Independent Evaluation Division
Office of Evaluation and Internal Oversight

Synthesis of UNIDO Independent Evaluations 2015-2018

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

INDEPENDENT EVALUATION DIVISION
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ACRONYMS AND ABBREVIATIONS

BAT	Best Available Techniques
BEP	Best Environmental Practices
CCA	Common Country Analysis
DaO	Delivering as One
EU	European Union
GEF	Global Environment Facility
GII	Green Industry Initiative
GIP	Green Industry Platform
IED	Independent Evaluation Division
IRPF	Integrated Results and Performance Framework
ISID	Inclusive and Sustainable Industrial Development
ITPO	India Trade Promotion Organisation
KASA	Knowledge Attitudes Skills and Aspirations
MAP	Medical and Aromatic Plan
MSME	Micro, Small and Medium Enterprises
NIP	National Implementation Plan
PCP	Programme for Country Partnerships
PV	Photovoltaic
SYNTHESIS	Results and Performance Synthesis
RECP	Resource Efficient and Cleaner Production
REEIS	Relevance Effectiveness Efficiency and Sustainability
SIDO	Small Industries Development Organisation
UNDAF	United Nations Development Assistance Framework Guide
UNEG	United Nations Evaluations Group
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation

Executive Summary

In February 2018, as part of the Independent Evaluation Division's 2018-2019 work programme, the UNIDO Executive Board approved the conduct of the 'Synthesis of Independent Evaluations during 2015-2018'. This Synthesis provides a systematic overview of the findings and results from 65 independent evaluations conducted in the last three years by UNIDO Independent Evaluation Division between July 2015 and June 2018, including 53 project evaluations, six thematic and six country evaluations. This is the second time such a synthesis is conducted, with the first synthesis undertaken in 2015 covering evaluations from 2012 to 2015. This Synthesis will also provide inputs to the UNIDO 'Integrated Results and Performance Framework' (IRPF).

Key Findings

A high proportion of the 53 evaluated projects, from 77% (n=41) to 100% (n=53), were rated in satisfactory range across the different evaluation criteria, namely relevance, effectiveness, efficiency and sustainability, as show in table 1. Overall, UNIDO projects were rated stronger in terms of relevance and effectiveness, but weaker in efficiency and sustainability. UNIDO organizational performance in terms of project design, management and backstopping also assessed satisfactorily. However, a deeper analysis of project-level Monitoring and Evaluation (M&E) suggests that the quantitative ratings by UNIDO independent evaluations were overstated, in comparison to the qualitative evidence from the evaluation reports.

Table 1. Overall Project Performance – by Evaluation Criteria* (number of projects)

Rating	Relevance	Effectiveness	Efficiency	Sustainability	Overall performance	Project design	UNIDO project management	UNIDO backstopping
Highly Satisfactory	34	9	3	0	0	5	10	8
Satisfactory	12	25	22	15	29	17	15	22
Moderately Satisfactory	7	18	16	25	19	13	4	6
Moderately Unsatisfactory	0	1	12	7	5	6	3	3
Unsatisfactory	0	0	0	2	0	2	0	2
Highly Unsatisfactory	0	0	0	0	0	0	0	0
Number of projects rated	53	53	53	49	53	43	32	41

*Note: *) Not all 53 evaluation reports assign ratings to all criteria*
Source: UNIDO Portfolio – Synthesis Analysis 2018

The overall performance of UNIDO projects funded by the Global Environment Facility (GEF); as verified by the GEF Independent Evaluation Office in 2018[1], indicates that 95% (21 out of 22) of projects designed and implemented by UNIDO are in satisfactory range, consisting of highly satisfactory, satisfactory and moderately satisfactory ratings.

Results in terms of intermediate outcomes reported in the evaluations were enumerated across the three UNIDO thematic priorities: namely Advancing Economic Competitiveness, Safeguarding the Environment and Creating Shared Prosperity. Overall, the flow of evidence on results from the evaluated projects was more qualitative than quantitative. Consequently, the synthesis of results was determined by the extent to which qualitative evidence was provided in relation to stated results. The synthesis analysis suggests that likelihood of contribution to impacts tended to be higher in economic and environmental areas, but lower in social sector. Local-scale impacts on direct beneficiaries have emerged from some projects at completion point; yet limited system-scale impact was reported. This is due to the extent of time required for system-scale impact to

[1] GEF 2018. Annual Performance Report 2017

take place, often long after project completion point when evaluations are conducted. Review of the evaluations suggests that broader adoption initiatives (e.g. mainstreaming, replication, scaling-up and market change) in UNIDO would be useful to bring about system-scale impacts and long-term sustainable changes.

Of the three areas corresponding to UNIDO's three thematic priorities namely Advancing Economic Competitiveness, Safeguarding the Environment and Creating Shared Prosperity: 78% (38)[2] of the evaluated projects indicated some positive local-scale contributions to economic impact, 65% (32) showed environmental impact, and 43% (21) showed social impact.

The Synthesis highlighted a number of important findings, lessons and areas for improvement which could assist UNIDO to accelerate progress towards ISID.

Broader adoption initiatives to replicate and scale up pilot projects were not systematically planned and implemented. Many UNIDO interventions are pilot or demonstration projects but it remains unclear how successful pilots could be replicated and up-scaled by others to transform project outcomes and local-scale impacts into system-scale impacts. Some broader adoption initiatives (e.g. mainstreaming, replication, scaling-up and market change) required by the GEF for the projects it funded have been planned, partially implemented and adopted in few projects, but some projects did not indicate intention to engage in significant broader adoption initiatives.

Good project design is critical. The Synthesis found that a context-specific, adaptive, and appropriate project design contributes towards programme success. Of the 29 projects identified as the most successful in the 53 evaluated projects, 13 (45%) had an appropriate design with satisfactory or highly satisfactory rating. Out of 43 projects with design rating, 35 (81%) projects with satisfactory design had also higher overall performance rating. There is a mark difference of 1.3 point in ratings between satisfactorily and unsatisfactorily designed projects. The analysis determined that a project could still achieve some results if it was well-designed but poorly implemented; but it struggled to achieve all of its objectives. Projects which were characterised by generic or poor designs which did not develop a clear and causal results chain (impact, outcomes, and outputs) with demonstrated links and suitable indicators often struggled to achieve their objectives. The most positive results achieved across the portfolio were generated when the project design was strategic, in-line with government priorities, well-structured, with clear and causal results chain, corresponding SMART indicators and clear roles and responsibilities.

Co-financing is important but appears to be under-reported. Co-financing (in-kind or cash) is another important part of UNIDO programmes and projects. It brings in more resources and increases country ownership of an initiative. For the Synthesis sample projects, the aggregated co-financing committed at design stage of nearly USD 150 million is more than the USD 127 million that UNIDO had to implement its programmes and projects. In addition, actual co-financing at completion is larger than promised co-financing at design. Co-financing also increases the likelihood of UNIDO pilot or demonstration interventions being replicated or scaled-up by national stakeholders in the public and private sectors. As a result, co-financing has the capacity to significantly widen UNIDO's on-the-ground development impact. Yet, few projects track actual level of co-financing achieved and there is no systematic tracking of co-financing across UNIDO portfolio. Only 17 out of 53 projects reported receiving financial support from

[2] Out of 53 evaluated projects, four projects were not designed to lead to any impact due to their nature of interventions such as capacity building, advocacy, and enabling activities.

member country governments or private sector at project completion. However, where there was a firm financial contribution from national stakeholders, these projects tended to display higher relevance, effectiveness, efficiency and sustainability.

Strategic leadership and country presence lead to implementation coherence. When UNIDO effectively utilises its strategic leadership and presence in a country, and collective expertise and experience to provide services to member states, projects were more likely to demonstrate highly satisfactory and satisfactory results. In cases in which UNIDO did not have a strong country presence, or demonstrated a fragmented approach to project implementation and management, projects suffered from a range of implementation issues, including poor coordination, staffing issues and procurement challenges. Amongst the 29 projects identified as being the most successful, 8 (26%) indicated that project results and performance could have potentially been improved if UNIDO had been more strategic in its leadership in a country.

Building knowledge and capacity is integral to good performance. UNIDO's ability to build capacity in member countries was identified as a crucial factor for project sustainability. Of the 29 most successful projects, around half successfully built the capacity of relevant stakeholders, businesses, and government departments. In addition, 36% of projects had good design as well as building capacity in-country. Capacity building delivered in-line with technological improvements enhances the sustainability of projects by passing on the skills and knowledge required to further maintain and up-scale a project to the local stakeholders via training.

Stakeholder engagement is crucial for achieving performance and results. A high-degree of stakeholder engagement was necessary for achieving project success. The extent to which projects and UNIDO staff engaged with stakeholders, particularly national governments and private sector actors, contributed significantly to the relevance, effectiveness, efficiency and sustainability of a project. Where this did not occur effectively, implementation challenges occurred and results were affected.

Quality of project-level M&E is suboptimal. Results of the quality of project M&E design and the implementation of the M&E plan are mixed with no positive trends emerging. However, encouraging evidence of cases emerge where M&E was used for adaptive management in some UNIDO projects. There are positive correlations between the quality of M&E and the performance of UNIDO projects based on the evaluation ratings.

Ratings by independent project evaluations were overstated. A deeper analysis of project-level M&E assessment and more critical qualitative evidence in reports within and outside[3] UNIDO indicate that the ratings by independent project evaluations do not always reflect the qualitative evidence in the evaluation reports, and seem to be overrated to some extent.

Potential areas for improvement

The Synthesis identified the following issues that can be considered by UNIDO when seeking continuous improvement in achieving results:

1. **Replication and scale-up**. How to capitalize on UNIDO's strengths to reach broader impact at system level through more defined broader adoption initiatives to replicate and scale up pilot projects should be given attention systematically.

[3] Joint Inspection Unit (JIU) 2017, Review of Management and Administration in the United Nations Industrial Development Organization (UNIDO); and GEF, 2018: Evaluation of the GEF-UNIDO Global Cleantech Innovation Programme.

2. **National context in project design and implementation**. A more structured approach to take national context into account at the design and implementation phase with clearer roles and responsibilities and a view to longer term results.

3. **Stakeholder engagement.** The status and systematic follow-up of stakeholder commitment could be given more formal attention and review at the design stage and during implementation to ensure stakeholder ownership of the process.

4. **Co-financing and resource leverage**. Innovative approaches are required to track, understand and upscale success factors for co-financing and resource leveraging. UNIDO does have good practice examples that could be further investigated and built upon.

5. **Cross-cutting issues**. Focus on cross-cutting issues in terms of gender mainstreaming, partnership building and policy work, particularly during project design and implementation appears to generate better results.

6. **M&E budget**. Allocate budget for M&E explicitly in project document at design; including separate allocation for: i) monitoring, ii) evaluation and iii) training local partners on project cycle and M&E.

7. **Corporate M&E system**. Rigorous and consistent corporate M&E system for defining and tracking results across UNIDO portfolio could help to aggregate and analyze performance and results for adaptive management. An institutional Monitoring, Reporting and Evaluation system is needed, together with practical tools to be used by project managers.

8. **Realistic rating by independent evaluations**. Greater scrutiny by UNIDO EIO/IED in line with the UNIDO Evaluation Manual introduced in February 2018 could lead to more systematic, rigorous and realistic ratings by project terminal evaluation teams.

1. INTRODUCTION

In February 2018, as part of the work programme of the Independent Evaluation Division (EIO/IED), the UNIDO Executive Board approved a review of independent evaluations conducted during 2015-2018. The 'Synthesis of Independent Evaluation during 2015-2018 provides a systematic overview of the findings and results from 65 independent evaluations conducted in the last three years by EIO/IED between July 2015 and June 2018, including 53 project evaluations, six thematic and six country evaluations. A previous synthesis of evaluations was conducted in 2015, covering evaluations from 2012 to 2015.

Since 2010, the Independent Evaluation Division (EIO/IED) has consistently taken stock of past independent evaluations and has consolidated key findings and lessons into synthesis reports to promote learning at UNIDO. Building on this work, the report will provide an independent and systematic overview of the results and performance of UNIDO programmes and projects evaluated between July 2015 and June 2018 by EIO/IED. The exercise aims at enhancing the learning at UNIDO to further improve the organization's performance and impact by identifying and capturing accumulated knowledge from UNIDO's independent evaluations, and to feed into UNIDO's decision-making process in an effective way. The Synthesis report will provide inputs to the current UNIDO's Integrated Results and Performance Framework (IRPF) on the indicators related to Organizational Performance (e.g. Programmes/projects rated successful at completion by evaluation in terms of relevance, effectiveness, efficiency, sustainability; Programmes/projects with adequate log-frames/monitoring and evaluation system; and Programmes/projects with gender-responsive analysis).

The Synthesis will take stock of UNIDO's independent evaluations; examine and synthetize in a qualitative and quantitative manner the findings from programmes and projects evaluations in the last three years; assess the drivers of success and failure to identify corrective actions to achieve better results; and draw attention to systemic issues.

This synthesis report will also concentrate on the specific learning theme of Monitoring and Evaluation (M&E) that is recurrent in evaluations and merits additional reflection and debate. This topic has been identified as an area for improvement in many evaluations.

2. OVERVIEW OF THE SYNTHESIS OF INDEPENDENT EVALUATIONS

2.1 Objectives

It was envisioned that the Synthesis would contribute to UNIDO's performance by fostering learning, capturing knowledge, and identifying areas of potential improvement. Specifically, the Synthesis aims to achieve the following objectives:

1. **Generate a robust and concise synthesis:** To independently present an overview of Results and Performance of UNIDO programmes and projects independently evaluated between July 2015 and June 2018;
2. **Enhance learning:** To highlight key learning issues related to Monitoring and Evaluation at project level that UNIDO needs to address to enhance future operations; and to assess factors contributing to and hindering results and performance; and
3. **Generate findings and identify areas from improvement:** To help UNIDO further improve its results and performance.

2.2 Methodology

The Synthesis used mixed methods to collect data and information from a range of sources and informants. It paid attention to triangulating the data and information to identify key findings. Thanks to the ratings by independent evaluations of most of programmes and projects in recent years and the introduction of the UNIDO Evaluation Manual in February 2018, a common framework is now available for use systematically across all UNIDO programme and project evaluations.

UNIDO evaluations use a six-point rating scale, with 6 indicating highly satisfactory performance and 1 indicating highly unsatisfactory performance (see table 3 for more details). This scale was used to rate each project against the following criteria: project performance consisting of relevance, effectiveness, efficiency and sustainability of benefits; progress to impact; project design; monitoring and evaluation; gender mainstreaming; performance of partners including UNIDO project management and backstopping, and etc. Overall performance is the composite of relevance, effectiveness, efficiency, sustainability and progress to impact, without specific weighting to any specific criteria. It should be noted that although many project evaluations attempted to discuss project impact, rating on progress toward impact has been required only since the introduction of the UNIDO Evaluation Manual in February 2018.

Project evaluation criteria

	Evaluation criteria
A	**Progress toward impact**
B	**Project design**
1	• Overall design
2	• Logframe
C	**Project performance**
1	• Relevance
2	• Effectiveness
3	• Efficiency
4	• Sustainability of benefits
D	**Cross-cutting performance criteria**
1	• Gender mainstreaming
2	• M&E: ✓ M&E design ✓ M&E implementation
3	• Results-based Management (RBM)
E	**Performance of partners**
1	• UNIDO
2	• National counterparts
3	• Donor
F	**Overall assessment**

Impact areas and results domains. In order to analyse and aggregate results information systematically, linking performance and results from projects to the IRPF at the corporate level, the review team developed three impact areas and eight results domains.

Based on the three thematic priorities of UNIDO, three Impact Areas were identified:

Impact areas

1. Economic impact : Advancing economic competitiveness
2. Environmental impact: Safeguarding the environment
3. Social impact: Creating shared prosperity

Based on UNIDO's role, its focus on Inclusive and Sustainable Industrial Development (ISID) and Sustainable Development Goal (SDG) 9, and its most common areas of intervention, eight Results Domains were identified:

Results domains

1. Technology improvements
2. Capacity building (of institutions & individuals)
3. Policy, legal & regulatory framework strengthening
4. Knowledge strengthening
5. Business models development
6. Finance leveraging
7. Norms & standards strengthening
8. Partnerships building & convening

The Bennett Hierarchy uses a seven steps logic model to identify the results which programs and/or projects should be targeting[4]. The model is an extended results-hierarchy indicating steps for projects to reach the final goal. The seven steps are:

Bennet hierarchy

7. End results – impact
6. Practice and behaviour change
5. Knowledge, attitude, skills and/or aspiration change
4. Reactions
3. Engagement/involvement
2. Activities and outputs
1. Inputs

The Synthesis used the Bennett Hierarchy to analyse results in relation to the eight results domains and the extent to which results have led to actual change in behaviour towards ISID. The results were assessed based on evidence presented in the evaluation reports that align with the respective step on the hierarchy.

