influence the success of your business?		

SERVICE PROVIDER SURVEY

Introduction:
We would like to thank you for taking the time to answer our questions. We are conducting this interview on behalf of the UNIDO CBL unit to better understand the outcomes of your initiative. In particular, we want to know if the activities we are carrying out in the scope of this project are producing the expected results and how we could improve the initiative to better suit our beneficiaries' needs and achieve greater impact.
Our interview will take approx. 30 min and include questions about your institution, your involvement in the cluster initiative and your collaboration with other support institutions and service providers in the cluster.

tion	#	Question	Answer Codes	Skip Code
A		RESPONDENT DATA		
A	1	Respondent Name: First Name_____ Surname:_____		
A	2	Name of Firm		
A	3	Business Activity		
A	4	Is your business independent or a branch office of a nationally operating business?	independent ..1 branch office ..2 other (specify) _____ ..3	
A	5	Year of establishment	Year: _____	
A	6	How many employees does your institution have?	Number:_____	
B		MEMBERSHIP IN NETWORKS AND ASSOCIATIONS		
B	1	Are you a member any network or association?	yes ..1 no ..0	 if no skip to C
B	2	What kind of networks or associations are you a member of? [CIRCLE ALL THAT APPLIES]	Cluster Working Group ..1 Cluster Steering Group ..2 Cluster Technical Group ..3 Sectoral Association ..4 Business Association ..5 Other (Specify) _____ ..6	
C		PARTICIPATION IN MEETINGS AND EVENTS		
C	1	Are you aware of the cluster initiative in this area?	yes ..1 no ..0	 if 0 skip to 12
C	2	How relevant do you think is the Edible Oil Cluster for the local economy?		
C	3	Are there any employees / extension workers in your organization that have completed a technical training that is relevant for the edible oil production?	yes ..1 if yes: specify:_____ _____ no ..0	
C	4	Have you been involved in any meetings or other events facilitated by the cluster inistiative in the past 6 months?	yes ..1 no ..0	 if 0 skip to 12
C	5	If yes, how many?		
C	6	What kind of activities have you been involved in in the past 6 months?	meeting with cluster producers ..1 meeting with cluster development agent (CDA) ..2 meeting with other service providers of same sector ..3 exposure visit ..4 meeting with members of steering committee ..5 other (specify) _____ ..6	
C	7	Is there any kind of institutionalized relationship? Please describe [PROBE FOR formalization (partnership agreement, MoU etc)?	yes ..1 no ..0	
C	8	Have you set up a mechanism to allow for regualar dialogue?	yes ..1 if yes: specify:_____ _____ no ..0	
C	9	Have you identified something like an action plan, a timeline and responsibilities?	yes ..1 if yes: specify:_____ _____ no ..0	

C 10	Have you made some kind of commitment? Probe:	financial ..1 Birr: _____ HR ..2 other (specify):_____ _____ ..3	
C 11	Do you have a person assigned to deal with all matters related to the cluster?	yes ..1 if yes: specify:_____ _____ no ..0	
C 12	Are you aware of the service needs of the cluster producers?	yes ..1 no ..0	
C 13	Are you currently collaborating with cluster firms to identify shared business interests and design services customized to the needs of the cluster firms?	yes ..1 no ..0	if no skip to 16
C 14	Describe briefly		
C 15	How many other actors are involved in this activity?	number of cluster producers __ number of service providers __ other actors (specify) _____ __	
C 16	Would you be able to design services that are customized to the needs of the cluster producers?	yes ..1 no ..0	
C 17	Do you think working with the cluster firms could be beneficial to your institution?	yes ..1 no ..0	if yes skip to D
C 18	Why not?		
D	AVAILABILITY AND ACCESSIBILITY OF SERVICES		
D 1	Which kind of services do you offer?	banking & financial services ..1 training services ..2 quality insurance ..3 certification ..4 legal councelling ..5 fiscal councelling ..6 management councelling ..7 market information ..8 promotion ..9 R&D .10 Information Technology .11 other (specify) _____ .12	
D 2	How many different services do you offer?	service code:_____number: _____ service code:_____number: _____ service code:_____number: _____ service code:_____number: _____ service code:_____number: _____	
D 3	Who are your most important clients? Describe sector, company size / ownership, share of sales those clients account for etc.		
D 4	What share of your client base do edible oil producers account for?	_____%	
D 5	Have you launched any new or customized services to satisfy the needs of the edible oil producers in the past 6 months? If yes, how many?	yes ..1 number: _____ no ..0	if no skip to 7
D 6	Describe briefly.		

