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Skills for
Trade and
Economic
Diversification

►STED►

STED Results
Based Management
and M&E Manual

Manual

►STED►

STED Results Based Management and M&E Manual

2016

Foreword

The Skills for Trade and Economic Diversification (STED) programme provides guidance for the integration of skills development in sectoral policies. It is designed to support growth and decent employment creation in sectors that have the potential to increase exports and contribute to economic diversification. STED takes a forward-looking perspective, anticipating a sector's development and growth opportunities based on its global competitive position and market development. Together with an analysis of current skills supply and demand, this provides an outlook of existing and future skills shortages. Thus, STED supports the formation of skills for which there is demand in the labour market and helps to avoid skills mismatches.

STED-based projects incorporate technical work, dialogue between stakeholders and collaboration between the ILO team and stakeholders. A typical STED-based project in a country focuses on one or two sectors involved in international trade.

The immediate outcomes of the STED analytic process are concrete recommendations at the policy, institutional and enterprise levels for each sector targeted. The process involved in designing those recommendations itself contributes to improvements on the ground by raising awareness and stimulating dialogue on skills development among key stakeholders within a sector. The STED programme provides a framework for partnerships with labour ministries, trade ministries, TVET institutions, employers' organizations and trade unions and other institutional partners to bring their individual perspectives and information together in order to build coherence between trade and development policies and skills systems, and to anticipate and prepare for emerging skill needs in targeted sectors.

STED-based projects also typically seek to develop capacity among partners and stakeholders to do STED-type work themselves.

A Full Cycle STED project continues beyond forming an analysis and recommendations into implementation, through a combination of: direct action on recommendations in varying degrees of collaboration with sectoral and national stakeholders; actions in support of stakeholders implementing recommendations themselves; and seeking to involve other actors, including other ILO projects and other development partners and donors, in implementation.

The STED programme has developed a Results Based Management (RBM) and Monitoring and Evaluation (M&E) framework and system in order to articulate clearly the theory of change, map out the development logic explicitly, increase the rigour with which each step in the causal chain can be measured, focusing on aspects such as data availability, social dialogue, implementation of recommendations and how that implementation is consistent with desired outcomes, objectives and impact.

Development of these frameworks has focused on articulating the causal linkages between actions to promote suitable training/education, actual training/education delivered, trade (and related measurable outcomes), focusing on the intermediate objectives and trade and employment impacts. The framework is based on the Donor Committee for Enterprise Development (DCED) standards, which provide a practical means to link development interventions targeted on strengthening enterprise to systemic change and impact. DCED is structured around results chains that map the development logic in detail, and the STED RBM and M&E framework takes these as its core.

This manual provides an overview of the STED RBM and M&E system, and guidance on its application. The manual serves as a guide for programme implementation and results-based management. It also serves as a communication tool that supports STED and other ILO staff, national and sector stakeholders, collaborating experts, donors and other development partners in understanding how a STED-based project expects to make an impact, intends to measure progress towards results, and plans to monitor progress.

The document provides an overall concept of the STED RBM and M&E system and outlines its conceptual and methodological building blocks The final part of this manual consists of a series of annexes that provide specific guidelines on constructing results chains, on preparation of intervention measurement guides, on how to conduct impact assessment and for what purpose, and other documents that are used in day-to-day implementation of the system. This manual is produced as a living and evolving document to be revised and updated with feedback and discussions as the STED programme progresses.

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Contents

Acknowledgements

Acronyms and abbreviations

CIDA	Canadian International Development Agency
DCED	Donor Committee for Enterprise Development
DCIGM	Development Cooperation Internal Governance Manual
DFID	UK Department for International Development
HR	Human Resource
ILO	International Labour Organization
M&E	Monitoring and Evaluation
MG	Measurement Guide
MGS	Measurement Guide Spreadsheet
MP	Measurement Plan
RBM	Result-Based Management
RC	Results Chain
SD	Skills Development
SDC	Swiss Agency Development for Development and Cooperation
SDG	Sustainable Development Goal
SIDA	Swedish International Development Cooperation Agency
STED	Skills for Trade and Economic Diversification
TVET	Technical and Vocational Education and Training
UN	United Nations
WIL	Work Integrated Learning

EXECUTIVE SUMMARY

The aim of the Results Based Management and M&E manual is to standardize the methods and formats for collecting, analysing and reporting data on results in the Skills for Trade and Economic Diversification (STED), and using this as a basis for monitoring, learning and decision making throughout the process, and as an input into evaluation. The manual also reflects the STED programme's commitment to complying with the International Labour Organization (ILO) project cycle, also with aspects of the Donor Committee for Enterprise Development (DCED) Standard on Measuring and Reporting Results. It is expected that there will be updates, revisions and additions to this manual as both STED and international best practice in results measurement continue to develop.

The STED Monitoring and RBM System consists of several elements: a mandate and logframe that sets out its goals and objectives, processes and methods that monitor implementation, reports that document what happened and why, and people trained in the application of the core processes and guidelines to set operational performance standards.

Planning → Implementing → Learning → Decision-making → Revising → Maximising → Communicating

The purpose of the system is to provide reliable and timely information so that project management at all levels of decision-making can transparently assess "what worked and what did not and why". Through this feedback better decisions will be made and resources will be allocated more efficiently.

1. INTRODUCTION

1.1 Purpose and structure of the Results Based Management and M&E Manual

This manual provides an overview of the STED results based management (RBM) and monitoring and evaluation (M&E) system and guidance on its application. It explains how and what will be: (i) monitored for STED interventions and the programme as a whole, to determine whether they are on track in achieving their intended results; and (ii) measured to estimate the impact and determine the effectiveness and sustainability of interventions.

The manual serves as a guide for programme implementation and RBM, and also as a communication tool that allows STED and other ILO staff, national and sector stakeholders, collaborating experts, donors, and other development partners to understand how the programme's objectives and targets will be measured.

This document provides an overall concept for a RBM and M&E framework for STED. The paper outlines the conceptual and methodological building blocks of how the STED programme intends to measure progress toward results and the associated monitoring activities that the programme will undertake in collaboration with its partner agencies.

The final part of this manual consists of a series of annexes that provide specific guidelines on constructing results chains, the preparation of intervention measurement guides, how to conduct impact assessment and for what purpose, and other documents that are used in the day-to-day implementation of the system.

The manual is structured as follows:

■ The remainder of this section and the following two sections set out the purpose and scope of the STED RBM and M&E System and the basis upon which it has been developed.
■ Section 4 summarises the RBM and M&E process and tools.
■ Sections 5 and 6 provide specific guidance on analytic and intervention monitoring.
■ A series of annexes provides more detailed guidance and templates.

STED RBM and M&E guidance notes:

■ Annex 1 – STED Analytic Phase Measurement Guide (MG – STED Analytic Phase).

- Annex 2 – STED-Guided Intervention Measurement Guide (MG – STED-Guided Intervention).
- Annex 3 – Guide to Developing Results Chains (STED Analytic process, STED-Guided intervention and STED Sector results chains).
- Annex 4 – Guide to measuring impact.
- Annex 5 – Guide to measuring systemic change.

STED RBM and M&E templates:
- Annex 6 – Measurement Guide Spreadsheets (MGS) - STED Analytic Phase, STED-Guided Intervention and STED Sector.

1.2 Purpose and scope of the STED RBM and M&E System

The STED RBM and M&E System has been designed to provide a consistent framework for capturing and reporting results and to ensure a coherent approach to measuring results across the programme. The purpose of the system is to deliver reliable and timely information so that programme management at all levels of decision-making can transparently assess what is working, what is not and why. Better decisions will be made and resources will be allocated more efficiently through this feedback. The RBM and M&E System will also play an accountability function in providing the information required to demonstrate the impact of STED investments.

The design of the RBM and M&E system has been based on:
- Approaches developed and lessons learned during STED implementation in a number of countries.
- Change in focus in STED, with a stronger emphasis on measuring results and ensuring mainstream systemic change linked to STED interventions.
- Best practice in measuring results for similar programmes – including introducing some elements[1] of the DCED Standard[2].
- Principles for measuring results in complex systems, particularly related to influencing and measuring mainstream change.
- Validation workshop with the STED team, other key ILO staff and experts, and independent experts from outside ILO.

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[1] The STED Programme does not intend its projects to be audited under DCED, but follows and applies some elements and control points from the Standard. The STED Programme focuses more on elements 1,2,3,4 and 5 elements of the DCED standard, and less on 6, 7 and 8.

[2] http://www.enterprise-development.org/page/measuring-and-reporting-results

1.3 Basis for STED RBM and M&E system

The system has been developed to achieve the following objectives:

- **Integrated:** The **RBM and M&E system** will be integrated into the STED project management system.
- **Consistent:** The RBM and M&E system and core indicators of success are standardized across the countries implementing STED to enable consistency and aggregation. The system will be coordinated by each country supported by the technical backstopping team, which will provide training and ongoing oversight and support to country and project offices.
- **Tailored:** Whilst the overall system has been standardized, it has been designed so that detailed results measurement approaches can be tailored to specific interventions, sectors and countries.
- **Adaptive:** The RBM and M&E system and intervention indicators have been designed to adapt to the evolving nature of STED-guided interventions and the programme as a whole.
- **Systemic:** Results measurement will go beyond firms, trainees and workers or entrepreneurs that are direct recipients of STED support, to assess wider changes in systems and impact on these systems as a whole, to the extent possible.
- **Results based management:** Results are central to planning, implementation, monitoring, evaluation, learning, reporting and ongoing decision-making.

2. WHY RESULTS-BASED MANAGEMENT?

Particularly since the Paris Declaration on Aid Effectiveness in 2005, the development assistance community has been called upon to be more accountable for measuring the results of its development projects. The major funding agencies are asking for attributable impact rather than just an assessment of what happened and a few success stories. Agencies such as SIDA, UN, ILO, SDC, DFID, CIDA and others are placing a strong emphasis on knowing "what works and what doesn't and why".

A focus on results and a solid RBM system means that 'results' are central to planning, implementation, monitoring and evaluation, reporting and ongoing decision-making. By focusing on 'results' rather than 'activities', RBM helps programmes to better articulate their vision and support for expected results and to better monitor progress using indicators, targets and baselines. Results- based reports also help the organization(s) and stakeholders to better understand the impact that a given programme or project is having on the local population.

Increasingly, results assessment is being seen as an internal management process rather than an external event conducted by consultants. For this reason it is essential that project management becomes more familiar with: a) how impact assessment can be incorporated into a project's design architecture; and b) how verification of impact can be used as a means for identifying the most important drivers of impact during a project's life cycle. By doing this, resources can be allocated and reallocated to those development interventions that are yielding the best results. All of this reinforces the need for a results based management approach to designing, delivering and measuring interventions.

2.1 RBM across ILO project cycle

Consistent with this, the ILO has recently issued a new Development Cooperation Internal Governance Manual (DCIGM) (2015) which puts strong emphasis on results and impact throughout. This current STED RBM and M&E manual is intended to be consistent with the DCIGM, and should be read in parallel. The current manual can be considered as providing practical guidance in the implementation of the DCIGM in STED-based projects.

Figure 1, taken from the DCIGM, sets out the ILO's technical cooperation project cycle.

STED RBM and M&E Manual

Figure 1. ILO Technical Cooperation Project Cycle

The ILO's extra-budgetary technical cooperation project cycle
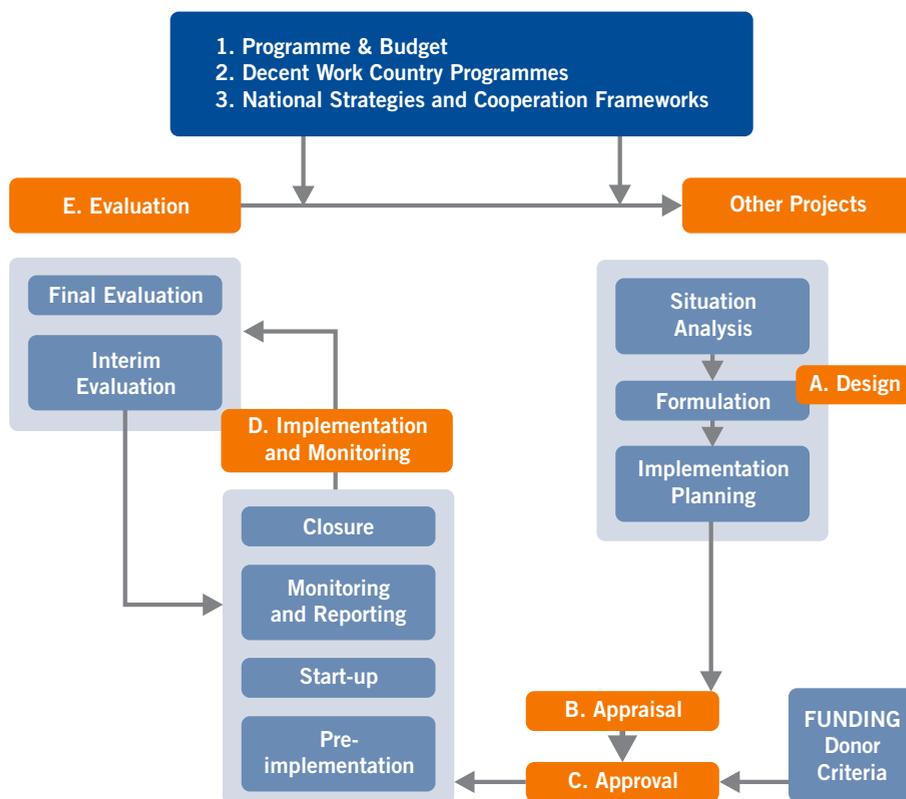
Source: ILO Development Cooperation Internal Governance Manual, 2015.

RBM and monitoring cut across all these project cycle phases in STED, as in other types of ILO projects. RBM focuses on performance and achievement of results at each level. Monitoring tracks whether results have occurred. The approach focuses on results (i.e., activities, outputs, outcomes), and learning, and adapting, as well as reporting performance at every stage.

RBM ensures that ILO technical cooperation projects contribute to the ILO's Programme and Budget and Decent Work Country Programme strategies and objectives, and to national strategies and cooperation frameworks. Project logframe indicators and measurement frameworks for STED-based projects are designed to be in line, not just with the STED RBM and M&E framework, but also with national strategies and cooperation frameworks, the ILO's Programme and Budget (P&B) and the ILO's Country Programme Objectives (CPOs), as presented in Figure 2.

Figure 2. STED within ILO RBM and M&E
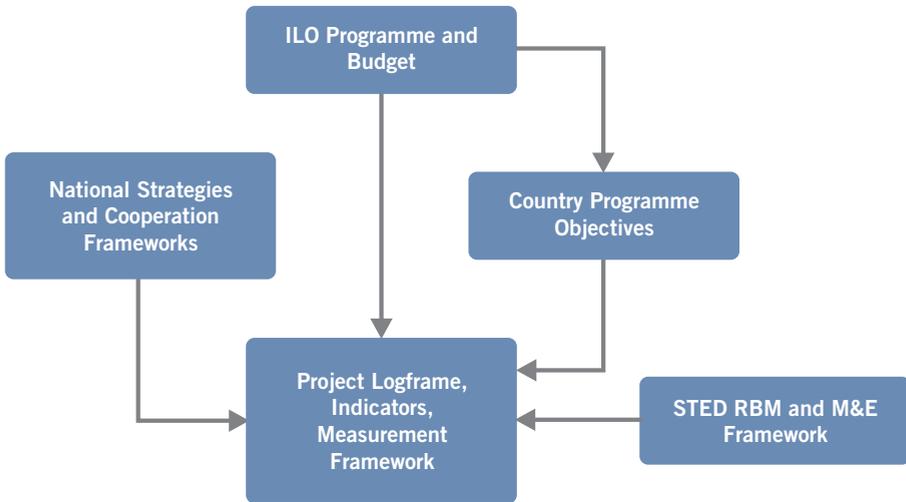
2.2 Use of the DCED Standard

The STED Programme chooses to use some key elements and control points of the Donor Committee for Enterprise Development (DCED) Standard[3] to underpin its RBM and M&E system. Element 1 – Articulating Results chains; Element 2 – Defining Indicators of change; Element 3 – Measuring changes in indicators; Element 4 – Estimating attributable changes; or Element 5 – Capturing wider changes in the system are followed; and Element 6 – Tracking programme costs; and to a lesser extent Element 7 – Reporting results and Element 8 – Managing the System for Results measurement. (See Figure 3 DCED Standard elements).

[3] www.enterprise-development.org.

Figure 3. DCED Standard elements

1 Articulating the results chain	2 Defining indicators of change	5 Capturing wider changes in the system	6 Tracking costs
3 Measuring changes in indicators	4 Estimating attributable changes	7 Reporting results	8 Managing the system for results measurement
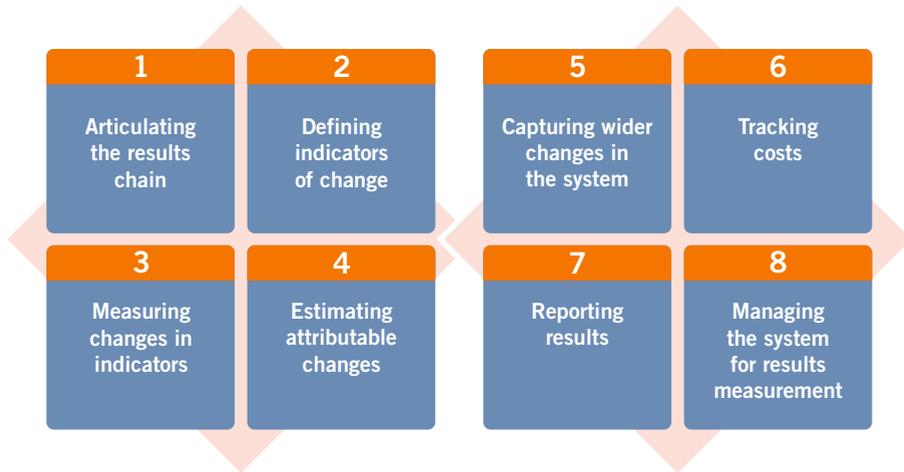
The DCED Standard is a practical framework for private sector development programmes to monitor progress towards their objectives. It comprises eight elements which are required for a credible results measurement process.

The DCED Standard[4] promotes a pragmatic approach to results measurement. It calls on programmes to measure results to a level that is complex enough to be credible, yet simple enough to be practical.

2.3 STED in line with Sustainable Development Goals (SDGs)

STED-based projects are primarily intended to contribute to SD Goal number 8 and a number of its targets:
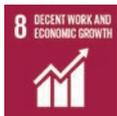
Goal #8: Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all

Target # **8.2**: Achieve higher levels of economic activity through diversification, technical upgrading and innovation, including through a focus on high value added and labour intensive sectors.

Target # **8.3:** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and

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4   The STED Programme follows some principles of the DCED Standard but does not require its M&E system to be audited.

encourage the formalization and growth of micro, small and medium-sized enterprises, including through access to financial services.

Target # **8.5**: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

In addition to supporting achievement of Goal 8, STED-based projects also aim to support the achievement of other goals, especially:

- *Goal 1*: End poverty in all its forms everywhere[5]
- *Goal 2*: End hunger, achieve food security and improved nutrition and promote sustainable agriculture[6]
- *Goal 3*: Ensure healthy lives and promote well-being for all ages[7]
- *Goal 4*: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- *Goal 5*: Achieve gender equality and empower all women and girls[8]
- *Goal 9*: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation[9]
- *Goal 12*: Ensure sustainable consumption and production patterns[10]
- *Goal 16*: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels[11]
- *Goal 17*: Strengthen the means of implementation and revitalize the global partnership for sustainable development[12.]

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[5] The intention of the STED programme is to strengthen participation in trade, with benefits for the number and quality of employment opportunities, directly in the sector targeted, indirectly in supplier sectors, and induced in other sectors through consumer spending of those employed directly and indirectly.

[6] Primarily where a STED-based project targets the agriculture or agro-food sectors.

[7] Particularly through training that encompasses work health and safety.

[8] STED-based projects aim to ensure that trade benefits employment and learning opportunities for women.

[9] STED-based projects aim to foster sustainable industrialization, industrial diversification, integration into value chains, value addition and provide the skills underpinning for industrial innovation.

[10] STED-based projects primarily contribute to this through aiming to enhance skills needed to improve productivity, reduce waste and manage for sustainability.

[11] STED-based projects primarily contribute to this through strengthening inclusive national and sectoral institutions to govern the planning and delivery of skills development.

[12] STED-based projects contribute to this through contributing to the development of an equitable multilateral trading system (focusing particularly on workforce skills), and through developing multi-stakeholder partnerships focused on learning and innovation capacity building.

3. HOW STED PROGRAMME WORKS

A STED-based project usually has two main phases: the STED Analytic Phase; and the STED Implementation Phase. The STED Implementation Phase seeks to implement and motive a programme of action based on the recommendations of the analytic phase.

In some cases, STED-based projects are designed to terminate after the analytic phase, but the usual aim is to continue into implementation, both so as to ensure directly that key recommendations are implemented, and so as to provide a platform for continuing to promote implementation by national and sector stakeholders, and for attracting supportive interventions by other development partners.

STED is designed for sectors that have potential to make substantial contributions to export development and economic diversification, or the need to improve competitiveness in the face of foreign competition. STED-based projects start by consulting with ILO constituents and other relevant stakeholders on the value that the project can bring, on the stakeholders that should be involved, and on which sectors should be the focus of the intervention. Based on the consultation and on technical analysis of the potential sectors, the ILO team agrees with national stakeholders on which sector or sectors should be selected.

Based on a range of research, combined with social dialogue and strategic analysis, the STED analytic phase produces a report on the strategic priorities for skills development in each targeted sector. These include practical recommendations, developed in collaboration with stakeholders. Throughout the process, the ILO team works in close collaboration with stakeholders through steering committees (national and/or sector), or through other mechanisms suited to the country and sector context. The project aims to develop or enhance a partnership-based approach to bringing coherence to skills planning and development for the targeted sectors, and to develop institutional mechanisms to support this. It also seeks to develop capacity in skills needs analysis and planning among relevant institutions including relevant ministries and agencies, sector bodies, employers and their organizations, workers' organizations and providers of education and training.

Implementation is guided by the report's recommendations. Close collaboration with stakeholders continues, and is crucially important for successful impact.

Figure 4. STED process chain
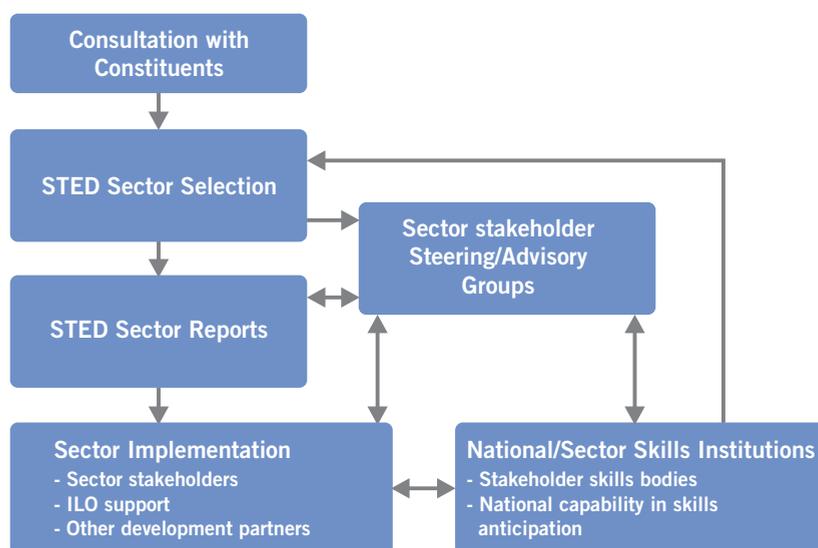
3.1 STED analytic phase

The analytic phase first focuses on identifying sectors where STED can have the most positive impact. STED focuses on sectors involved in, or exposed to, international trade, and usually focuses on exporting sectors with potential to increase exports and/or add more value to exports. Priorities in choosing between tradable sectors include the potential for skills to impact positively on trade, the potential for increased participation in trade to increase good quality employment for women and men and boost productivity, and the extent to which a STED-based project working with a sector can contribute to national development priorities.

Once one or more sectors have been selected, the STED analytic phase undertakes a range of research and consultation. The research typically includes desk research, surveys, stakeholder interviews, and investigation of the existing skills supply. The analysis is wide-ranging, focusing on a trade and business priorities, and developing a vision for the future. It identifies the constraints that skills place on achieving that vision, and presents an analysis and recommendations on skills needs based on this wider strategic context. This vision and the constraints to be addressed are then reflected in the sector results chain.

The initial findings are discussed with stakeholders. A detailed report on each targeted sector is prepared based on the analysis and consultations. The analysis is structured following the STED analytic framework as set out in Figure 5.

Figure 5. STED analytic framework
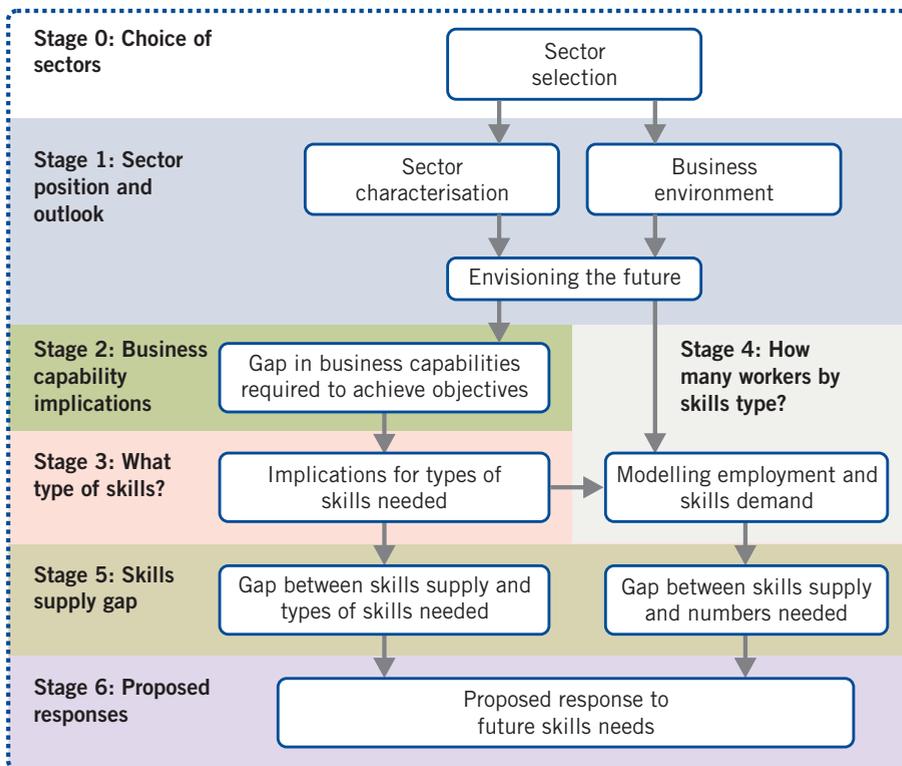
3.2 STED implementation phase

STED reports typically make a range of different types of recommendation on skills development, which can include, for example: development and piloting of skills standards; development and piloting of new curricula; initiatives to improve the relevance or quality of higher education courses; developing new sector skills institutions such as sector skills councils; providing training in areas such as human resource management or export marketing; improving the capability of businesses to provide for their own training needs; building the capacity of education and training institutions or developing the capacity of national and sector institutions and stakeholders on skills policy and planning.