A more detailed description of the review methodology can be found in Annex 1 and 3.

[4] The Bennett hierarchy model presents a basic results chain, describing seven steps that are necessary to get from input to impact. This has been applied by UNIDO as a results planning model that is scalable at project, programme, initiative, country, and corporate level, and supports the whole programme cycle. (Source: UNIDO 2018, Integrated results and performance framework - definition of indicators and setting of targets. (PBC.34_CRP.02)).

2.3 Scope

The synthesis draws quantitative and qualitative findings from all 65 evaluations independently conducted by IED between July 2015 and June 2018. They include 53 terminal project, six country and six thematic evaluations (a full list is in Annex 2). This means that the overall timeframe of UNIDO interventions is approximately 2010-2017 but may also cover earlier work as thematic and country evaluations included projects, programmes and other organizational level processes over a wider period of assessment.

2.4 Limitations and mitigation

The UNIDO portfolio is large and varied in project type, scope and impact. All due care was made in the analysis to ensure that data was accurate and reflective. Nevertheless consolidating the data across a portfolio as varied as UNIDO's presented some challenges. Three main limitations, listed below, were identified and addressed through the methodology:

- **Portfolio and project data in UNIDO is not uniformly available.** Data extraction for all projects in the UNIDO portfolio was not easily available. Data was manually extracted from the UNIDO ERP database but this did not include full data for all projects and there were some projects where data was incomplete or hard to verify. Similarly, the presentation of data in the evaluations was variable and difficult to combine for effective analysis. Data triangulation was used to ensure findings were as robust as possible, but often the team had to rely on qualitative data. The M&E recommendations within this report can contribute to improve data quality for assessment of results in future Synthesis.

- **A high proportion of larger projects are funded by the Global Environment Facility (GEF).** There is a disproportionate number of larger projects[5] (27 of 53) that are funded by the GEF in the sample. This risk of bias towards one funding source rather than representation across the whole portfolio was mitigated by including an explicit statement of the proportion of GEF evaluations against the total evaluations and the qualification of any findings specific to GEF projects as compared to other projects.

- **Evolution in rating process of evaluation reports.** During the analysis, it was noted that there is variability in rating between project evaluations. EIO/IED introduced Evaluation Manual in February of 2018, however prior to this project ratings were not always consistent and not all evaluation criteria were rated across 53 projects. In order to ensure a complete data set for the analysis, the Synthesis team conducted a robust triangulated process of rating (the Rule of Three)[6] in order to address any gaps in the data. The consistency of evaluation assessment and rating improved in later years as a result of the strengthening of UNIDO's evaluation function and the introduction of UNIDO evaluation guidelines and tools.

[5] For the purpose of this Synthesis report, larger projects are defined as projects that are over $2 million.
[6] Three independent members of the Synthesis team reviewed evaluation reports and rated key evaluation criteria independently. One team member reviewed all the independent ratings and where there was a discrepancy, the team discussed the difference and agreed on the final rating.

3. OVERVIEW OF EVALUATED PROJECTS, COUNTRIES AND THEMES

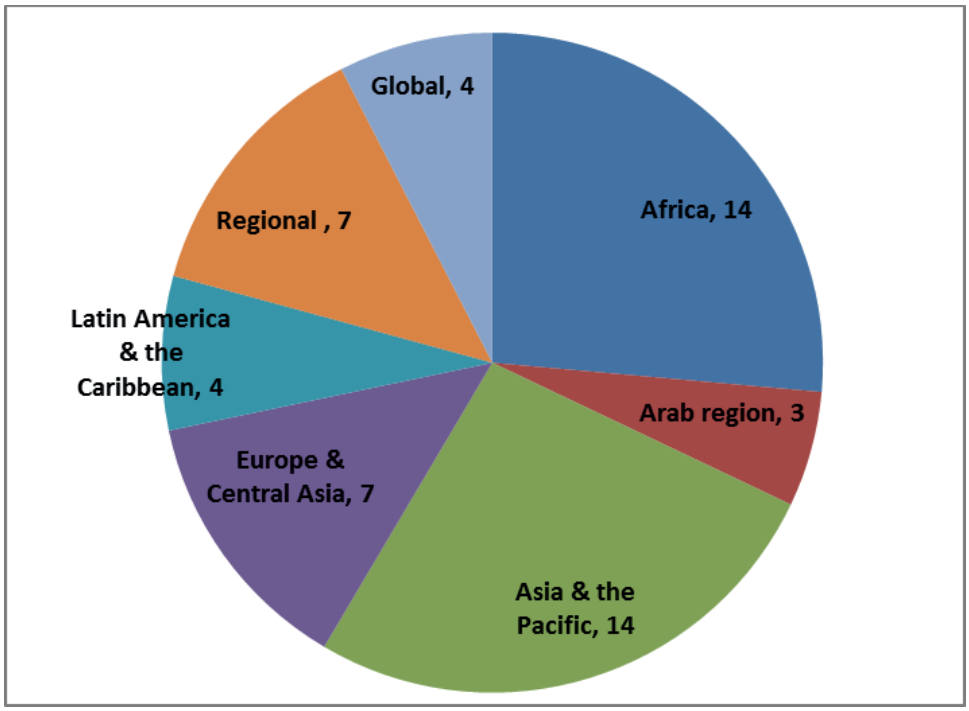
This section of the report provides a brief summary of the overall UNIDO portfolio the sample of project, country and thematic evaluations covered in the Synthesis.

Project evaluations

The total budget of the 53 projects was approximately USD 310 million, including USD 127 million directly channeled to UNIDO by donors and USD 183 million in co-financing. The key funding partners include the GEF, European Union, Finland, Italy, Japan, Sweden, and Switzerland. All of the evaluations are terminal project evaluations i.e. completed close to or after project completion. A brief description of the sample is provided in the section below and a full list, including the short names used in the examples throughout this report is available in Annex 2.

Project geographical distribution. The 53 project evaluations span all regions of UNIDO's operations. They spread across all five regions with Africa and Asia having the largest share of the projects (see Figure 1. Geographical distribution of projects).

Figure 1. Geographical distribution of projects



Project size. This Synthesis included projects with a range of budget sizes – calculated based on project budget channelled through UNIDO at approval. The majority (20) were less than USD 1 million and the largest two ranged between USD 10 – 20 million. The projects included in the Synthesis sample consisted of 66% of projects smaller than or equal to USD 2 million and 34% more than USD 2 million.

Table 1. Project size

Project size	Number of Projects	Percentage of Projects
≤USD 1 million	20	38%
>USD 1 million; ≤USD 2 million	15	28%
>USD 2 million; ≤USD 5 million	12	23%
>USD 5 million; ≤USD 10 million	4	8%
>USD 10 million; ≤USD 20 million	2	4%
TOTAL	53	100%

Source: Independent project evaluation reports, Project documents.

Projects funding partners. The 53 projects were funded by 17 different donors, including multi donors and the GEF. Over half were funded mainly by the GEF (27 = 51%) in partnership with UNIDO and country stakeholders. Japan funded four projects (8%) and Norway, Russia and Switzerland funded three projects each (6%).

Table 2. Project donors

Donor	No. of Projects Funded	Percentage of Sample funded		Donor	No. of Projects Funded	Percentage of Sample funded
Austria	1	2%		Japan - Switzerland	1	2%
Egypt	1	2%		Multi donor	1	2%
EU	1	2%		Norway	3	6%
Finland	1	2%		One UN	2	4%
GEF	27	51%		Russia	3	6%
GEF, others	1	2%		Sweden	1	2%
Italy	1	2%		Switzerland	3	6%
Japan	4	8%		UNIDO	1	2%
				Uruguay	1	2%
				53	**100%**	

Source: Synthesis sample database, 2018

Country programme evaluations

The six country evaluations cover UNIDO's programmes in targeted countries: Indonesia, Nigeria, Tanzania, Thailand and Tunisia; and a combined assessment for Guatemala, Nicaragua and the Dominican Republic.

Thematic evaluations

The six thematic evaluations were reviewed in relation to the IRPF tiers:

IRPF Tier 1: UNIDO's Results and Performance:

- UNIDO's Interventions in the area of Enterprise Development for Job Creation, Including for Women and Youth;
- UNIDO's approach to ozone depleting substances projects under the Montreal Protocol with emphasis on countries in the European and in the Latin American and Caribbean regions;
- Mid-term evaluation of UNIDO's Programme for Country Partnership.

IRPF Tier 2: UNIDO's Organization Performance:

- UNIDO Procurement Processes;
- UNIDO's Staff Competency Development;
- UNIDO Partnerships with Donors.

The findings from these evaluations are incorporated in the sections for crosscutting issues (Section 6) and UNIDO's organizational performance (Section 7), respectively.

4. PERFORMANCE OF EVALUATED PROJECTS

This section summarises findings on project performance ratings from the evaluations based on the UNIDO six-point scale evaluation rating system, dividing into satisfactory and unsatisfactory range.

Table 3. UNIDO Evaluation rating scale

Score		Definition*
6	Highly satisfactory (HS)	Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets).
5	Satisfactory (S)	Level of achievement presents minor shortcomings (70% - 89% achievement rate of planned expectations and targets).
4	Moderately satisfactory (MS)	Level of achievement presents moderate shortcomings (50% - 69% achievement rate of planned expectations and targets).
3	Moderately unsatisfactory (MU)	Level of achievement presents some significant shortcomings (30% - 49% achievement rate of planned expectations and targets).
2	Unsatisfactory (U)	Level of achievement presents major shortcomings (10% - 29% achievement rate of planned expectations and targets).
1	Highly unsatisfactory (HU)	Level of achievement presents severe shortcomings (0% - 9% achievement rate of planned expectations and targets).

*Note: * For impact, the assessment will be based on the level of likely achievement, as it is often too early to assess the long-term impacts of the project at the project completion point.*

At corporate level, UNIDO IRPF Tier 1 analysis of performance in relation to development effectiveness is based on the project ratings of relevance, effectiveness, efficiency, impact and sustainability. The country programme evaluations helped to deepen the qualitative analysis.

The IRPF Tier 2 analysis for UNIDO organizational performance is drawn from projects where a rating for UNIDO performance was provided and from the three thematic evaluations that related to UNIDO organizational matters (procurement, staff capability and relationships with donors). The findings are presented in sections 6 and 7.

4.1 Overall performance of evaluated projects

Overall performance is determined based on the analysis and rating of project relevance, effectiveness, efficiency, sustainability and progress to impact, without specific weighting to any specific criteria, but is not an average of ratings.

Overall, high percentages of UNIDO evaluated projects are in satisfactory range (see table 4), especially in relevance and effectiveness but lower in efficiency and sustainability. Taking into account only projects rated satisfactory or highly satisfactory, 87% of projects are assessed as highly satisfactory or satisfactory for relevance, 65% for effectiveness, but much weaker for efficiency of 48% and for sustainability of results of 31%.

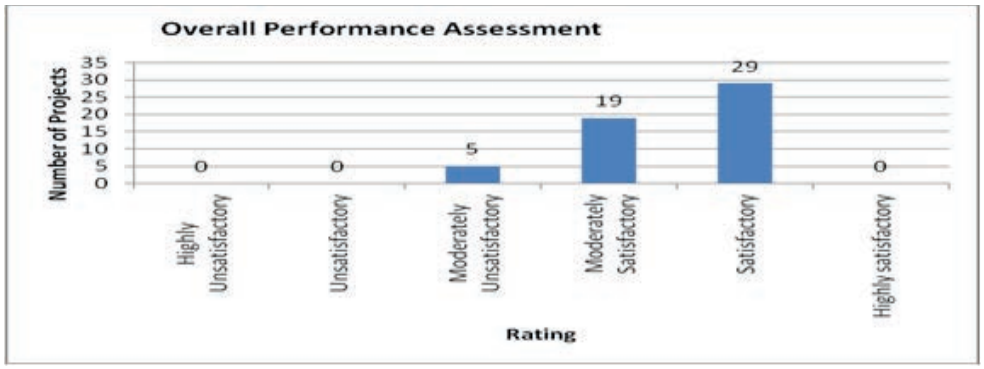
Table 4: Overall project performance – by evaluation criteria* (number of projects)

Rating	Relevance	Effectiveness	Efficiency	Sustainability	Overall performance	Project design	UNIDO project management	UNIDO backstopping
Highly Satisfactory	34	9	3	0	0	5	10	8
Satisfactory	12	25	22	15	29	17	15	22
Moderately Satisfactory	7	18	16	25	19	13	4	6
Moderately Unsatisfactory	0	1	12	7	5	6	3	3
Unsatisfactory	0	0	0	2	0	2	0	2
Highly Unsatisfactory	0	0	0	0	0	0	0	0

*Note: *) Not all 53 evaluation reports assign ratings to all criteria*
Source: UNIDO Portfolio – Synthesis Analysis 2018

The overall performance of UNIDO's projects is largely satisfactory as shown in Figure 2; although none was rated as highly satisfactory across all criteria. This is due to the fact that none of the projects obtained highly satisfactorily rating in terms of sustainability and very few projects were assessed highly satisfactorily in efficiency. The overall performance of 29 projects were rated satisfactory and 19 moderately satisfactory. Of the five projects that are in unsatisfactory range, all were rated as moderately satisfactory. No projects were rated as unsatisfactory or highly unsatisfactory.

Figure 2. Overall performance assessment



Source: UNIDO Portfolio - SYNTHESIS Analysis 2018

4.2 Overall ratings by evaluation criteria

4.2.1 Relevance

Relevance is a measure of the extent to which project objectives are consistent with the needs of the target groups and the priorities and policies of the donor and UNIDO.

All evaluated projects were assessed as relevant, and the majority 46 out of 53 (87%) were highly or substantially relevant to the target beneficiaries, donors and UNIDO.

Key drivers of relevance. Projects rated as HS and S were shown to have the following key drivers in common: (i) clear evidence of relevance to the needs of all stakeholders; (ii) alignment with country policies and priorities; (iii) timely and appropriate response of project to the needs of stakeholders and beneficiaries within the design; (iv) compliance with international

conventions, for example the Minamata and Stockholm Convention[7] (see Box 3); and (v) alignment with international priorities with multiple partners, for example towards the Sustainable Development Goals.

Highly relevant projects most commonly displayed high levels of ownership from national governments and industries, which significantly contributed to the project's relevance in-country. In contrast, where government or industry ownership and engagement is weaker, the project is likely less relevant.

Appropriate project design, considering local context and timing was another key driver of relevance. Of the 53 projects reviewed 22 were identified as having a strong design which contributed to their high achievement in other criteria. Careful consideration of project country context at the design stage was key in ensuring that projects were suitable for the context in which they were implemented.

Stockholm Convention targets were a priority and progress was achieved across regions. Seven of 53 sample projects were designed to address persistent organic pollutants (POPs) and polychlorinated biphenyls (PCBs). Of the seven projects, five have been assessed as being highly relevant.

Two projects, *Market Access and Trade Facilitation Support for South Asian LDCS and Trade capacity building in the Mekong Delta countries* (106034 and 106078), have a rating of Moderately Satisfactory for relevance. The projects were considered to be Highly Relevant in intent; however the design was not appropriate for all countries at different levels of trade quality infrastructure and had to be tailored to requirements, which impacted the project's overall relevance rating. There are significant differences in size, culture, religion, and development level between the countries involved in the project *Market Access and Trade Facilitation Support South Asian LDCs*. Important elements, such as the strategic planning of the national trade quality infrastructure systems at policy level and the institutional strengthening of beneficiary institutions, would have been highly relevant, but were insufficiently covered. The mixed degree of ownership in each country – very high in some institutions, but weak in others – also affected the overall project relevance.

Key constraints to relevance are (i) confusion on the roles of stakeholders; (ii) confusion on the value that can be added by the project; (iii) when project design is drawn from context in another country; and (iv) the envisaged project outcomes have not been achieved. Projects generally were divided into multiple stages, with learning from previous phases informing the outcomes and design of subsequent phases. Where indicators were not clear or outcomes were ambivalent, project activities tend to fail to fully align with either the project's intent, or with the overarching policies and priorities of UNIDO and partner organisations. Conversely, projects that were reviewed that rated as S or HS tended to show clear link between outcomes and outputs and indicators at design.

Inadequate review of the country context tended to result in unexpected costs, slow implementation and other challenges that led to lower effectiveness than expected. Similarly, in the case of regional projects, adaptation of project design to fit country contexts was a source of challenge. Again strong government buy-in and priority alignment was important for addressing this challenge. If project designs fail to reflect the local capacity to provide the materials necessary

[7] It is notable that the majority of the GEF-funded projects related to Minamata or Stockholm Convention.

for the project's success; be it materials, education providers, technical staff or finances, the project's success becomes less likely (see Box 1).