2 of 4 pages

D 7	List 3 most important services you offer most frequently. SERVICE PROVIDER SURVEY	1._____ 2._____ 3._____	
D 8	How many times have you sold these three services, in the past 6 months?	1._____ 2._____ 3._____	
D 9	What are the prices you charge for each of these services?	1._____per_____ 2._____per_____ 3._____per_____	
D 10	[INTERVIEWER CHECK POINT: Is the interviewee representing a profit oriented service provider?]	yes ..1 no ..0	if no skip to 17
D 11	Thinking about all services you sell, what is the income from sales your enterprise has generated in the past 6 months?		
D 12	Do you have any special discounts, reduced rates or government subsidies that you can offer poor enterpreneurs?	none ..1 government subsidy ..2 reduced price ..3 special 1-time discount ..4	
D 13	How much is the price reduction?	fixed amount ..1 specify: _____ percentage reduction ..2 specify: _____%	
D 14	How many customers did you cater to in the past 6 months?	Total: _____	
D 15	How many of these customers are regular customers?		
D 16	How many of your customers are poor enterpreneur qualifying for price reductions?	_____%	
D 17	What share of your customers are female? [WRITE XX FOR I DON'T KNOW]	male:_____ % female:_____%	
D 18	How satisfied, do you think, are your customers with the quality of your services?	very satisfied ..1 rather satisfied ..2 rather unsatisfied ..3 very unsatisfied ..4 I don't know ..5	
D 19	Have you received any customer complaints in the past 6 months? If yes, how many?	Yes ..1 Number:_____ No ..0	
D 20	[CROSSCHECK WITH E1] Do you provide training services?	yes ..1 no ..0	if no skip to 23
D 21	What kind of trainings do you offer	Management ..1 Marketing ..2 Accounting ..3 Quality ..4 Productivity ..5 Technical skills ..6 Group Leadership ..7 other (specify): _____ _____ ..8	
D 22	What are the prices for a 1-day training per person, on average?	Management - Price: _____ Marketing - Price: _____ Accounting - Price:_____ Quality - Price: _____ Productivity - Price: _____ Technical skills - Price: _____ Leadership T. - Price: _____ other (specify): Price: _____	
D 23	[CROSSCHECK WITH E1] Do you provide banking or financial services?	yes ..1 no ..0	if no skip to 28

SERVICE PROVIDER SURVEY

D 24	What kind of financial services do you provide?	saving ..1 credit ..2 insurance ..3 other (specify):_____ _____ ..4	
D 25	What interest rate to you charge for loans [specify amount and conditions for better comparability]?	_____% p.a.	
D 26	What other fees do you charge? Specify		
D 27	How many loans do you are currently outstanding? What is the total volume of loans outstanding?	Number:_____ Volume:_____	
D 28	Are you planning to offer new services that are accustomed to the needs of the cluster producers?	certainly yes ..1 probably yes ..2 probably not ..3 certainly not ..4 I don't know ..5	if 3, 4 or 5 skip to END
D 29	What kind of services are you planning to offer? Describe briefly.		
D 30	Are you planning to involve cluster stakeholders in designing suitable serices?	yes ..1 no ..0	if 1 skip to END
D 31	Why not?		
D 32	Is there anything else you would like to add or ask us?		

SERVICE PROVIDERS - WHO AND WHAT

Use this tool to take a snap-shot of provision of and demand for services within the cluster and track availability of and access to services over time

Instructions:

1. In each worksheet, list the services available in the cluster and the providers offering each particular service.

2. Service provision can be looked from three different angles:

a. Scale: Number of clients accessing a specific service from a specific service providers. Clients are disaggregated by type of stakeholder (producer, supplier etc.) (worksheet #1: scale)

b. Frequency: The demand for / consumption of particular services within a specified time period, disaggregated by type of stakeholder (worksheet #2: frequency)

c. Value: The aggregate value of particular services rendered within a specified time period, disaggregated by type of stakeholder (worksheet #3: value)

If data is collected in regular intervals, it can provide a detailed picture of the development of service provision within the cluster.

SERVICE PROVIDERS - Number of actors accessing specific service

Service Providers \ Clients		Producers	Suppliers	Traders	Workers	Other	TOTAL
Banking	Opportunity International						0
	Grameen Bank						0
	Accion						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
Management Training	Provider # 1						0
	Provider # 2						0
	Provider # 3						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
Certification	Provider # 1						0
	Provider # 2						0
	Provider # 3						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0

SERVICE PROVIDERS - Number of times service provided in past 6 months

Service Providers \ Clients		Producers	Suppliers	Traders	Workers	Other	TOTAL
Banking	Opportunity International						0
	Grameen Bank						0
	Accion						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
Management Training	Provider # 1						0
	Provider # 2						0
	Provider # 3						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
Certification	Provider # 1						0
	Provider # 2						0
	Provider # 3						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0

SERVICE PROVIDERS - Value of services provided in past 6 months

Service Providers \ Clients		Producers	Suppliers	Traders	Workers	Other	TOTAL
Banking	Opportunity International						0
	Grameen Bank						0
	Accion						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
Management Training	Provider # 1						0
	Provider # 2						0
	Provider # 3						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
Certification	Provider # 1						0
	Provider # 2						0
	Provider # 3						0
	Provider # 4						0
	SUBTOTAL	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0

Printed in Austria
V.12-54639—December 2012—100

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, Internet: www.unido.org