The STED implementation phase is concerned with developing results chains for these interventions, guiding implementation, getting pilots implemented, and having successful pilots mainstreamed. Implementation activities ideally include a combination of action by stakeholders themselves, action under the project or by other ILO projects, and implementation involving other development partners. Successful implementation of any activity typically requires collaboration amongst a range of partners.

3.3 The STED Pathway: from analytic phase and sector results chain to guided interventions results chains

Analytic phase analysis informs the development of **sector results chains**. These sector results chains will then guide the development of **interventions** and their results chain; The implementation of these interventions and results achieved will feed back into **sector results chains** to show if and how interventions results impacted on sector level changes, or not, and if STED is closer to achieving its vision of the sector. Figure 6 presents the STED Pathway from analytic phase and sector results chain to STED-guided interventions.

It describes specifically how skills constraints identified in the STED report inform and become the basis for developing the **sector results chain**. The sector results chain depicts how, by addressing these multiple constraints, growth in the sector can occur, with benefits in terms of exports, additional employment and/or decent jobs created for women and men. If interest exists and funds are made available, the STED Programme, its partners or other interested funders move into addressing some (or all) of the constraints by creating and pioneering new practices that can showcase these more innovative approaches. STED-guided interventions are developed with relevant and detailed **intervention results chains** that show how, by addressing constraint(s), changes in sectors and systemic change can occur.

Figure 6. Pathway for STED programme implementation: from analytic phase to sector results chain and guided interventions

[14] P: Month and Year   A:
Increased employment in the sector direct (from interventions and indirect (sector overall)
Indicators: Employment (new jobs, better jobs); (check what is available from NS Office for sector: interventions: Establishment survey done by NSO - Labour force survey; Companies-structured questionnaire about employment--M/F, FT and PT seasonal. employment outcomes; progress decent jobs (labour turnover, decent wages (decent decided by staff - intervention/sector specific; perception)
P: # ; perception decent job explain, #
A:

[15] P: Month and Year   A:
Increase in exports
Indicators: value of exports; # companies: diversity of products exported
P: $; # and type of products
A:

[16] P: Month and Year   A:
Stabilisation of domestic market share
Indicators: trends in domestic market share (share of domestic market held by domestic firms); perception if they are gaining using domestic market by an excess in demand. Note: more likely perception of what's happening across; from sector level organisations etc.
P: %; perception index
A:

[11] P: Month and Year   A:
Skills Development system improvement
Indicators: growth in provision of skill in relevant areas; improvement in relevance (quality and relevance); quality and number of **Training Institutions; perceptions**
P:
A:

[12] P: Month and Year   A:
Sufficient (supply of) good quality skills in the sector
Indicators: vacancies as % employment; satisfaction of businesses with quantitative supply; and quality of supply
P: %; satisfaction index; quality index

[13b] P: Month and Year   A:
Companies perform better
Indicators: # companies performing better (profitability/margins, labour productivity); labour productivity by value
P: #; $
A:

[13a] P: Month and Year   A:
Companies improve business capabilities
Indicators: company perception on improvements; change in etc (e.g. ...unit labour productivity - output/hour worked (unit of labour), investment in training building on the skills -
P: perception index; %
A:

[11.1] P: Month and Year
Improve Training Institutions, capabilities to respond and meet the needs/"demand" of the sector
Indicators: Perception; training provision index; capability index
P: perception; index (TBD)
A:

[11.2] P: Month and Year
Improve Training provision at the company level
Indicators: Perception; training provision index
P: perception; index (TBD)
A:

[5] P: Month and Year
Business capability gaps: Operating efficiency
Indicators: company perception on improvements; change in unit labour productivity - output/hour worked (unit of labour)
P: perception index; %
A:

[6] P: Month and Year
Business capability gaps: Operating quality and compliance
Indicators: peception; % compliant with standards, waste measurement
P: perception index (TBD); %; tbd
A:

[7] P: Month and Year
Business capability gaps: Marketing and other downstream oriented functions (working with downstream partners in the value chain)
Indicators: peception; scorecard composed of e.g.: new markets entered; expand in existing markets etc.
P: perception index; scorecard (to be defined)
A:

[8] P: Month and Year   A:
Business capability gaps: Innovation/product and process development and improvement
Indicators: percentage of sales from products improved in the last 2 years; # improved processes introduced;
P: %; #
A:

[9] P: Month and Year   A:
Business capability gaps: Supply chain and sourcing
Indicators: % non compliance with requirement for inputs
P: %
A:

[10] P: Month and Year   A:
Business capability gaps: Compliance Management
Indicators: # standards that each business complies with
P: #
A:

[11.1.1] Higher education
[11.1.2] TVET Colleges
[11.1.3] Other providers or education and training specialists
[11.1.4] Professional institutions

[11.2.1] Apprenticeships
[11.2.2] On the job training

[1] P: Month and Year   A:
Priority skill gaps # 1 area
Indicators: # priority skills
P: #
A:

[2] P: Month and Year   A:
Priority skill gaps # 2 area
Indicators: # priority skills
P: #
A:

[3] P: Month and Year   A:
Priority skill gaps # 3 area
Indicators: # priority skills
P: #
A:

[4] P: Month and Year   A:
Priority skill gaps # 4 area
Indicators: # priority skills
P: #
A:

...[n] P: Month and Year   A:
Priority skill gaps # 1 area
Indicators: # priority skills
P: #
A:

[0] STED Report recommendations

Sector change (growth)

Business capability gaps addressed

Skills development system change

Guided interventions implemented

Priority skill gaps/constraints in the sector

Sector impact — Mainstreaming of transformational and/ incremental system change — Transition — Pilot
Phase 4 — Phase 3 — Phase 2 — Pase 1

Sector Results Chain

Intervention 1 Results chain — *Intervention 2 Results chain* — *Intervention 3 Results chain*

RECOMMENDATIONS and VISION FOR THE SECTOR

STED Guided Interventions Phase

CONSTRAINTS IDENTIFIED

STED Analytic Phase

Figure 6. Pathway for STED programme implementation: from analytic phase to sector results chain and guided interventions

4. RBM and M&E PROCESS AND TOOLS

4.1 STED logic

The programme results framework derives its priorities from the programme logic. The logic, that is usually part of a programme design document, summarises the basic causal steps that lead from outputs to the achievement of the programme impacts. In the case of STED, the impact level, for example, captures the effect that STED interventions have on exports, economic diversification and ultimately on people through more and better jobs. Export related indicators, which capture improvements in the value and type of exports, could be part of this results framework. An employment indicator which captures both job creation and improved employment could be added too.

The STED logic is a high-level summary of the results framework for the programme and therefore hides the complexity and inter-linkages between interventions and different stages in the 'results chain'.

An example of possible programme logic is presented in the following figure.

Figure 7. Logic model of a possible STED-based project

STED RBM and M&E Manual
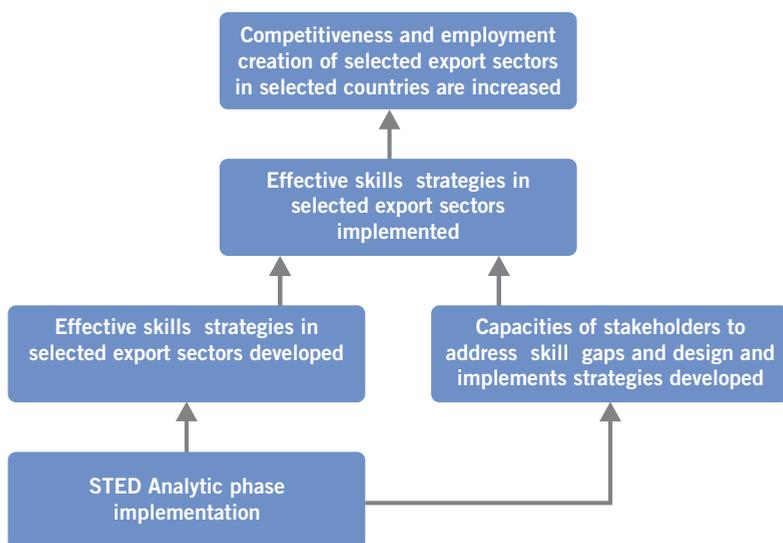
4.2 STED theory of change

A theory of change 'defines all building blocks required to bring about a given long-term goal'.[13] It enables us and others to understand our logic - why we believe our actions will lead to positive change and how. It tells the story of the changes that the programme aims to achieve, showing interconnections between them, and provides a platform to critically analyse this logic. It ultimately unfolds the programme logic in adding the dimension of "how"[14].

STED's overall theory of change, about how skills development will lead to enhanced competitiveness, export, economic diversification and job creation for women and men, is presented here.

A STED-based project improves the ability of policy-makers, industry and the skills development system to identify export-oriented sectors with growth potential, to then identify emerging skill needs in those industries, and to build up the capacity of training providers to meet them.

Through catalysing sustainable, large scale, skills development systems change and the way skills are provided to businesses, STED aims to improve competitiveness and support export enhancement and economic diversification in the selected sectors. Ultimately, future and existing employees will benefit from improved working conditions or treatment and from employment creation.

Could you provide us with a little more detail on step two?

STED's overall theory of change is about how interventions will effect changes in skills development systems that would lead to enhanced competitiveness, export and economic diversification of the sector, and ultimately more (decent) jobs.
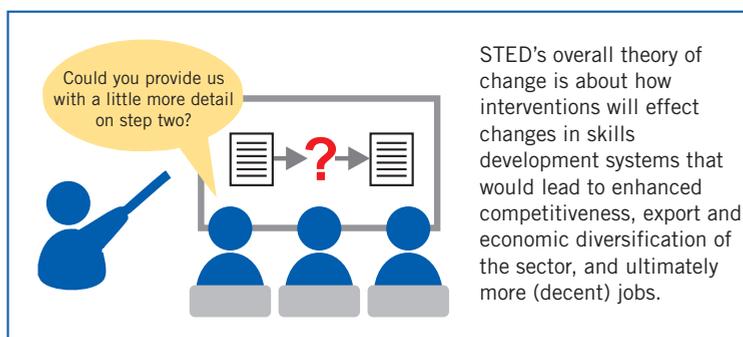
STED-based projects start with an analytic phase in which the project, in collaboration with stakeholders, prioritizes between tradable sectors for action, identifies emerging and existing skills needs with potential to constrain their development, and formulates an agreed strategy for action which is reflected in the STED report(s) on the targeted sectors. In itself, this builds institutional capacity to do similar work on skills anticipation and improving skills systems among relevant stakeholders in the

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[13] The Centre for Theory of Change (see https://www.theoryofchange.org/what-is-theory-of-change/)

[14] Theory of change could be part of the design document for a programme, or could be developed after by the team when project implementation starts.

country. It can also lay the groundwork for further developments such as establishing sector skills councils, and establishing or strengthening other skills-focused institutions, to strengthen governance and planning in skills systems. The capacity building can be supported by further capacity development work under the STED-based project.

Implementation of recommendations can take place either under the project itself – usually in collaboration with partners among stakeholders – or through mobilizing action external to the project, whether enabled by other ILO projects, other development partners, or by national and sector stakeholders acting independently of the development community. In general, direct implementation activities under STED-based projects are at the level of developing initiatives, piloting them and developing capacity. The direct impact anticipated at this stage is typically expected to be limited. The sector-wide impact that is the ultimate target of STED-based projects is expected to come from mainstream adoption of changes designed and piloted on the basis of STED recommendations.

After a pilot phase and the evaluation of the pilot, is the project will enable wider spread of innovations - mainstreaming - beyond the direct recipients of STED support – other skills development system players and (export) sector players taking up the innovations (diffusion of innovations).

This approach follows in part from the recognition that adoption of an innovation by one system player does not necessarily represent mainstream change. Diffusion of innovation in the system is what drives widespread change. However it also conveys the notion that the linear theory of change expressed in a logframe is but one possible pathway of change. The STED theory of change recognises that this type of change does not follow a specific order and is non-linear.

In terms of the specific process followed, initially, constituents in target countries gain practical experience in integrating skills anticipation and development in sector growth strategies, building up and using labour market information and strengthening national and sector institutions for social dialogue to link trade, employment and skills policies.

In terms of direct interventions, STED-based projects typically deliver: technical assistance to support innovations[15], resulting in the adoption of innovations; evaluation of innovations; dissemination of innovations; activities to improve the linkages between sector actors (e.g. brokering partnerships, facilitating events, etc.) to facilitate mainstreaming. Figure 8 provides a visual depiction of STED's theory of change.

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[15]   STED defines innovations broadly, to include e.g. practices that are not currently implemented in a country or sector, but which might exist elsewhere (e.g. HR management systems that are not new, but are currently not used in factories in Malawi).

Figure 8. STED theory of change
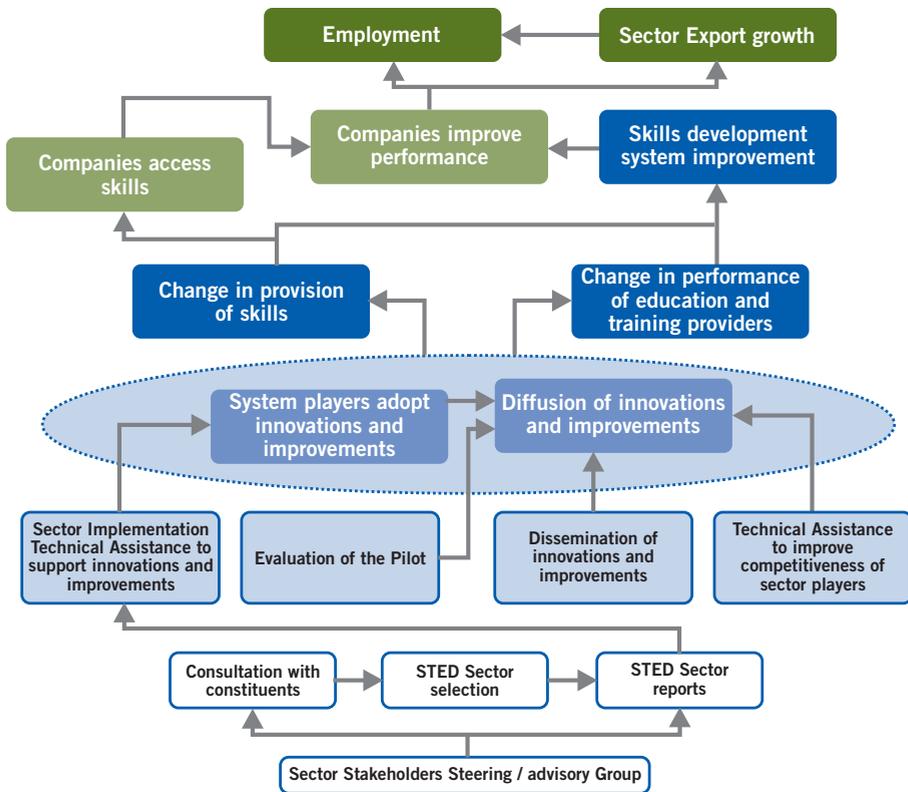
4.3 STED results chains

The basic logic of the programme is reflected in the smallest implementation unit of a STED-based project's operations, namely the intervention. Each intervention has the same logic as the overall STED logic but it is elaborated in more detailed "results chains," each of which has more specific indicators at each critical link of the logic.

The results chain is a tool that shows the causality of impact at different levels. For STED it shows how programme activities will influence skills development systems, how changes in these systems will affect enterprises, and how those changes in enterprises will ultimately contribute to sector growth.

Because this core logic is the same, it is then possible in principle for the STED-based project to add up its results both at the sector level and for the overall project.

4.4 Features of the STED RBM and M&E system

The STED RBM and M&E system has been developed around the measurement of change at five levels: STED global programme; country programme; sector; intervention; and analytic phase (Figure 9).

Figure 9. STED flow of logic chains
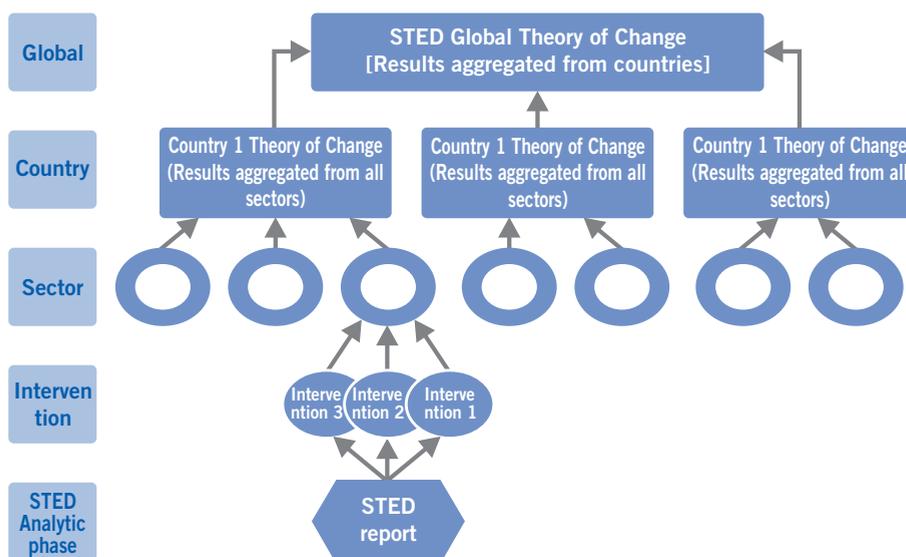
Specifically:

- **Global programme:** the overarching framework for STED with key indicators encompassed in an overarching logic and a newly developed theory of change.
- **Country programme:** the structure of the STED logic is mirrored at the country level.
- **Sector:** Results chains are developed as part of the sector strategies. The research conducted to feed into the STED report analysis will provide a baseline on the state of the sector(s) prior to STED intervention. A summary of the expected results to be achieved by the combination of STED interventions in a particular sector will be summarised in the sector results chain.
- **Intervention**: An intervention is defined by the DCED as "a coherent set of activities that are designed to achieve a specific system change, reflected in one results chain". It is likely to include a range of activities, which may include STED support to more than one stakeholder.

a. Activities are defined as discrete areas of STED-based projects, most likely the provision of technical assistance to potential training and economic sector partners.

b. Intervention results chains and associated measurement guides (MG) will be developed for every intervention, following a standardised template in Excel.

■ **Analytic phase:** The phase consists of a series of activities following the STED methodology[16] which will culminate with a STED report that leads to generation of intervention ideas. A STED analytic phase results chain and respective indicators are developed to monitor the progress of activities during this stage; they will also help assess success against pre-defined milestones, based on feedback from stakeholders involved in this phase – both through regular visits by STED staff and more formalised reporting and feedback processes.

4.5 Sector-level monitoring

This level incorporates a brief analysis of the sector: it starts during the STED analytic phase – and culminates with the development of the STED report. It includes:

■ Overview of sector focus and potential/rationale for STED to contribute to sustainable sector transformation through skills development.
■ Overview of each sector targeted:
  – Definition of the sector and export potential
  – Its importance to employment generation for men and women.
  – Analysis of sector from skills and skills development perspective, including interrelationships.
  – Business capability analysis with clear identification of key constraints on skills and their causes (see Table 1).
  – Understanding on how skills development leads to improved competitiveness.
  – Basic vision of change.

The sector analysis should also include a results chain that encompasses STED's 'change logic' for the sector. The sector-level results chain should show how different constraints (and interventions) fit together, and how the impact of multiple interventions that address these constraints can be more than the sum of their parts. An example of results chain for the sector is presented in Figure 10.

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16   STED is a practical methodology for sectoral skills anticipation.

Figure 10. STED sector results chain (an example)

Sector change (growth)

[14] **P: Month and Year   A:**
Increased employment in the sector direct (from interventions and indirect (sector overall)

Indicators: Employment (new jobs, better jobs); (check what is available from NS Office for sector: interventions: Establishment survey done by NSO - Labour force survey; Companies-structured questionnaire about employment--M/F, FT and PT seasonal. employment outcomes; progress decent jobs (labour turnover, decent wages (decent decided by staff - intervention/sector specific; perception)
P: # ; perception decent job explain, #
A:

[15] **P: Month and Year   A:**
Increase in export

Indicators: value of exports; # companies: diversity of products exported

P: $; # and type of products
A:

[16] **P: Month and Year   A:**
Stabilisation of domestic market share

Indicators: trends in domestic market share (share of domestic market held by domestic firms); perception if they are gaining using domestic market by an excess in demand. Note: more likely perception of what's happening across; from sector level organisations etc.
P: %; perception index
A:

Business capability gaps addressed

Skills development system change

[11] **P: Month and Year   A:**
Skills development system improvement

Indicators: growth in provision of skill in rilevant areas; improvement in relevance (quality and relevance); quality and number of **Training Institutions; perceptions**
P:
A:

[12] **P: Month and Year   A:**
Sufficient (supply of) good quality skills in the sector

Indicators: vacancies as % employment; satisfaction businesses with quantitative supply; and quality of supply
P: %; satisfaction index; quality index
A:

[13b] **P: Month and Year   A:**
Companies perform better

Indicators: # companies performing better (profitability/margins, labour productivity); labour productivity by value
P: #; $
A:

[13a] **P: Month and Year   A:**
Companies improve business capabilities

Indicators: company perception on improvements; change in indicators (e.g. ...unit labour productivity - output/hour worked (unit of labour), investment in training building on the skills -
P: perception index; %

[11.1] **P: Month and Year**
Improve Training Institutions capabilities to respond and meet the needs/"demand" of the sector

Indicators: Perception; training provision index; capability index
P: perception; index (TBD)
A:

[11.2] **P: Month and Year**
Improve Training provision at the company level

Indicators: Perception; training provision index

P: perception; index (TBD)
A:

[5] **P: Month and Year**
Business capability gaps: Operating efficiency

Indicators: company perception on improvements; change in unit labor productivity - output/hour worked (unit of labour), list of interventions implement that impact on this gap

P: perception index; %
A:

[6] **P: Month and Year**
Business capability gaps: Operating quality and compliance

Indicators: perception; % compliant with standards, waste measurement, list of interventions implement that impact on this gap

[7] **P: Month and Year**
Business capability gaps: Marketing and other downstream oriented functions (working with downstream partners in the value chain)
Indicators: perception; scorecard composed of e.g.: new markets entered; expand in existing markets etc, list of interventions implement that impact on this gap

[8] **P: Month and Year   A:**
Business capability gaps: Innovation/product and process development and improvement

Indicators: percentage of sales from products improved in the last 2 years; # improved processes introduced; list of interventions implement that impact on this gap

[9] **P: Month and Year   A:**
Business capability gaps: Supply chain and sourcing
Indicators: % non compliance with requirement for inputs, list of interventions implement that impact on this gap

P: %

[10] **P: Month and Year A:**
Business capability gaps: Compliance Management
Indicators: # standards that each business comply with, list of interventions implement that impact on this gap

P: #

[11.1.1] Higher education

[11.1.2] TVET Colleges

[11.1.3] Other providers or education and training specialists

[11.1.4] Professional institutions

[11.2.1] Apprenticeships

[11.2.2] On the job training

[1] **P: Month and Year   A:**
Priority skill gaps # 1 area
Indicators: list of specific gaps in this area
List of interventions planned
List of interventions implemented

[2] **P: Month and Year   A:**
Priority skill gaps # 2 area
Indicators: list of specific gaps in this area
List of interventions planned
List of interventions implemented

[3] **P: Month and Year   A:**
Priority skill gaps # 3 area
Indicators: list of specific gaps in this area
List of interventions planned
List of interventions implemented

[4] **P: Month and Year   A:**
Priority skill gaps # 4 area
Indicators: list of specific gaps in this area
List of interventions planned
List of interventions implemented:

...[n] **P: Month and Year   A:**
Priority skill gaps # 1 area
Indicators: list of specific gaps in this area
List of interventions planned
List of interventions implemented

Priority skill gaps / constraints in the sector

[0] STED Report recommendations

Figure 10. STED sector results chain (an example)

Table 1. Business capability analysis at core of STED

Business Capability Area	Examples of Linked Skills
Efficiency and effectiveness of operations	• Technical skills of machine operators, assemblers crafts, technicians … • Production management skills, including people management, engineering … • Core work skills of workers at all levels required for modern work organization and productivity improvement
Compliance with standards	• QA and compliance skills • Regulatory management skills • Laboratory scientist and technician skills
Marketing, sales, distribution	• Marketing skills, channel management skills • Sales management and sales skills
Innovation, design and product development	• Design engineers, scientists, designers • Marketers
Supply chain management and logistics	• Logistics management, logistics workers • Supply chain management
Development of value chain	• Modernization of farming skills (food processing)

This analysis also provides an important baseline for the 'state of the sector' at the start of the STED-based intervention.

Due to limitations in data availability and the complexity of sector analysis, the baseline in many cases could be primarily qualitative, drawing a picture of the key constraints of skills for sector growth, reasons underlying them, and impact of the skills development constraints on the export potential, economic diversification and employment for women and men. This baseline will be used as a basis for subsequent analysis of the changes that the STED-based project achieves at the sector level and the impact level changes that would result.

To the extent that is feasible, the STED programme will undertake periodic follow-up analysis (indicatively annually) to assess if changes such as improved competitiveness of the sector or increase in exports and employment have occurred and the contribution that STED work on skills development system has made to these changes (Figure 11. STED Development Logic). The logic shown in this figure is reflected in more detail in the sector results chain.

This should include analysis of key indicators of sector performance, the linkages to skills and, to the extent possible, the way in which this impacts on employment (by gender) and employees in the sector.

This analysis should assess the key factors that have driven observed changes and the contribution changes in the skills development system has made to it.

Figure 11. STED development logic
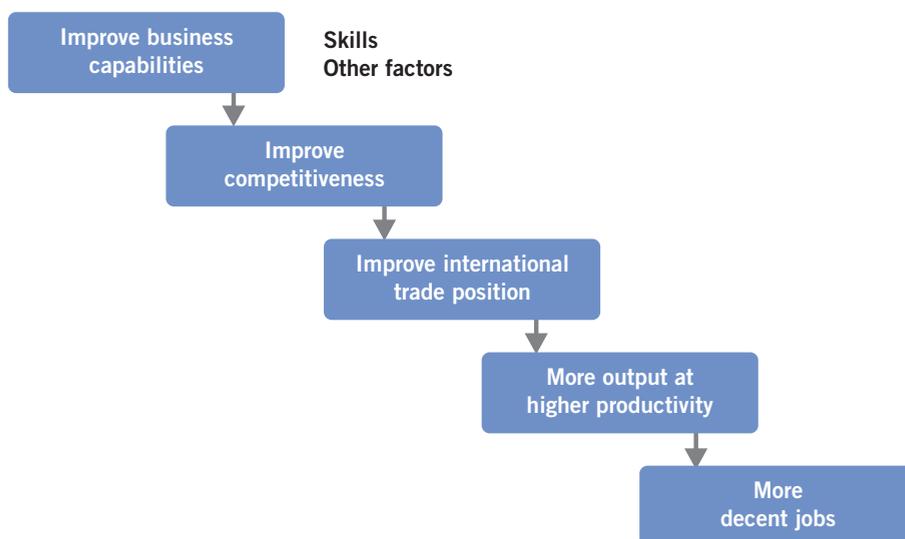
 This should be based on consultations with intervention stakeholders, the collation and strategic analysis of secondary data, and possibly through a follow-up survey of employers designed to assess firm-level impact. By combining this with an assessment and aggregation of the changes that individual STED interventions have achieved (through intervention-level monitoring – see Sections 4.6 and 4.7), it should be possible to assess the extent to which STED has achieved mainstream change.