Box 1

Improving Competitiveness of Export-Oriented Industries in Armenia through Modernization and Market Access- 140117

This project sought to encourage export market competitiveness in the fashion production industry in Armenia. It was highly relevant to UNIDO strategic priorities and was rated by the evaluation as Highly Satisfactory for relevance. The evaluation noted that project alignment was highly relevant overall and the design elements were appropriate, but the design failed to acknowledge the difficulty in sourcing raw material and skilled workers. Furthermore, although implementation was smooth and there was a measurable positive economic benefit for participating enterprises, concerns were raised about the cost of support per participating enterprise, and the chances of pursuing this support beyond the project called into question the sustainability of the results. The project design did not clearly explain obstacles in the business environment such as access to input materials and production equipment, customs procedures and fees including tax payment rules if importing from outside the Eurasian Economic Union. In this sense, the project design is considered inadequate as it underestimated the wide range of actions needed at different levels (macro, meso, and micro) to improve the overall export performance of the sector (several of which are outside what the project could cover, especially in a pilot phase).

4.2.2 Effectiveness

Effectiveness is defined as the extent to which the project objectives were achieved or were expected to be achieved at project completion.

Overall, a high proportion (98% or 52 projects) of the evaluated projects was rated effective in reaching their expected results: 17% (9) as highly satisfactory; 47% (25) as satisfactory and 34% (18) moderately satisfactory. Only one project received a rating of moderately unsatisfactory.

Key drivers of effectiveness included: (i) project processes that built on previous accomplishments on both national and international levels; (ii) mobilisation of supporting organisations and networks through extensive advocacy and outreach activities; (iii) substantial co-financing with demonstrated commitment of project partners; and (iv) strong communication networks established between program partners and stakeholders.

Effectiveness of projects was related to the appropriateness of expected higher level results (outcomes and impact) identified at design primarily because it is these outcomes that effectiveness is measured against. There were two ways in which the expected results were less than effective in the reviewed projects: i) results that are beyond the scope of the project; and ii) results that are generic, generalised or not specific to the intended aims of the project. Overly ambitious results were identified in projects that sought to address a part of a large scale problem.

Appropriate scope and scale. In addition, although the project's outputs may have been achieved, if the outcomes are overly ambitious, the projects seem less effective at completion by the evaluation. Concurrently, inaccurate reflection of country context in project design will severely hinder effectiveness. While organic elements of a project's country context are beyond the control of implementing agents, failure to acknowledge a countries capacity in the project

design process will reduce its effectiveness, such as in the *Improving Competitiveness of Export-Oriented Industries* (140117) and *Safe PCB Management Programme* (104051) projects.

Box 2

BAT/BEP Center for Environmentally Safe Disposal of Potentially Hazardous Consumer Products and Industrial Wastes - 104121

This project was developed in response to the ever-increasing volume of used consumer and industrial product waste in Russia, and the identified need to establish environmentally sound management practices for collection, possible recycling, pollution prevention and environmentally safe disposal of products such as electrical and electronic wastes and used rubber tyres. As a result of the project, policy change recommendations were drafted, and training and support initiatives were started.

The project was well designed and implemented, however it was not able to impart a decisive momentum to the country's entire waste management drive due to the daunting nature of the problem; more sustained action including potential extension to Phase III would be needed to adequately generate the expected impact.

Policy and legislative change. Supporting development initiatives with legislative change is a common practice in UNIDO. However, long-term project effectiveness requires that legislative change appropriately reflects the development initiatives undertaken in the project. The *BAT/BEP Center for Environmentally Safe Disposal of Potentially Hazardous Wastes* project (104121) was successful in initiating legislative change which contributed to the project's long term effectiveness. Yet, the Synthesis identified that when the push for legislative change overshadows the local context, project implementation can become confused and lose effectiveness. Nevertheless, a recurring theme arising from the project reviews was the necessity of legislative change to support country behavioural change. For instance, in the *Management and Disposal of PCBs* (104052) project, high practical targets were met, however, relevant legislation was not strengthened and the project failed to raise the awareness of the general public. The project has therefore not succeeded in achieving the overarching objectives.

Well-appointed supporting networks. The Synthesis identified that well-appointed supporting structures and networks significantly contributed to project effectiveness, especially in regards to upscaling and capacity building. An example of a supportive network is the *National Cleaner Production Programme* (104143) in Moldova. This project was supported by a national executive board, which operated throughout the project and contributed to its efficient implementation by providing guidance on the instigation of Resource Efficient and Cleaner Production (RECP) clubs and training, promotion and outreach activities. Although overall policy implementation in the country is a challenge, progress towards mainstreaming RECP concepts through policy instruments has been made. The industry-to-regulation/policy approach applied (the established RECP Club model) as part of NCPP-Moldova has been proven to be successful. These clubs are built upon several success factors for replication, including the involvement of regional communities, creation of so-called "industry champions", trust building between local stakeholders, hands-on information sharing and problem solving, and creating platforms for tackling collective opportunities and challenges in the regions.

Key constraints to effectiveness include: (i) project delays as a result of scheduling issues, workflow problems, and/or funding issues that impacts the achievement of project objectives (see efficiency section 5); (ii) the 'withdrawal' of an operational entity resulting in objectives not being achieved; (iii) complex management and administrative arrangements; (iv) equipment supplied not effectively used or not functional; and (v) external factors such as political unrest and procurement issues.

Box 3

Human Security through Inclusive Socio-Economic Development in Upper Egypt 120203 and 140098

The "Human security through inclusive socio-economic development in Upper Egypt (HAYAT)" project was designed to provide a portfolio of solutions to human security challenges and threats to one of the most vulnerable areas in Upper Egypt by targeting Edwa and Maghagha, two of the poorest districts in Minya.

The project was effective in responding to social and economic elements of human security and resulted in mindset change in respect to women's economic participation. Even though the projects' effectiveness was inhibited by complex Management and Administrative Arrangements, the Project Management Committee (PMC) was a good coordination mechanism and facilitated dialogue and joint planning.

4.2.3 Efficiency

Efficiency is a measure how economically resources/inputs (funds, expertise, time, etc.) are converted into results.

All in all, 77% (41) of the evaluated projects were assessed as efficient: 6% (3) as highly satisfactory, 42% (22) as satisfactory and 30% (16) as moderately satisfactory. 23% (12) of the projects were rated as moderately unsatisfactory. This criterion received the lowest rating among the standard evaluation criteria, which is a common phenomenon among international development agencies.

Key drivers of efficiency included: (i) project budgets that concentrated on the achievement of project goals and an adaptable approach to using the funds; (ii) strong co-financing by donors, key government organisations and private sector players; (iii) project funds disbursed and received in a timely manner; and (iv) synergies with other projects and government developments.

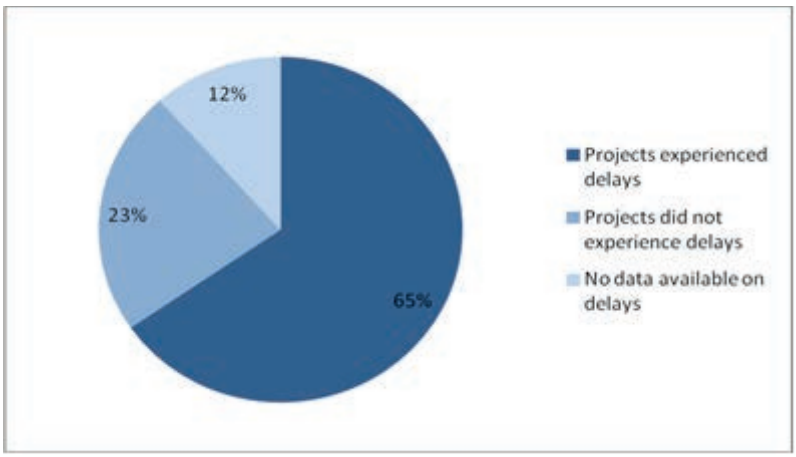
Box 4

Enhancing Youth Employability and Entrepreneurship in Tanzania – 150054

The project was developed upon request of the Government of Tanzania, Ministry of Labour and Employment, to support activities and initiatives aiming at youth employment under the National Youth Employment Creation Programme (NYECP). The project was affected by considerable delays as a result of political and management issues. Despite these issues the project management team responded well to challenges to the extent that efficiency was rated as Satisfactory by the Terminal Evaluation.

Key constraining factors included (i) factors outside of UNIDO's direct control that hindered efficiency of project implementation such as funding mobilisation from and delays with project partners (ii) procurement and equipment issues; (iii) monitoring of co-financing; (iv) delays as result of endorsement and project approval by national stakeholders, administrative and management issues, fund transfers, lack of information and full disclosure at the start of the project and, lengthy procurement processes; (v) operational models that are too reliant on international experts with a high cost of technical input; and (vi) lack of uniformity in processes.

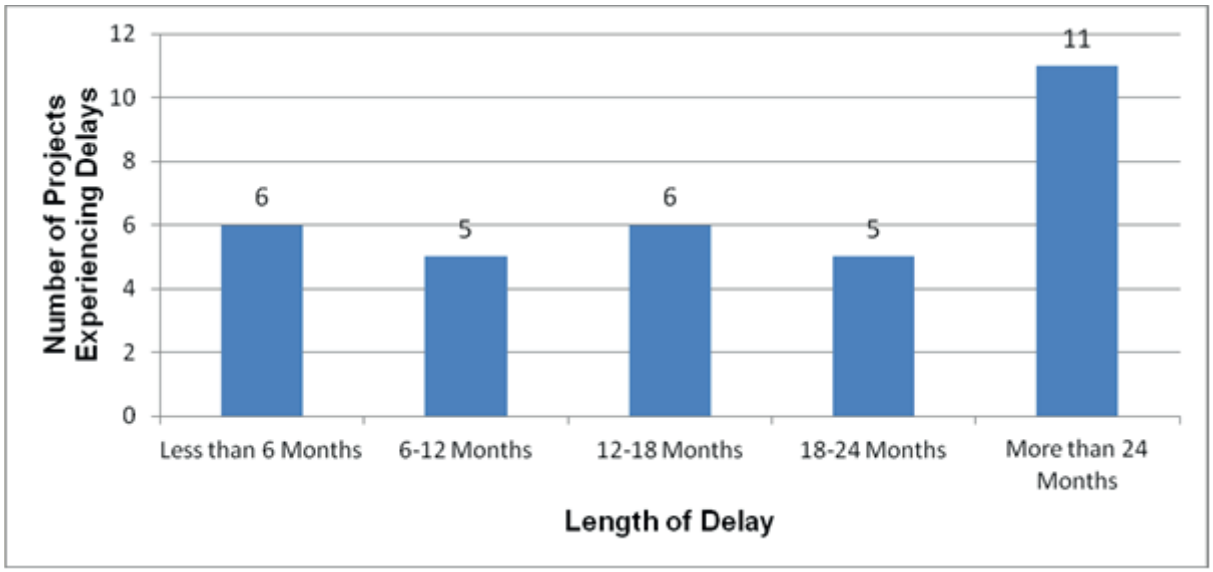
Figure 3. Number of project that experienced delays



Source: UNIDO Portfolio - Synthesis Analysis 2018

A significant hindrance to project efficiency was time delays. Delays were experienced in 65% (34) of the evaluated projects (see Figure 3), and 34% (11) of these projects faced delays of greater than 2 years (see Figure 4). Delays were predominantly occurred during late design and early implementation, and related to appointment of staff, tendering processes and identification of target beneficiaries. Although in most cases the project objectives were still achieved, the delays required extensions, combining or reducing of project activities, and in many cases budget issues. However, as exemplified by the multi country *Demonstration of BAT and BEP in Fossil Fuel-fired Utility* project (104066, Box 5), the negative effect of delays can be mitigated in part by adaptability and flexibility in project design.

Figure 4. Length of Delay Experienced



Source: UNIDO Portfolio – Synthesis Analysis 2018

Factors outside of UNIDO control. Political and environmental factors within a country were identified as potential causes of reduced efficiency, for example bad weather in the project *Environmentally sound management and disposal of PCBs in Nepal* (104052). Other factors include a lack of funding mobilisation from partners and procurement issues beyond project management control. Projects that adapted to change in political contexts and found solutions to challenging procedures achieved stronger performance.

Box 5

Demonstration of BAT and BEP in Fossil Fuel-fired Utility and Industrial Boilers in Response to the Stockholm Convention on POPs – 104066

The project aimed to assist the respective governments to comply with Article 5(a) of the Stockholm Convention (SC) on Persistent Organic Pollutants (POPs). Despite considerable delays, relating to the identification of suitable pilot facilities and equipment procurement, the project was able to achieve the majority of its intended outputs and outcomes. A number of planned outputs were deleted and their activities merged with other outputs. However, this does not appear to have hampered project success. Indeed, the project appears to have successfully achieved its two overarching objectives. The project has reduced UP-POPs release, built national and regional capacity through knowledge exchange and training, as well as, introduced BAT/BEP measures to the sector. The project succeeded despite considerable delays and amendments for a number of reasons. Project management proactively visited each country at least once and chaired meetings concerning progress, delays and difficulties. They also provided recommendations and guidance on how to improve reporting and the execution of activities. In addition, country counterparts were present at regular meetings.

4.2.4 Sustainability

Sustainability captures the continuation of benefits from a project, the probability of continued long-term benefits, and the resilience to risk of the net benefits over time beyond the project completion.

In total the sustainability of 82% (40 of 49 projects)[8] of evaluated projects was assessed in satisfactory range. But a closer look into the specific ratings revealed that no project received a highly likely rating, 31% (15) received a likely and 51% (25) a moderately likely rating. For 18% (9) of the projects, the results would not be sustainable beyond project completion, including 14% (7) being rated as moderately unlikely and 4% (2) as unlikely.

Key drivers to the likelihood of sustainability in projects included: (i) co-financing and donor support for follow-up phases or the continuance of project activities; (ii) support from and participation by project partners, government and the local community; (iii) the introduction of new legislation and government policy and the establishment of strategic partnerships amongst key governmental agencies that will result in a more coordinated regulatory effort; and (iv) training and capacity development of project partners and key stakeholders.

Stakeholder engagement and policy/legislative change are key drivers of the sustainability of project results. Strong stakeholder engagement at both the national and local level has a strong impact on a project's likelihood of sustainability. An example of this can be seen in the project *Promoting Industrial Energy Efficiency through System Optimization and Energy Management Standards in Vietnam* (103081), in which the introduction of new legislation and government policy coupled with strong stakeholder engagement at the national and local level has laid a strong foundation for sustainability of the project results.

A lack of a financial mechanism to support future implementation and sustain results surfaced as one of the key constraints to the sustainability of a project. In the project *Demonstration of BAT/BEP in fossil fuel-fired utilities and industrial boilers in response to the Stockholm Convention on POPs* (104066) the implementation of BAT/BEP required a significant

[8] Sustainability ratings were assigned in 49 out of 53 project evaluations.

amount of initial investment from the facilities. Whilst most big enterprises would be in the position to make such initial investments, most small and medium enterprises in the participating countries cannot afford these initial financial efforts. This presents a risk to the sustainability of the project outcomes.

Other constraints include a lack of an institutional framework that will allow private sector operation and future buy-in; uncertainty of whether project recommendations will be adopted by government; a lack of a vision and a clear structured approach to future implementation; a lack of interest and support by national authorities; and political instability.

5. RESULTS AND PROGRESS TOWARD IMPACT

5.1 What are the key results at completion?

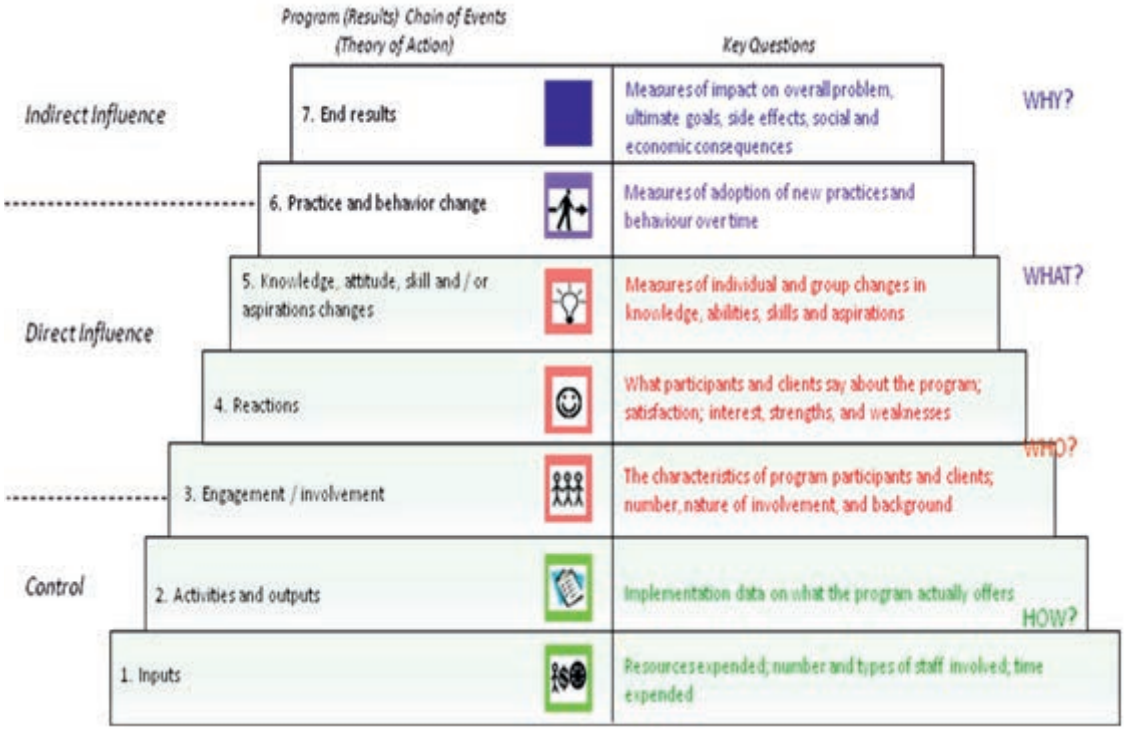
As explained in the methodology section, to analyse and aggregate results information systematically, and to link results at project level to corporate level related to the IRPF, the review team assessed results using eight results domains and the Bennett Hierarchy. It is noted that some results, in terms of outcomes and local level impacts, were observed and reported **at completion point when the projects were evaluated**. Results beyond project completion are not captured in independent terminal evaluation reports.

Results domains

1. Technology improvements
2. Capacity building (of institutions & individuals)
3. Policy, legal & regulatory framework strengthening
4. Knowledge strengthening
5. Business models development
6. Finance leveraging
7. Norms & standards strengthening
8. Partnerships building & convening

Overall, the Synthesis analysis shows that at completion point UNIDO evaluated projects have achieved results at level 5 of the Bennett hierarchy where changes have occurred in knowledge, abilities, skills and aspirations of individual and group beneficiaries across all results domains.

Figure 5. Bennett Hierarchy[9]

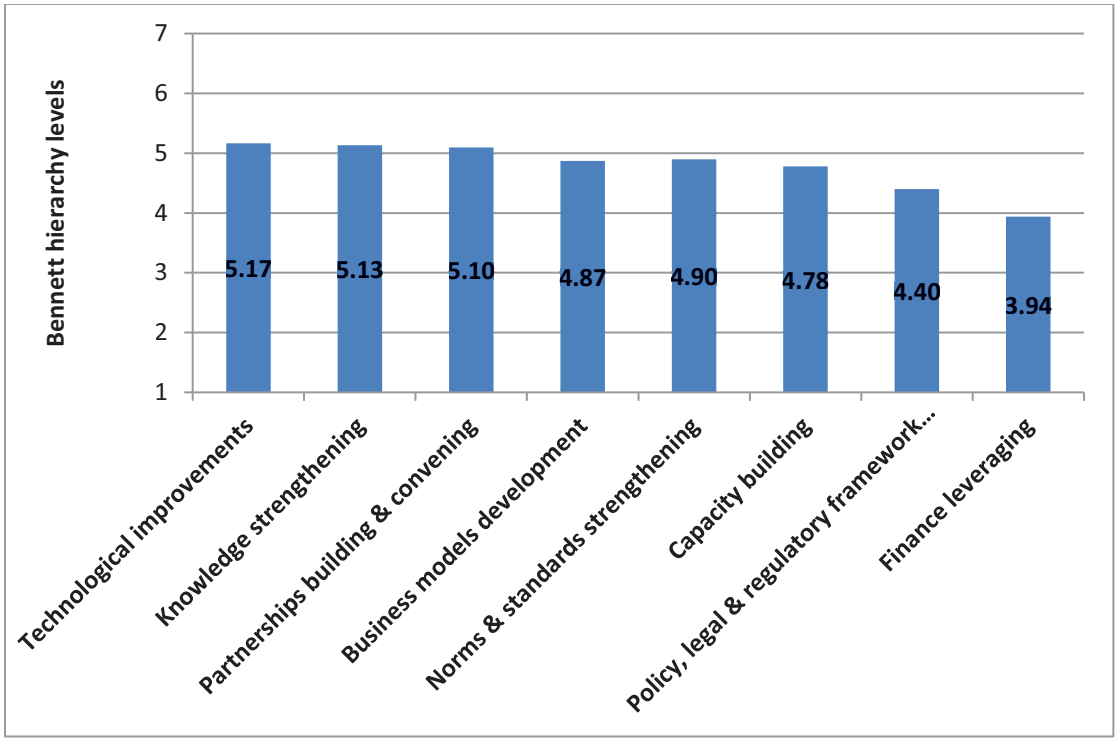


[9] Steve Montague from Claude Bennett 1979. Taken from Michael Quinn Patton, Utilization-Focused Evaluation: The New Century Text, Thousand Oaks, California, 1997, p 235.

The highest level of results were achieved in technological results and the lowest in leveraging finance; notwithstanding the previous analysis in the efficiency section (section 4.2.3) that concludes that funds leveraged may be under-estimated. Results in term of behaviour changes and adoption of new practices have started to take place in three domains namely technological improvements, knowledge strengthening and partnership building, but it is still a long way before the end results at level 7 would occur.

In relation to the domains of business models development, norms and standards strengthening, capacity building and policy, legal and regulatory framework strengthening, project results were between level 4, where the stakeholders appreciated and were satisfied with UNIDO's interventions, and level 5 of the Bennett Hierarchy. Financial leverage results of the projects, on average, sits just below level 4 but still within the engagement/involvement step 3 of the hierarchy, indicating that projects were reaching out to the relevant stakeholders to leverage resources to sustain or expand project results.

Figure 6. Average Bennett Hierarchy Score for Results Domains



Source: UNIDO Portfolio - Synthesis Analysis 2018

Results Domain 1: Technology improvement. Of the 53 sample projects, technology improvement was observed in 83% (44) through a number of different ways including: customisation, transfer, adaptation to context, business cost savings, and so on. The ways in which projects reflected progress towards technological outcomes was predominantly through environmental benefits (53% or 28 projects) and hard infrastructure development (47% or 25 projects). Efforts to enhance and upgrade technology were most successful when the project demonstrated positive outcomes in relation to changes in behaviour rather than just knowledge and skills building. For example, the project *Reducing greenhouse gas emissions through improved energy efficiency in the industrial sector* (104034) successfully improved energy efficiency in Cambodia. Not only did the project introduce more efficient technology but it also demonstrated productivity and cost-benefits to involved businesses resulting in energy savings and greenhouse gas emission reductions. In contrast, the project *Reducing greenhouse gas and ODS emissions*

through technology transfer in industrial refrigeration in Vietnam (120621) failed to fully meet its objectives of 'creating an enabling environment' for reducing greenhouse gas emissions through the use of new refrigeration technology. The project did deliver 25 new refrigeration units to four enterprises and improved energy efficiency but not to the level expected at design because of a lack of business interest in the new technology and a failure to demonstrate a strong return to investment.

Results Domain 2: Capacity Building (of both of institutions and individuals). Of the 53 sample projects, 74% (39) indicated positive outcomes in this results domain. Projects tended to work closely with central/state governments; consequently this was where the greatest amount of institutional strengthening was observed. Strengthening existing trade/industry institutions was reported in 60% (32) of the sample. Projects in larger countries such as Russia, India and China tended to be successful with strengthening of knowledge and skills within government. This may be as a result of the specific demand in these countries for adding value to existing institutional mechanisms. Some projects demonstrated success in strengthening of existing trade and industry institutions. For instance, the project *Improve the health and environment of artisanal and gold mining communities by reducing mercury emissions* in the Philippines (120016) resulted in miners organising into associations. These associations then generated enough momentum to have a provincial mining summit that acted as an opportunity for both introducing improved practices and building knowledge more widely.

Results Domain 3: Policy, legal and regulatory framework strengthening. Of the 53 evaluated projects, just over half (55% or 29 projects) demonstrated outcomes in this domain with the area of biggest change occurring in the drafting of new/revised laws, regulation and administration procedures (47% of the sample, or 25 projects). Of these new/revised laws, 28% (15) indicated that whole or part of the laws/procedures was adopted by the governments. In addition, just over a quarter of the sample (26%, or 15 projects) made changes to new/revised laws or regulations by project completion point. There are some powerful examples of where policy and legal changes led to substantial results. For example, the project *BAT/BEP Centre for Environmentally Safe disposal of potentially hazardous consumer products and industrial wastes phase I and II* (104121) aimed to build capacity for disposing electrical waste and worn rubber tyres in Russia. The project successfully raised awareness around the issue and brought about the adoption of new legislation and amendments which supported the introduction of regulations for waste management that are now being implemented. Similarly, a good example of policy change in Ecuador and Peru is seen in a project with the objective of reducing mercury releases by at least 40%, as well as promoting more cost-effective gold recovery and income enhancement. This included policy/legal reforms. These reforms were successful with the Ecuadorian government banning the use of mercury in mining. Furthermore, both national governments have also endorsed mercury reduction targets. These have combined to result in a decrease in the use of mercury and associated emissions. The analysis suggests that policy/legal change was more likely to occur when a project's objectives aligned with that of the host government and when governments have capacity and motivation to enact legislative changes.

Results Domain 4: Knowledge Strengthening. This area was the strongest area of achievement for the sample projects. Of the 53 evaluations, 96% (51) reported achievement of outcomes related to knowledge building through the dissemination of trade and industry-related knowledge. A further 62% (33) of projects reported knowledge building through the generation of new trade/industry/Micro, Small and Medium Enterprises (MSME) related activities and 58% (31) through the use of trade/industry/MSME related knowledge. The level of progress achieved in regards to this results domain varied greatly between projects. Some projects raised

awareness, others went further to provide technical training and capacity development, and others went beyond this to combine awareness raising, improved technical knowledge and soft skills. One successful example of knowledge strengthening can be found in the project *Countering violence and extremism through skills, training and livelihoods support for at-risk youth in Kismayo* (140231). The project aimed to increase the capacity of training centres, increase the number of qualified trainers and train 250 youth. Training in conflict minimisation and harm-reduction strategies was also areas of focus. The project provided 240 beneficiaries with technical skills and resulted in individuals who were better equipped to communicate and deal with conflict. As a result individuals from across clans now communicate, sometimes for the very first time.

Results Domain 5: Business Models Development. Of 53 evaluations, approximately half (51%, or 27 projects) reported results on business model development, with most (38%, or 20 projects) indicating that they had identified a business model and 36% (19) having proved or demonstrated their business model to the private sector. The results in this regard were more difficult to assess because they were often referred to in project designs as demonstration activities, and it was not always easy to track the extent to which improved practices led to the development of changed business models. The project *Green Trade Initiative* in Egypt (100089) provides a good example of progress towards viable business models and understanding. This project resulted in an increased volume of fresh produce exports because of improved connections with strategic markets and suppliers. It achieved its goals through market development, capacity building and information sharing.

Results Domain 6: Finance Leveraging. Of the 53 evaluations, fewer projects (34% or 18) produced significant progress towards financial leveraging for replication and upscaling. The areas where achievements were most seen were in the availability of incentives for replication and upscaling, upscaling mechanisms with financial commitment and private sector investments in up scaling (13% of the sample each, or 7 projects). The most noteworthy example is the global programme *Joint UNIDO-UNEP programme on resource efficient and cleaner production in developing and transition countries* (100050). This programme aimed to promote business and financial models supportive of resource efficient and cleaner production. It assisted companies to reach two chemical leasing agreements with the support of the Colombian National Centre for Cleaner Production.

Results Domain 7: Norms and Standards Strengthening. Of the 53 evaluations, overall 57% (30) reported results in this domain. The biggest area of achievement was in skills development on governance/implementation of trade and industry norms and standards (42%, or 22 projects) and the introduction of new trade/industry standards (34%, or 18 projects). There was also improved compliance with existing standards by industry (19%, or 10 projects) and improvement in existing trade/industry standards (15% or 8 projects) reported. The project *Green Trade Initiative* in Egypt (100089) aimed to enhance the performance of Egyptian export-oriented value chains and resulted in better alignment between Egyptian horticultural products and EU food safety standards. Furthermore, it helped to establish a working group for the development of guidelines. In addition, the project *Environmentally sound management and disposal of polychlorinated biphenyls (PCBs)* in Azerbaijan (104030) also demonstrated significant results in norms and standards strengthening. It led to the development of numerous new agencies, databases, reporting guidelines and processes. This has helped the government to overcome a past lack in legislation, standards and guidelines.

Results Domain 8: Partnerships Building and Convening. Of 53 evaluations, achievements in partnerships building were reported by 75% (40) of the sample projects, with most outcomes in

the strengthening of existing partnerships. The building of stronger inter-governmental partnerships were the most commonly reported outcome in projects (58%, or 31), followed by technical partnerships e.g. between research and technical institutions and other stakeholders (32%, or 17) and private sector partners (28% or 15). In terms of creating new partnerships, the most commonly reported were within the private sector (36% or 19) and technical and financial partners (21% each, or 11 projects). Of particular note is the project *Cleantech Programme for SMEs in Malaysia* (120096) that aimed to promote the uptake of clean energy technology innovations and entrepreneurship in Malaysia. The main way this was to be achieved was through the establishment of a Clean Energy Technology Innovation Competition and Entrepreneurship Accelerator Programme. It activated partnerships across government, technical, private sector, financial and advocacy partners, both establishing new partnerships and strengthening existing ones. The project engaged stakeholders and the broader public though information meetings, competition award functions, and other outreach and public events and this has led to on-going business networks and uptake of improved technology. Similarly, the project *Cleantech programme for SMEs in Armenia* (120344) also developed partnerships through 15 regional stakeholder meetings that stimulated business to business relationships leading to improved business relationships and wider adoption of clean-tech practices.

5.2 Progress towards Impact at Project completion

In order to assess the progress towards impact, the Synthesis used a series of sub-indicators across the three UNIDO thematic priorities: economic, environmental and social impact.

Impact areas

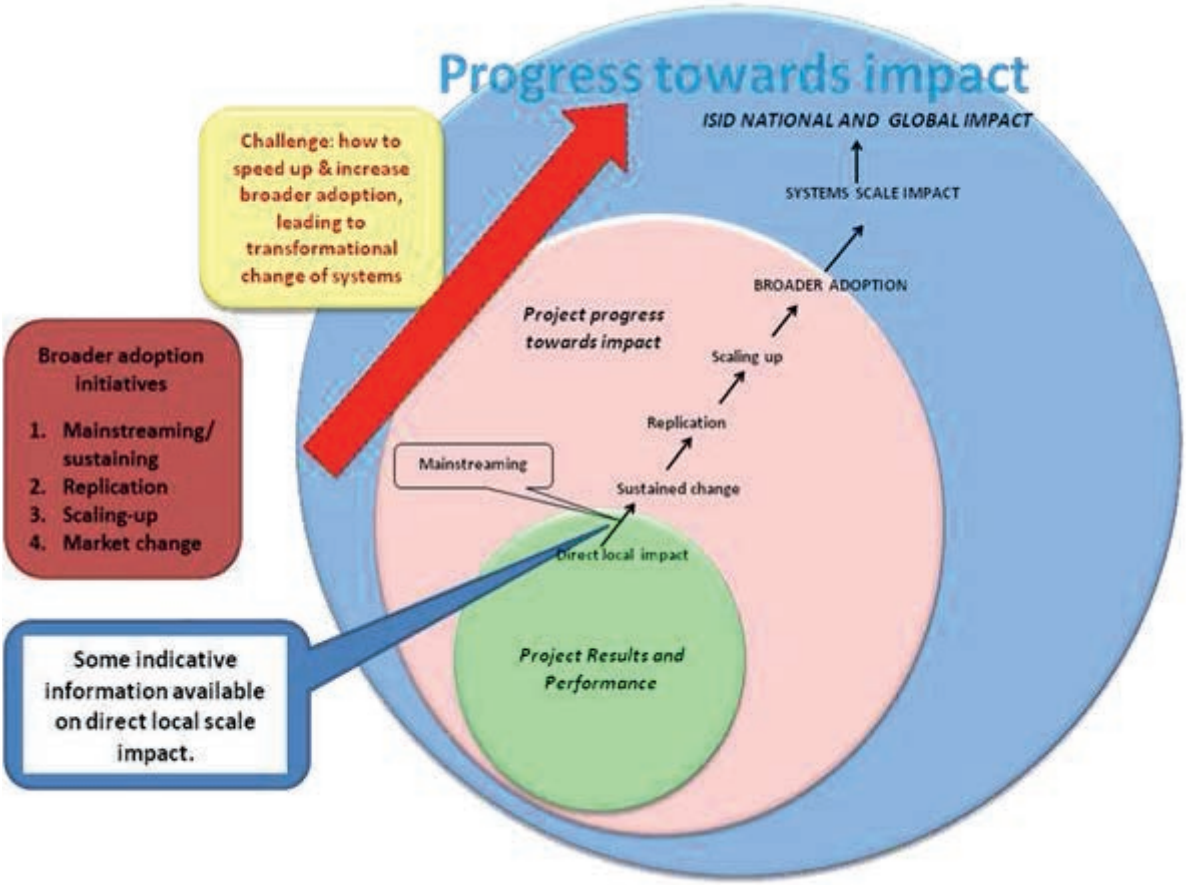
1. Economic impact : Advancing economic competitiveness
2. Environmental impact: Safeguarding the environment
3. Social impact: Creating shared prosperity

Figure 7 explains the type of impacts, progress toward impacts, and the challenges to speed up and increase broader adoption initiatives (e.g. mainstreaming and sustaining, replication, scaling-up and market change) to transform impacts at local level on project direct beneficiaries into impacts on the whole system. It is important to keep in mind that system transformations take time and are not expected to take place within the time span of a project.