4.6 Intervention-level monitoring

Intervention-level monitoring works alongside the process for intervention design and implementation. It follows six key steps:

- the development of a results chain that summarises the 'intervention logic';
- definition of indicators;
- establishment of a baseline;
- development of projections;
- regular measurement; and
- analysis and use of monitoring results.

Adjustments to intervention design should be reflected in an amended results chain. Further detail on each stage in this process is provided in Section 6.

STED-guided intervention and STED analytic phase design templates have been developed – the Measurement Guide Spreadsheets (MGS). MGSs provide a single document in which the intervention and results chains are summarised, and a

measurement plan is presented. Data collected will be consolidated into this MGS. Detailed guidance on using an MGS is provided in Annex 1 for the Analytic Phase and Annex 2 for STED-guided Interventions. The MGSs are illustrated in Annex 6.

4.7 Aggregating results at the sector, country and global levels

The RBM and M&E system will provide managers and stakeholders with an overall view of the STED programme's progress toward its objectives by aggregating impact, outcome and output data from all interventions and countries annually.

The aggregation will rely on the latest figures for each of the interventions and sector level data. Aggregated impact will be reported on an annual basis to the extent possible and also serve as the basis for an annual report which includes analysis of the sectors targeted and the main implementation strategies.

Most STED results will be measured at the intervention level and across sectors within a country. Hence, in reporting overall programme results, they have to be aggregated across interventions and sectors.

In aggregating results, the following factors will need to be taken into account which, if not dealt with carefully, may compromise the integrity of the results reported:

- Many indicators (in particular at the impact level) may be defined in different ways in different contexts. This may result in the aggregation of inconsistent units. It is therefore important that STED carefully defines impact indicators and applies these definitions consistently.
- By aggregating results from individual interventions, there is a risk that the impact of synergies between STED interventions are missed. Sector-level monitoring should aim to identify and measure such synergies.
- There is a risk of double counting between interventions – e.g. where trainees or businesses benefit from more than one STED intervention. Such overlaps could happen in the following ways:
  - **Organization/business** – when several interventions support the same organization.
  - **Beneficiary outreach** – when one particular trainee gets benefits through interventions from different sectors.

To address overlap, when aggregating data, STED will identify interventions that have overlaps and properly account for this. Intervention and sector results chains will help identify overlaps between interventions and illustrate the influence of external causal factors (including other STED interventions). The STED programme

will log the organizations that receive STED support, as well as the geographical spread of trainees, to identify overlaps. After identifying overlaps, results should be corrected following DCED guidance:

Table 2. Identification of overlaps and required adjustments

Outreach	Adjustment required
Overlap less than 5%	Add all beneficiaries (no corrections)
Overlap more than 95%	Account for only the largest number (so no 'adding' at all)
Overlap between 5 and 95%	Estimate each overlap(s) and show calculation
Income/jobs	**Adjustment required**
If attributable (isolated) impact per (cluster of) interventions	Add all beneficiaries
Pilot and upscale phase	**Adjustment required**
Upscale (phase 2) interventions probably overlap with pilot (phase 1) interventions if target beneficiaries are the same	
Outreach	Deduct 100% after completion of upscale intervention (achieved/projected).
Sales/export/jobs	"Freeze" impact of pilot intervention at the start of the 'upscale intervention'.

STED RBM and M&E Manual

4.8 RBM and M&E calendar and reporting for SIDA project (as example)

Table 3. RBM and M&E calendar

Process	Relevant document	Purpose	Audience	Frequency
Phase I: STED analytic phase				
STED analytic phase development and review	STED Analytic Phase Measurement Guide	A single document in which the STED Analytic phase and results chain are summarised, and a measurement plan is presented. Changes in assumptions, strategies are clearly outlined, based on STED's ongoing learning.	Internal	Developed at start of STED analytic phase. Updated quarterly during STED analytic phase review
	STED Sector Results Chain	STED sector analysis (STED report) will inform the basis for developing the sector results chain.	Internal	Developed at start of STED analytic phase. Updated quarterly during STED analytic phase review
STED analytic phase review	STED analytic phase review meeting notes	Outline and update process strategy, results chain, monitoring plans and results. Documentation of achievements, challenges, etc.	Internal	Quarterly
Quarterly reporting	Quarterly report	Update on key activities undertaken, work plan, revisions, results achieved, Management performance, updated risk assessment, and budget update.	Internal	Quarterly
Annual report	Technical progress report	Annual review of activities undertaken, work plan, revisions, results achieved, management performance, updated risk assessment, and budget update.	Donor	Annually
STED report	STED report(s)	Report on the sector analysis, skills needs and recommendations based on research and social dialogue.	Public	Once per sector

Process	Relevant document	Purpose	Audience	Frequency
Phase II: STED Report recommendations implementation (development and implementation of STED-guided interventions)				
Plan for STED intervention implementation	Implementation workplan	A detailed accounting of how STED or its partners proposes going about approaching the intervention. It could be a chart, Excel or Word document for example.	Internal	Developed at start of implementation phase and updated as required, minimum annually
STED Intervention strategy development and review	Measurement Guide Spreadsheets (MGSs) for 6 STED-guided interventions	A single document in which the intervention strategy and results chains are summarised, and a measurement plan is presented. Changes in assumptions, interventions and strategies are clearly outlined, based on STED's ongoing learning	Internal	Developed at start of intervention. Updated quarterly during intervention review
Intervention strategy review	Intervention strategy review meeting notes	Outline and update intervention strategy, results chain, monitoring plans & results. Documentation of achievements, challenges, etc.	Internal	Quarterly
Intervention impact assessment	Intervention impact assessment report	Assessment of impact of STED interventions, using a combination of quantitative and qualitative methods.	Internal	Baseline, midterm and end-term
Sector analysis and strategy	Sector analysis and strategy report	Assesses key trends taking place in the skills development system and its impact on the sector.	Internal	Annually
Quarterly reporting	Quarterly report	Update on key activities undertaken, work plan, revisions to programme portfolio, results achieved, management performance, updated risk assessment, and budget update.	Internal	Quarterly
Annual report	Technical progress report	Annual review of activities undertaken, work plan, revisions, results achieved, management performance, updated risk assessment, and budget update.	Donor	Annually

Process	Relevant document	Purpose	Audience	Frequency
Phase III: STED Programme development and knowledge sharing activities				
Framework for RBM and M&E developed	STED RBM and M&E Manual (including annexes)	A single document that offers a guide on how to design and implement STED RBM and M&E activities	Internal	During the first year of the project
STED Global and regional knowledge sharing event	Global and regional knowledge sharing workshop reports	Opportunity to share knowledge about whether skill gaps constrain export growth in sectors and to share experience on how to overcome such constraints	Internal	Twice: 2014 and 2017
Exchange of information	Informal exchanges of information	Periodic video calls or F3F meetings on key RBM topics and learning from the use of the RBM and M&E framework	Internal	When necessary
ILO-WTO joint research on trade and skills	1. Joint publication on trade and skills 2. Joint paper – "Investing in Skills for Trade and Inclusive Growth" – for G20 Trade Ministers' Meeting	The publications will aim to synthesize the country level practical experience accumulated through the STED programme, to bring together the research findings on the nexus of trade, and skills and draw lessons and policy conclusions.	Public	1. 2017 2. October 2015
Country research on trade and skills	Synthesis report	The report will provide background information on the impact of trade on employment, and its implications on skills demand and mismatch for the countries covered by the STED programme, including Cambodia, Myanmar, Malawi, Vietnam, Tunisia, Morocco, Ghana and Philippines.	Public	2017
Mid Term Internal Evaluation	Internal evaluation	Evaluation report prepared by the ILO and external consultants.	ILO management and ILO project staff, donor and stakeholders	2016
Evaluation report	Independent evaluation	Evaluation report prepared under the authority of ILO EVAL.	Donor and stakeholders	2017

5. STED ANALYTIC PHASE MONITORING

STED analytic phase monitoring follows the six standard steps for DECD monitoring shown below. However some of them are less applicable to this phase and more to the intervention implementation phase.

The process involves developing results chains, then setting indicators for each of the boxes in the results chain. It goes on with: establishing baselines for these indicators; making projections for these indicators; measuring results, collecting data and ensuring attribution of results; analysing results, and using these results for decision making to improve implementation.

Figure 12. Six steps of STED monitoring

STED RBM and M&E Manual

This section of the manual provides guidance on each of these steps. Further detailed guidance is provided in a series of annexes to this manual, which are referenced in the relevant parts of this section.

5.1 Develop results chains

A results chain describes the flow of activities and the cause and effect relationships that take place due to an intervention, ultimately leading to STED impact. In this case, for the STED analytic phase, it stops at the level of uptake of recommendations by stakeholders. The implementation phase is monitored at the STED-guided intervention level.

A results chain has been developed for the STED analytic phase, though country teams are encouraged to adapt it to each country context. This results chain provides the basis for analytic phase monitoring. It should be informed by discussions with partners, and where possible, with other stakeholders, although ultimately, the STED-based project should ensure that the results chain reflects its vision for the change that will be achieved (which may in some cases not be entirely consistent with that of organizations receiving STED support).

The results chain describes how STED activities are expected to lead, through a series of changes and consultations, to the development of a STED report and its recommendations and implementation plans, and further take-up of ideas for implementation by the ILO and/or other stakeholders.

Detailed guidance on the preparation of the results chain is provided in Annex 3.

5.2 Define indicators

After adapting and articulating the results chain, the next step is to identify indicators to measure the changes in each results chain box. For each results chain box, there should be one or more indicators to specify the expected changes that need to be measured. Then, indicators identified together with definition and/or calculation should be documented in the Indicator Tracker worksheet in the MGS-STED analytic phase.

Generally, good indicators should be SMART:

- **Specific:** Indicators must be clearly defined and specific to the changes described.
- **Measurable:** Indicators must be measurable either quantitatively or qualitatively.
- **Attainable:** Indicators must be realistic and attainable.
- **Relevant:** Indicators must be relevant to the changes in the results chain box.
- **Time-bound:** Indicators must be identified with a specific timeframe.

Where relevant, both quantitative and qualitative indicators should be specified. Quantitative indicators are often useful to measure to what extent changes are happening. Qualitative indicators are useful to explore the nature of changes: how and why (or why not) changes are taking place, as well as the sustainability of changes.

If the changes described in the results chain boxes are clearly defined, it will be easier to identify indicators. Hence, during the development of the result chains, it is important to make certain that descriptions of changes in the results chain boxes are clearly defined. Additional guidelines on how to define indicators can be seen in DCED guidelines on defining indicators of change[17].

5.3 Establish a baseline

Baseline is zero.

5.4 Project results

Programmes typically develop and regularly update projections of results. The DCED Standard for Results Measurement recommends that "anticipated impacts are realistically projected for key quantitative indicators to appropriate dates."

In the case of the STED analytic phase there are not many indicators where estimates can be calculated. Country teams should try to estimate only for upper level boxes, such as the number of interventions that could result from STED report (Box 22 of the STED Analytic Phase RC). This will only be a 'guess' at this stage - maybe using ILO experience from other countries.

Projections should be recorded in the Measurement Plan of the Measurement Guide Spreadsheet (MGS). It is important to explain the basis for the calculations made and, where relevant, check the projections with each organization supported. Indicators and projections should be revisited at least annually.

5.5 Measure changes

Once the indicators have been developed, the next step is to develop the measurement plan for collecting the data. The measurement plan should include:

- What information will be collected?
- Sources of information.
- When the information will be collected.
- How the information will be collected.
- What methods will be applied in measuring attributable change?

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[17]   http://www.enterprise-development.org/page/download?id=2132

- Who is responsible for collecting and analysing the information?
- Possible weaknesses and/or limitations in measurement.

Measurement plans should be documented in the MGS-STED analytic phase and serve as a reference point in planning data collection activities. Similar to the results chain, measurement plans should be reviewed quarterly since the changes made to results chains and implementation might also affect the measurement plan.

5.6 Use, analyse and report

The STED-based project should use the information gathered through the previous steps to assess progress with its STED analytic phase, update its understanding of sector dynamics, and review and revise its STED analytic phase accordingly. Formal processes for this are set out in the M&E calendar, including quarterly intervention reviews. These provide a regular meeting cycle to review information gathered to date, to analyse the findings and to apply them to STED analytic phase improvement. This process provides the basis for updating the strategy for the STED analytic phase.

The quarterly review should cover the following agenda:

Changes in operating environments

- Which factors in the broader environments have affected, or may affect, the STED analytic phase and its results?
- Are our initial analysis and assumptions still correct? How have they changed and why (because of more information or because sectors themselves have changed)?
- If we revise our assumptions, how this will affect the implementation and results?

Intervention design

- Are the objectives still achievable?
- Can we achieve the objectives with our existing activities?
- Do the objectives need to be modified?
- Are there any opportunities for new activities?

Results and key issues

- Is the process on track?
- What are the key issues facing its implementation? And, how can we address them?

Lessons learned

- What lessons can we draw from the past three months and what are their implications for STED analytic phase design, implementation and results?
- How can these lessons be applied in other countries?

Improvement plan

- What actions are needed to address the above issues?
- What is the agreed improvement plan to implement those actions?

The results of the meeting should be documented in the STED analytic phase Strategy Review Report. In addition, the results chains, projections and measurement plan will be reviewed and revised as necessary. The changes made will be reflected in amendments to the MGS-STED analytic phase.

6. STED-GUIDED INTERVENTION MONITORING

Intervention monitoring follows the same process and cycle as the analytic phase – hence there is some repetition in this section. This is intentional to facilitate staff wanting to just use these sections independent of the other sections of this manual.

Implementation of monitoring activities for STED-guided interventions follows the six-step cycle. However the impact assessment presented here is specific for these interventions. This assessment will be carried out at least at the beginning and end of each intervention. Where appropriate, information may be gathered for a sector, rather than a single intervention. Information regarding impact assessment specific to STED-guided interventions is contained in Annex 2.

6.1 Develop results chains

A results chain describes the flow of activities and the cause and effect relationships that take place due to an intervention, ultimately leading to skills development system change and increase in exports and employment in the sector. It summarizes the expected changes at each level of analysis, each element of change, and how this change will lead to benefits to the sector. It provides the basis for intervention monitoring.

A results chain should be developed for each intervention[18] early in the intervention design process. It will be informed by discussions with partners in the STED process, and where possible, with other stakeholders, although, ultimately, the STED-based project should ensure that the results chain reflects its vision for the change that will be achieved (which may in some cases not be entirely consistent with that of organizations receiving STED support).

Each results chain should describe how STED activities are expected to lead, through a series of changes in the skills development systems, to impact in terms of benefits for the companies, employees (by gender), and the sector overall. They should illustrate the key changes expected in the behaviour and performance of key players that lead to impact – encompassing both the direct effects of STED

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[18] Sector-level results chains should also be prepared. The STED programme has prepared one example of a sector results chain. It has already developed one STED analytic phase results chain, and six types of guided results chain; these could be adopted and adapted to each country context.

support (which will be observed through the adoption of an innovation) and the more indirect or systemic effects of support (e.g. observed through wider diffusion of innovations in the system).

The key assumptions underpinning the design of STED intervention strategies should be highlighted in the results chains and will be examined in subsequent monitoring. Rationale and evidence in support of assumptions should be included in the MGS. The validity of assumptions should be tested throughout the programme.

Detailed guidance on the preparation of the results chain is provided in Annex 3.

6.2 Define indicators

After articulating the intervention results chain, the next step is to identify indicators to measure the changes in each results chain box. For each results chain box, there should be one or more indicators to specify the expected changes that need to be measured. Then, indicators identified together with definition and/or calculation should be documented in the Indicator Tracker and Projections and Support Calculation worksheets in the MGS.

Generally, good indicators should be SMART:

- **Specific:** Indicators must be clearly defined and specific to the changes described.
- **Measurable:** Indicators must be measurable either quantitatively or qualitatively.
- **Attainable:** Indicators must be realistic and attainable.
- **Relevant:** Indicators must be relevant to the changes in the result chain box.
- **Time-bound:** Indicators must be identified with a specific timeframe.

Where relevant, both quantitative and qualitative indicators should be specified. Quantitative indicators are often useful to measure to what extent changes are happening. Qualitative indicators are useful to explore the nature of changes: how and why (or why not) changes are taking place as well as sustainability of changes.

If the changes in the results chain boxes are clearly defined, it will be easier to identify the indicators. Hence, during the development of the result chains, it is important to make certain that descriptions of changes in the results chain boxes are clearly defined. Additional guidelines on how to define indictors can be seen in the DCED guidelines on defining indicators of change[19].

All interventions should contribute towards the STED objectives and outputs as defined in the logical framework. Consequently, indicators associated with the

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[19]   http://www.enterprise-development.org/page/download?id=2132

intervention-specific results chains should, wherever appropriate, be consistent with the logframe.

6.3 Establish a baseline

Baseline data should be collected to help to understand the current situation, which can assist in strengthening intervention design, as well as providing a basis for assessing the degree of change that has occurred as a result of the intervention. Some baseline data will be collected through the STED report and sector analysis undertaken as part of the STED analytic phase. There will be two other key baseline processes:

Organizational baselines

An organizational baseline meeting/workshop should be undertaken with each recipient of STED support at the start of the intervention. The purpose of the workshop is to:

1. **Provide a snapshot of the starting point:** The core purpose of baseline information is to provide the initial 'snapshot' of the starting point, against which future change and progress can be measured.

2. **Set appropriate targets and indicators that will 'count as success':** What counts as success will vary for each business model. Although there are some indicators that will be the same for each organization supported by the STED-based project, it is important to select the key additional indicators that best reflect the objectives of the specific business model.

Examples are provided in results chains for the STED Analytic Phase and six examples of guided intervention results chains. These indicators should be collected at the start of the intervention to provide baseline information for subsequent monitoring. These can then be transferred into the MGS.

As well as being a useful RBM and M&E tool, this will contribute to achieving other objectives, including:

- Helping **define 'what success looks like'** and the associated chain of logic, which can help to improve the design and implementation of the project.
- Setting up a **constructive and interactive dialogue** between the STED -based project and the organization or company in a way that is practical and ideally adds some value to it.
- Developing the organization/company's **understanding of the STED approach to results measurement** and agreeing with the company which indicators they will report against, simplifying the monitoring task for the STED team.

- Developing **interaction around sharing knowledge and insights** and inform our understanding of how knowledge can be shared with and about the organization/company.

Impact baselines

The nature of the impact baseline depends on the tools that are selected to measure impact. An impact baseline will normally collect baseline data on the skills development system and sector overall. It will include some combination of (i) secondary data; (ii) surveys; (iii) semi-structured interviews; and (iv) focus group discussions.

More information on the impact baseline is contained in Annex 4.

6.4 Project results

Programmes typically develop and regularly update projections of results. The DCED Standard for Results Measurement recommends that "anticipated impacts are realistically projected for key quantitative indicators to appropriate dates."

There are three main reasons for this:

- Many programmes like STED typically do not expect large-scale impact for years, perhaps not until after the end of the project. Well-supported projections allow programmes to demonstrate expected impact, even if it cannot be measured.
- Projections are useful at the design stage, as they give an indication of whether particular investments are worth the cost. Throughout the programme, updating projections is a way for staff to consider how and why they expect their activities to benefit the poor.
- Comparing actual results against projections will provide feedback on the extent to which an intervention is on track.[20]

The STED approach speaks of 'projections' rather than 'targets', for a number of reasons:

- Projections are developed at the beginning of an intervention, often before the full intervention has been planned. Consequently, initial projections are likely to be inaccurate.
- Good practice in RBM and monitoring (such as the DCED Standard for Results Measurement) emphasises the importance of continually revising projections. It does not make sense to continually revise targets.
- "Targets" can set inappropriate incentives unintentionally. In particular, the necessity of hitting targets may encourage a focus on short-term,

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[20]   DCED Guidelines on Indicators.

demonstrable wins, instead of longer term systemic change. Setting projections emphasises the importance of predicting and monitoring impact, while acknowledging the importance of achieving sustainable change.

Guidance on projecting results for **interventions** is provided in Section 8 of the MG– Guided Intervention in Annex 2. Projections should be recorded in the specific worksheet in the Measurement Guide Spreadsheet (MGS). It is important to explain the basis for the calculations made and, where relevant, check the projections with each organization you support. Indicators and projections should be revisited at least annually.

6.5 Measure changes and additionality

Measuring changes

Once the indicators and projections have been made, the next step is to develop the measurement plan for collecting the data. The measurement plan should include:

- What information will be collected?
- Sources of information.
- When the information will be collected.
- How the information will be collected.
- What methods will be applied in measuring attributable change?
- Who is responsible for collecting and analysing the information?
- Possible weaknesses and/or limitations in measurement.

Measurement plans should also incorporate indicators that assess possible unintended effects of an intervention.

Measurement plans should be documented in the MGS and serve as a reference point in planning data collection activities. Similar to the results chain, measurement plans should be reviewed quarterly since the changes made to result chains and implementation might also affect the measurement plan.

Estimating additionality and attribution

The STED RBM and M&E System needs to address two key issues:

- **Input additionality:** whether the system change would have occurred in the same way without the STED process.
- **Intervention-level attribution:** whether the observed benefits (in terms of outcome and impact) would have occurred without the intervention and skills development systems change.

Input additionality is typically assessed before the intervention is started and should be a key consideration by country managers in decisions regarding the provision

of STED support. However it should be followed up *ex post* through interviews with recipients of STED support.

We can categorise additionality in three main ways:

- **No additionality:** The supported organization adopts the innovation, but would have done in exactly the same way without STED support.
- **Partial additionality**: The supported organization adopts the innovation. It would have done so without STED support, but not as quickly, not on such large a scale, or not at such a high quality.
- **Full additionality:** The supported organization adopts the innovation, and would not have done so without STED support.

Because the STED input is typically small relative to the input of the organization, we would expect few cases of full additionality. Instead, STED will typically look for partial additionality, measured through:

- Subjective assessments of additionality from the organization, country manager, and consultant delivering technical assistance.
- Articulation of a clear counterfactual describing what we expect would have happened in the absence of funding.
- Articulation of a clear theory of change describing how the STED project's activities influenced change in the organization.

When reporting impact, STED will clearly report that it contributes to change, rather than being solely responsible for it. It will disaggregate reported impact data by category of additionality in order to make it clear how additional the overall impact is.

In measuring *attribution*, care is required in realistically assessing the extent to which changes observed by the monitoring system can be attributed to STED interventions. STED activities operate as part of a wider system within which they interact with other public and private activities to achieve results. Particularly when considering the influence of a STED-based project on skills development systemic change or wider sector change, interventions will be a 'contributory' cause of any given result – i.e. the intervention is a vital part of a 'package' of causal factors that are together sufficient and necessary to produce the intended effect.

The methods for measuring attributable change will be chosen when the intervention monitoring plan is developed. The method chosen will be documented and reflected in the Results Measurement Plan (MP) of the MGS.

Attribution methods will be based around the "theory of change" and results chain logic of the intervention (see Figure 8). This requires:

- Developing clear and logical results chains, and measuring changes at every level of those chains.

Attribution: What to measure?

Questions:

To what extent did change 3 take place? To what extent was change 3 due to change 2?

To what extent did change 2 take place? To what extent was change 2 due to change 1?

To what extent did change 1 take place? To what extent was the change due to programme activities?

Change 1 ← Other influences

Change 2 ← Other influences

Change 3 ← Other influences

Activities

■ Investigating the extent to which each change is due to the previous one in the results chain, based on qualitative information.

Estimating attribution will follow a contribution analysis using the following steps:

1. **Set out the attribution problem to be addressed**: Assess the nature and extent of the attribution challenge by asking:

   ■ What do we know about the nature and extent of the contribution expected?
   ■ What other public programmes and private actions will have contributed to the changes claimed?
   ■ What would show that STED has made an important contribution?
   ■ What would indicate that STED has had the effects envisaged in the results chain for the intervention?
   ■ How might the STED programme evidence these effects?
   ■ What challenges or limitations might the STED programme face in evidencing effects?

2. **Assemble and assess the contribution narrative and challenges to it:** From the outset, it is important to validate whether the results chain for an intervention and the assumptions that it depends on hold true. This validation process will be undertaken systematically and regularly in order to iteratively build up a convincing and plausible evidence-based narrative on the effects that STED is having in direct and/or indirect ways. This process will involve relevant external stakeholders who are in a position to externally verify that the original results chain and future observed changes are plausible and credible.

3. **Gather evidence to verify the contribution narrative:** The type of evidence gathered will largely depend on the nature of the intervention and the context. Ideally, the evidence base will consist of a combination of quantitative and qualitative data focused on testing and proving the results chain. If the chain of changes in the impact logic does not happen as expected, STED would assume that any measured changes at the outcome level are not due to STED activities.

Figure 13: Guideline to the DCED Standard for Results Measurement: Estimating attributable changes, DCED
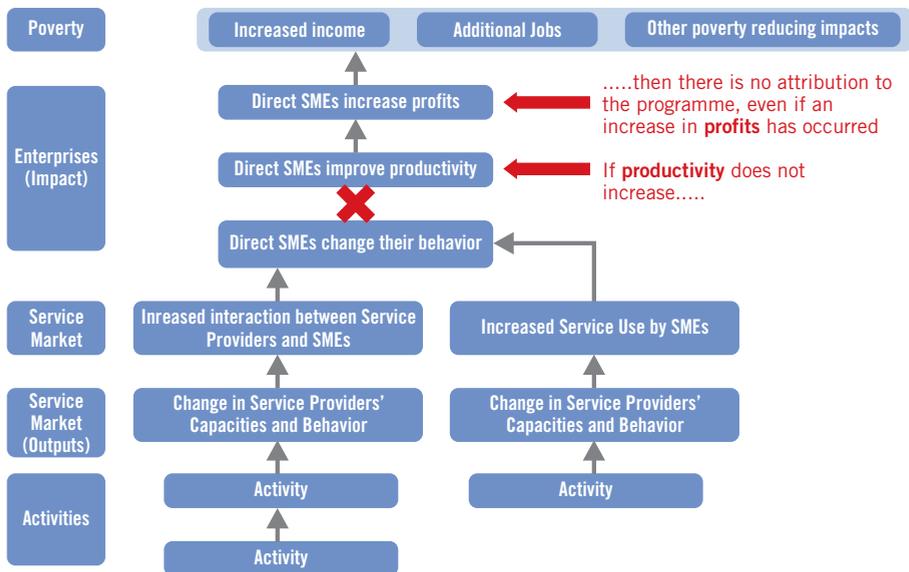
Source: Sen, 2013.