As the range and scope of impacts is often not captured by project M&E and is not quantified, the assessment of impact in the Synthesis is indicative, only based on the evidence from the evaluation reports.

Evidence from the 53 evaluated projects indicates some level of progress towards impacts at completion. It must be noted that most of the impacts observed are at local-scale on direct beneficiaries, instead of system-scale impact. Given the fact that all the project terminal evaluations took place a little bit before or after project completion, it is normal that they cannot capture system-scale impacts which are not expected to take place within a project life cycle.

Figure 7. Progress towards Impact



Note: Adjusted model of S. Montague 2000. Circles of Influence: An Approach to Structured, Succinct Strategy and 2017 GEF Project Evaluation Guidelines for the Synthesis analysis.

Overall, of all 49 evaluated projects with some form of progress or likelihood towards impact[10], 78% (38) of the projects showed some type of positive economic local scale impacts, 65% (32) showed environmental local scale impacts, and 43% (21) showed social local scale impacts. Only 4% (2) of projects did not show any type of impact. The extent of impact for each impact area needs to be considered in the light of the spread of the Synthesis sample projects across the UNIDO thematic priorities: Advancing Economic Competitiveness (17%, 9 projects), Safeguarding the Environment (72%, 38 projects) and Creating Shared Prosperity (11%, 6 projects).

A finding of the analysis indicated that projects of different thematic priorities resulted in impacts crossing over several impact areas. There is a certain degree of integration of impacts of all three thematic priorities across the UNIDO portfolio, as show in Figure 8. For instance, environmental projects have not only led to environmental impacts, but also economic and social ones. While only 17% (9) of the sample projects were classified as in "Advancing Economic Competitiveness" group, 78% (38) of projects reported at least one form of economic impact. Similarly only 11% (6) of projects were in "Creating Shared Prosperity" priority, but at least one form of social

[10] Projects that were not expected to lead to impact at design such as enabling projects by the GEF, capacity building or global forum projects by UNIDO are not included in this number.

impacts was found in 43% (21) of the projects. A particular relationship has been noted between environmental impacts and economic impacts as many projects in the Economic Competitiveness area also led to positive environmental results.

Figure 8. Emerging local-scale impact from projects at completion

Source: UNIDO Portfolio - Synthesis Analysis 2018

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5.2.1 Economic impact: Advancing economic competitiveness

Based on the analysis from the sample projects and UNIDO's strategic documents, contribution to economic competitiveness was considered to comprise of the following factors:

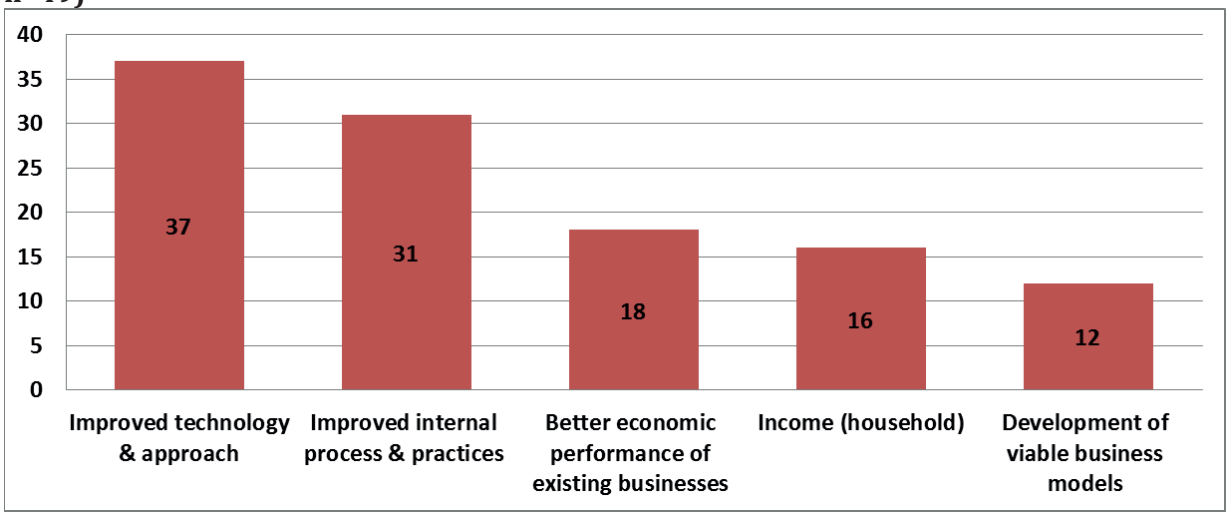
- Improved technical technologies, practices, concepts, techniques, approaches;
- Improved internal process and practices (production, management…);
- Better economic performance of existing businesses (saving, higher revenue, market access…);
- Income (improved/worsened); and
- Development of new business models.

Overall, 78% (38 out of 49)[11] of the projects reported at least one of the aspects to advance economic competitiveness of supported firms or institutions. 76% (37) recorded significant impact in terms of improved technical technology and approach. This finding is in line with the conclusions of the thematic and country evaluations that stakeholders and funding partners

[11] Projects that were not expected to lead to impact at design such as enabling projects by the GEF, capacity building or global forum projects by UNIDO are not included in this number.

highly appreciate UNIDO technology expertise. Examples include: sound management of electrical waste and PCB, system optimization and energy management to increase energy efficiency, cleaner production, mercury reduction techniques in artisanal mining, non-combustion technology to destroy POPs and industrial upgrading. Developing viable business models is less successful, accounting for only 24% (12) of all projects.

Figure 9. Economic Impact: Advancing Economic Competitiveness (Number of projects, n=49)



Source: UNIDO Portfolio - Synthesis Analysis 2018

22% of the projects reported no contribution to economic impact at all by completion point. This was generally due to the project itself focussing on a policy, capacity building or advocacy change that was not expected to have an immediate and direct economic outcome but which was seen as an important step to drive eventual impact. However quantitative information on the full local economic impact is limited.

5.2.2 Environmental impact: Safeguarding the environment

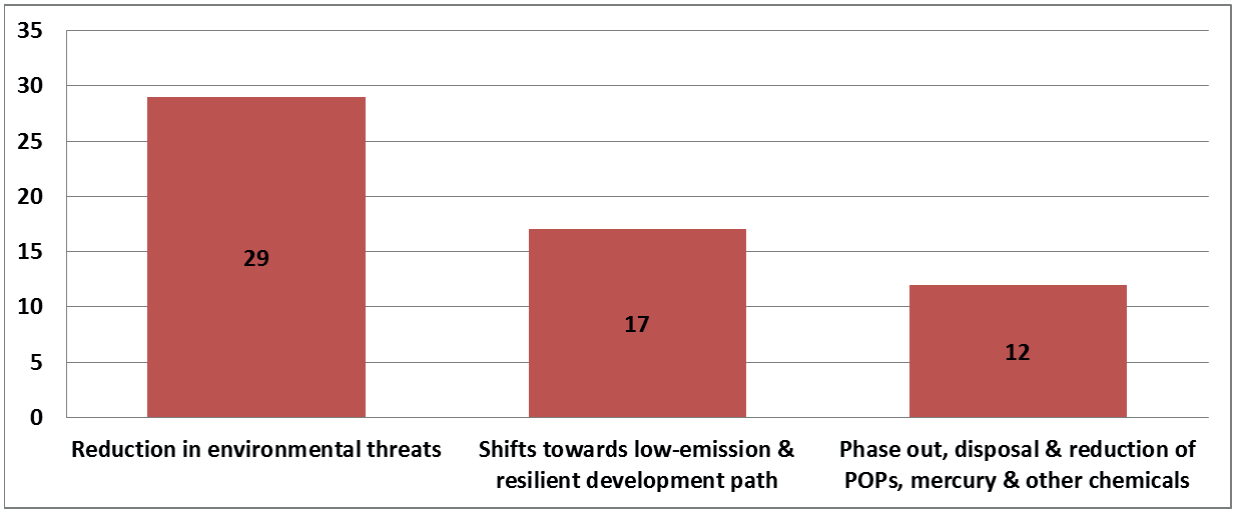
Contribution to Environmental impact was considered to comprise of the following factors:

- Reduction in environmental threats
- Shifts towards low-emission and resilient development path
- Phase out, disposal and reduction of POPs, mercury and other chemicals

All in all, 65% (32) of the projects reported impact for at least one of the factors to safeguard or enhance the environment (Figure 10). This is commensurate with the thematic distribution of the sample. Reduction in environmental threats was the area where more projects (59% or 29 projects) reported impact, while lesser impact was made in the other two factors.

More quantitative information was collected on environmental impact, in comparison to the other two Impact areas, as there was a demonstrated greater effort to gather such data directly from the projects. This greater effort is the result of encouragement by the GEF, who is the main funding partner. However, reporting on environmental impacts also benefiting from more established monitoring framework (e.g. Emission reduction methodologies).

Figure 10. Environmental Impact: Safeguarding the environment (Number of projects, n=49)



Source: UNIDO Portfolio - Synthesis Analysis 2018

5.2.3 Social impact: Creating shared prosperity

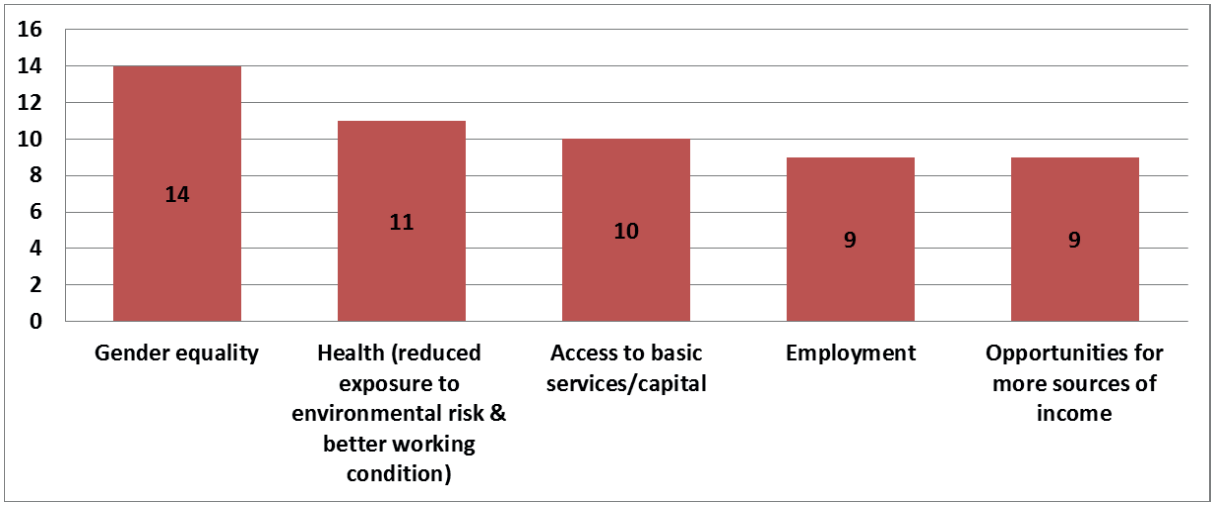
The following factors were considered in assessing contribution to social impact:

- Gender equality
- Employment
- Health and safety (reduced exposure to risk environmental risks and better working condition)
- Access to basic services/capital
- Opportunities for more sources of income

Overall, 49% of the projects reported at least one form of impact to create shared prosperity in terms of social inclusiveness (see Figure 11). This is substantially higher than the share of thematic allocation and is a good indication that UNIDO's projects are contributing to social inclusiveness. However, there is still room for improvement in this regard for the portfolio to be fully inclusive as Creating Shared Prosperity demonstrated the lowest level of impact among the three Impact areas. In any case, this is consistent with the small proportion of projects in this thematic priority (11%) and the nature of UNIDO interventions, which tend to work mainly at macro and meso level with institutions and firms to create transformative changes in the whole system, rather than with individual beneficiaries directly. There may be indirect social benefits through other impact domains but at present it is not possible to track or analyse the extent of secondary benefits.

Notably the highest achievement of impact in this area is in gender equality while the lowest is in employment. However this was not unexpected as the objective of 89% (47) of projects was not creating jobs and for those that do, the results are small in scale due to small project sizes. Health benefit is often not considered and monitored by project M&E but emerges from the qualitative evidence from the evaluation reports.

Figure 11. Social Impact: Creating shared prosperity (Number of projects, n=49)



Source: UNIDO Portfolio - Synthesis Analysis 2018

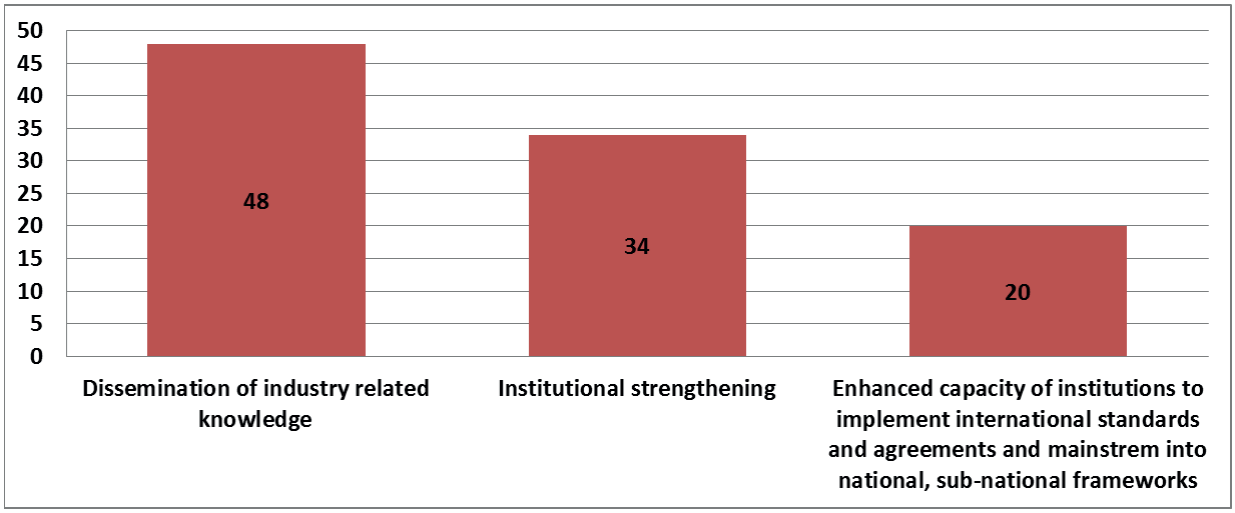
5.2.4 Strengthening knowledge and institutions

As noted above, the extent of results related to knowledge and institutional strengthening across the projects was substantial and an integral part of many of the projects. The extent of results was assessed by:

- Dissemination of industry related knowledge
- Strengthening of institutions (assessed in relation to the target and extent expected in the project design)
- Capacity development of institutions to implement standards and agreements

The dissemination of knowledge was taken as a proxy for having built knowledge amongst project stakeholders, given that knowledge needs to be generated, tested and shared before it is disseminated. A stronger indicator would be assessment of uptake of knowledge but this would require impact evaluations which are not among the sample evaluations. With respect to dissemination of technical or other industrial related knowledge, this occurred in 98% (48) of projects and indicates a prime way that UNIDO contribute to ISID through knowledge products. A total of 69% (34) of projects demonstrated result in achieving institutional change through strengthening of processes and structures. The uptake of new standards in institutions is important not only to demonstrate improved capacity for long term impact, but also as a means to assess impact of policies that are now being activated or more proactively implemented that relate to ISID.

Figure 12. Strengthening knowledge and institutions (Number of projects, n=49)



Source: UNIDO Portfolio - Synthesis Analysis 2018

5.3 Broader adoption mechanism

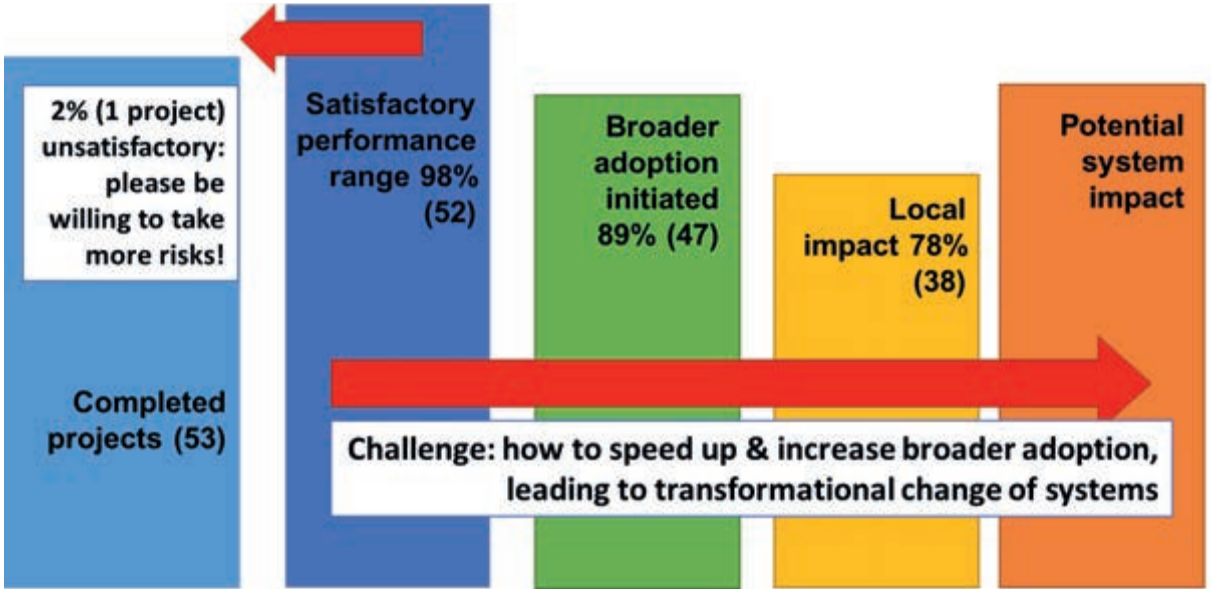
Many UNIDO interventions are pilot or demonstration projects thus to ensure project outcomes and local impacts transform into system impacts, broader adoption of UNIDO initiatives by governments and others need to take place, during project implementation or at completion. Broader adoption[12] takes place through:

- **Mainstreaming/sustaining**: Information, knowledge or specific results of projects are incorporated into laws, policies, regulations & programmes by governments, development agencies or private sectors
- **Replication**: UNIDO initiatives are reproduced/adopted at other geographical area or region
- **Scaling-up**: UNIDO initiatives are implemented at larger geographical scale
- **Market change**: UNIDO initiatives catalyze market transformation by influencing the supply and demand for goods and services contributing to global environmental, economic and social benefits.

Broader adoption of UNIDO initiatives. At present very limited system-scale impact has been observed at project completion among the 53 evaluated projects. Some broader adoption initiatives have been adopted and implemented in 6% (3) of projects, partially implemented in 38% (20) of projects and planned but not yet adopted in 26% (14) of projects. 11% (6) of projects did not indicate intention to engage in significant broader adoption initiatives. The most common form of broader adoption implemented was mainstreaming where information, knowledge or specific results of projects are incorporated into laws, policies, regulations and programs by governments, private sectors or other development agencies. Strong evidence on other forms of broader adoption initiatives such as replication, scaling-up and market change is yet to emerge.

[12] Progress towards impact and broader adoption concept used by the Synthesis team are based on the GEF Independent Evaluation Office's evaluation methodology (GEF 2013. Progress Towards Impact, OPS5 Technical Document #12 and GEF 2017. Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects)

Figure 13. Progress towards impact after project completion



5.4 Factors promoting or hindering results and performance

The analysis identified six common factors which influenced the overall success of a project, five of which can be controlled: (i) country ownership; (ii) stakeholder engagement; (iii) high quality design; (iv) in country capacity development; and (v) a strategic, coordinated approach by UNIDO. Another factor affecting success that is beyond the influence of UNIDO is emergency and disaster events.

Box 6

The most significant factor of success for projects is clear **ownership by national counterparts**. Projects that reflected substantial alignment between country policies and focus areas, and UNIDO strategic priorities were well received, which encouraged the adoption of higher level changes, such as legislative amendments and nationwide adoption of improved industrial processes.

Projects which are closely aligned with the priorities of host nations and obtained co-financing are more likely to generate policy and legal changes, which support the sustainability of a project. Only 17 out of 53 (32%) projects reported receiving direct support from member country governments in terms of co-financing. However, where there was a firm government financial contribution at completion, these projects tended to display higher relevance, effectiveness, efficiency and sustainability (See Table 5). Furthermore, many projects with no recorded financial contribution from national governments reported that active engagement of country governments in project activities is also a powerful enabling factor towards achieving ISID results. Projects rated as Highly Satisfactory all identified high levels of government engagement as a contributing factor in the project's relevance. In contrast, projects rated as Moderately Satisfactory tended to report gaps in government ownership.

Table 5. Government funding commitment contributes to strong performance (Average rating, rating scale from 1 to 6, where 1 is highly unsatisfactory and 6 is highly satisfactory)

	Relevance	Effectiveness	Efficiency	Likelihood of Sustainability
Projects <u>with</u> firm co-financing from government and private sectors (n=17)	5.7	4.9	4.4	4.3
Projects <u>without</u> co-financing from government and private sectors (n=36)	5.4	4.8	4.3	4.0

Source: UNIDO Portfolio - Synthesis Analysis 2018

For example, the project *Promoting Ultra low-head Micro Hydropower Technology to Increase Access to Renewable Energy for Productive Uses in Rural India* (120182) aimed to increase rural energy access in India through micro-hydropower grids. This aligned strongly with the central government's objective to expand electricity access. As a result, there was strong participation from the Indian government, who implemented policy changes to help facilitate this project.

Conversely, where country support was lacking, performance was weakened. For example, the project *Industrial Energy Efficiency in Ecuador* (103017) encountered delays in government approval and slow progress establishing new regulations due to a lack of government commitment. The lack of interest from the government thus affected negatively the efficiency of the project. While the evaluation did not explore the reasons for the lack of commitment from the government, it is speculated that the reasoning could have been due to the prominence of oil in the Ecuadorian economy and the country's generally low energy prices (supported by subsidies). This example reflects the importance of delivering projects which are closely aligned with government priorities and which have in-country support from communities and businesses alike.

A context-specific, adaptive, and appropriate design contributes towards project success. The analysis found that while a project could still achieve some result if it had a good design but poor implementation; it still struggled to meet its all objectives. Projects which were characterised by generic designs, which did not develop a clear and causal results chain (impact, outcomes, outputs with a demonstrated cause-effect links), and corresponding SMART indicators, often struggled to achieve their overarching goal. The analysis found that of the 29 projects identified as being the most successful in the portfolio, 45% had an appropriate design. Poor designs were also noted as contributing towards delays in project implementation and a lack of adaptability and responsiveness in designs prevented projects from overcoming unexpected challenges. For example, the project *Demonstration of BAT/BEP in fossil fuel-fired utilities and industrial boilers in response to the Stockholm Convention on POPs* (104066), implemented in multiple countries in East and South East Asia, encountered delays relating to the identification of consultants and appropriate pilot facilities. However, due to the flexibility and adaptability of the design, the project was able to respond to these challenges and still achieve its overarching objective.

Strategic leadership and UNIDO country presence increase the likelihood of projects achieving objectives. When UNIDO effectively utilises its strategic leadership and presence in a country, and collective expertise and experience to provide services to member states, projects were more likely to demonstrate highly satisfactory and satisfactory results. In cases in which

UNIDO did not have a strong country presence, or demonstrated a fragmented approach to project implementation and management, projects suffered from a range of implementation issues, including; poor coordination, staffing issues, capacity and procurement challenges. For example, the project *Building institutional capacities for the sustainable management of the marine fishery in the Red Sea State* (130130) aimed to improve the quality of fisheries data in Sudan. This project was identified amongst the 29 most successful in the portfolio. It experienced enhanced efficiency due to UNIDO's presence in the Red Sea State and its experience with similar projects. When the project encountered challenges UNIDO responded proactively to address them. On the other hand, the project *Promoting Renewable Energy Based Mini-Grids for Rural Electrification and Productive Uses in Chad* (100184) was largely managed out of UNIDO headquarters in Vienna. This reduced local coordination and hampered efficiency, reducing overall performance ratings. Amongst the 29 most successful projects, 26% indicated that project results and performance could have potentially been improved if UNIDO had been more strategic in its leadership in a given country. This indicates that while the projects were still successful, that there is room for improvement in UNIDO's management of field offices and coordination between headquarters and field offices.

In-country capacity building is important for project implementation and sustainability. Of the 29 projects with highest rating, 45% successfully built the capacity of relevant stakeholders, businesses, and government departments. In addition, many successful projects were noted as having an appropriate design as well as building capacity in-country. Capacity building increases a project's likelihood of sustainability by passing on the knowledge and skills required to maintain and scale-up existing projects. For example, the project *Countering Violence and Extremism through Skills Training and Livelihoods Support for At-Risk Youth in Kismayo* (140231) gave technical training to youth in Somalia to address widespread poverty and unemployment. The training also combined conflict minimisation approaches to build life skills. In this project, the technical training improved opportunities and income. The conflict minimisation also brought results: after the training it was reported that individuals across clans were now communicating, in some cases for the first time.

Capacity building delivered in-line with technological improvements enhanced the sustainability of projects by passing on the skills and knowledge required to maintain and up-scale a project to the local population via training. For example, the capacity building project *UNIDO service in Japan for the promotion of industrial investment in developing countries* (130257) successfully promoted Japanese technology to developing countries. Delegates from developing countries travelled to Japan for training, capacity building, and technology transfer. Most of the delegates indicated that their in-country projects reaching maturation in part due to ongoing visits to and relationships with Japan. As a result 296 technologies were promoted, 166 more than the number outlined in the work programme. In comparison, technological improvements delivered under the project *Promoting ultra-low-head micro hydropower technology to increase access to renewable energy for productive uses in rural India* (120182), were constrained by a lack of capacity development which lead to issues with the maintenance and the local manufacturing of equipment. Capacity building efforts and subsequent training are likely to be a key reason for level 5 Knowledge, Attitude, Skills and or Aspirations Changes (KASA) rating so highly in the Bennett hierarchy analysis.

External influences outside of UNIDO and government control can negatively impact on a project's likelihood of success. The level of support and engagement which projects received from host nations may be limited by external influences. For example, the project *Horlivka Chemical Plant Remediation* (100025) aimed to remediate toxic pollution in Ukraine and negative

health effects from a disused chemical plant. However, during the project lifecycle, hostilities between Russia and Ukraine developed and rendered the project site inaccessible. Despite high levels of support from both Ukraine's environment ministry and the local population, the project was eventually cancelled.

6. SYSTEMIC CROSS-CUTTING ISSUES

It is important for the Synthesis to take these cross-cutting issues into consideration. Improvement in cross-cutting issues contributes to the better performance of UNIDO and projects. In addition to the three identified priorities of UNIDO, results-based management is noted as cross-cutting issue as well. An exploration of the effects of results-based management is provided in the Monitoring and Evaluation section of this report.

These three priority areas are demonstrated throughout the 53 project evaluations and in country and thematic evaluations, a detailed exploration of the ways in which they were engaged with is outlined below.

6.1 Co-financing

Co-financing[13] in all forms, either in cash or in-kind, is important for UNIDO programmes and projects as it brings in more resources, increases country ownership, and increases the likelihood that the UNIDO pilot or demonstration interventions would be replicated or scaled up by national stakeholders in the public and private sectors, therefore widening the potential development impact of UNIDO on the ground.

Co-financing performance is strong and contributes towards development results. For the Synthesis sample projects, the co-financing committed at design stage of nearly USD 150 million is more than the USD 127 million that UNIDO mobilized to implement the programmes and projects (see table below). Based on the available data at completion point, UNIDO has managed to mobilize at least USD 33 million more co-financing than what expected at design, amounting to around USD 183 million. Thus actual co-financing at completion is larger than promised co-financing at design.

On average, 122% of expected co-financing was materialized at completion, which is very similar to the GEF rate of 126%[14] (see table 6), this is contradictory to the perception at UNIDO that promised co-financing hardly materializes at project completion. Most of programmes and projects with high level of co-financing are funded by the GEF who has put a strong emphasis on leveraging resources for its projects through co-financing for similar reasons as of UNIDO.

[13] Co-financing refers to grant, soft loan, hard loan, guarantee, in kind, or cash.
[14] GEF 2018, Updated Co-financing Policy

Table 6. Co-financing of 53 projects included in the Synthesis

Budget channeled through UNIDO (USD)	Co-financing (USD) (Cash + In-kind)		Total costs (USD)	
	Projected at design	*Actual at completion*	*At design*	*At completion*
127,153,430	149,865,270	183,646,680	**277,018,700**	**310,800,110**

Source: Independent project terminal evaluation reports and project documents.
Note: The exchange rate is UN exchange rate of November 2018.

The extent of co-financing is likely to be under-stated. For the Synthesis sample, 70% (37) of projects included pledges for co-financing at approval stage; however only 32% (17) reported the materialization rate at completion.

Despite its importance in strengthening and expanding UNIDO's results and impact, co-financing has been neither recorded nor monitored and tracked systematically at design and completion stage, at organizational level through the Enterprise Resource Planning (ERP) system and at project level. The project evaluations identified the main reason for under or non-reporting of co-financing contribution is that project level (M&E) often did not record or track co-financing during the project implementation. Yet, many of the evaluation reports provided anecdotal information regarding additional resources mobilized by project partners and by the private sector suggesting that the achievement of the co-financing contribution seems to is likely to be under-reported.

In recent years, more efforts have been put in measuring and reporting actual co-financing contribution, mainly thanks to the increasing pressure from the GEF. Indeed 73% of GEF-funded programmes and projects reported promised and confirmed co-financing, in comparison to only 6.7% of non-GEF ones.

In summary, UNIDO has missed the opportunity to demonstrate its good performance and ability in mobilizing co-financing from the public and private sectors by not attaching sufficient importance to co-financing and by not monitoring and tracking co-financing in a systematic manner.

6.2 Gender Equality and Gender Mainstreaming

UNIDO recognises that gender equality and women's empowerment have a significant positive impact on sustained economic growth and ISID[15]. The multiplying effect of industrialisation on all other areas of development contributes to the entire 2030 Agenda and also supports SDG 5 – "Achieve gender equality and empower all women and girls"[16]. UNIDO updated its Gender Policy and adopted the Gender Equality and Empowerment of Women Strategy 2016-2019[17]. This Strategy aims to assist the mainstreaming of gender considerations throughout UNIDO.

[15] UNIDO Secretariat, 2015. Policy on Gender Equality and the Empowerment of Women. Available at: https://www.unido.org/sites/default/files/2015-12/DGB110Rev2_gender_policy_0.pdf
[16] UNIDO, 2015. Gender Equality and Empowerment of Women Strategy, 2016-2019, p.3. Available at: https://www.unido.org/sites/default/files/2015-12/GC.16_8_E_Gender_Equality_and_Empowerment_of_Women_Strategy__2016-2019_0.pdf
[17] Available at: https://www.unido.org/sites/default/files/2015-12/GC.16_8_E_Gender_Equality_and_Empowerment_of_Women_Strategy__2016-2019_0.pdf

Overall 57% (30) of the evaluation reports addressed gender, yet only 29% (14) of sample projects reported making some progress towards gender equality and benefits in women's health, capacity and empowerment. Projects where gender issues were addressed during the design phase resulted in women's empowerment as an intrinsic outcome in the description of results. Key areas of success were training, capacity development and awareness raising. However, contribution to health and wellbeing improvements for female participants was also of particular note. A key lesson from the evaluations was that addressing gender issues requires significant and targeted effort to be successful, as demonstrated in Box 7 below.

A gender perspective was conscientiously included, as far as possible, at all stages of the project. Several projects were shown to be a good example of gender mainstreaming. The equal participation of women and their specific needs and priorities were considered from design to implementation and evaluation phase (see Box 7). A total of 57% (30 out of 53) of the evaluation reports addressed gender issues. These reports demonstrated significant, targeted and well-resourced efforts, as illustrated in Box 7, to be successful. 29% (14 out of 49) of the evaluated projects with some form of impact reported having made an impact on gender equality.