4. **Revise and strengthen the contribution narrative:** This is a continuous process of testing and revising the theory of change that underpins the central argument that STED is making a difference. In this way, the analysis will have a formative effect in that it will allow the STED-based project to quickly understand whether or not interventions are designed optimally to deliver the changes envisaged at the outset.

6.6 Use, analyse and report

The STED-based project should use the information gathered through the previous steps to assess progress with its interventions, update its understanding of sector dynamics, and review and revise its interventions and projections accordingly. Formal processes for this are set out in the M&E calendar, including quarterly intervention reviews. These provide a regular meeting cycle to review information gathered to date, to analyse the findings and to apply them to intervention improvement. While the available information will inform decision-making on a day-to-day basis, the formal intervention review process will give staff an opportunity to step back and assess progress and the current state of the sector. This process provides the basis for updating the strategy for each intervention.
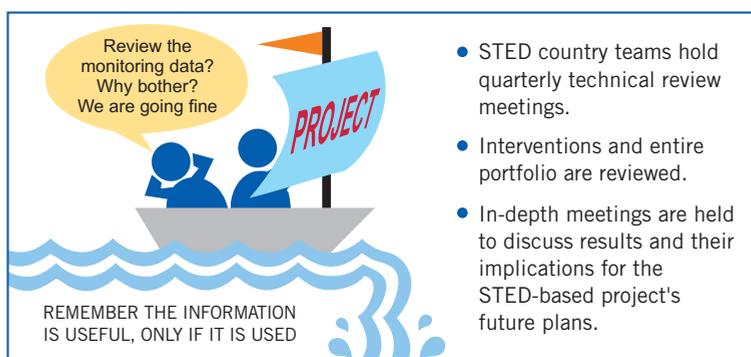
The quarterly intervention review should cover the following agenda:

i. **Changes in operating environments**
   - What factors in the broader environments have affected or may affect the implementation of the intervention and its results?
   - Are our initial analysis and assumptions still correct? How have they changed and why (because of more information or because sectors themselves have changed)?
   - If we revise our assumptions, how will this affect the intervention implementation and results?

ii. **Intervention design**
   - Are the objectives still achievable?
   - Can we achieve objectives with our existing activities?
   - Do the objectives need to be modified?
   - Are there any opportunities for new activities?

iii. **Results and key issues**

- Is the intervention on track?
- What are the key issues facing the intervention implementation? And, how can we address them?

iv. **Lessons learned**

- What lessons can we draw from the past three months and what are their implications for intervention design, implementation and results?
- How can these lessons be applied to other interventions?

v. **Improvement Plan**

- What actions are needed to address the above issues?
- What is the agreed improvement plan to implement those actions?

The results of the meeting should be documented in an Intervention Strategy Review Report. In addition, the results chains, projections and measurement plan will be reviewed and revised as necessary. The changes made will be reflected in amendments to the MGS.

ANNEXES

Annex 1: STED Analytic Phase Measurement Guide (MG-STED Analytic Phase)

Introduction

The STED Analytic Phase Measurement Guide is a management tool developed to allow the STED team to outline the strategy for the phase, and show how it is expected to move from initiating the STED analytic phase to disseminating results and enabling uptake of recommendations.

The STED Programme developed the Measurement Guide Spreadsheet - **MGS-STED Analytic Phase –** for monitoring, measuring and managing results. This is an excel document with multiple worksheets. It is used primarily for STED internal purposes and is managed on a daily basis by the country designated "M&E officer", falling under the direct responsibility of the Chief Technical Advisor (CTA) and by the relevant regional skills specialist and central backstopping team.

This guide includes the following sections after this Introduction section:

1. Why use the MGS-STED analytic phase?
2. What does it include?
3. When is it completed?
4. Who will review the MGS after initial completion?
5. Who will approve the MGS-STED analytic phase?
6. How often is it updated?
7. Step-by-step guide to filling the MGS-STED analytic phase.

Why use the MGS-STED analytic phase?

The MGS-STED analytic phase allows the country team to keep the data for monitoring and managing results in this phase in one place. It will show:

- How STED staff expects its inputs into the first phase of the programme, the STED analytic phase, to lead to a report or reports being finalized, to recommendations being disseminated and hopefully being taken up by

stakeholders, and to follow up by implementation of these recommendations. It also indicates what assumptions the analytic phase relies upon.

■ How STED will monitor these assumptions and changes over time.

■ Data on actual results achieved, and an assessment of the extent to which STED has facilitated further uptake and facilitated the move to the second phase, implementation of STED-guided interventions.

This tool (MGS) can be used for monitoring, programme results-based management and reporting.

What does it include?

The MGS-STED analytic phase contains seven separate worksheets:

1. Summary page
2. Results chain
3. Measurement plan
4. Indicator tracking sheet
5. Progress of the STED analytic phase
6. Assumptions and risks (that sit behind the STED analytic phase logic)
7. List of other programmes (that could impact positively or negatively on the STED analytic phase and follow up implementation).

When is it completed?

When the STED analytic phase is approved it should be accompanied by a results chain outlining the journey to STED analytic phase implementation. This results chain will form the basis of the MGS-STED analytic phase.

Once the results chain has been finalized, the country designated M&E officer will work with the CTA to complete all sections of the MGS-STED analytic phase **within one month from this phase start date[1]**.

Who will review the MGS after initial completion?

■ The CTA and/or relevant regional skills specialist
■ The central technical backstopping team

Who will approve the MGS-STED analytic phase?

■ The relevant regional skills specialist
■ The central backstopping team

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[1] The intervention start date is the date when, for example, an MOU was signed with a partner.

How often is it updated?

Once the first version of the MGS-STED analytic phase is completed and approved, it should be saved and filed in order to store a record of the initial intervention M&E and managing for results strategy.

Since the MGS-STED analytic phase is a management tool, it is a working document and should be updated on an ongoing basis. Data collection should be carried out as indicated on the measurement plan, and other qualitative data entered when required. Major updates to the document should be discussed during the quarterly meetings (*each country will determine when these shall take place*). These updates could include, among others:

- tailoring the results chain and hence its summary page
- Adjusting the indicators; or
- Adjusting data collection plan in the light of recent experience.

New versions of the MGS should be uploaded in the relevant country M&E folder, and saved with the following file name format. <country>_<STED Analytic phase >_< yyyymmdd>.xlsx

Step-by-step guide to the Measurement Guide Spreadsheet

1. Summary

The summary page provides an overview of the key facts about the intervention (in this case, STED analytic phase)

- a) Dates: STED analytic phase starting date, expected activity closing date, expected monitoring closing date;
- b) Intervention code: STED analytic phase in this case;
- c) Short summary of the STED analytic phase;
- d) A table to log the review dates and updates made to the document.

A hypothetical example is presented below.

INTERVENTION SUMMARY						
INTERVENTION TITLE	**STED Analytic Phase**					
Sector (if applicable):	Tourism					
Intervention manager:	Gift					
Location:	Malawi					
Intervention No.:	MAL01	**Date of last update**:				
START DATE:	Sept 2015	**FINISH DATE:**		June 2016		
Intervention monitoring closing date:	June 2017					
Partner (if applicable)	MasterCard Foundation					
Intervention cost ($):	$100,000					

100-200 word intervention summary Example: In 2011, Tourism contributed 13% of Malawi's GDP, or FJD 831 million. When considering indirect contributions, such as those industries supplying the tourism sector, tourism is responsible for estimates as high as 35% of total GDP. The tourism sector is a growing sector, with 7.8% growth in 2010, and it is expected to grow on average of 4.9 % per annum over the next ten years. Direct employment within the tourism sector is estimated to be 38,500, or almost 12% of the total labour force. When considering the total contribution to employment generated from the tourism sector, including those jobs within supplying sectors, tourism generates employment of 53,700. Employment within the tourism sector has been growing since 2006 and is expected to continue growing over the next ten years. As a result of its strong growth, poverty within the sector has declined; however there are still 25% of households working in Tourism which live in poverty.

There are however constraints within the sector which restrict furher growth and growth within supporting sectors. Limited and inefficient transportation linkages, and available information and booking options limit the number of tourist choosing Malawi as a holiday destination; and influence the amount of time spent within Malawi. Also there is a lack of variety in activities whether entertainment, shopping or others, available for and marketed to tourist, which limits where tourists visit, what they do and how much they spend. In addition, the tourism sector currently imports a large portion of food and other supplies which means tourism spending leaks back out into imports, weakening its contribution to local economic development. STED will support activities which increase the number of tourists arriving, increase the duration of their stay, and increase spending while in Malawi. STED will also support improvements within supporting sectors which supply the tourist industry, such as farmers, food distributors and handicraft makers, in order to keep more money within Malawi. By better utilizing local suppliers for locally produced food and supplies, the tourism sector could stimulate growth in a wide variety of supporting sectors. In addition, because tourism is geographically dispersed, a more diversified tourism product will help spread the economic benefits as visitors to Malawi visit more places, stay longer and engage in a variety of activities.

Changes made to intervention measurement guide (This table keeps record of changes made to the MGS and the reasons fot that change)			
Worksheet Changed	Changes made	Reasons for change	Date of change

2. Results chain[2]

The second worksheet of the MGS-STED Analytic Phase contains the results chain. A results chain describes the flow of activities and the cause and effect relationships that take place due to an intervention, ultimately leading to STED impact. In this case, for the STED Analytic Phase, it stops at the level of uptake of recommendations by stakeholders. The next level —which is put in a dotted box in the results chain – is the implementation of recommendations.

The results chain summarizes the expected changes at each level of analysis. There are three main reasons for using a results chain:

- **Programme results based management**: A results chain displays the connections between resources, activities, outputs, outcomes and impact. As such it is the basis for developing a more detailed management plan. During the course of implementation, a results chain is used to explain, track, monitor operations, processes and functions and take decisions. It serves as a management tool as well as a framework to monitor and improve the plan.
- **Results measurement, M&E**: A results chain is the first step in M&E. Through monitoring, we test and verify the reality of the STED analytic phase theory – how we believe it will work. A results chain helps us focus on appropriate activities, outputs and outcome measures.
- **Communication**: Communication is key to success and sustainability. A simple, clear graphic representation helps communicate about our programme or initiative, whether it be with/to programme staff, those funding the programmes, or other key stakeholders.

The STED analytic phase results chain is split into five main areas, each corresponding to a different category of change: activities; activity results; outputs; outcomes and intermediate impact.

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[2]   See also Guide to developing results chains.

In the early phase of the intervention, most emphasis is expected to be placed on developing the STED report: desk review, establishment surveys, stakeholder consultations, drafting and presenting initial findings, proposing draft recommendations, drafting the report, other engagements, finalizing the report.

As this process unfolds the focus shifts towards the end to examining and facilitating the potential for recommendations to be implemented. As the STED process develops, the team will spend more time disseminating results of the report and looking for potential for signs of uptake, and mapping them in the upper level of the results chain accordingly.

Once the recommendations have been taken up by stakeholders, the programme moves to implementation of these recommendations phase. This is represented here in dotted boxes but it is tracked in the next phase of STED: the STED-guided intervention phase.

The following is a basic guideline for drawing STED analytic phase results chain.

1. Write down the main activities STED plans to undertake, with one box for each activity.

2. Link them in a cause-effect relationship rather than a chronological order as in the hypothetical example shown below:

Example 1:

[7] **P: Month and year**   A:
ILO staff or consultant conducts desk review that is approved as good quality by CTA

Indicators: Yes/No
P:
A:

[8] **P: Month and year**   A:
Consultants conduct STED establishment surveys and prepare survey results
Indicators: Yes/No; # establishment surveys; # establishments in sample frame; data base of survey results prepared in English approved by central backstopping team
P:
A:

[9] **P: Month and year**   A:
ILO project staff conduct consultations with sectoral experts

Indicators: # consultations held; # experts involved; satisfaction with the process
P:
A:

[10] **P: Month and year**   A:
Consultants and ILO staff conducts skills supply study approved as good quality by CTA

Indicators: study prepared
P:
A:

[5] **P: Month and year**
ILO project staff and Steering Committee select sectors
Indicators: # sectors selected; type; selected sectors comply with selection criteria; SC approves sector selection
P:
A:

[6] **P: Month and year**
ILO project staff contract consultants

Indicators: Yes/No
P:
A:

[2] **P: Month and year**   A:
ILO project staff develop sector selection note analysing the needs of possible sectors against selection criteria; the note is QA-ed by central backstopping team
Indicators: Yes/No
P:
A:

[3] **P: Month and year**   A:
ILO project staff set up Steering Committee

Indicators: Yes/No
P:
A:

[4] **P: Month and year**   A:
ILO project staff develop TORs for consultants QA-ed by Central backstopping team

Indicators: Yes/No
P:
A:

[1] **P: Month and year**   A:
ILO hires project staff with JD developed by ILO central backstopping team and approved by HR and regional management
Indicators: Yes/No
P:
A:

3. Describe the activity results leading from step 2 above: what has come out of the number of activities you have listed before. Again, here is a hypothetical example.

Example 2:

[12] **P: Month and year**   A:
Formation of recommendations (proposal) by project staff in collaboration with SC

Indicators: # proposed recommendations validated by SC and feedback incorporated; recommendations cover all major skill gaps identified; each recommendation valuated as effective and sustainable by CTA, SC ILO central backstopping team
P:
A:

[11] **P: Month and year**   A:
Project staff draft STED findings and results (intermediate synthesis) in collaboration with consultants and they are of good quality and PPT

Indicators: Yes/No; quality QA-ed by central backstopping team; Yes/No
P:
A:

4. Describe the outputs. This is the finalization of the STED report with recommendations and implementation plans. These represent the product the programme aims to create during the STED analytic phase.

Here is a hypothetical example.

Example 3:

[14] **P: Month and year**   A:
QA of draft STED report by Central backstopping team

Indicators: Yes/No
P:
A:

[15] **P: Month and year**   A:
Final STED report agreed and published

Indicators: #Yes/No; Yes/No
P:
A:

[16] **P: Month and year**   A:
Project implementation plans developed and agreed with responsibilities for each action assigned to stakeholders
Indicators: Yes/No; Yes/No
P:
A:

[13] **P: Month and Year**   A:
Draft STED report developed by project staff with support from consultant, for each sector and trade oriented skills development recommendation; stakeholders agree recommendations amount to a comprehensive strategy for HRD of the sector
Indicators: Yes/No; Yes/No
P:
A:

5. Describe the outcome of the STED analytic phase: the trigger by enabling the dissemination of the STED report findings and its recommendations; and the uptake – practical interest from stakeholders in implementing these STED findings and recommendations. Here is a hypothetical example.

Example 4:

[21] **P: Month and year**   A:
Identified stakeholders are supported to start off implementation

Indicators: Yes/No;
P:
A:

[18] **P: Month and year**   A:
Other stakeholders and development partners interested in implementing STED recommendations
Indicators: # partners willing to implement STED recommendations
P:

[19] **P: Month and year**   A:
ILO supported STED implementation project proposal developed

Indicators: Yes/No; # proposals developed
P:

[20] **P: Month and year**   A:
Resources for ILO supported STED implementation available

Indicators: Yes/No; $ value
P:

[17] **P: Month and year**   A:
Presentation of the proposed recommendations to policy makers and development partners (launch of STED report)

Indicators: Yes/No; Yes/No; list of organizations at launch
P: #?; #?
A:

6. Describe the 'intermediate impact'. This shows if and how the implementation of recommendations occurs. This is just a statement of this type of change. A more detailed description will form part of the documentation for the next phase of STED: the STED-guided intervention phase. It will require the development of a proper results chain, and proper monitoring. Here is a hypothetical example.

Example 5:

[25] **P: Month and year**   A:
In collaboration with stakeholders to follow up implementation of recommendations and its effects (and LINK to and monitored under relevant STED Guided Intervention pilot and mainstream results chain)
Indicators: # implemented; scale of benefits
P:
A

key milestones coloured

[18] **P: Month and year**   A:
Other stakeholders and development partners interested in implementing STED recommendations
Indicators: # partners willing to implement STED recommendations
P:

[19] **P: Month and year**   A:
ILO supported STED implementation project proposal developed
Indicators: Yes/No; # proposals developed
P:
A:

[20] **P: Month and year**   A:
Resources for ILO supported STED implementation available
Indicators: Yes/No; $ value
P:
A:

3.   Results Measurement Plan (MP)

Along with the results chain there is a measurement plan which contains a list of all the elements in the results chain, in the sequence that they occur, details on indicators to be measured, how this will be done. It describes which tools to use, who will do it and when it will be done.

It is critical that at the beginning of an intervention, at least one indicator is developed for each box of the results chain, showing how the STED-based project will measure the progress of the STED analytic phase and the initial effects on this phase.

The MP is a planning tool for data collection and outcome assessment. Here is a hypothetical example.

Example 6:

Measurement Plan					
	Activity Monitoring (Activity Level)	**Ongoing Potential Partner monitoring (Output level that is being measured on a regular basis with potential Partners)**	**Ongoing monitoring (Outcome level that is being measured on a regular basis with potential Partners**	**Early Impact assessment of intermediate impact**	**Activity Monitoring (Activity Level)**
Time	Month 'x' to Month 'y'	Month 'x' to Month 'y'	Year 2	Year 2+ (beyond STED Analytic phase)	Month and year
Actor		users of the report	Partner, other implementers	Partner, other implementers	Steering Committee
Objective/Purpose	Progress and completion of activites and activyti results	Monitoring of STED process outputs (STED report)	Monitoring of outcomes	*Early impact assessment*	Ongoing monitoring of STED report Activity results and upwards
Box Numbers	Boxes 1 through 12	Box 13.1 to 17.2	Box 18.1 - 21.1	*Box 22 to 25*	Box 26
Indicators (Refer to Indicator Tracking Sheet for details on Indicators)	Indicators 1.1 to 12.3	Indicators 13.1 to 17.2	Interviews with partners, other implementers	*Indicator 22.1-25.2*	Indicators 26.1-26.5
Tool	Desk review of existing documents	Interviews combined with Desk review of existing documents	Potential Partners and other stakeholders which decide to implement recommendations with limited or no support from STED	*Sample survey of stkh and beneficiaries group*	Interviews combined with Desk review of existing documents
Sample	Partners, STED staff	Potential Partners and other stakeholders which decide to implement recommendations with limited or no support form STED	STED Intervention Manager	*A sample of xxxx(TBD)*	STED records and from SC notes
Task Manager	STED Intervention Manager	STED Intervention Manager	STED Intervention Manager	STED Intervention Manager/ SIDA/ donors	STED Intervention Manager
In-house or outsourced	in-house	in-house	in-house	*in-house / outsourced*	*in-house*
Date Completed					
Documents					

4. Indicator tracker

This worksheet helps with data collection for each indicator, as it is here where results will be stored: measured value and date when indicator was collected are also included here. Here is a hypothetical example.

Example 7:

Indicator tracker					
Indicator No.	**Indicator**	**Box number**	**Source/key documents**	**Measured value**	**Date**
List indicator reference number	Start with activities and list indicator with one indicator per row... **Please indicate which is the additional indicator, and include relevant baseline value**	Box number where indicator can be found	Location with back up documentation for the measured figures or statement	Measured and attributable value of indicator, after it has been verified and adjusted for counterfactual	Date for which the value was measured (or latest date which matches the measured value given if measured periodically)
1	Yes/No	Box 1	Contract with JD signed	Yes	
2.1	Yes/No	Box 2	Sector selection note with analysis		
2.2	Yes/No	Box 2	Email confirming		
3	Type	Box 3	SC minute of the meeting		
4.1	Yes	Box 4	TOR		
4.2	Yes	Box 4	Email confirming approval		
5	# sectors selected	Box 3	Record of agreement with SC		
6	Yes	Box 6	Contract issued		
7.1	Yes/No	Box 7	Note from CTA approving quality and explaining deviations from the TORs		
8.1	Yes/No	Box 8	Survey report and survey data base in English		
8.2	# establishements surveyed	Box 8	Note from CTA approving quality and explaining deviations from the TORs		
8.3	# establishements in sample frame	Box 8	Email from backstopper		
9.1	# consultations held	Box 9	Short paragraph from each meeting on key issues and challenges		
9.2	# experts involved	Box 9			
9.3	satisfaction	Box 9			
10.1	Yes/No	Box 10			
11.1	Yes/No	Box 11	PPT		
11.2	Quality	Box 11	Feedback and approval sent by email		
11.3	Yes/No	Box 11	Feedback and approval sent by email		
12.1	# proposed recomm validated by SC and feedback incorporated	Box 12	List of recommendations with CTA note on how recommendations are potentially sustainable		

Indicator No.	Indicator	Box number	Source/key documents	Measured value	Date
List indicator reference number	Start with activities and list indicator with one indicator per row... **Please indicate which is the additional indicator, and include relevant baseline value**	Box number where indicator can be found	Location with back up documentation for the measured figures or statement	Measured and attributable value of indicator, after it has been verified and adjusted for counterfactual	Date for which the value was measured (or latest date which matches the measured value given if measured periodically)
12.2	Yes/No	Box 12	SC minutes of meetings		
12.3	Yes/No	Box 12	Approval sent by email		
13.1	Yes/No	Box 13	Draft report for each sector		
13.2	Yes/No	Box 13	Record of verbal or email approval		
14.1	Yes/No	Box 14	Approval sent by email		
15.1	Yes/No	Box 15	Approval sent by email		
15.2	Yes/No	Box 15	Final report; publication existance		
16.1	Yes/No	Box 16	PIP report with action point responsibilities, agencies contributing for implementation, timeframe		
16.2	Yes/No	Box 16	PIP report with action point responsibilities, agencies contributing for implementation, timeframe		
17.1	Yes/No	Box 17	Report on the launch		
17.2	Yes/No	Box 17	Report on the launch		
18.1	Yes/No	Box 18	Project recods formal and informal expression of interest		
19.1	Yes/No	Box 19	Proposals developed		
19.1	# of proposals funded	Box 19	Agreement on funding		
19.2	# of proposals funded	Box 19			
21.1	# recommentations accepted for implementation by other	Box 21			
21.2	Yes/No	Box 21			
22.1	No. of interventions initiated by other	Box 22	informal meeting report		
23.1	Yes/No	Box 23			
23.1	Yes/No	Box 23	Notes of consultations with stkh; evaluation report		
24.1	Yes/No	Box 24			
24.1	Yes/No	Box 24			
25.1	# implemented	Box 25	Progresss report, interview meeting/case study		
25.2	Benefits	Box 25	Progresss report, interview meeting/case study		
26.1	Yes/No	Box 26	TORs for SC, meeting notes		
26.2	Composition;	Box 26	TORs for SC, meeting notes		
26.3	# meetings held	Box 26	Meeting notes		
26.4	# decision taken	Box 26	Meeting notes		
26.5	# decision acted upon	Box 26	Meeting notes		

Annex 1

5. Progress of STED analytic phase

Progress toward the implementation of the STED analytic phase is recorded in this worksheet. This could be linked with each activity box in the results chain, but also key learning from implementing the STED analytic phase.

Example 8:

Intervention progress
Activities
28-May-15	An in-house scoping assessment of X was conducted with Y partner
The assessment took place as planned but several issues were identified such as …
Learning
We should start the process much earlier, stakeholders should be consulted from the very beginning

6. Assumptions and risks

During the design of the STED Analytic phase, the implementing team identifies the assumptions in the results chain. Assumptions are principles, beliefs and ideas about what sits behind the results chain logic.

Outline the assumptions for each key 'step change' (link between two boxes) in the results chain, so the STED analytic phase monitoring, measurement and assessments can 'interrogate' the results chain to see if the assumptions necessary for the STED analytic phase lead to the changes expected. Assumptions describe the conditions that must exist if the cause-effect relationships in the results chain can be said to have occurred.

Make explicit all the implicit assumptions behind the results chain logic in this worksheet. Think about and clarify your assumptions on all dimensions of your results chain. What do you "know?" What are you "assuming?" Document what is the basis for your assumptions, and the strength of evidence.

Assumptions			
ASSUMPTIONS *(What are the assumptions you are making at this step in the results chain? What risks does it face?)*	**Basis for assumption (including source of evidence)**	**Strength of evidence (i.e. how reliable or credible is our evidence? (high, medium, low)**	**Plans to test assumption (explain)**
Assumption			
Other effect			

Continue to check and clarify them as you proceed. Often faulty assumptions are the reason for poor results.

Record any changes to your initial assumptions in the "summary" worksheet, in the table that records updates made to the MGS -STED analytic phase document.

List also the risks - the contextual factors and external actors - which might influence the results chain, or otherwise affect the outcomes of interest. Unlike assumptions, which are things 'necessary' for change to occur as expected, other factors and actors could potentially influence outcomes (but are not deemed necessary for the logic to hold). Factors are usually negative externalities (economic climate, policies). They should be defined as precisely as possible.

Risk Assessment			
Value	**Likelihood**	**Consequence**	**Rating**
1. Operating environment: What factors in the operational or physical environment (political instability, security, poor governance, lack of essential infrastructure etc.) might impact direcltly on achieving the objectives?	**Possible**	**Minor**	**Moderate**

Event/s (what can happen):
  〈 Funding of one business distorts the market by creating structural disadvantages for other businesses.
Source (what can cause the event to occur):
  〈 External - Political/Economic Environment in target country.
Impact (what is the impact on the objective if the event occurs):
  〈 Potential under-performance or failure of individual partnerships

Mitigation - what (if known) can STED do to decrease the likelihood and/or consequence of the risk?
  〈 **Potential negative impact on the broader market will be considered in the assessment of all intervention proposals. Funding multiple competing businesses in the same sector will be viewed positively**

For more information about assumptions and risks check Annex 3 - Guide to developing results chains.

7. Other programmes

List other public or private programmes/initiatives that could affect your STED Analytic phase positively and negatively. As you implement it, record any changes to your initial thoughts in the "summary" worksheet, in the table that records updates made to the MGS document.

Programmes and Initiatives in the area of STED			
Name of the programme	**How will it complement STED?**	**Any actions or follow up activities required**	**Observations**

Disclaimer:

The "Scaling up STED" is a project funded by SIDA. It is implemented by the ILO.

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Annex 2: STED-Guided Intervention Measurement Guide[1]

Introduction

The STED-guided Intervention Measurement Guide Spreadsheet (MGS STED-guided intervention) is a management tool developed to allow the STED team to outline the intervention strategy, show how it is expected to achieve mainstream systemic change, track progress, and test the intervention logic.

The STED programme has developed the MGS STED-guided intervention for monitoring, measuring and managing results. This is an excel document with multiple worksheets. It is used primarily for STED internal purposes and is managed on a daily basis by the country designated "M&E officer", falling under the direct responsibility of the Chief Technical Advisor (CTA) and by the relevant regional skills specialist and central backstopping team.

This guide includes the following sections after this introduction section:

1. Why use the MGS STED-guided intervention

2. What does it include?

3. When is it completed?

4. Who will review the MGS after initial completion?

5. Who will approve the MGS STED-guided intervention?

6. How often is it updated?

7. Step-by-step guide to filling the MGS STED-guided intervention

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[1] Sample results chains have been developed for six types of possible STED-guided interventions: i) MGS – Reform of Initial TVET for Priority Occupations; ii) MGS – TVET Level Courses for Workers; iii) MGS – Specialist Continuing Education and Training Courses; iv) MGS – Capacity Building for TVET Institutions; v) MGS – Setting Up Skills Council; vi) MGS – Skills Training (Malawi). Country teams are expected to adapt them as they feel necessary, to take into account the country and sector context, and also their specific plans for implementation. They are welcome to suggest to the technical backstopping team new interventions for sample results chains, and add these to the available pool.