Box 7

Promoting energy efficiency technologies in beer brewery in Burkina Faso – 100046

Women are the main stakeholders of this project since dolo brewing is an activity traditionally reserved to women. Although the project directly contributed to the empowerment of women by providing them with the tools to reposition themselves in their households, communities and villages, the main socioeconomic impacts will only affect a relatively small sector of the population who involved with the actual dolo brewing. The project has, however, directly contributed to improving women's health by reducing the amount of smoke generated by the ICS from wood burning which caused irritation of the eyes and poor quality sleep, and by helping to make the dolo brewing process more efficient, has freed up some of their time. This has not only allowed them to improve the wellbeing of their households (health, clothing, schooling, etc.) but also to take up different livelihood activities - thus potentially increasing their income.

Project design and approach had a clear focus on female beneficiaries. In projects in which gender and gender equality and gender mainstreaming were addressed and incorporated at design level, women's empowerment is recognised as a normative right and as an important economic and development strategy. The project *Renewable energy-based mini grids* in the Gambia (103023) is an example of how female beneficiaries benefitted for example by providing women with more opportunities to earn an income.

Improvement of health and wellbeing of female participants. Several projects made specific reference to their contribution to the improvement of the wellbeing of women's households and have empowered female participants to take up different livelihood activities that have the potential to increase their income.

Gender mainstreaming efforts are often directed towards training, capacity development and awareness raising activities. In the majority of projects in which gender mainstreaming was specifically addressed, an effort was made to attract female participants to the training courses. Given the traditionally male-dominated areas of, for example, Technical and Vocational Education and Training (TVET) and in particular in the heavy equipment sectors, as well as the socio-cultural context of a number of the countries, some of the results of female inclusion are impressive. In some of the projects, however, the inclusion of females in training, awareness-

raising activities and capacity development activities seem to be focused not as much on inclusion and mainstreaming, but merely part of ticking the gender inclusion box.

Box 8

Thematic Evaluation – Enterprise Development for Women and Youth Meta-Evaluation (2015)[18]

This thematic evaluation was undertaken to understand how UNIDO's enterprise development projects have affected women and youth.

A number of factors were identified that determine the level of success of a project. These were the sector in which the project was undertaken, the partners involved, the country context, the scale, the policy support available, funding and the delivery pressure on staff. It was found that many of the evaluations focussed on the outputs and outcomes as the project staff and evaluators found it difficult to measure more long term changes such as job and employment results. This has led to limited quantitative reporting and therefore UNIDO's impact is likely being underreported. In addition, the evaluations focussed more on the outcomes for women than for youth with the scale of impact being quite localised to those directly affected by the projects.

Key recommendations were that a focus on women and youth should be written into organisation wide policy to provide a baseline to measure results against and an approach more focussed on quantitative outcomes that would make evaluations more robust as it would allow for easier comparison to pre-project baselines and goals. During the project design, further consideration should be given to the scale of projects and the possibility of increasing the scale in which they operate. Further understanding is also needed in regards to the direct impacts of UNIDO's projects through ex-post assessment.

These recommendations were already considered in UNIDO's Gender Equality and Empowerment of Women Strategy (2015).

Limited reference to the promotion of gender equality and mainstreaming in the project proposal and design. A common theme from the evaluated projects in which gender mainstreaming was not addressed relate to the fact that the project design did not address gender issues; or that no gender indicators were included in the log frame and that annual reporting did not systematically address gender or gender mainstreaming. In some of the projects, general gender considerations were taken into account at project design phase, however gender concerns were not at the forefront at design or during implementation.

Gender mainstreaming requires dedicated effort and resources. Gender mainstreaming are facilitated in projects where budgets are specifically made available, training is conducted and gender-specific tasks are adequately assigned to knowledgeable staff. Progress tends to be prevented in some projects due to the absence of a specific budget, or because increasing female participation requires significant effort and time and the project has not allowed for this at design stage.

[18] Available at: https://www.unido.org/sites/default/files/2016-02/THEM_REVIEW_Entrepren_dev_Women_Youth-2015_E-book_0.pdf

6.3 Partnerships

Partnerships and South-South cooperation refers to UNIDO's commitment to continue to grow its portfolio of partnerships and to support developing countries to share knowledge, skills and expertise to meet development goals[19]. In 2017, UNIDO adopted a policy on Business Sector Partnerships and engaged with a number of new business platforms in order to foster increased collaboration across a wide-range of organisations, private sectors, foundations, and projects.[20]

Convening and building partnerships was one of the core areas of UNIDO strategic plan. The Synthesis analysis showed that out of the 53 projects, 75% (40) indicated that they had convened or built partnerships. In addition, no steps had been taken towards building or convening partnerships as a result of programme activities in 17% (9) of the projects.

The Synthesis used a Bennett hierarchy approach to track what kind of partnerships projects were establishing or strengthening and with whom. It found that 80% (42) of projects which indicated that they had achieved some form of partnership building or convening did so by strengthening existing partnerships with governments and government partners. Strengthening existing government partnerships reached level 5 on the Bennett Hierarchy, meaning that changes in knowledge, attitudes, skills and aspirations of individual and group beneficiaries have happened.

In addition to government partners, projects often established relationships with local stakeholders/communities and businesses.

54% (27) of the projects which indicated convening and building partnerships did so by strengthening existing private sector partnerships. Significantly, 11 projects each demonstrated the convening and building of partnerships through strengthening existing and establishing new relationships with technical partners.

The area in which the least partnerships were built was establishing new advocacy and new community partnerships. Only five of the projects which recorded convening and building partnerships demonstrated progress in these areas. Only one project each convened a partnership with research institutions, cooperative societies, university graduates, policy experts, the finance sector, industry associations, or Civil Society Organisations (CSOs).

Box 9

Mid-term evaluation of Programme for Country Partnerships

An evaluation was conducted in 2018 to measure the progress and effectiveness of UNIDO's Pilot Programme for Country Partnerships (PCP). The programmes aim to help countries work towards ISID through partnerships with governments and private organisations. The programme is currently being piloted in Ethiopia, Senegal and Peru and it is hoped that this new approach will increase the scale of results in contrast to previous UNIDO efforts.

This evaluation found that while the PCP is working towards achieving its goals, a majority of the focus up to now has been on groundwork such as planning and feasibility activities and therefore the measurable results are limited. Some positive aspects of the programmes thus far are the increased scale of results that has been witnessed and the excitement of other

[19] United Nations Office for South-South Cooperation, 2018. What Is South-South Cooperation? Available at: http://unossc1.undp.org/sscexpo/content/ssc/about/what_is_ssc.htm

[20] UNIDO, 2018. Annual Report 2017. Vienna, p. 46.

development organisations and their willingness and eagerness to be involved. Some aspects of the programmes that need further work include: the efficiency with which organisations are approached and resources are obtained; and managing the expectations of stakeholders – including in regards to the timeframe of outputs and the level of focus currently afforded to the flagship projects.

The recommendations for further success of the PCPs include: the development of a clearer statement regarding the role and capabilities of UNIDO in the programme; increased and improved communication between UNIDO representatives; higher level personnel within partner governments and organisations to achieve the ambitious scope; a more structured reporting framework that focuses strongly on the workability of the programme rather than institutional hierarchies; increasing UNIDO's country influences to make implementation of further PCP's viable; and a more detailed framework for future evaluations including a logical framework and clear accountabilities and targets.

6.4 Industrial policy advice, research and statistics

Industrial policy advice, research and statistics are one of the priority cross-cutting areas for UNIDO. UNIDO supports member states by assisting them to develop industrial strategies and policies. The way UNIDO does this is by providing analytical and policy advisory services. The goal behind helping member states to develop industrial policy is to provide them with research and evidence-based platform from which to develop economic growth and industrial structural change.[21]

Out of the 53 projects, the Synthesis analysis indicated that 40% of projects had led to policy/legal results in the participating countries. Out of these projects 46% noted policy and/or legal results regarding the drafting of new or revised laws, regulations, administration procedures, and so on. In addition, 27% observed that new or revised laws were adopted by the country government. On average, the projects with policy and/or legal results in relation to the drafting/revising of laws reached level 4 of the Bennett hierarchy, meaning that stakeholders appreciate the project interventions.

The most common form of policy/legal change was achieved through assisting with the drafting of new or revised laws, regulations, administration processes and procedures. Stable and consistent government support is required to achieve policy change; sometimes beyond the scope of UNIDO to influence. However, understanding the context and long-term engagement priorities of UNIDO is influential in establishing consistency and long-term support to enact policy change. Nevertheless, encouraging compliance with new laws and regulations still requires more attention, especially when attempting to replicate or scale up a project.

[21] UNIDO, 2018. Annual Report 2017. Vienna, p. 47.

7. PERFORMANCE OF UNIDO FROM EVALUATED PROJECTS

In the context of this synthesis, the performance of UNIDO has been rated based on efforts relating to project design, management and backstopping. Overall, UNIDO design, backstopping and project management have been rated positively, with 81% (35), 88% (36) and 91% (29) of projects respectively in satisfactory range (Figure 14). 19% (8), 12% (5) and 9% (3) of projects respectively were rated in unsatisfactory range. The effectiveness of UNIDO's support has clear implications for the overall success of a project.

Figure 14. UNIDO Project Design, Management and Backstopping (Number of projects)

Rating	Project design	Project management	UNIDO backstopping
Highly Satisfactory	5	10	8
Satisfactory	17	15	22
Moderately Satisfactory	13	4	6
Moderately Unsatisfactory	6	3	3
Unsatisfactory	2	0	2
Highly Unsatisfactory	0	0	0
Number of projects rated	43	32	41

Source: UNIDO Portfolio - Synthesis Analysis 2018

UNIDO's Role in the Design Process. A strong UNIDO supporting presence was identified as being important to good project design. Projects benefiting from a strong field presence indicated that access to UNIDO expertise and networks was invaluable.

All in all, the design of 81% (35 out of 43) of the evaluated projects was rated in satisfactory range, consisting of highly satisfactory, satisfactory and moderately satisfactory ratings. However, 14 % (6) was rated moderately unsatisfactory and 5% (2) was unsatisfactory.

Table 7. Satisfactory project design contributes to satisfactory project performance (Average rating, rating scale from 1 to 6, where 1 is highly unsatisfactory and 6 is highly satisfactory)

	Relevance	Effectiveness	Efficiency	Likelihood of Sustainability	Overall project performance
Projects with design rated in satisfactory range (n=35)	5.7	4.9	4.5	4.3	**4.7**
Project design rated in unsatisfactory range (n=8)	4.4	4.1	3.3	3.3	**3.4**

Source: UNIDO Portfolio - Synthesis Analysis 2018

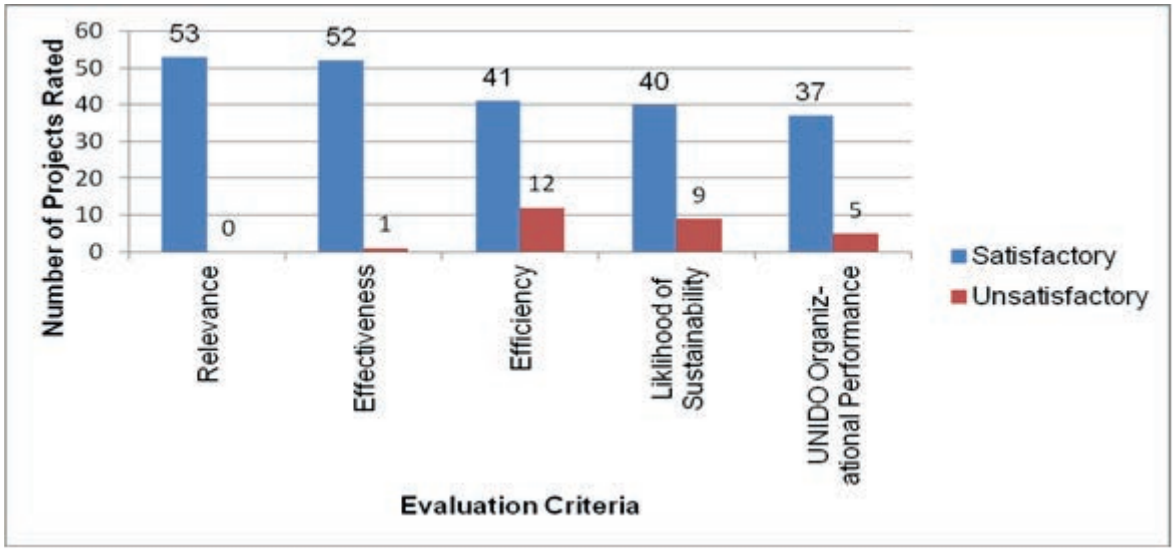
Good project design is critical. Good project design was another key driver of project performance. Of the 29 projects identified as the most successful in the 53 evaluated projects, 13 (45%) had an appropriate design with satisfactory or highly satisfactory rating. Of the 53 projects, those with satisfactory design would contribute to higher achievement in overall project performance in terms of relevance, effectiveness, efficiency and sustainability. There is a mark difference of 1.3 point in rating between satisfactorily and unsatisfactorily designed projects (see table above). The analysis determined that a project could still achieve some success if it was

well-designed but poorly implemented; however, it still struggled to meet all its objectives. Projects which were characterised by generic designs which did not develop impact, outcomes, outputs with demonstrated links and a clear chain of cause and effect progression and suitable indicators often struggled to achieve their overarching goal. The most positive results achieved across the portfolio were generated when the project design was strategic, in-line with government priorities, well-structured, with clear and causal results chain, and clear roles and responsibilities.

UNIDO's Role in Project Implementation. Out of 53 total projects reviewed, three were identified as being poorly designed and implemented. One of the key factors which generated poor performance in implementation was "inadequate" management by UNIDO. Where UNIDO experienced difficulty coordinating activities and aligning them with the goals and strategic priorities of key partners, such as the national government, stakeholders, and donors, projects struggled to achieve their overarching goals. Tied in with this was a lack of staffing capacity and an overreliance on a few staff members to see project activities carried out. This is an area which UNIDO guidance could contribute to in the future. The thematic evaluation of staff competency conducted in 2017 explored the link between staff competency and UNIDO's strategic goals. A need for more 'strategic leadership' from UNIDO was identified in the three projects. One area which UNIDO could demonstrate more strategic implementation is by capitalising on existing knowledge and learning from past projects. This would help to prevent the same issues from occurring in similar projects or help to mitigate them if they do emerge.

Efficiency and likelihood of sustainability are the areas where UNIDO's support has the most impact on a project. When UNIDO's support was rated highly 37% of projects were also rated well in terms of likelihood of sustainability, while only 8% projects that received a low rating for UNIDO performance rated highly for the same criteria (Figure 15). There was a 41% difference in the number of projects that rated highly in terms of efficiency depending on the level and effectiveness of UNIDO support. This indicates that UNIDO can have a strong influence on the overall efficiency of a project.

Figure 15. Rating of projects based on UNIDO backstopping & project management performance



Source: UNIDO Portfolio - SYNTHESIS Analysis 2018

One major factor affecting the efficiency of projects was delays. Of 53 evaluated projects, 65% experienced delays in the initial administrative phase owing to insufficient time allocation for essential administrative tasks, such as tendering processes. This is an area where future UNIDO support could be valuable given the organization's ability to influence efficiency through a more rigorous approach to scheduling and procurement – a key constraint in delays experienced across the portfolio.

Box 10

Staff Competency Thematic Evaluation

Staff competency has been identified in numerous previous UNIDO documents as an area requiring more monitoring and evaluation focus. The evaluation reviewed processes, training events, competency development and the link between staff competency and UNIDO's strategic goals.

The evaluation found that there is a disconnect between the competency frameworks in place, how staff understand them and the strategic goals of the organisation. Furthermore, it found that while staff enjoyed and learnt from training opportunities, they had little use for their learning in their everyday work. Limited funding for these training opportunities could contribute to the poor outcomes as well as decreasing numbers of regular staff members being replaced by consultants who are not eligible to participate in training. It also found that the staff were confused how participants of training opportunities were picked. This confusion extended to reassignments where staff felt that competencies were not being well matched to the position.