Why use the MGS STED-guided intervention?

The MGS STED-guided intervention allows the country team to keep the data for intervention monitoring and for managing results in one place. It will show:

- How STED staff expect its inputs to lead to employment and wider mainstream (systemic) change in the skills development system and sector overall, and what assumptions this relies on.
- How STED will monitor these assumptions and changes over time.
- Detailed projections for the results that are expected from the intervention.
- Data on actual results achieved, and an assessment of the extent to which STED has facilitated mainstream systemic change.

This tool (MGS) can be used for monitoring programme results-based management and reporting.

What does it include?

The MGS STED-guided intervention contains nine separate worksheets:

1. Summary page
2. Intervention results chain
3. Measurement plan
4. Indicator tracking sheet
5. Intervention progress
6. Assumptions and risks
7. List of other programmes (that could impact positively or negatively on the STED-guided intervention and follow-up implementation)
8. Projections and support calculations
9. Measurement and attribution strategy

When is it completed?

When an intervention is first approved, it is accompanied by a results chain outlining the journey of the intervention moving through three phases: from pilot phase, through to assessment, to reach mainstream change.

This results chain with these three phases will form the basis of the MGS STED-guided intervention.

Once the results chain has been finalized (often in collaboration with the STED stakeholders), the designated M&E officer will work with the CTA to complete all

sections of the MGS STED-guided intervention **within one month from the intervention start date**[2].

Who will review the MGS STED-guided intervention after initial completion?

- The CTA and/or relevant regional skills specialist
- The central technical backstopping team

Who will approve the MGS STED-guided intervention?

- The CTA and/or relevant regional skills specialist
- The central technical backstopping team.

How often is it updated?

Once the first version of the MGS STED-guided intervention is completed and approved, it should be saved and filed in order to store a record of the initial intervention Results measurement and RBM and M&E strategy.

Since the MGS STED-guided intervention is a management tool, it is a working document and should be updated on an ongoing basis. Data collection should be carried out as indicated on the Measurement plan, and other qualitative data entered when required. Major updates to the document should be discussed during the quarterly meetings (each country should establish when). This could include:

- Tailoring the new results chain and hence the summary page
- Adjusting the indicators and data collection plan in the light of recent experience.

New versions of the intervention measurement guide should be uploaded in the relevant Country M&E folder, and saved with the following file name format. <country>_<name of the STED guided intervention>_< yyyymmdd>.xlsx

The current version could be for example: Malawi_Capacity Building for TVET Institutions _20150718.

Step-by-step guide to the MGS STED-guided intervention

1. Summary

The summary page provides an overview of the key facts about the intervention.

    i.   Dates: intervention starting date, expected activity closing date, expected monitoring closing date;

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2   The intervention start date is the date when for example an MOU is signed with the ILO partner.

ii.   Intervention code; intervention name;

iii. Short summary of the intervention;

A table to log the review dates and updates made to the document.

An example based on the Malawi "Work-Integrated Learning" (WIL) intervention is provided below, and in the sections that follow.

Example 1:

INTERVENTION SUMMARY			
INTERVENTION TITLE	**Work integrated Learning (WIL)**		
Sector (if applicable):	Hoticulture (vegetable subsector)		
Intervention manager:	Ruth Makwakwa		
Location:	Liongwe/Blantyre		
Intervention No.:	M41015901666	**Date of last update**:	
START DATE:	June 2015	**FINISH DATE:**	March 2016
Intervention monitoring closing date:	March 2016		
Partner (if applicable)	TEVETA ECAM MoLMD		
Intervention cost ($):	USD 154 805		

The intervention is being implemented as a pilot model for providing work integrated learning (WIL) that helps bridge the gap between the largely theoretical technical education provided by the training system and the practical skills required by industry in the world of work. The objective of the intervention is to upgrade the skills of TVET college graduates in the horticulture value chain with the view to align their competencies with industry needs and expectation. Activities of the this pilot will be implemented in Lilongwe and Blantyre.

Changes made to intervention measurement guide (This table keeps record of changes made to the MGS and the reasons fot that change)			
Worksheet Changed	**Changes made**	**Reasons for change**	**Date of change**
Results chain	Adjusted the activities and some indicators	to make activities and indicators more relevant	15th Sept 2015

2. Results chain[3]

The second worksheet of the MGS STED-guided intervention contains the results chain. A results chain describes the flow of activities and the cause and effect relationships that take place due to an intervention, ultimately leading to changes at the sector level in terms of export growth and decent employment creation. It summarizes

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3   See also Guide to developing results chains.

the expected changes at each level of analysis, and the pathways from pilot to mainstream level changes. There are three main reasons for using a results chain:

- **Programme results-based management**: A results chain displays the connections between resources, activities, outputs, outcomes and impact. As such it is the basis for developing a more detailed management plan. During the course of implementation, a results chain is used to explain, track, monitor operations, processes and functions and take decisions to improve implementation. It serves as a management tool as well as a framework to monitor the plan.

- **Results measurement and M&E**: A results chain is the first step in results measurement and M&E. Through monitoring, we test and verify the reality of the programme/intervention theory – how we believe it will work. A results chain helps us focus on appropriate process and outcome measures.

- **Communication**: Communication is key to success and sustainability. A simple, clear graphic representation helps communicate about our programme or initiative, whether it be with/to programme staff, those funding the programmes, or other key stakeholders.

Where possible, STED based projects should work with partner organizations to review and complete the results chain at the start of the partnership.

The STED results chain is split horizontally and vertically.

- **Horizontally**, the RC is split into four main areas/levels corresponding to a different category of change: activities, outputs, outcomes, and impact.

- **Vertically**, four main phases are highlighted: each corresponding to a different phase in the intervention pathway: Pilot –> Transition (Go - No go) –> Incremental or Mainstream system change –> Sector impact.

These phases are presented below:

| Pilot | Transition | Mainstreaming of transformational and/or incremental system change | Sector Impact |

Phase 1   *Phase 2*   *Phase 3*   *Phase 4*
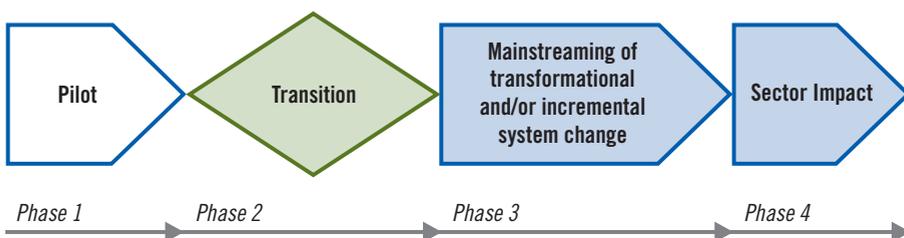
In the early phase of the intervention, the "Pilot", more emphasis in the results chain is placed on 'testing' and examining the business model in detail and how can it made to work to ensure it moves to mainstream system change phase, and impacts on the sector. This is presented on the left side of the results chain.

As the intervention develops, the team will spend time evaluating the pilot; if results are positive and the business model seems to work for all players, then enabling it to move to the next phase "Transition". It is represented in the middle of the results chain.

The third phase has two options. It may lead to an incremental system change which includes continuous system change occurring over an extended period of time, designed to bring about improvement in the skills development system (for example, better teaching in an important type of course). The changes are foreseeable and planned, and their effects build slowly but inexorably. Or it may be transformational system change, or fundamental change which involves a major shift in context and touches all parts of the system. This type of change can occur quickly or over time. STED ideally aims to produce both incremental and transformational types of system change. It is recognized that this phase is less developed at this planning stage as many uncertainties are still at play, and it would require further work and adaptation once the pilot is being tested and assessed. This phase is presented on the right side of the results chain.

The following is a basic guideline for drawing intervention results chain with an example used in one STED-guided intervention, the MasterCard funded *Work integrated Learning (WIL) Malawi.*

For the pilot phase:

i. Write down the main activities the STED based project plans to undertake in order to address a certain constraint, with one box for each activity. In most cases, this is likely to be the provision of technical assistance to stakeholders/partners.

ii. Add the expected activities undertaken by the experts/partner to the results chain. This will generally show the business model: how the partner, with support from the STED-based project in some cases, expects to deliver activities, which will be in general training. This may not be apparent at the beginning of an intervention, and so the results chain should be revised on a quarterly basis as the activities undertaken by the partner become clearer. An example is presented below.

Annex 2

Link them in a cause-effect relationship rather than a chronological order. An example is shown below.

Example 2:

Activities

[9] **P: Nov-2015   A:**
Training experts develop training materials
Indicators: [9.1] Training materials developed in accordance with curriculum; [9.2] Four modules developed

P: YES; #?
A:

[4] **P: Nov-2015**
Training experts develop curriculum
Indicators: [4.1] # sets of WiL curriculum developed [4.2] curriculum approved by SC and qualification authority
P: 4; YES
A:

[5] **P: Nov-2015**
TEVETA & Training Institutions select lectures
Indicators: [5.1] # lectures selected from TI
P: 8
A:

[6] **P: Nov-2015**
ECAM & Companies select mentors
Indicators: [6.1] # mentors selected through companies
P: 6
A:

[7] **P: Dec-2015   A:**
TEVETA and TI select graduate trainees
Indicators: [7.1] # Trainee graduates selected
P: 40
A:

[8] **P: Jul15-Mar-2015   A:**
SC provides advice during implementation
Indicators: [8.1] advice/support provided by SC
P: Yes
A:

[1] **P: Aug-2015   A:**
TEVETA hires experts to develop training materials and curriculum
Indicators: [1.1] Experts hired (Yes/No); [1.2] # hired
P: YES; # 1 international, 15 local
A: 15 local Experts and 1 international expert hired

[2] **P: Nov-2015   A:**
MoLMD & TEVETA selects Training Institutions
Indicators: [2.1] # TIs recruited; [2.2] approved by stakeholders
P: 4, YES
A:

[3] **P: Sep-2015   A:**
ECAM selects the Companies for WiL interventions
Indicators: [3.1] # companies recruited; [3.2] approved by stakeholders
P: 4, YES
A:

[0] **P: July-2015   A:**
ECAM and sector companies identify skill area in which to undertake WiL training intervention
Indicators: [0.1] skill area approved by stakeholders
P: YES;
A: skill areas agreed and approved by stakeholders

iii. Describe the outputs, or system-level changes. This is typically the entry of a new or improved service or product onto the market.

Example 3:

[13] **P: Jan Feb-2016   A:**
Lecturers deliver training to graduates
Indicators: [13.1] # of lecturers delivering training;
[13.2] # graduates trained;
[13.3] ratio (#graduates/lecturer)
P: 6: 36; 6
A:

[14] **P: Jan- Feb-2016   A:**
Mentors support graduates during workplacement
Indicators: [14.1] # mentos supporting graduates; [14.2] # graduates mentored;
[14.3] ratio (# graduates/mentor)
P: 5: 36; 7
A:

[10] **P: Dec-2015   A:**
Expert delivers TOT to lecturers and mentors
Indicators: [10.1] Six mentors trained;
[10.2] Eight lecturers trained

P: 14- 8 lecturers/ 6 mentors
A:

[11] **P: Jan-2015   A:**
Lecturers and mentors are knowledgeable
Indicators:
[11.1] Eight lecturers knowledgeable;
[11.2] Six mentors knowledgeable

P: 14= 8 and 6
A:

iv. Describe the outcome. This shows how stakeholders interact with each other, and change their behaviour as a result. It shows the improved performance that is expected to result from increased use of the service or product and/or interaction of the firm with its agents. First at the trainee level:

Example 4:

[16a] **P: Jun-2017   A:**
Supply of graduates with relevant skills available to the sector for employment

Indicators:
[16a.1] # of graduates actively seek employment

P: 13.
A:

[16b] **P: Jun-2017   A:**
Supply of graduates with relevant skills available to the sector for self employment/start own business

Indicators:
[16b.1] # of graduates actively seek guidance on starting or expand their own businesses

P: 19.
A:

[15] **P: Jun-2015/Jun-2017   A:**
Graduates are more competent in skills demanded by industry

Indicators:
[15.1] # of graduate completing WIL programme with competency level A & B

P: 34.
A:

Second, it will also include the benefit at the business level, including an increase in capabilities, sales, export or profits.

Annex 2

Example 5:

[18] **P: Jun-2015/Jun-2017   A:**
Graduates workers/entrepreneurs are performing well
Indicators:
[18.1] # of graduates and entrepreneurs performing well;
[18.2] # enterprises using the new skills
P: 26; 25
A:

[19] **P: Jun-2017   A:**
Company improve its business capabilities
Indicators:
[19.1] # companies improving business capabilities (define buss cap)- ability to do xxx; [19.2] # all of new start ups are perceived as being of good quality by their customer
P: 7, 13 perception and reasons;
A:

[20a] **P: Jun-2017   A:**
Availability and Quality of products improved
Indicators:
[20a.1] quality index above xxx;
[20a.2] perception from buyers that availability and quality has improved;
[20a.3] # companies for which availability and quality has improved as perceived by clients
P: quality index above xx; perception above 60%; 18
A:

[17a] **P: Jun-2017   A:**
Enterprises bring back trained graduates
Indicators:
[17.1] # of graduates go back to the companies
P: 4.
A:

[17b] **P: Jun-2017   A:**
Enterprises employ trained graduates
Indicators:
[17.1] # of graduates get employment
P: 7.
A:

[17c] **P: Jun-2017   A:**
Graduates start own businesses
Indicators:
[17.1] # start/expand own businesses
P: 17.
A:

[20b] **P: Jun-2017   A:**
Increased aggregated production of good quality from beneficiary businesses
Indicators:
[20b.1] additional production in volume;
[20b.2] companies with aggregated production of good quality

P: 180 tonnes, 18
A:

[16a] **P: Jun-2017   A:**
Supply of graduates with relevant skills available to the sector for employment
Indicators:
[16a.1] # of graduates actively seek employment
P: 13.
A:

[16b] **P: Jun-2017   A:**
Supply of graduates with relevant skills available to the sector for self employment/start own business
Indicators:
[16b.1] # of graduates actively seek guidance on starting or expand their own businesses
P: 19.
A:

[15] **P: Jun-2015/Jun-2017   A:**
Graduates are more competent in skills demanded by industry
Indicators:
[15.1] # of graduates completing WIL programme with competency level A & B
P: 34.
A:

v. Add Impact of the intervention: Show the change in employment, income, or other benefits for the target group that result from change in behaviour.

Example 6:

[21] **P: Jun-2017   A:**
Graduate trainees have improved income (from employment and from start up business)

Indicators:
[21.1] # employees graduates with add income;
[21.2] # self employed with incr income; [21.3] # TBA increases in income among trained graduates/ entrepreneurs
P: 7; 8; TBD $
A:

[22] **P: Jun-2017   A:**
Company increase sales

Indicators:
[22.1] # of companies improving their sales
[22.2] % of new start ups continuing supplying to customer;
[22.3] additional sales volume

P: 15; 8; 144 tonnes
A:

For the transition phase:

Evaluating the intervention at the end of the pilot is a key step in the pathway to mainstreaming. The business model shows that it works and all players have some benefits as a result of the pilot. Also the interest of players to continue to expand the pilot is tested at the transition phase.

If the result of the evaluation is positive, the STED-based project disseminates good practices to enable uptake and then moving on to mainstreaming.

Draw an arrow from the end results of the pilot phase to an evaluation box.

Example 7:
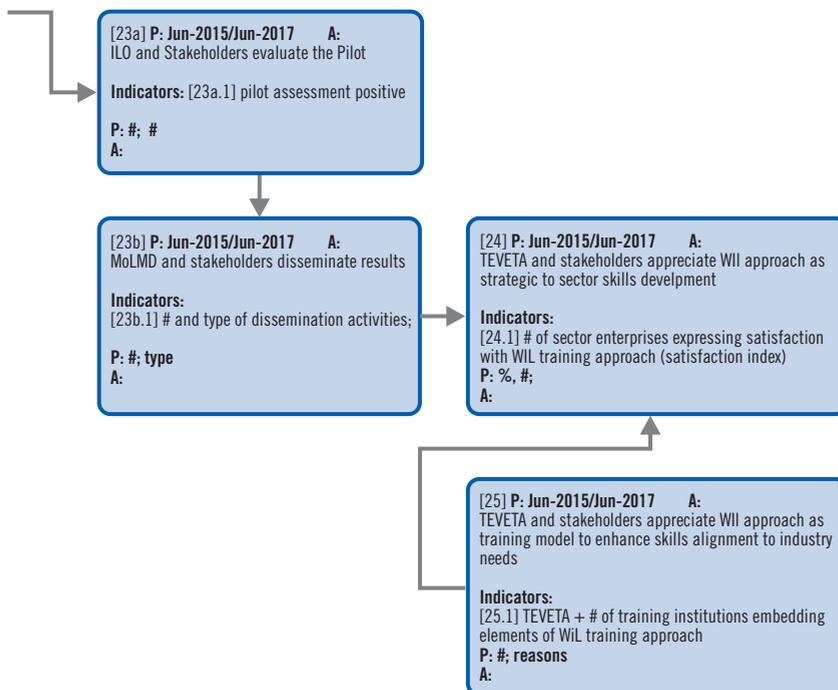
In the mainstreaming phase

At the beginning of an intervention, it will often be difficult to know exactly if mainstreaming/systemic change is feasible. This pathway is developed at the design phase to show initial expectations, and will be further refined as the intervention progresses.

The steps to complete this phase are:

i. Draw an arrow from the 'transition box", showing how the adoption of the business model is expected to lead to mainstreaming. For example,

the increase in benefits to the business/ training organisations that adopts the innovation[4] might encourage other businesses to replicate this business model.

ii. Map out any additional STED-based project activities to support mainstreaming.

iii. Map out the expected causal chain from specific activities related to training to a change on the skills development system:

Example 8:

[29] **P: Jun-2017**   **A:**
Companies continue investing in skills upgrading

Indicators:
[29.1] # of companies investing; reasons for that

P: #, reasons
A:

[30] **P: Jun-2017**   **A:**
Other companies invest in skills upgrading.

Indicators:
[30.1] # of other companies investing in skills development; reasons for that

P: #, reasons
A:

[27] **P: Jun-2015/Jun-2017**   **A:**
Training Institutions expand training services

Indicators:
[27.1] number of TIs expanding; reasons for that

P: #, reasons
A:

[28] **P: Jun-2015/Jun-2017**   **A:**
Other Training Institutions crowd-in

Indicators:
[28.1] # of TIs crowding-in, reasons for that

P: #, reasons
A:

Skills development system change

[26] **P: Jun-2015/Jun-2017**   **A:**
Training Institutions, companies and college graduates (continue) use and benefit from WII approach to enhance competency levels

Indicators:
[26.1] TI & Companies are using and [26.2] benefiting training outcomes

P: # Tis benefiting; # Companies using (TBD)
A:

Add activities which because of changes in the skills development system lead to impact on sector growth, culminating with increases in exports, decent jobs or other indicators of ultimate impact.

_____

4   Innovation is used interchangeably with intervention in STED.

Annex 2

Example 9:

[34] **P: Jun-2017   A:**
Increased employment in the sector
Indicators:
[34.1] employment (new jobs, better jobs);
[34.2] decent jobs;
[34.3] increased income through additional jobs created
P: #; (TBD) decent job e.g. staff turnover & decent wage; $ value (of % increase)
A:

[35] **P: Jun-2017   A:**
Increase in exports

Indicators:
[35.1] change in exports; reasons for change

P: % reasons
A:

[36] **P: Jun-2017   A:**
Domestic market improved in competition with imports

Indicators:
[36.1] % change in domestic marketshare vs imports; reasons

P: %, reasons
A:

(export) Sector growth

[31] **P: Jun-2015/Jun-2017   A:**
Companies have increased supply of good quality skills/products
Indicators:
[31.1] % increase in workers/suppliers with good quality skills/products;
[31.2] # of suppliers/workers performing well as result of WIL training
P: %, #
A:

[32] **P: Jun-2017   A:**
Companies improve their business capabilities

Indicators:
[32.1] # of companies improving business capabilities (define buss cap)

P: #, reasons
A:

[33] **P: Jun-2017   A:**
Companies increase productivity and competitiveness

Indicators:
[33.1] # of companies performing better; reasons for this

P: #, reasons
A:

While developing results chains, some points need to be taken into consideration:

- **Focus on causality**: The results chain typically shows up an expected causal relationship. The technical assistance provided by the STED based project causes change in the partner's behaviour, which causes a change in the skills development system, which causes a change for the company and the target group. When reviewing results chains, ensure that this causal logic is realistic.

- **Make explicit which assumptions support the results chain logic**: Make explicit all the implicit assumptions behind the results chain logic. They may not all be portrayed in the one-page chart so it is best to include them in the "assumptions and risks" tab of the MGS STED-guided intervention. Think about and clarify your assumptions on all dimensions of your results chain. What do you "know?" What are you "assuming?" Continue to check and clarify them as you proceed. Often, false assumptions are the reason for poor results.

- **Statements should be specific and result oriented**: Each box in the intervention logic should carry specific achievements or result-oriented complete statements written in the past tense. The statements should make clear who is implementing an activity or making a specific change. Not all activities in an intervention are recorded in the results chain, however, critical activities delivering significant result are included at the activity level (very often with corresponding dates and relevant figures).

- **Numbered boxes**: Each box in the results chain has a number. The numbers are placed sequentially starting from the activity level through to impact level.

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■ **Keep it simple:** The results chain should be kept as simple as possible without losing the context. Unnecessary arrows and boxes should be avoided, and if required footnotes can be inserted to clarify particular issues.

3. Results Measurement Plan (MP)

Along with each intervention results chain there is a measurement plan, which contains a list of all the elements in an intervention's results chain, in the sequence that they occur. It is a planning tool for data collection and impact assessment.

Measurement Plan						
	Activity Monitoring (Activity Level)	Ongoing Partner monitoring (Output level and upwards that are being measured on a regular basis with Partners)		Measurement Tasks		
Time	Month Jun 2015 to Month Dec 2015	Month Nov 2015 and Jan 2016 (Year 1)	Month and Year March-June 2016	Month and Year 2016-2017	Month and year (year 3) Transition	Month and year (year 3+) Transition
Actor						
Objective/Purpose	Progress and completion of activities	Progress on completion of outputs	Progress on completion of outcomes	Progress on completion of impact	*Transition*	Mainstreaming
Box Numbers	Box 1 to 8	Box 9 to 14	Box 15 to 20	Box 21 and 22	*Box 23-25*	Box 26 to 36
Indicators (Refer to Indicator Tracking Sheet for details on Indicators)	1.1-8.1	9.1-14.2	15.1-20b.2	21.1-22.3	*23.1-25.1*	26.1-36.1
Tool	Direct observation, interviews	Interviews	in depth interviews	in depth interviews with partners, combined with secondary data	*evaluation study (TBD)*	in depth interviews with partners, combined with secondary data
Sample	N/A	N/A	TBD			
Task Manager						
In-house or outsourced	In-house	In-house	In-house	In-house	*outsourced or in-house TBD*	In-house and external
Date Completed						
Documents						

The table contains details on which indicators should be measured, it shows how this will be done – which measurement tools will be used, who will do it and when it will be done for each level of activity.

At the beginning of an intervention, at least one indicator should be developed for each box of the results chain, showing how the STED based project will measure the progress of the intervention and the initial effects on the target group.

4. Indicator tracker

The worksheet record results achieved in key intervention indicators. It includes key indicators and achievements.

Reference to sources of data, specific dates, responsible person and the indicators monitored and summary of findings need to be included in the form.

Each data recorded from other sources needs to have specific references to those documents, studies and/or persons interviewed. In cases where the information/ data is too laborious to copy or summarize in the sheet, a reference to reports mentioning titles, date, page number and clear description of type of information or impact to be found there must be provided.

Indicator No.	Indicator	Box number	Definition and calculation (if required) (targets)	Baseline value	Source/key documents	Measured value (actual)	Source/key documents	Date
List indicator reference number	Start with activities and list indicator with one indicator per row.... **Please indicate which is the additional indicator, and include relevant baseline value**	Box number where indicator can be found	Definition or details on how it is/will be calculated	Baseline value. For indicators where not applicable enter N/A	Location with back up documentation for the measured figures or statement	Measured and attributable value of indicator, after it has been verified and adjusted for counterfactual	Location with back up documetation for the measured and calculated figures	Date for which the value was measured (or latest date which matches the measured value given if measured periodically)
0.1	Skill areas identified by stakeholders	0	Private sector consultative workshop and KII	TVET graduates have limited competencies	WIL concultative workshop report	11 skill areas identified	Project mission report July 2015; ECAM and MCCCI consultative workshop report, July 2015	Validated 6th August 2015
1.1	International expert hired to support national experts	1	Hire curriculum development and subject experts (1 international curriculum develpment specialist; 5 subject specialists; 10 national curriculum develpment specialists)	No known Work integrated Learning (WIL) experts	Skills Supply Side Survey	1 international curriculum development specialist; 5 subject specialists; 10 national curriculum development specialists	Work integrated Learning concept note; external collaborator contracts	
2.1	Four TIs recruited and approved by stakeholders	2	TEVETA identifies 4 participating TIs	No training institution involved in Work integrated Learning	Role clarification report		WIL implementation progress report	
3.1	Four companies recruited and approved by stakeholders	3	ECAM identifies 6 member companies to participate in WIL pilot	No known ECAM member companies implementing WIL	Horticulture establishment Survey; KII		WIL implementation progress report	

Annex 2

5. Intervention progress

In this worksheet, progress toward the implementing the intervention is recorded. This could be linked with each activity box in the results chain, but also key learning from implementing the STED-guided intervention.

<table>
<tr><td colspan="2" align="center">**Intervention progress**</td></tr>
<tr><td colspan="2">**Activities**</td></tr>
<tr><td>29-Jul-15</td><td>**ECAM and sector companies identify skill areas in which to undertake WIL training intervention**</td></tr>
<tr><td colspan="2">The following skills were identified in the meeting:
Cold chain management
Post harvest management, grading and packaging
Crop management
High-Tech Agricultural production management
Quality control
Irrigation and disease management
Supply chain management
Green house management
Understanding different types of crops</td></tr>
<tr><td>16-Sep-15</td><td>**Stakeholder develop curriculum for WIL Pilot**</td></tr>
<tr><td colspan="2">Curriculum for modules developed with support from a South African Expert and 15 local experts from companies and private sector</td></tr>
<tr><td colspan="2">**Learning**</td></tr>
<tr><td colspan="2">It is important to ensure that enough time is allocated for interventions. Securing stakeholder buy in requires constant and active engagement of all stakeholders. Pilot is too small to make a significant difference</td></tr>
</table>

6. Assumptions and risks

During the design of the STED-guided intervention, the implementing team identifies the assumptions in the results chain. Assumptions are principles, beliefs and ideas about what sit behind the results chain logic.

Outline the assumptions for each key 'step change' (link between two boxes) in the results chain, so the STED monitoring and assessments can 'interrogate' the results chain to see if the assumptions necessary for the intervention lead to changes as expected. Assumptions describe the conditions that must exist if the cause-effect relationships in the results chain can be said to have occurred.

Make explicit all the implicit assumptions behind the results chain logic in this worksheet. Think about and clarify your assumptions on all dimensions of your results chain. What do you "know?" What are you "assuming?" Document what is the basis for your assumptions, and the strength of evidence.

Assumptions			
ASSUMPTIONS *(What are the assumptions you are making at this step in the results chain? What risks does it face?)*	**Basis for assumption /risk (including source of evidence)**	**Strength of evidence (i.e. how reliable or credible is our evidence?) (High, Medium, Low)**	**Plans to test assumption/ risk/other effects (explain)**
Assumption			
Other effect			
There is demand for skills in that particular area	STED report	Medium	periodic survey with companies in the sector; check trends in the sector

Continue to check and clarify them as you proceed. Often false assumptions are the reason for poor results.

Record any changes to your initial assumptions in the "summary" worksheet, in the table that records updates made to the MGS document.

List also the risks, the contextual factors and external actors, which might influence the results chain, or otherwise affect the outcomes of interest. Unlike assumptions, which are 'necessary' for change to occur as expected, other factors and actors could potentially influence outcomes (but are not deemed necessary for the logic to hold). Factors are usually negative externalities (economic, climate, policies etc.). They should be defined as precisely as possible.

Annex 2

Risk Assessment			
Value	**Likelihood**	**Consequence**	**Rating**
1. Operating environment: What factors in the operational or physical environment (political instability, security, poor governance, lack of essential infrastructure etc.) might impact directly on achieving the objectives?	**Possible**	**Minor**	**Moderate**
Event/s (what can happen): 〈 Funding of one business distorts the market by creating structural disadvantages for other businesses. **Source** (what can cause the event to occur): 〈 External - Political/Economic Environment in target country. **Impact** (what is the impact on the objective if the event occurs): 〈 Potential under-performance or failure of individual partnerships			
Mitigation - what (if known) can STED do to decrease the likelihood and/or consequence of the risk? 〈 **Potential negative impact on the broader market will be considered in the assessment of all intervention proposals. Funding multiple competing businesses in the same sector will be viewed positively**			

For more information about assumptions and risks check the Guide to Developing Results Chains in Annex 3.

7. Other programmes

List other public or private programs/initiatives that could affect your STED intervention positively and negatively. As you implement it record any changes to your initial thoughts in the "summary" worksheet, in the table that records updates made to the MGS STED-guided intervention document.

Programmes and Initiatives in the area of STED			
Name of the programme	**How will it complement STED?**	**Any actions or follow up activities required**	**Observations**
Business Innovation Fund	The programme works with firms to identify constraints to growth in sector; one constraint could be skills; design interventions to address those constraints	Meet with programme X periodically; identify common ground and how to complement each other	The skills gap survey in X sector could be useful to STED

8. Making projections

Programmes typically develop and regularly update projections of results. The DCED Standard for Results Measurement recommends that "anticipated impacts are realistically projected for key quantitative indicators to appropriate dates."

There are three main reasons for this:

- Programmes typically do not expect large scale impact for years, perhaps not until after the end of the project. Well-supported projections allow programmes to demonstrate expected impact, even if it cannot yet be measured.
- Projections are useful at the design stage, as they give an indication of whether particular investments are worth the cost. Throughout the programme, updating projections is a way for staff to consider how and why they expect their activities to benefit the targeted country and sector(s).
- Comparing actual results against projects will provide feedback on the extent to which an intervention is on track.

Projections for key indicators are provided in the MGS STED-guided intervention, in the "projections and support calculations" worksheet with proper references to the logic boxes. More details and supporting documentation might also be needed. An example from WIL is presented below.

Support calculations for projections in RC									
Box	**Indicator**	**Projection**			**Support calculations**	**Supporting research a and assumption**			**Source of information**
		2016	**2017**	**2018**					
Box 2	# TIs selected	4			See worksheet support calculations				STED staff
Box 3	# companies	4			See worksheet support				STED staff
Box 5	# lectures/TI & total	8			See worksheet support				STED staff
Box 6	# mentors/TI and total	6			See worksheet support				STED staff
Box 7	# trainees	40			See worksheet support				STED staff
Box 10	# mentors trained	6			See worksheet support	1			STED staff
	# lectures trained	8			See worksheet support	1			STED staff
Box 11	# mentors knowledgeable	6			See worksheet support	1			STED staff
	# lectures knowledgeable	8			See worksheet support calculations	1			STED staff
Box 13	# lectures deliver training	6			See worksheet support calculations	75%			STED staff
	# graduates trained	36			See worksheet support calculations	90%			STED staff
	# graduates per lecturer	6			See worksheet support calculations	6 per lecturer			STED staff

All projections should be supported by clear calculations showing how the projections were derived, assumptions that were made in the implementation, and the sources for these assumptions.

All sources supporting the data should also be mentioned. For example, interviews (mentioning respondent with contact info), field studies (with dates), assessment reports, attendance sheets, training participation lists, registration sheets, meeting minutes, etc.

The organizational baselines will provide useful information to feed into the completion of the Measurement Plan (MP) and Projections worksheets. *However it is important that the STED-based projects do not take company information and projections at face value. They should do separate work to assess the viability of the projections made by partner organizations and amend the projections to ensure that they are realistic.*

Projections can be revised at the quarterly RBM and M&E meetings.

9. Measurement and attribution strategy

This worksheet records the attribution strategy for the intervention. This should record a clear explanation of how impact will be isolated. There are different possible attribution options. These options are explained in the further guidance on attribution in the main part of the STED RBM and M&E Manual.

Measurement and attribution strategy	Impact attributable to STED will be measured by conducting a before-after analysis combined with beneficiay opinion
What other factors could affect the key beneficiary behaviour change?	
What other factors could affect the key beneficiary performance (Sector I)?	
Attribution methodology (how will you establish the counterfactual?)	
Why?	

Also specific measurement tools for each actor should be listed in the table below – if the case.

Key measurement tools for each actor	Primary	For triangulation
STED partner		
TVET Institution		
Trainees		

When to collect the baseline for each actor:	

Disclaimer:

The STED is a project funded by SIDA. It is implemented by the ILO.

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Annex 3: Guide to developing results chains

Introduction

This guide helps STED staff use and apply results chains (RCs)[1] - a framework and way of thinking to improve our work and also be accountable for results. It describes what a RC is and how to use it for planning, implementation, monitoring and evaluating your interventions.

Three types of RC are required for a full STED project:

- STED sector results chain (1)
- STED analytic phase results chain (1)
- STED-guided interventions results chains (1 for each major intervention – or group of similar interventions)

Six types of sample STED-guided intervention RCs have been developed in STED, for project staff to use as a starting point when developing RCs for their own interventions. These are RCs for:

1. Reform of initial TVET for priority occupations
2. TVET level courses for workers
3. Specialist continuing education and training courses
4. Capacity building for TVET institutions
5. Setting up skills councils
6. Work Integrated Learning (WIL) Malawi

These RCs are included in Annex 6 of the STED RBM and M&E Manual.

This document has ten sections.

1. Results chains basics
2. What is a results chain?
3. Why do we need a results chain?
4. When do we develop results chains in STED?
5. Results chain structure
6. Assumptions and risks
7. What does a complete STED-guided intervention results chain look like?
8. Hints and tips for constructing a good results chain

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[1] Results chains are used interchangeably with impact logics, logic models, and causal chains. STED chose to use results chains, in line with the DCED Standard. STED is applying elements of the DCED Standard, but does not aim to become compliant with the Standard. More information on the DCED Standard and its eight control points at: www.enterprise-development.org/page/measuring-results

9. Sector results chain
10. Review results chains

We start this Guidance with a basic, simple concept and add to it over the various sections to provide a thorough foundation in the use of RCs in STED-based projects. Each section contains useful resources and references.

1.   Results chains basics

"What difference are you making? How do you know it? What is the value of your programme?" Do these questions sound familiar? Are they questions you are being asked?

The RC helps us design results-based interventions and have data to answer important questions.

2.   What is a results chain?

Think of the results chain as your "road map"

What would happen if you ventured off on a trip without a map? Would you ever get to your final destination? Even if you did, how much time would you have spent in trying to find your way, when mapping your journey in advance would have given you the right direction from the beginning?

A results chain ...

- is a simplified picture of a programme, initiative, or intervention;
- shows the logical relationships between the resources that are invested, the activities that take place and the benefits or changes that result;
- makes explicit the underlying theory of a programme;
- is made up of seven components: activities, activity results, outputs, outcomes, impact, assumptions, external factors;
- is useful for developing understanding, improving programmes, clarifying impact, monitoring and evaluation, and communicating to stakeholders.

3. Why do we need a results chain?

There are three main reasons for using a RC:

- **Programme results-based management**: A RC displays the connections between resources, activities, outputs, outcomes and impact. As such it is the basis for developing a more detailed management plan. During the course of implementation, a RC is used to explain, track and monitor operations, processes and functions, and take decisions to improve implementation. It serves as a management tool as well as a framework to monitor the plan.

- **Results measurement and M&E**: Through results measurement and monitoring, we test and verify the reality of the programme/intervention theory – how we believe it will work. A RC is the first step in planning your work. It helps us focus on an appropriate process, but more important, on how this process leads to outcome and impact and how we measure that.
- **Communication**: Communication is key to success and sustainability. A simple, clear graphic representation helps communicate about our programme or initiative, whether it be with/to programme staff, those funding the programmes, or other key stakeholders.

Where possible, STED based projects should work with partner organizations to review and complete the RC during inception of the partnership.

4.   When do we develop results chains in STED?

We develop RCs for all our interventions. RCs are also developed for a sector STED works on (more on the sector RCs in Section 10).

As we all know, STED aims to achieve impact at scale in the sector it is working in. RCs chart the planned process towards attaining mainstream change, and thereby helps to ensure that interventions are designed to be systemic.

For the STED analytic phase, the RC is split into five main areas/levels horizontally corresponding to a different category of change; activities, activity results, outputs, outcomes, and intermediate impact.

For STED-guided interventions, the RC is split horizontally but also it is split vertically in four different phases.

- **Horizontally**, the RC is split into four main areas/levels corresponding to a different category of change: activities, outputs, outcomes and impact.
- **Vertically**, four main phases are highlighted: each corresponding to a different phase in the intervention pathway: **Pilot –>Transition (Go/No go) –> Incremental or Mainstream system change –> Sector impact**. These phases are presented below:

| Pilot | Transition | Mainstreaming of transformational and/or incremental system change | Sector Impact |

| Phase 1 | Phase 2 | Phase 3 | Phase 4 |
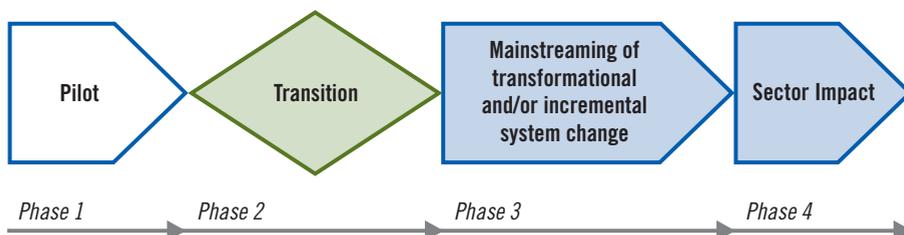
In the early phase of the intervention, the "pilot", more emphasis in the RC is placed on 'testing' and examining the business model in detail and how it can be made to work to ensure it moves to the mainstream system change phase, and impacts on the sector. This is presented on the left side of the RC.

As the intervention develops, the team will spend time evaluating the pilot; if results are positive and the business model seems to work for all players, then enabling it to move to the next phase is part of the "transition". It is represented in the middle of the RC.

Therefore the third phase has two options. It may lead to an incremental change which includes continuous system change occurring over an extended period of time, designed to bring about improvement in the skills development system. The changes are foreseeable and planned and their effects build slowly but inexorably. Or it may be a transformational system change, or a fundamental change which involves a major shift in context and reaches all parts of the system. This type of change can occur quickly or over time. STED ideally aims to produce both incremental and transformational types of change.

The following section presents a basic guideline for drawing intervention RC with an example used from a possible STED-guided intervention, the *Reform of initial TVET for priority occupations intervention*[2].

5. Results chain structure

A results chain is a system model that shows the connection of interdependent parts in a programme or intervention that together make up the whole. As with systems thinking, we know that a total programme is greater than the sum of the individual parts.

A results chain has multiple activities, outputs and outcomes and impacts, with sometimes complex links between them, as demonstrated in the RC for STED interventions which is built up below.

A results chain in STED depicts the intervention "mainstream/systemic change story". It starts with a set of activities (technical assistance to organizations). Once accepted, the interventions move to full implementation. Activities are developed that are aimed at improving skills development that can underpin improvements in the performance of enterprises. In some cases, these are developed to pilot stage, with a view to mainstreaming them in the skills development system3 if they are seen to be successful. In these cases, the expected impact of the pilot at sector

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[2]   The step-by-step process followed to develop the STED analytic phase results chain is presented in the STED Analytic Phase Measurement Guide.

[3]   Including at the level of education and training providers, in workplace learning and in all other forms of vocationally-oriented learning provision.

level is expected to be limited, and the impact is expected to become significant from scaling up through mainstreaming. In other cases, the intervention focuses on improving capabilities of key actors in skills development for the sector, and the impact is expected to come from applying what is learned at key points of leverage (such as, for example, improved school management, improved people management at significant companies or improved skills planning for the sector as a whole).

Under the pilot-mainstreaming approach, a new or improved learning approach is adopted by the STED partner – the "early adopter" - that will improve learning in ways that enable enterprises to perform better in international markets, and that is implemented in a way that represents a viable and sustainable business model for the actors concerned – including enterprises, education and training providers, workers (and potential workers) and government.

Figure 1: RC and Mainstream/Systemic Change
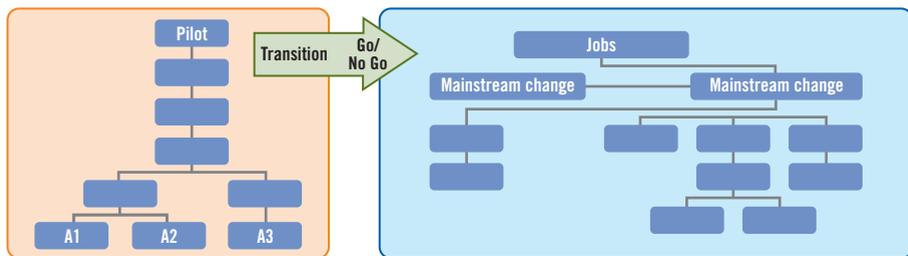
You will need to explicitly describe the business model in your RC by including sufficient boxes, showing all players involved and what they are doing in a cause-effect relationship.

In the pilot phase:

1. Write down the **main activities** a STED-based project plans to undertake in order to address a certain constraint, with one box for each activity. In most cases, this is likely to be the provision of technical assistance to stakeholders/ partners.

Annex 3
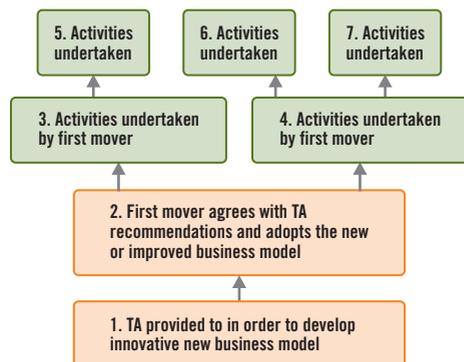
Link them in a cause-effect relationship rather than chronological order.

2. Add the **expected activities** undertaken by the experts or partner to the RC. This will show how the partner with support from the STED-based project, expects to deliver activities which will, in general, be training.

This may be less clear at the beginning of an intervention, and so the RC should be revised on a quarterly basis as the activities undertaken become clearer. The example for *Reform of initial TVET for priority occupations intervention* is presented below.

Example 1:

[9] **P: Month and year**   A:
ILO with support from consultant(s) and TVET authorities consult with stkh to ensure that skills standards are applicable and relevant & coherent with policies
Indicators: #
P:
A:

[10] **P: Month and year**   A:
Consultant in collaboration with experts and trainers experts on occupation (TVET) develop or adapt curricula and course content based on the skills standards
Indicators: #
P:
A:

[7] **P: Month and year**   A:
Consultant(s) and ILO staff working with group of experts research skills content and existing skill standards and curricula for priority occupations
Indicators: #
P:
A:

[8] **P: Month and year**   A:
ILO staff and consultant(s) working with group of experts develop, adapt or harmonise skills standards
Indicators: #
P:
A:

[6] **P: Month and year**   A:
Pilot TVET Institution/s select trainers to be trained
Indicators: #
P:
A:

[14] **P: Month and year**   A:
Pilot TVET Institution/s and stkh source necessary equipment for pilot
Indicators: yes/no
P:
A:

[5] **P: Month and year**   A:
ILO staff and stkh develop an implementation plan that includes the establishment of a group of experts (including industry experts on occupation, TVET trainers experts on occupation, worker experts on occup, curriculum specialists)
Indicators: #
P:
A:

[1] **P: Month and year**   A:
STED report identifies recommendations for reform of initial TVET training
(link with STED Analytic Phase Results chain)
Indicators: yes/no
P:
A:

[2] **P: Month and year**   A:
ILO and SC agree with bodies governing TVET that they will work jointly on system reform
Indicators: yes/no
P:
A:

[3] **P: Month and year**   A:
ILO staff hire consultant(s) to support implementation of reform
Indicators: #
P: yes/no
A:

[4] **P: Month and year**   A:
All (ILO staff, Consultant, experts etc.) select Pilot TVET Institution/s
Indicators: #
P: yes/no
A:

3. Describe the **outputs**, or system-level changes. This is typically the entry of a new or improved service or product onto the sector. In the *Reform of initial TVET for priority occupations intervention* case, it is about "training" (= the service) in skills which is required in the sector being made available in the market hence to potential trainees.

Example 2:

[11] **P: Month and year**   A:
Consultant and experts develop course for master trainers to deliver to trainers
Indicators: **#**
P:
A:

[12] **P: Month and year**   A:
Consultant and experts select and train master trainers for pilot
Indicators: # master trainers trained
Indicators: **#** master trainers trained
P:
A:

[13] **P: Month and year**   A:
Trainers from pilot TVET Institution/s are trained by master trainers in delivering the courses
Indicators: # master trainers; # trainers trained
**P:**
A:

You will need to explicitly describe the outputs (and link between them if inter-connected) in your RC by including sufficient boxes.

Note: This is just a STED intervention RC that does not capture all possibilities and asks you to tailor the RC to your own intervention needs and context.

4. Describe the **outcomes** or changes in behaviour of key players in the sector triggered by the existence of the newly developed outputs. This happens at two levels.

Firstly, if outputs are effective, they will first be used by the target group (potential trainees, in this case) to make some changes in the way they operate. In this *Reform of initial TVET for priority occupations intervention,* it will make more qualified skills available in the sector.

Example 3:

[16] **P: Month and year**   **A:**
Trainees are knowledgeable and get qualifications certified by National Qualification Framework or other similar official bodies

Indicators: # trainees knowledgeable; # with qualifications obtained
P:
A:

[15] **P: Month and year**   **A:**
Trainers are delivering pilot training to trainees in pilot TVET Institutions

Indicators: # trainees trained
P:
A:
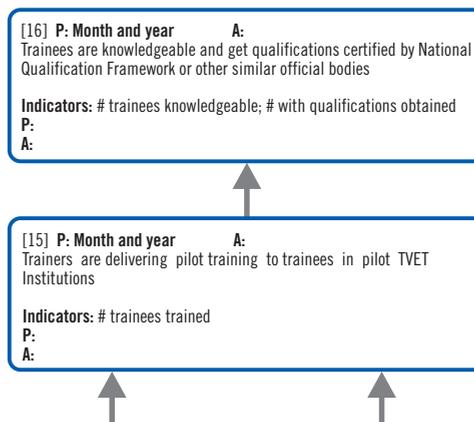
Secondly, this new skill set made available will trigger a 'reaction' from companies in the sector that will aim to 'attract' and use this skillset to respond to their skill gap.

Example 4:

> [17a] **P: Month and year   A:**
> Companies employ trainees from the pilot
>
> **Indicators:** # trainees employed on a full time basis;
> reasons for employment
> **P:**
> **A:**
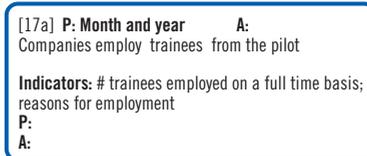
Note: This level, in general, shows how key players and stakeholders interact with each other, and change their behaviour as a result.

Impact: As new skills are now being used by companies this will bring benefits such as increased sales/exports/profits, reduction in costs or a combination of these.

This step is about improved performance at the enterprise level.

Add impact of the intervention: Show the change in sales, income, or other benefits that result from change in behaviour.

Example 5:

> [17b] **P: Month and year   A:**
> Companies improve business capabilities
>
> **Indicators:** company perception on improvements;
> change in etc (e.g. ...unit labour productivity -
> output/hour worked(unit of labour), investment in
> training building on the skills -
> **P:** perception index; %
> **A:**

For each level you will need to show all steps and links between them if interconnected, by including sufficient boxes in your RC.

This example shows how the RC depicts the pilot phase of this intervention, reflective of at least one firm/market partner buying-in to a new way of working, an improved business model, practice, product/service offer or a new responsibility within the system. *This phase represents the testing of the business case with a firm, institution, or organization that has the incentives and capacity to change.*

In the transition phase:

Evaluating the innovation at the end of the pilot is a key step in the STED-guided intervention pathway, for interventions that start with piloting. The results of the pilot must show if the business model worked (or not) and all players have had (or not) some benefits as a result of the pilot. The interest of players to continue to expand the pilot is tested here in the transition phase.

If the result of the evaluation is positive, the STED-based project disseminates good practices to enable uptake and move to the mainstreaming phase.

Draw an arrow from the end results of the pilot phase to the evaluation box.

An example from *Reform of initial TVET for priority occupations intervention* is presented below.

Example 6:

[18] **P: Month and year   A:** Group of experts and key stkh evaluate the pilot
Indicators: yes/no; reasons
P:
A:

[21] **P: Month and year   A:** Skills standards and curricula are mainstreamed (published and recognised and made official as skills standard for occupation by the country approved qualification authority). sample course content is published
Indicators: yes/no
P:
A:

[20] **P: Month and year   A:** Skills standards and curricula are finalised
Indicators: yes/no
P: yes/no
A:

[19] **P: Month and year   A:** ILO and stkh including bodies governing TVET institution/s disseminate results
Indicators: yes/no
P:
A:

[22] **P: Month and year   A:** TVET Institutions interested to take up the business model
Indicators: # TVET Institution/s, market share, reasons
P:
A:

TVET Institutions expect enough income to be able to fund running costs of courses
Indicators: # TI expecting higher income, reasons
P:
A:

[24] **P: Month and year   A:** TVET Institutions obtain access to equipment required to run courses (if applicable)
Indicators: yes/ no, reasons
P:
A:

In the mainstreaming phase

As the first mover(s) begins to adopt innovations, the STED-based project discusses future plans with current partners and new market players and assesses the possibility of rolling out the innovation. Often mainstreaming is required. On other occasions, these changes could happen autonomously.

If firms and providers of education and training look likely to expand or drive market responses without your help, leave them to it! After all, minimal project involvement

increases partner responsibility and encourages greater ownership over the change(s) introduced. Knowing when to act and when not to act is informed by your understanding of the sector and its players: Is the innovation likely to be profitable in the long-term? Are firms and providers of education and training willing and able to take risks? Are they in a position to invest? Is the sector competitive enough to spur them on? Do the funding and governance models for education and training enable mainstreaming of the innovation? Is the innovation 'disruptive' enough that the sector will have to respond? If so, the sector may not require the STED-based project's assistance further.

Where the STED-based project undertakes activities to support the roll-out of the innovation to mainstreaming:

(1) We can support early adopters – whether firms, providers of education and training, government or a combination of these, to interpret lessons to be learnt from the pilot to roll-out and improve the innovation

If incentives are high early adopters continue *to use the innovation that they originally adopted in the pilot phase, (relatively) independently of the STED-based project,* preferably choosing to improve and develop it, making the changes necessary to internalise it fully within the organization, and making additional investments and increasing scale, of their own accord or with less – or different – forms of support from the project.

(2) We can support the scale-up the innovation through working (differently) to crowd-in and support new partners, following successful piloting.

If incentives are there, new player/s (training institutions etc.) will start to replicate the original innovation (mainstream). Whether or not the STED-based project directly supports this process will need to be monitored. This is reflected in the "Mainstream" column of the RC.

Note: When STED staff first design the intervention RC, it is difficult to know exactly if mainstreaming/systemic change is feasible. The chain of changes you draw will show initial expectations, and will be refined as the intervention progresses and the pathway becomes clearer.

We will need to monitor and see if that behaviour change happened: Sector players in the wider sector, or in adjacent sectors connected to the system within which the programme has been working, are reacting to the adopted innovation by developing new offers and taking on new roles and responsibilities that support (or act in response to) its presence.

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Essentially, the original innovation has prompted, or created, a new set of market conditions that have incited other relevant market players to themselves evolve and re-organize to take advantage of new incentives and opportunities.

The steps to prepare the mainstreaming phase are:

At the beginning of an intervention, it will often be difficult to know exactly if mainstreaming/systemic change is feasible. This pathway is developed at the design phase to show initial expectations, and will be further refined as the intervention progresses.

The steps to complete this phase are:

1) Draw an arrow from the 'transition box", showing how the adoption of the business model is expected to lead to mainstreaming. For example, the increase in benefits to the business/ training organizations that adopts the innovation[4] might encourage other businesses to replicate this business model.

2) Map out any additional STED activities to support mainstreaming.

3) Map out the expected causal chain from specific activities related to training to a change on the skills development system (blue boxes):

---

[4]   Innovation is used interchangeably with intervention in STED.

Example 7:

[31] **P: Month and year   A:**
Skills development system change

Indicators: growth in provision of skills in relevant areas; improvement in relevance (quality and relevance); quality and number of Training Institutions; perceptions
P:
A:

[29] **P: Month and year   A:**
Training institutions increase their training capabilities to respond to demand for priority skills

Indicators: % staff with good quality skills; # performing well; reasons for this
P:
A:

[30] **P: Month and year   A:**
Trainees are knowledgeable and get qualifications

Indicators: # trainees knowledgeable; # with qualifications obtained
P:
A:

[27] **P: Month and year   A:**
Training courses for the priority occupations across the TVET system are sustainably (at least cover running costs) delivered by the trainers at TVET Institutions under the new skills standards

Indicators: yes/no, how and why
P:
A:

[26] **P: Month and year   A:**
The master trainers train trainers from TVET institutions

Indicators: #, #
P:
A:

[28] **P: Month and year   A:**
More Potential trainees see benefit of having qualifications in priority occupational skills and they enroll

Indicators: % companies perception; reasons
P: %, reasons
A:

[25] **P: Month and year   A:**
TVET Institutions select and send trainers to be trained

Indicators: #, #, reasons
P:
A:

Light brown boxes show the changes at the learner level.

4) Add activities which, because of changes in the skills development system, lead to impact on the sector growth culminating with increase in exports, decent jobs or other.

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Example 8:

[37] P: Month and year   A:
Increased employment in the sector

Indicators: Employment (new jobs, better jobs); (check what is available from NSOffice for sector: intervention: Establishment survey done by NSO - Labour force survey; Companies--structured questionnaire about employment--M/F, FT and PT seasonal..employment outcomes; progress decent jobs (labour turnover, decent wages (decent decided by staff - intervention/sector specific; perception)
P: # ; perception decent job explain, #
A:

[36] P: Month and year   A:
Increase in exports

Indicators: value of exports; # companies : diversity of products exported

P: $; # and type of products
A:

[35] P: Month and year   A:
Achieving sustainable share of domestic market

Indicators: % change in domestic market vs imports; reasons

P: $; # and type of products
A:

[32] P: Month and year   A:
Companies employ trainees and have sufficient (supply of) staff with good quality skills according to market demand

Indicators: vacancies as % employment; satisfaction businesses with quantitative supply; and quality of supply

P: %; satisfaction index; quality index
A:

[33] P: Month and year   A:
Companies improve business capabilities

Indicators: company perception on improvements; change in etx (e.g. ...unit labour productivity - output/hour worked(unit of labour), investment in training building on the skills -

P: perception index; %
A:

[34] P: Month and year   A:
Companies perform better

Indicators: # companies performing better (profitability/margins, labour productivity); labour productivity by value

P: #; $
A:

6.   Assumptions and risks

Assumptions are the beliefs we have about the intervention, the people involved and the way we think the intervention will work. This is the "theory" we are talking about: the underlying beliefs in how it will work. These are validated with research and experience.

Assumptions underlie and influence the decisions we make. Assumptions are principles, beliefs and ideas about what sits behind the RC logic.

In developing a RC, we want to make explicit all the implicit assumptions we are making. They may not all be portrayed in the one-page graphic, but we do want to explore and discuss them.

Often, inaccurate or overlooked assumptions are the basis for failure or under performance.

Think about and clarify your assumptions on all dimensions in your RC. What do you "know?" What are you "assuming?" Continue to check and clarify them as you proceed. Often false assumptions are the reason for poor results.

Assumptions

Annex 3
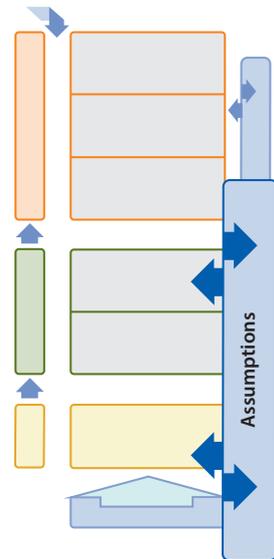
There is a worksheet in the measurement guide spreadsheet (MGS) that asks you to list all assumptions behind the chain logic and document them.

More about assumptions

Clarifying assumptions demands knowledge of the research or "best practice" in the intervention area, as well as "common sense."

Consider the following:

- *Why do you believe that the intervention will work this way?* Are your ideas and beliefs based on research, best practice, experience, local wisdom, intuition?
- *Is there evidence that supports the theory of change* you have laid out? Review the following:
  - Programmes and change strategies that have proved effective in similar communities or situations.
  - Research literature.
  - Evaluation reports.
- *Specifically, what evidence is there that STED support is 'additional'* – i.e. that the partner would not pursue the innovation in the same way without STED support.
- *Why do we expect the business model that we are supporting to have a beneficial impact on specific intervention target group.*

Examples of assumptions:

- Information exists on best practices in ...
- People will be motivated to learn/change.
- Increased use of training leads to increased productivity for enterprises.
- External funds and agents can serve as catalysts for change.
- Staff can be recruited and hired by the partners with necessary skills and abilities.

Where evidence is lacking, this should be highlighted clearly and we can follow this up through our monitoring and evaluation.

Risks should also be listed here, with risk mitigation strategies and risk assessment included.

Risk Assessment			
Value	**Likelihood**	**Consequence**	**Rating**
1. Operating environment: What factors in the operational or physical environment (political instability, security, poor governance, lack of essential infrastructure etc.) might impact directly on achieving the objectives?	**Possible**	**Minor**	**Moderate**

Event/s (what can happen):
　　〈 Funding of one business distorts the market by creating structural disadvantages for other businesses.
Source (what can cause the event to occur):
　　〈 External - Political/Economic Environment in target country.
Impact (what is the impact on the objective if the event occurs):
　　〈 Potential under-performance or failure of individual partnerships

Mitigation - what (if known) can STED do to decrease the likelihood and/or consequence of the risk?
　　〈 **Potential negative impact on the broader market will be considered in the assessment of all intervention proposals. Funding multiple competing businesses in the same sector will be viewed positively**

7.　What does a complete STED-guided intervention results chain look like?

Let us now look at a STED complete RC. Chapter 6 of the M&E and RBM Manual represents a number of sample possible STED-guided intervention RCs. Those developed so far are:

1. Reform of Initial TVET for Priority Occupations
2. TVET Level Courses for Workers
3. Specialist Continuing Education and Training Courses
4. Capacity Building for TVET Institutions
5. Setting Up Skills Council
6. WiL Malawi

Each RC takes us from a simple activity/output/impact graphic to a more complete RC: one that includes the major components of a good systemic intervention that will "mainstream". However do not forget that you will need to make boxes explicit, include more boxes and connect them so as to show cause and effect; you will need to tailor the RC to fit the intervention needs and context.

In addition, a sample STED sector RC and a STED analytic phase RC have also been developed.

It is anticipated that in all cases STED project staff will have to make significant changes to the sample RCs shown here in order to make them fit the country and

sector context, and in order to fit their plans for project implementation. They should be seen as only providing a starting point for development of the RCs that will actually be used in a project.

8. Hints and tips for constructing a good results chain

- ■ **Statements should be specific and result-oriented**: Each box in the intervention logic should carry specific achievements or result-oriented complete statements written in the past tense. The statements should make it clear, who is implementing an activity or making a specific change. Not all activities in an intervention are recorded in the RC, however, critical activities delivering significant results are included at the activity level (very often with corresponding dates and relevant figures).
- ■ **Numbered boxes**: Each box in a RC should be numbered. The numbers should be placed sequentially starting from the activity level to impact level. This number is used in the Results Measurement Plan worksheet of the MGS.
- ■ **Keep it simple:** The RC should be kept as simple as possible without losing the context. Unnecessary arrows and boxes should be avoided, and if required footnotes can be inserted to clarify any particular issues.

9. Review results chains

Regularly review your results chain

Objectives may change in a STED-based project, strategies adapt, and the context can shift. In these situations, the RC you developed may eventually become out of date, not reflecting your actual intervention. Consequently, it is vital to revisit your RC quarterly, or more frequently if there has been a significant change in the project or context, new information is obtained, lessons are learnt, or operating conditions have changed. This could be done during STED project quarterly reviews.

When reviewing RCs consider the following questions:

- ■ Are you still trying to achieve the same things you were before?
- ■ Have you changed your strategy to achieve this?
- ■ Have you observed the change you were hoping for at this stage?
- ■ If not, does the logic of your programme need adjustment?
- ■ Did all of your assumptions hold true?

Document and record any change in your RC.

Keep a record of all changes you made to the RC. Document when, why and which version was changed. The best place to do that is in the RC worksheet of the MGS STED-guided interventions.

10. Sector results chain

STED is designed for sectors that have potential to make substantial contributions to export development and economic diversification, or need to improve competitiveness in the face of foreign competition.

The sector RC is designed to make the linkages between addressing skills gaps, improving the capabilities of relevant education and training providers, and the ultimate impact on trade performance and employment creation explicit for a targeted sector.[5]

The STED report, which is the main tangible output of the STED analytical phase identifies a vision for the sector's future development and the major skills gaps standing in the way of achieving that vision. The logic of the report is to identify gaps in the capabilities of businesses in the target sector that constrain the sector's performance, and to identify the major gaps in skills availability that contribute to these business capability gaps. The sector RC will use content drawn directly from the report.

The steps to develop the sector RC are as follows:

1) The foundation tier of the sector RC is the recommendations as agreed with stakeholders and included in the report.
2) The recommendations are each designed to tackle skills gaps that have been prioritised in the report. These skills gaps are set out in the second tier from the bottom. Indicators for each of these skill gaps include a more detailed list of skills gaps, a list of interventions planned by the project or other, and a list of interventions actually implemented.

Example 9:

[1] P: Month and year A:	[2] P: Month and year A:	[3] P: Month and year A:	[4] P: Month and year A:	...[n] P: Month and year A:
Priority skill gaps # 1 area	Priority skill gaps #2 area	Priority skill gaps # 3 area	Priority skill gaps #4 area	Priority skill gaps #1 area
Indicators: List of specific gaps in this area List of interventions planned List of interventions implemented P: # A:	**Indicators**: List of specific gaps in this area List of interventions planned List of interventions implemented P: # A:	**Indicators**: List of specific gaps in this area List of interventions planned List of interventions implemented P: # A:	**Indicators**: List of specific gaps in this area List of interventions planned List of interventions implemented P: # A:	**Indicators**: List of specific gaps in this area List of interventions planned List of interventions implemented P: # A:

[0] STED Report recommendations

3) The interventions implemented impact on the skills development system – on provision by education and training providers and on provision by businesses themselves. This impact is described in a section of the RC on skills development system change.

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[5] A sample sector RC is presented in Figure 10 of the STED Results Based Management and M&E Manual.

Example 10:

[11] **P: Month and year   A:**
Skills development system change

Indicators: growth in provision of skills in relevant areas; improvement in relevance (quality and relevance); quality and number of **Training Institutions; perceptions**
P: #
A:

[12] **P: Month and year   A:**
Sufficient (supply of) good quality skills in the sector

Indicators: vacancies as % employment; satisfaction of businesses with quantitative supply; and quality of supply
P: %; satisfaction index; quality index
A:

[11.1] **P: Month and year   A:**
Improve Training Institutions' capabilities to respond and meet the needs/"demand" of the sector

Indicators: Perception; training provision index; capability index
P: perception; index (TBD)
A:

[11.2] **P: Month and year   A:**
Improve training provision at the company level

Indicators: Perception; training provision index
P: perception; index (TBD)
A:

[11.1.2] TVET Colleges

[11.1.3] Other providers or education and training specialists

[11.1.4] Professional institutions

[11.2.1] Apprenticeships

[11.2.2] On the job training

4)   The main intended impact of improvements in skills development and supply is through improving the business capabilities of firms in the sector. The list of business capabilities targeted for improvement should be taken from the STED report on the sector. Improvements in the skills development system (which are linked to STED-guided interventions discussed earlier) aim to enhance business capabilities of firms. Indicators include lists of STED-guided interventions (by the project or others) that have targeted improving each targeted business capability, as well as evidence on the impact of these interventions on each business capability.

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Example 11:

[13a] **P: Month and year   A:**
Companies improve business capabilities
Indicators: company perception on improvements; change in etc. (e.g. ...unit labour productivity - output/hour worked(unit of labour), investment in training building on the skills -
P: perception index; %
A:

[5] **P: Month and year**
A:
Business capability gaps: Operating efficiency
Indicators: company perception on improvements; change in unit labour productivity - output/hour worked(unit of labour), list of interventions implement that impact on this gap
P: #
A:

[6] **P: Month and year**
A:
Business capability gaps: Operating quality and compliance
Indicators: perception; % compliant with standards, waste measurement, list of interventions implement that impact on this gap
P: perception index (TBD);
A:

[7] **P: Month and year   A:**
Business capability gaps: Marketing and other downstream oriented functions (working with downstream partners in the value chain)
Indicators: perception; scorecard composed of e.g.: new markets entered; expand in existing markets etc., list of interventions implement that impact on this gap
P: perception index; scorecard (to be defined)
A:

[8] **P: Month and year**
A:
Business capability gaps: Innovation/product and process development and improvement
Indicators: percentage of sales from products improved in the last 2 years; # improved processes introduced; list of interventions implement that impact on this gap
P: %; #?
A:

[9] **P: Month and year**
A:
Business capability gaps: Supply chain and sourcing
Indicators: % non compliance with requirement for inputs, list of interventions implement that impact on this gap
P: %
A:

[10] **P: Month and year   A:**
Business capability gaps: Compliance Management
Indicators: # standards that each business comply with, list of interventions implement that impact on this gap
P: #
A:

5)   As a result, companies in the sector perform better:

Example 12:

[13b] **P: Month and Year   A:**
Companies perform better

Indicators: # companies performing better (profitability/margins, labour productivity); labour productivity by value

P: #; $
A:

But also this change puts pressure on the skills development system to continue to perform and supply skills to respond to sector demand (dotted line below):

Example 13:

[11] **P: Month and Year   A:**
Skills development system change

Indicators: growth in provision of skills in relevant areas; improvement in relevance (quality and relevance); quality and number of **Training Institutions; perceptions**
P:
A:

[13b] **P: Month and Year   A:**
Companies perform better

Indicators: # companies performing better (profitability/margins, labour productivity); labour productivity by value
P: #; $
A:

6) Project what ultimately the overall impact will be: sector growth in terms of exports, increase in domestic market share and ultimately decent job creation for women and men:

Example 14:

[14] **P: Month and year   A:**
Increased employment in the sector direct (from interventions)and indirect (sector overall)

Indicators: Employment (new jobs, better jobs); (check what is available from NSOffice for sector: intervention: Establishment survey done by NSO - Labour force survey; Companies-- structured questionnaire about employment--M/F, FT and PT seasonal..employment outcomes; progress decent jobs (labour turnover, decent wages (decent decided by staff - intervention/sector specific; perception)
P: # ; perception decent job explain, #
A:

[15] **P: Month and year   A:**
Increase in exports

Indicators: value of exports; # companies : diversity of products exported

P: $; # and type of products
A:

[16] **P: Month and year   A:**
Stabilisation of domestic market share

Indicators: trends in domestic market share (share of domestic market held by domestic firms); perception if they are gaining using domestic market by an excess in demand. Note: more likely perception of what's happening across; from sector level organisations etc.

P: %; perception index
A:

The sector RC is generated by the STED analytical phase recommendations and the identified constraints for sector growth in terms of skills provision. It provides a snapshot on how the skills development system should change in order to positively impact the sector growth.

Annex 3

Annex 4: Guide to measuring impact

What is impact assessment?

Measuring impact entails examining positive and negative, intended and unintended consequences of an intervention.[1] For STED interventions, the *intended* impact is 'higher and more diversified exports with more decent job creation for women and men', measured by:

- annual value of exports
- diversity of products exported/produced
- diversity of export markets
- share of domestic market held by domestic firms
- total and net additional decent jobs created as a result of programme activities (for both direct jobs created during the pilot and those which are created in the mainstream phase and triggered by the pilot).

But also improvements in the technical and vocational training and skills development system in relevant sectors.

The programme is founded on two pillars: rigorous economic analysis and rigorous social dialogue. It addresses a wide range of issues which countries confront in promoting skills development, export growth and economic diversification and employment growth for men and women.

The accuracy of impact measurement, and indeed the quality of our interventions themselves, depend on the careful analysis of assumptions, contributing factors and other effects that might result from our interventions. Selection of data collection tools will depend on the evaluation questions to be answered, feasibility and context, and the resources available. Impact monitoring will require a combination of primary and secondary, qualitative and quantitative data. Where it is not possible to directly assess impacts, testing the linkages and assumptions in the results chain will provide reliable estimates of impact-level indicators.

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[1] Development Assistance Committee definition of impact, OECD 2010.

What kind of impact should be assessed?

Impact, as defined by the Development Assistance Committee, should include positive and negative effects, both intended and unintended. For example, it is important to not just look for positive instances of success on the intended beneficiary group, but also consider any possible effects on other groups as well as environmental effects. Because not all changes can be anticipated, data collection approaches that can capture unexpected change, such as open-ended questions and focus group discussions need to be included.

Intended impacts relate to the impacts set out in the STED (relating to exports, skills provision, jobs growth and other benefits to selected sectors and countries).

'**Unintended** impacts' go beyond what was set out to be achieved, and can include economic, social and/or environmental impacts. These may be direct or indirect. They can be **positive** (e.g. opening up opportunities for people in other sectors through changes in regulation, empowerment of women, reduced greenhouse gas emissions; etc.) or they can be **negative** (e.g. displacement effects, exacerbation of gender inequalities, production of waste, increased greenhouse gas emissions, health effects, etc.)

All STED interventions will require at minimum, assessment of the intended impacts. In addition, some interventions will require an assessment of unintended impacts, in order to capture any other effects that are not within the scope of the above indicators. Both should also include an emphasis on the effects on and perspectives of youth and other ILO crosscutting themes such as gender and disability.

Challenges in impact assessment

There is great demand in the analysis of development interventions to be able to rigorously quantify attributable impacts. However, this faces a number of key challenges.

One key challenge is the determination of the counterfactual; what would have happened if the intervention had not occurred. In many cases, defining the counterfactual is especially problematic, as sectors are dynamic and so would change regardless of the intervention. Moreover, more and more programmes are adaptive to sectors – they are fluid and responsive rather than static approaches. If the intervention changes its course, then the nature and scale of 'beneficiaries' become inherently uncertain. For example, if a programme changed its focus areas through their implementation, this means that much of the ex-ante baseline data it has already collected can no longer be used.

Quantitative impact assessment can be challenging because STED initiatives are inherently aiming for substantial mainstream and systemic effects in the skills development systems for the sectors targeted, with large scale resulting impacts in the sectors targeted themselves, therefore making it difficult to establish a comparison (or non-treatment) group in order to ascertain what would have happened in the absence of the intervention.

The timescales of the STED interventions also present challenges to assessing impact. Generally, we have six time lags: Time between technical assistance to improve skills development and improvement in skills development system and its outputs; time between the provision of technical assistance to improve skills development and uptake of these skills by businesses; time between the uptake of skills and changes in the businesses practices; time between the changes in the business practices and the effects that we see on productivity; time between change in productivity and change in exports; and, for all of these, time to move from a small scale impact resulting from initial incremental change or piloting to a large scale or mainstream impact.

Therefore, for some (or many) interventions, the expected effects on the sector may not be realized until after the end of the programme. In other cases, issues such as demand volatility[2] could affect the validity of findings (e.g. surveys are conducted during a particularly bad or particularly good year for a volatile sector may not be representative of long term, average effects).

A way forward is, where possible, *to assess impacts at multiple stages* (e.g. before the innovation has reached scale), to look at long-term patterns of data and trends (including data that is available from other sources), and to collect quantitative data to try to predict long term effects.

A full Impact assessment would require both independence and significant resources. ILO projects typically engage independent evaluators in order to undertake mid-term and/or final evaluations. A STED-based project's work on assessing impact must be done in a way that avoids duplication and ensures the most effective allocation of resources for assessing impact, ideally feeding information to the evaluator(s) in order to improve the quality of the assessment that they can feasibly do. A STED-based project's work on impact assessment should focus on early signs of impact and testing the links, assumptions and contributory factors in the results chains in order to ensure that the project is taking the right approaches to benefitting businesses and employees.

Annex 4

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2   Demand volatility is the pace at which demand for a certain product or service rises or falls, and how erratic is it.

Approach

For purposes of measuring impact within STED, what we will consider is a theory-based mixed methods assessment of impact, using primary and secondary data:

- **Theory based:** The use of a theory of change is recommended in evaluating complex initiatives, especially in which time lags make it difficult to directly measure changes at the impact level. Testing the strength of the assumptions and causal links in a theory of change enables one to assess the likelihood and magnitude of effects of an intervention. This includes testing assumptions about key constraints, risks, and linkages between outputs (systemic change in the training and skills development system) and impact (increased employment and exports). It also includes an identification of alternate pathways of change and other factors which might also contribute to change. Theories of change should be tested through the collection and analysis of evidence and through vetting with external stakeholders, including (a) beneficiaries, and (b) individuals and/or organizations with relevant expertise. In the case of STED-based projects, a choice will need to be made on whether the sector-level or intervention results chains should be used as the basis for theory-based impact assessment. Whichever is appropriate is likely to vary between sectors of STED intervention.

- **Mixed methods**: in evaluating programmes of such a nature, a mixed methods approach including qualitative and quantitative methods is currently seen as best practice. Both qualitative and quantitative data are required in order to accurately evaluate programmes. Quantitative data is important for ascertaining impacts of interventions, but it runs the risk of being rendered obsolete with changes in strategy or location (often inherent in complex programmes as they adapt to the sector), and quantitative changes may not be representative of longer-term patterns within the limited timeframe of the project. Qualitative data can help to mitigate this risk, as well as provide invaluable information about why changes have occurred (i.e. causal factors) and can indicate patterns of change over time.

- **Mix of primary and secondary data**: Taking into consideration the nature of the STED-based interventions and the scope of RBM and M&E systems, impact should be measured through a mix of primary and secondary data. Primary data is likely to include surveys, company data reported to the STED-based project or focus group discussions. Secondary data is likely to include data collected by other public or private organizations or a review of relevant research.

Intervention-level vs. sector-level: In assessing impact (through primary or secondary data collection), it may be feasible to combine data collection for multiple interventions within the same sector. For example, a survey of companies would likely capture data for multiple interventions within a furniture sector.

Timing and frequency: Assessing realized and anticipated impacts should be done at regular intervals within the programme, in line with recommended practice in RBM and M&E of donor-funded initiatives. The timing for the collection of primary data ideally depends on the anticipated timing at which we anticipate the effects will be realized. However, within the scope of a STED-based project, this data should be collected at the very least at baseline and at the end of the intervention.

Resources: Efforts to evaluate impact need to be proportionate to the potential impacts (which may not necessarily be proportionate to the inputs). Therefore, it is recommended that a rapid appraisal be made about the scale and likelihood of impacts in order to prioritize some interventions for more rigorous assessments of impact.

Responsibility: Assessments of impact should be a joint effort between in-country staff, backstopping specialists in the region and the STED central team. In addition, it is relevant to coordinate with ILO EVAL to ensure coherence with independent project evaluation. Because of the resources and expertise required for data collection and analysis, it will likely be necessary to contract out some of the data collection for impact evaluation to survey or evaluation firms with relevant expertise, and to make the data and results available to the independent evaluator(s).

Process for monitoring impact in STED

The process for monitoring impact in STED is as follows:

A. Identify evaluation questions
    1. Determine feasibility of directly assessing intended impacts
    2. Identify key assumptions and their evidence base
    3. Identify other effects of the intervention
    4. Identify other contributing factors

B. Design and implement data collection and analysis
    5. Assess the need for baseline data collection
    6. Select data collection tools and identify sources of information
    7. Design data collection tools
    8. Collect and analyse data

Skills development example

For the purposes of explaining the process by which impact will be assessed, we have developed a fictitious theory of change for a skills development intervention (Figure 1). This is included for example purposes only and does not claim to accurately represent STED interventions.

Figure 1: Example Skills Development results chain
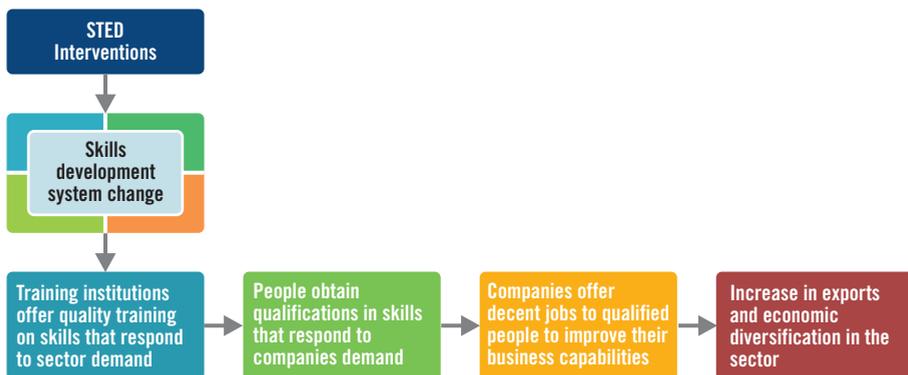
A. Identify evaluation questions

1. Determine feasibility of directly assessing intended impacts

- The in-country designated "M&E officer" will work with colleagues to determine whether it is feasible to directly assess the intended impacts of the interventions.
- In cases where it is determined to be feasible, the country designated "M&E officer" will collaborate with the in-country team on the selection and design of methods to measure intended impacts.
- Because of the challenges to impact assessment previously outlined (e.g. long timescales, difficulties in establishing baselines and counterfactuals, etc.) it may not be possible to directly measure impact within the scope of the STED-based project. In these cases, it will be essential to estimate impact primarily through testing causal linkages and assumptions.
- For all interventions – regardless of whether they are suitable for direct impact measurement – the team will go through the process of identifying and testing assumptions, identifying other causal factors, and identifying (and assessing where appropriate) other possible effects.

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## 2. Identify key assumptions and their evidence base

During the intervention design phase, the implementing team identifies the assumptions in the results chains. This will include assumptions about starting points, linkages and desired impacts:

- Identifying **assumptions about the starting points** entails being explicit about the problems that the intervention seeks to address. Example:
  - Skills development: this might include data about existing lack of relevant skills to match the potential growth in export in a particular sector (including segment of the population (age groups, gender, etc.) and geographic spread).
- Identifying **assumptions about desired impacts** entails being explicit about why the team believes that the skills development systems change will benefit workers, potential employees and the sector overall. This may also include larger assumptions about the intervention (i.e. double loop learning). Example:
  - Skills development: this might include for example operators' in the Malawi cassava sector factories desire to secure long-term employment (e.g. as opposed to seasonal employment).
- Assumptions about the **linkages in the results chain** refers to the certainty that one change will lead to another. For example,
  - Skills development: we might need to assume that the segment of the population which is unemployed is willing to undertake training to develop the skills required by the target sector, if it is offered.
  - The in-country team identifies the evidence base for their assumptions (e.g. secondary data from another organization, case studies from other countries or contexts, primary data collection with producers or workers, key informants in the sector, etc.).
  - Assumptions and their evidence base are shared with Regional Skills Specialist and Central STED backstopping team for input and feedback (e.g. to determine whether additional assumptions need to be made explicit, assess strength of evidence base, etc.).

The country staff and country designated "M&E officer" will work together to determine which assumptions need to be tested based on (a) reliability of evidence; (b) significance of the assumption; and (c) feasibility of testing / measuring within the scope of STED.

The table below provides a template for easy identification of these assumptions and their validity. Here, it has been completed with a few hypothetical examples of how evidence might be needed to test assumptions.

Figure 2: Skills development results chain with assumptions identified

STED Interventions

Skills development system change

Training institutions offer quality training on skills that respond to sector demand	People obtain qualifications in skills that respond to companies demand	Companies offer decent jobs to qualified people to improve their business capabilities	Increase in exports and economic diversification in the sector
Assumption: People are unemployed and unskilled	*Assumption:* Segment of the population which is unemployed is able (and willing) to undertake training to upgrade skills	*Assumption:* Upskilling of staff leads to improve company performance	*Assumption:* Improved company performance can drive increase in exports
Assumption: It makes more sense to improve availability of training than to try to increase passive payment systems to the unemployed		*Assumption:* People are knowledgeable and use skills correctly on the job	*Assumption:* There is demand for exports from the sector

Assumption	Basis for assumption (including source of evidence)	Strength of evidence (i.e. how reliable or credible is our evidence?) (high, medium, low)	Significance of this assumption to the success of the intervention (high, medium, low)	Plans to test assumption (if not feasible to test, please explain)
Starting point assumptions				
There is not a sufficient supply of good quality skills to respond to expected sector growth	Responses to enterprise survey	Medium - more in-depth qualitative data may be needed to explore this further	High – if for example, skills is a necessary constraint but not sufficient to improve performance	Focus group discussions or interviews with existing managers, employees (to gain more qualitative insights on why and how)
Desired impact assumptions				
Deficiencies in companies' performance limits their sales/ exports	Data on levels of productivity in the sector; companies are using high cost machinery, low performance production lines etc.	Inconclusive: lack of clarity about current production levels; rationale behind company preferences for these approaches and concerns are not known	High – research is needed to ensure improved production methods are leading to increase in exports	Light-touch surveys or focus groups with companies to assess current performance levels and pros and cons of existing and new changes Light-touch surveys with buyers to confirm issues
Linkages assumptions				
People are knowledgeable and use skills on the job	Discussions with individuals working in the company	Medium – more qualitative – assessors might not know about the quantities and frequency of required skills/ abilities	High – if sufficient and appropriate skills are not present, then company performance levels will not change	Review ILO literature in similar programmes

3. Identify other effects of the intervention

■ The in-country team identifies other possible effects of the intervention, both positive and negative, and estimates the likelihood and significance of these effects, and the basis for these estimates (including any relevant evidence, stakeholder opinions, etc.).

- The regional skills specialist and central STED backstopping team provide inputs and feedback about the effects identified and may suggest others to consider as appropriate.
- The evaluability of the effects is assessed, based on feasibility.
- The team jointly decides which, if any, possible effects should be assessed, and the methods and sources of information for doing so.
- A traffic light system (red-amber (orange)-green) will be used for ease of assessment.
- Because of the emergent nature of development in any sector, this exercise is to be repeated on an annual basis, or as possible effects become known to the team.

Other effects of the intervention	Source of evidence	Likelihood of effect	Significance of effect	Feasibility to measure	Plans to measure

4. Identify other contributing factors

- Other factors which might also contribute to (or inhibit) outcomes, intermediate impacts and impacts should be identified. These should be identified during the process of developing results chains and updated on an annual basis, or as they become known to the team. Consultation with stakeholders external to the project is recommended in this process to avoid bias. Below are a few examples of how other factors might need to be considered:
  - **Skills development**: If this initiative to strengthen skills in the sector were to be implemented by another organization, the STED-based project would need to consider whether any changes in businesses performance and exports were due to skills development or to other efforts to improve HR practices.
- Once possible contributory factors are identified through a combination of evidence and consultation with key stakeholders, the implementation team will work closely with the regional skills specialist to determine how best to assess the extent to which STED interventions led to changes (e.g. through qualitative or quantitative counterfactuals[3], etc.)

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[3] Note that establishing a counterfactual does not necessarily require a 'control' group. For STED, we are interested in knowing what the situation would have been if STED had not intervened.

B. Design and implement data collection and analysis

Steps 1 to 4 enable the team to identify their evaluation questions – which elements of the intervention need to be assessed in more depth, either directly or indirectly, based on feasibility, significance and the strength of the existing evidence base. The next step is to design an approach to collecting data.

5. Assess the need for baseline data collection

- It will often be necessary to collect baseline information for impact evaluation. This will assess the status of companies, training institutions and employees or unemployed (by gender) before the start of the intervention, and allow us to show resulting changes. Whether a baseline is needed or not depends on the quality of existing secondary information, the feasibility of collecting robust data, and the relevance of baseline data to the intended change. When considering baseline data collection:
- Conduct a literature review and key informant interviews (e.g. with the company) to assess whether baseline data already exists. If there is sufficient existing baseline data (e.g. from recent surveys) it may not be necessary to get more. You might have sufficient information in the STED report.
- If it is necessary to do a baseline, then think about when change is expected. If change is anticipated to occur in the near-term, it is important that the baseline be conducted early, so as to accurately capture the situation before change starts. However, if change is not expected for a long time (e.g. because the business is in very early stages of design) then no baseline will be needed at this stage.
- If the target group of the training institutions (trainees) and company (potential employees) is unpredictable, then think about whether you can do a retrospective baseline, or take baseline data from groups in the mainstream stage rather than the pilot. This is because you might do a baseline survey and then find that the training institutions and company(ies) have changed their target group and your work would be wasted.
- If you think it is the right time to do a baseline, think about whether you can combine baselines for multiple interventions into one.
- Then get in touch with the regional technical specialist and central backstopping team and start planning!

6. Select data collection tools and identify sources of information

The data collection tools used will depend entirely on the questions that need to be answered and the nature and scope of the innovation. While other tools might be appropriate in certain cases, the following are often likely to be the most appropriate:

- **Surveys** could be undertaken in situations in which it is practical and desirable to collect standardized information with a representative sample of a given population. A few considerations:
  - **Sampling**: Approaches to sampling will depend on size of the total sample and the methods used (quantitative or qualitative). Where possible, samples should ideally be statistically representative although, due to budgetary or feasibility constraints, this may not be realistic in all cases.
  - **Comparison group**: The feasibility of a comparison group must be considered. Comparison groups are important for capturing the changes that can be 'attributed' to the intervention and separating them out from changes that might have happened otherwise. Comparison groups are more likely to be feasible before the innovations spread or go to scale.
  - **Scope**: Surveys should be carefully designed to provide accurate information about the individual respondents and the relevant questions at hand – who is reached, how are they affected, etc.
- **Semi-structured interviews** can ensure a minimum level of standardization while allowing other issues to emerge as needed. They allow for more depth of understanding than surveys, which is essential for evaluating sector interventions. Interviews can include information about why something has or hasn't worked. These can be conducted at multiple levels:
  - **Beneficiary level:** Interviews should attempt to unpack not only who the innovation has reached, but also any affects that have resulted from the innovation (e.g. on exports, well-being, social relations, environment, etc.), and whether the innovation is addressing a key constraint for firms or people. Peer informants can also serve as an important source of information about beneficiaries.
  - **Sector player level:** Interviews with players within the sector can help to test the theory of change. These interviews can focus on the identification of key constraints, assumptions, other effects and contributing factors. Such player consultations can contribute to a greater understanding of sector dynamics more generally, resulting in a more informed programme approach.
  - **Wider sector level:** Specifically for testing assumptions, other effects and other causal factors in the theory of change, interviews with a wide variety

of relevant stakeholders should take place at regular intervals. Stakeholders should be selected in a way that ensures a diversity of opinion and background. For example, evaluating an innovation related to skills development would include interviews with key sector and training system stakeholders.

– **Sampling:** For qualitative data collection, mixed purposeful sampling is recommended: e.g. maximum variation sampling, or typical-case sampling combined with positive and negative-case sampling (deviance).

■ **Focus group discussions** (FGDs): can provide both quantitative and qualitative data. For example, employees can give value scores to the contribution of an intervention to different aspects of economic and social well-being. FGDs, if facilitated well, can generate accurate statistics in a very cost-effective way.[4] FGDs should be conducted with intended beneficiaries and comparison groups. Participants should be selected via purposeful sampling and include typical cases as well as positive and negative deviations from the typical. Groups should be formed with consideration of dynamics between different segments of the population; for example, separate groups might be formed for larger and smaller firms, or for individual male and female beneficiaries. Data from focus group discussions should be written up and analysed according to the same standards as for surveys.

■ **Company data:** This should have useful information on employees, number of export clients of the good or service that the company is providing, and other relevant information, which will depend on the nature of the intervention/business model.

■ **Analysis of secondary data**: Data related to sector performance (trade, output, employment (by gender), value added etc.), sector constraints, risks, income, and well-being can be collected through secondary sources. Much of the data may be available from the national statistical office or from ministries, agencies or sector stakeholders. If other organizations are working in the target area, they may have data related to income levels or asset holdings that could be used by the STED-based project to help assess impact.

■ **Review of relevant literature, case studies, etc.:** Reviewing relevant literature (e.g. in the sector of focus) and examples of other programmes in the area of intervention or elsewhere can help to test the theory of change and identify areas for inquiry. In the example of the skills development, one might examine case studies from other projects and consider reviewing research about the effectiveness of skills to jobs and to exports.

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4   See Holland, 2013.

7. Design data collection tools

Once the data collection tool is selected, the implementation team will work together to determine appropriate sampling techniques, develop and test interview questions, and outline analysis approaches.

8. Collect and analyse data

Data can be collected by implementation, or it may be deemed more appropriate to contract an external data collection firm or an evaluation consultant or team. In contracting external support, the regional skills specialist or central backstopping team can assist in developing terms of reference and reviewing work.

In all cases, data collection and analysis will be reviewed by the implementation team on a regular basis to ensure reliability and validity.

Impact assessment of each intervention should be undertaken annually. Where in-depth and expensive data collection exercises (such as large-scale beneficiary surveys) form part of the impact assessment methodology, annual impact assessments might be relatively light, with more in-depth assessments taking place at the end line of the intervention.

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Annex 4

Annex 5: Guide to Measuring Systemic Change

Introduction

This guidance note helps STED staff understand how they can make systemic changes in the sector they are working on by planning it from early stages of the STED process. It provides a framework and a way of thinking to improve STED work, but also to ensure that more sustainable results are achieved.

The guidance note starts by describing what systemic change is and how systems thinking could influence the planning, implementation, monitoring and evaluation of STED interventions. It continues with proposing a pathway to deeper transformation in the skills development system (systemic change) – the supply side to respond to the demand for skills in the sector – that could have impact on the sector in terms of export growth, and decent job creation. It then adds some information on how these changes could be monitored.

This document has six sections. After this short introduction, the following sections are included:

1. What represents systemic change for STED
2. STED-guided intervention phases
3. The pathway for achieving systemic change
4. Representation of systemic mainstream change in intervention results chains
5. Monitoring systemic change
6. Assessing sector-level systemic change

1.   What represents systemic change for STED

As well as measuring the direct results achieved by its interventions, the STED RBM and M&E system places emphasis on assessing their sustainability and the degree of systemic change that they achieve. Systemic approaches are built across the STED project lifecycle, including across design and implementation processes.
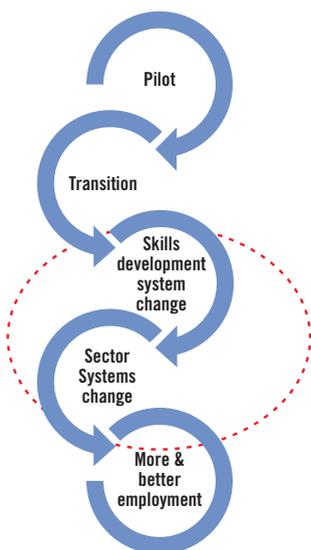
STED defines systemic change as long lasting transformation in both the structure and dynamics of a sector: 'change(s) that pervades all parts of a system/sector, taking into account the interrelationships and interdependencies among those parts'. It embeds this thinking starting with the intervention level design.

During the implementation of its interventions STED-based projects seek to achieve transformation in two systems: They target the skills development system directly, in order to have a resulting positive impact on the sector's business system. Interventions in the skills development system are designed to improve the capabilities of businesses in the sector, thereby improving the business and trade performance of the sector.

Defining a vision for systemic change is an important part of STED intervention design, not only for monitoring and results measurement but also to set clear strategies from the onset and define what shape system's change should take.

In principle there are at least three signs of systemic change that the programme expects to generate because of the pilot (pioneering new practices):

Growing - adaptation of the (pilot) innovation by the first movers (STED partners and their support organizations);

Diffusion (widespread growth) - uptake of the innovation by other players in the system;

At the end - further re-arrangement of the system to better "fit" the innovation - this is considered mainstream change or "systemic change", as it brings deeper transformation of the system in which STED has intervened.

These type of changes[1] reverberate in the "systems" STED works on: 1) the skills development system, and, due to that in 2) the sectors[2] that have the potential to make substantial contributions to export development and economic diversification, or need to improve competitiveness in the face of foreign competition. These systemic changes are depicted in the four STED-guided intervention phases.

In addition to this change model, STED-guided interventions may also target key points of leverage in the skills development system directly for incremental

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[1] "Mainstream change" is used interchangeable with "systemic change".

[2] These can be sectors that are still in their infancy, or established sectors with potential to diversify, for example through better products or new markets.

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improvement, through initiatives that can have a broad impact on the sector with limited investment of resources, such as, for example, through developing capacity in skills anticipation and skills system governance for the targeted sector.

2. STED-guided intervention phases

Once the STED analytic phase is over and a number of recommendations are selected for implementation, interventions are developed. Each of these interventions goes through four subsequent phases: **Pilot (Phase 1) –> Transition (Go - No go) (Phase 2) –> Incremental or Mainstream system change (Phase 3) –> Sector impact (Phase 4)**. These four phases are reflected in the STED Guided intervention results chain.

| Pilot | Transition | Mainstreaming of transformational and/or incremental system change | Sector Impact |

Phase 1   Phase 2   Phase 3   Phase 4

In the early phase of the intervention, the "pilot", more emphasis in the results chain is placed on 'testing' and examining the business model in detail and how can it made to work to ensure it moves to the mainstream system change phase, and impacts on the sector. This is presented on the left side of the results chain.

As the intervention develops, the team will spend time evaluating the pilot; if results are positive and the business model seems to work for all players, then enabling it to move to the next phase is part of the "transition". It is represented in the middle of the results chain.

The third phase has two options. It may lead to an incremental change which includes continuous system change occurring over an extended period of time, designed to bring about improvement in the skills development system. The changes are foreseeable and planned and their effects build slowly but inexorably. Or it may be transformational system change, or fundamental change which involves a major shift in context and touches all parts of the system. This type of change can occur quickly or over time. STED ideally aims to produce both incremental and transformational types of change.

3. STED Programme Pathway for achieving systemic change

These phases are reflected in the STED *four-step pathway to sector growth* framework.

Figure 1: Pathway to systemic change
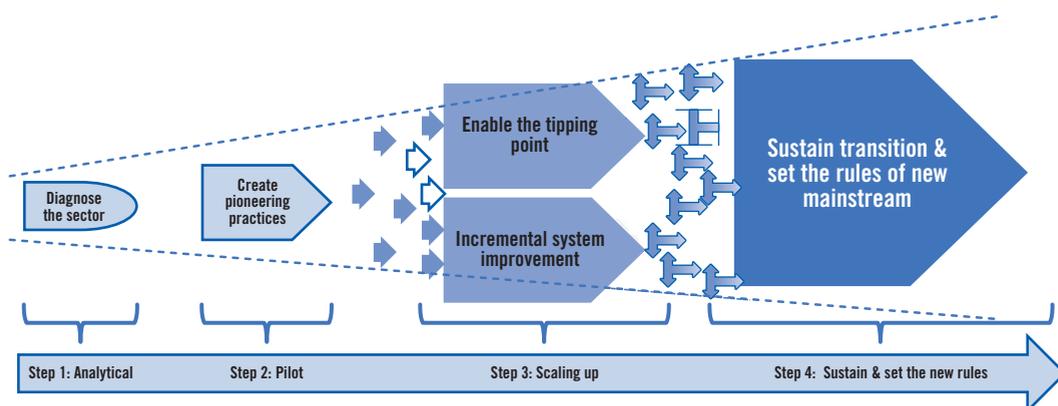
Step 1 Analytical phase: Through a *diagnosis of the sector*, including the system for skills development (demand and supply for skills), STED identifies constraints to sector growth which relate to skill. This culminates with a set of STED recommendations for stakeholders on how the skills development system would look and its potential impact on the sector in terms of export growth and ultimately decent job creation for women and men.

Step 2 Create pioneering practices (pilot): If funds are made available, STED, its partners or other interested funders can move into addressing the constraints by *creating and pioneer new practices* that can showcase these more innovative approaches.

Project and backstopping staff know that some of these practices, once piloted, might not catch on sustainably but a few can lead to sector growth. This is assessed towards the end of the pilot (transition). If the assessment of the pilot shows it is successful, then STED intervention can move onto the next phase.

Step 3 Scaling up

1. *Enabling the tipping point*: The hardest step to make is growing those achievable practices so that they become mainstream and are adopted across the system. It takes the pilot - a good idea, product or service - and grows or multiplies it so that it can have the biggest impact possible. It takes the innovation from a "niche" to mainstreaming. There are two ways this could happen:

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- Growing (adaptation of the innovation by the first movers);
- Diffusing/influencing (uptake of the innovation by other players in the sector(s); to reach scale STED would then take one, or many, of the elements of the intervention and share and disseminate them through the corporate and/or government mainstream or other key influencers.

These (behaviour) changes could happen with STED support, and semi-autonomously where STED can still support the change, or autonomously.

2. *Incremental change*: Rather than seeking a tipping point, STED-guided interventions may also target key points of leverage in the skills development system directly for incremental improvement.

Step 4 Sustain and set the rules of the new mainstream

The final steps for STED interventions involve making sure the change is here to stay and is sustainable in the long run. This further re-arrangement of the system to better enable the "innovation" is considered systemic change with deeper transformation of the system(s) STED is working on.

The dynamism of this approach adopted contradicts other models that use static representations of system change. This model reemphasises that true scale depends on the wider system change developing alongside programme system stakeholders STED is working with.

4. Representation of systemic mainstream change in STED intervention results chains

A template for the STED intervention results chains is provided in the STED-guided intervention Measurement Guide Spreadsheet (MGS). It includes separate columns for each stage of this process: Pilot – Transition – Mainstream.

These distinctive columns help visualise the transition between the initial outreach generated with a small number of system players from skills development system and the export sectors, to larger-scale outreach driven by multiple players and wider transformations, and, operationally, the strategic shift from piloting to deepening and broadening impact during the mainstream phase.

In the early phase of the intervention, the "pilot", more emphasis in the results chain is placed on 'testing' and examining the business model in detail and how it can be made to work to ensure it moves to the mainstream phase. This is presented on the left side of the results chain.

As the intervention develops, the team will spend time evaluating the pilot; if results are positive and business model seems to work for all players, then enabling it to

move to the next phase is part of the "transition". It is represented in the middle of the results chain.

The next phase is STED facilitating wider changes in the system(s) in order to achieve mainstreaming and sustainable system's change. It is represented on the right side of the results chain.

First, in the skills development system which concludes with growth in the provision of skills that respond to demand of the sector.

Figure 2: Systemic change in the skills development system

[31] **P: Month and year   A:**
Skills development system change

Indicators: growth in provision of skills in relevant areas; improvement in relevance (quality and relevance); quality and number of Training Institutions; perceptions
P:
A:

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[29] **P: Month and year   A:**
Training institutions increase their training capabilities to respond to demand for priority skills

Indicators: % staff with good quality skills; # performing well; reasons for this
P:
A:

[30] **P: Month and year   A:**
Trainees are knowledgeable and get qualifications

Indicators: # trainees knowledgeable; # with qualifications obtained
P:
A:

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[27] **P: Month and year   A:**
Training courses for the priority occupations across the TVET system are sustainably (at least cover running costs) delivered by the trainers at TVET Institutions under the new skills standards

Indicators: yes/no, how and why
P:
A:

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[26] **P: Month and year   A:**
The master trainers train trainers from TVET institutions

Indicators: #, #
P:
A:

[28] **P: Month and year   A:**
More Potential trainees see benefit of having qualifications in priority occupational skills and they enroll

Indicators: % companies perception; reasons
P: %, reasons
A:

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[25] **P: Month and year   A:**
TVET Institutions select and send trainers to be trained

Indicators: #, #, reasons
P:
A:

Note: Light orange boxes show the changes at the beneficiary (trainee) level.

Second, because of changes in the skills development system a significant change in the sector will occur e.g. increases in exports, decent jobs creation for men and women (figure 3 below).

Figure 3: Systemic change in the sector

[37] **P: Month and year   A:**
Increased employment in the sector

Indicators: Employment (new jobs, better jobs); (check what is available from NSOffice for sector: intervention: Establishment survey done by NSO - Labour force survey; Companies--structured questionnaire about employment--M/F, FT and PT seasonal..employment outcomes; progress decent jobs (labour turnover, decent wages (decent decided by staff - intervention/sector specific; perception)
P: # ; perception decent job explain, #
A:

[36] **P: Month and year   A:**
Increase in exports

Indicators: value of exports; # companies : diversity of products exported

P: $; # and type of products
A:

[35] **P: Month and year   A:**
Achieving sustainable share of domestic market

Indicators: % change in domestic market vs imports; reasons

P: $; # and type of products
A:

[32] **P: Month and year   A:**
Companies employ trainees and have sufficient (supply of) staff with good quality skills acc to market demand

Indicators: vacancies as % employment; satisfaction businesses with quantitative supply; and quality of supply

P: %; satisfaction index; quality index
A:

[33] **P: Month and year   A:**
Companies improve business capabilities

Indicators: Indicators: company perception on improvements; change in etx (e.g. ...unit labour productivity - output/hour worked(unit of labour), investment in training building on the skills -

P: perception index; %
A:

[34] **P: Month and year   A:**
Companies perform better

Indicators: # companies performing better (profitability/margins, labour productivity); labour productivity by value

P: #; $
A:

The move is 'messy' as it is sometimes non-sequential (there is a potential for other players to crowd-in around a 'buzz', even if the model is not yet proven profitable), it is reversible (the incentives of initial partners may change over time) and not mutually exclusive.

It is recognized that this phase is less developed as many unknowns are still at play, and it would require further work and adaptation once the pilot has been tested and assessed.

The critical step at the outset of an intervention is therefore to map out the logic and underlying assumptions for first-wave impact onto a results chain, along with thinking about where the triggers might be for the wider 'sector' to start buying in to the innovation. Examples are provided - for six sample generic interventions - in the STED RBM & M&E manual and its annexes.

5. Monitoring systemic change

Various approaches to measuring results will be adopted across the STED systemic change pathway.

1. During *Step 2 create pioneering practices*: Implementing partners (i.e. private or public sector partners) will be monitored to determine if they are successfully adopting key practice changes during and after direct programme support has ended. This stage also includes checking if beneficiaries have access to new products/services.

2. *Growing - enabling the tipping point and incremental change (Step 3)* the scale of the intervention is expected to increase at both supply and demand side as a follow on from the pilot stage. Monitoring and measurement activities will take place at various levels:

   ■ From continuing monitoring STED partners to determine if they have successfully adapted the practice change after direct programme support. Specific information is collected from partners on increase in sales, customer base, demand etc. (for more information see intervention results chain). This data also needs to be used to identify the further uptake from trainees and other stakeholders – private companies - "beneficiaries of the skills development system"- to enable increased scale in the skills development system and subsequently the sector.

   ■ To looking for new players in the system or outside which adopted the innovation autonomously or semi-autonomously; when STED identifies this "type of behaviour change", it will seek to verify a link between practice change of STED's direct partners and practice change of the potential other market actor(s). At this stage the programme monitors the actors adopting the practice change.

Monitoring involves a scan of the system and sector landscape through key informant interviews with system actors (including partners and copycats). It also involves monitoring direct and indirect target group benefits (at both skills development system and sector levels) on 'outcome' and 'impact level' indicators for sustainability. Monitoring at this stage becomes more investigative, involving looking for clues and following up on leads. However, secondary data on changes in the sector can be used to triangulate results. More examples of possible indicators are presented in the MGS – STED Sector (Annex 6 of the STED RBM and M&E manual).

3. *Sustain the transition and set the rules of the new mainstream (Step 4).* STED has created an intervention, pioneered the practice that addressed a key leverage point and helped it to scale. That may be where most programmes finish, when scale is misinterpreted as systemic change; but it is not the end

of the change story. In order to maintain the type of system shifts that have been described, efforts are needed to:

- First, *sustain the transition*. One key thing that needs to be monitored is that configuration of the "old" system(s) breaks and sustainable adjustments occur in the system. Monitoring involves a scan of the industry landscape; key informant interviews with system actors; and observation of response to shocks. At this stage, monitoring is again investigative, involving looking for clues and following up on leads, looking at linkages using tools such as network mapping[3], sensemaker[4], power changes framework etc. It is largely qualitative in nature.

- Second, s*etting new rules of the mainstream* – which is the moment of cementing the change. These things do not happen in isolation – they have to be preceded by shifts in attitudes and evidence that they will work. Sometimes these shifts themselves are enough – such as new social rules or new regulations. Key dynamics to watch is the new system influencing other systems and the macro-environment.

6.   Assessing sector level systemic change

In order to assess a STED-based project's contribution to sector level systemic change, we have developed a sector level results chain.

Based on that, the STED-based project will undertake periodic analysis of the skills development system for the sector (including provision within businesses, provision at education and training providers and education by others) and its impact on the sector growth (indicatively on an (bi) annual basis) to assess the changes that have occurred and the contribution that the project has made to these changes, whether directly through its own interventions, indirectly through action by others motivated or enabled by the project or its recommendations, or as a downstream consequence of these actions. This would include analysis of key indicators of sector performance and, to the extent possible, the way in which this impacts on employees and skills development system "consumers" in the sector (i.e. the impact level of the STED

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3   Network mapping is a method to analyse the structure of relationships in a group of interconnected elements. In the context of market systems development, Network mapping can describe patterns of how individuals, firms, or other entities regularly interact over time. It can help the project team to detect changing patterns of connection, trust, satisfaction, investment in relationships, frequency of interaction, etc. Part of the utility of network analysis lies in the ability to quantify the structure of networks and, in doing so, behavioural patterns. These patterns can then be analysed according to parameters such as location or attributes of the individual/firm, which can be tracked across an entire system over time.

4   SenseMaker combines an innovative research methodology with patented software to collect and analyse large quantities of narratives in order to understand complex change. It brings together insights from complexity sciences, anthropology, and cognitive science. It uses participants' narratives to uncover foundational attitudes and norms that inform and influence behaviour.

logframe). The sector-level analysis should assess the key factors that have driven observed changes. This will be based on consultations with intervention stakeholders and the collation, analysis of secondary data.

By combining this with an assessment and aggregation of the systemic changes that individual STED-guided interventions have achieved (through intervention level monitoring and potentially one or more enterprise surveys to assess impact at enterprise level, among enterprises that have benefitted directly from interventions or among the wider population of enterprises in the sector), it should be possible to assess the extent to which STED has achieved systemic change. Following the logic of the sector results chain, monitoring should look not just at impact on skills, but also at the impact that skills improvements have on business capabilities and the impact these improvements in business capability have on business performance.

Monitoring should link firm level impacts to sector level impacts, taking account of system change in skills development for the sector. In doing this, it should take account of delays inherent in the system. If significant impact at sector level can reasonably be projected to happen in the future, monitoring should focus on indicators on which change is already measurable, and demonstrate the logic that is expected to drive future change in high-level systemic indicators in areas like trade and employment impact.

Attribution at the sector levels however should be treated carefully. The methods suggested in the Impact Assessment Guide should be followed.

Export sector level indicators for example are: increase in exports, stabilisation of the domestic market, decent employment creation for women and men; skills development system growth in provision of skills. For more information on these and other indicators at the sector level please refer to MGS – STED Sector and to the results chain from Annex 6 (Measurement Guide Spreadsheets (MGS) for STED Analytic Phase and six STED Guided Interventions and MGS Sector) of the STED RBM and M&E manual.

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