8. MONITORING AND EVALUATION IN UNIDO – KEY FINDINGS AND LESSONS

Introduction

This section aims to analyse the specific learning theme of Monitoring and Evaluation (M&E) that is recurrent in UNDO evaluations and merits additional reflection and debate. This topic has been identified as an area for improvement in many evaluations, and is in line with UNIDO management priority for the organization for 2018 as the Senior Management has decided to focus on 'a results-based approach with enhanced monitoring and improved reporting on clear results'.[22]

The United Nations Joint Inspection Unit (JIU) reported in 2017 on results-based management in UNIDO that: "UNIDO management acknowledged difficulties in this area, notably in terms of the alignment of resources with strategic objectives, effective data collection, performance monitoring and reporting at the corporate, programme and project levels. These same concerns have been highlighted repeatedly in internal evaluation reports and external reviews of UNIDO."[23] The Global Environment Facility (GEF) found in 2018 that "there was little systematic monitoring and reporting in the projects where the Global Cleantech Innovation Programme (GCIP) was first launched.[24]" The GEF concluded that "the direct and indirect impacts of the GCIP are not easy to gauge due to generally weak monitoring and evaluation, including inconsistency in measurement and the lack of requirement for project beneficiaries to report on global environmental and socio-economic benefits.[25]

[22] UNIDO 2018, Management Priorities 2018 - Integration and scale-up – Driving change for UNIDO.
[23] G. Tarasov and G. Achamkulangare, UN Joint Inspection Unit (JIU) 2017 Report # 1, Review of Management and Administration in the United Nations Industrial Development Organization (UNIDO), page 23.
[24] GEF, 2018: Evaluation of the GEF-UNIDO Global Cleantech Innovation Programme.
[25]"ibid, page 43.

M&E findings

Key finding 1: There is a disconnect between high UNIDO ratings on M&E performance compared to the high number of evaluations that cite M&E as a key issue in project performance (Table 8). Furthermore, the high ratings in evaluations do not align with the weaknesses identified in the reports of the JIU (2017) and the GEF (2018).

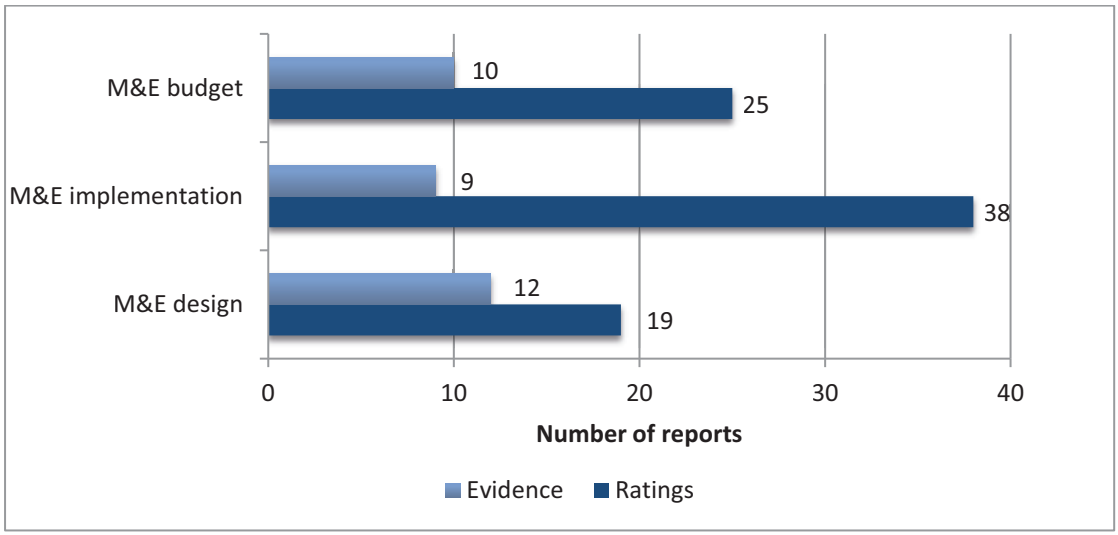
Table 8. M&E rating for UNIDO evaluated projects

Rating	M&E design	M&E implementation	M&E budget
Highly Satisfactory	4	2	2
Satisfactory	10	21	13
Moderately Satisfactory	6	15	10
Moderately Unsatisfactory	0	4	2
Unsatisfactory	1	3	0
Highly Unsatisfactory	0	0	0
Number of projects rated	21	45	27

Source: UNIDO Portfolio - Synthesis Analysis 2018

A deeper analysis of the disconnect between the ratings and evidence shows (see figure below) a disconnect for the ratings on the M&E design, M&E budget and M&E implementation, with a correction factor of 0.47 (arithmetic middle). In other words, ratings on M&E can be lowered by 47% in average to reflect the supporting evidence in the independent evaluation reports.

Figure 16. Number of evaluated projects with positive evaluation findings: differences between UNIDO project ratings on M&E and the underlying evidence from the evaluation reports*



Note:) M&E budget: n= 27; M&E implementation: n= 45; M&E design: n= 27*
Source: UNIDO Portfolio - Synthesis Analysis 2018

Quality of project M&E by project management

Independent project evaluations often assess M&E through three criteria: i) M&E at design when a project proposal is approved, including the M&E plan, M&E budget and the M&E governance to clarify roles and responsibilities; ii) M&E implementation during the project implementation;

and iii) results-based management through M&E. The latter implies the use of performance and results data for adaptive management to inform decision-making.

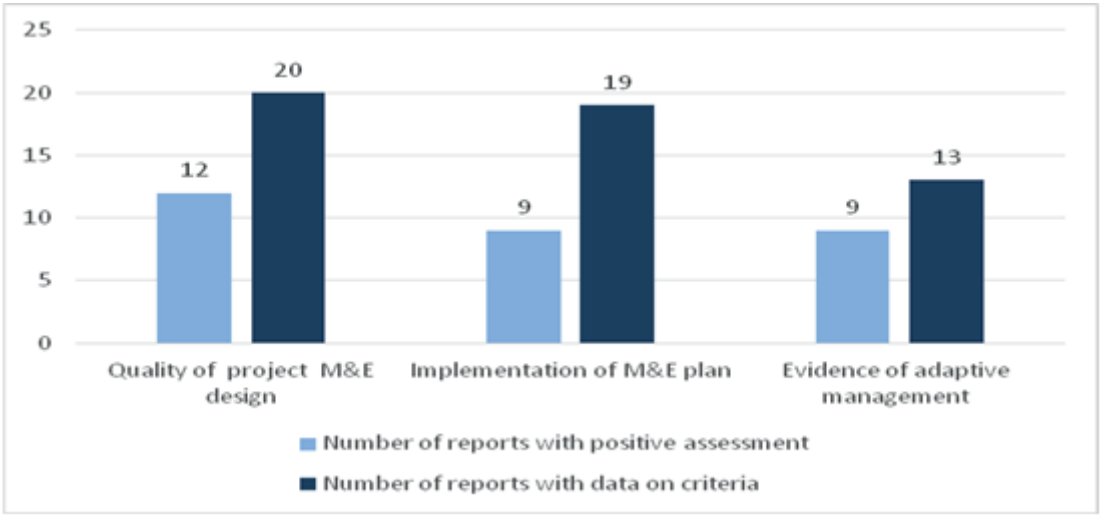
Key finding 2: Results of the quality of project M&E design and the implementation of the M&E plan are mixed with no positive trends emerging. However, encouraging evidence of cases emerge where M&E was used for adaptive management in UNIDO projects.

Figure 17 shows the quality of M&E design, M&E implementation and M&E evidence used for adaptive management, including the number of reports commenting on each topic. The data derives for the analysis of project evaluation reports and evidence provided rather than evaluation ratings.

The **overall quality of project M&E design** by project management shows varying results for the assessment period. 12 evaluation reports (60%) positively assessed the quality of project M&E design, considering that 20 evaluation reports (38%) of assessed that criterion, as ratings, in general, are still not applied for all evaluations. No clear trends emerge over time. While in 2015 negative assessments of that criterion predominated[26], the trend was reversed in 2016 and 2017. In 2018, the gap was closed with an equal number of evaluation reports with positive and negative findings on the topic.

Concerning the **implementation of an M&E plan**, one sub-criterion for quality, nine out of 19 evaluation reports (47%) found that an M&E plan was implemented, with the number of reports containing negative evidence dominating since 2016[27]. Follow-up interviews with UNIDO project managers showed that having a high-quality execution partner with a very high level of technical and planning precision is the basis for a robust implementation of M&E plans, as observed in two evaluations of projects in China.

Figure 17. Performance of main review criteria



Source: UNIDO Portfolio - Synthesis Analysis 2018

M&E enabling results-based management by project management: Out of the 13 evaluation reports reviewing whether **M&E was used for adaptive management**, nine found positive results (69%). Given the lower number of reports assessing this criterion, a trend analysis is less feasible.

Mid-term evaluations emerge as one useful tool for adaptive management. While a range of UNIDO evaluation reports state that ***mid-term evaluations*** were undertaken as part of the

[26] Based on the evidence presented in the narrative of evaluation reports.
[27] 36% of the evaluation reports addressed the implementation of an M&E plan.

project cycle of UNIDO interventions, four evaluation reports explicitly mention the value of mid-term evaluations to take corrective action.

> "The mid-term evaluation and consultative follow-up process gave me back-up and confidence to refocus the project."

Source: UNIDO Project Manager

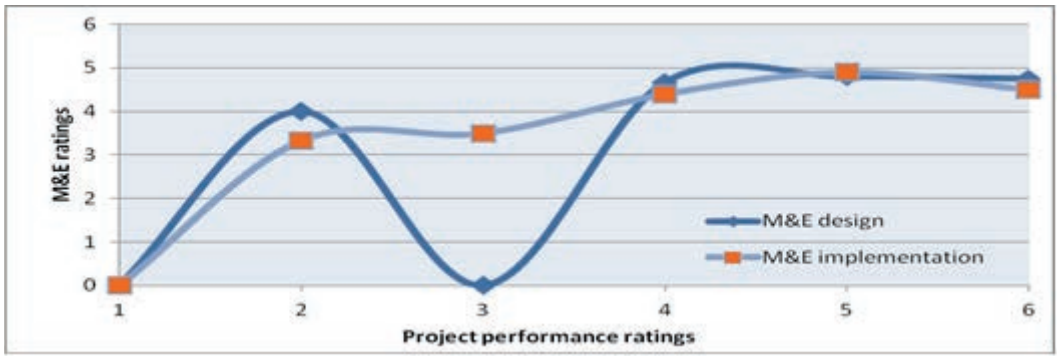
Those corrective actions include i) clear output-oriented planning and reporting, ii) a logframe revision or iii) the need to reformulate a project. In three cases the project management acted upon the recommendations of mid-term evaluations.[28]

Lesson learned:
Mid-term evaluations/reviews are of high value for verification or redirection, even in projects below the threshold of EURO 2 million.

Key finding 3: Positive correlations show between the quality of M&E and the performance of UNIDO projects based on evaluation ratings.

For the quality of M&E design, the correlation with the quality of the project at entry is 0.70 (out of 1). The correlation between the quality of M&E implementation and the average project implementation reaches 0.75 (out of 1). Figure below shows the correlations in more detail.

Figure 18. Correlation between the quality of M&E and the overall quality of UNIDO projects



Source: Ratings used in UNIDO project evaluation reports from July 2015 to June 2018

Factors promoting or hindering a good M&E system at the project level and good practices

Key findings 4: Recurrent factors that influence the performance of project M&E in UNIDO: M&E budget, M&E governance arrangements, the quality of logframes, stakeholder ownership for M&E and M&E capacity building.

The evaluation reports show the following major recurrent factors that influence the performance of M&E, as presented in Figure 19 below.

- The budget allocated to M&E activities
- The governance arrangements for setting up and implementing M&E

[28] - Independent Terminal Evaluation Human Security Through Inclusive Socio-economic Development in Upper Egypt (HAYAT)
- Independent Terminal Evaluation: Industrial energy efficiency for Malaysian manufacturing sector (IEEMMS)
- Development of the guidelines for updating of National implementation plans (NIPs) under the Stockholm Convention taking into account the new POPs added to the convention

- The quality of project logframes
- Participatory processes to create stakeholder ownership in implementing M&E
- M&E capacity building in UNIDO projects

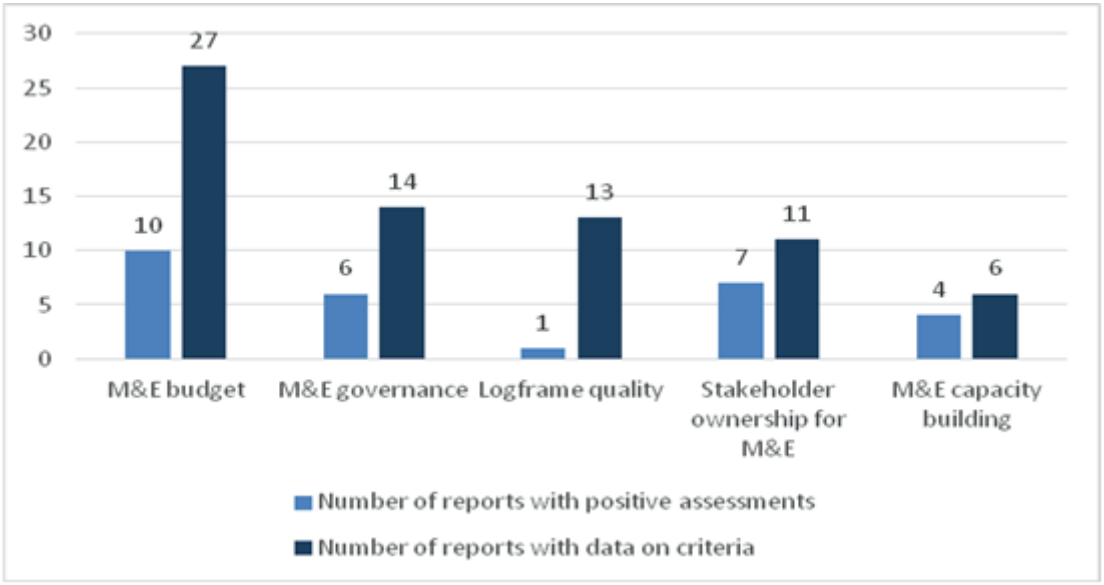
Data sources are mainly project evaluations, but the factors are confirmed in thematic and country evaluations. The figure also shows the percentage of reports assessing those factors to facilitate the readers' ability to interpret their weight.

M&E budgets
Ten out of 27 evaluation reports find that M&E budgets are adequate and influencing M&E of UNIDO interventions positively[29]. In some cases, evaluators commented on budgets available for a mid-term or final evaluation but not for monitoring purposes. Monitoring seems often to be implicitly subsumed in project management budgets.

> "I replicate the use of a mid-term evaluation in all my projects, even for smaller ones. Yes, it impacts on the project budget, but I find that this can be accommodated."

Source: UNIDO Project Manager

Figure 19. Recurrent factors influencing the quality of M&E positively in UNIDO interventions



M&E governance arrangements. Six out of 14 evaluation reports find adequate M&E governance arrangements. This entails clear roles and responsibilities of the stakeholders for M&E in different contexts, ranging from a project to a UNIDO field or country office.

Follow-up interviews with selected project managers in UNIDO confirmed the importance of M&E governance for the quality of M&E, as shown in the quote below.

> "The project was extremely well planned. Responsibilities were delegated in the project, with UNIDO playing an implementation supervision role. The project benefitted from a very strong execution partner and roles and responsibilities for M&E were absolutely clear."

Source: UNIDO Project Manager

[29] The ratings on M&E budget show 93% positive ratings (4,5 or 6), which does not reconcile with the evaluation evidence provided (36% positive evidence in reports commenting on the criterion)

A final evaluation of *Promoting renewable energy-based grids in rural communities for productive uses* in Côte d'Ivoire (100186) impressively showcased the importance of governance structures of local users' organizations, including for monitoring. The governance structure involves equal representation of different village groups in Côte d'Ivoire and aims at monitoring the functioning of the systems even after the project end.

Lesson learned:

- Clear roles and responsibilities for M&E are the basis for good M&E governance. This can be achieved either through quality project planning or during participatory processes in the inception phase.

UNIDO logframes

The results emerging from evaluation reports concerning the quality of UNIDO logframes show that only one out of 13 reports finds a good quality logframe.

Follow-up interviews revealed that project managers could feel confined by the logframe as an inflexible tool which does not allow for embracing upcoming opportunities. Rather than revising the logframe, some project managers pursuit results also outside the logframe, lacking baselines, milestones, indicators, and targets. Opportunities for logframe revisions emerge during the inception phase or at mid-term of a project.

At the same time, evaluators have been observed in focusing only on logframe deliverables, without sufficiently putting attention to the unintended effects of UNIDO projects. In UNIDO projects were the logframe was kept unrevised, this approach leads to evaluations' "results-blindness" for change achieved outside the logframe.

Lessons learned:

- Project Managers in UNIDO would benefit from better understanding the use of logframes in the context of a project's Theory of Change. Understanding that a logframe can be revised and the benefits of doing so during the project lifecycle if required is still underdeveloped.
- Evaluators can further add value to UNIDO by systematically addressing positive and negative unintended results of UNIDO interventions or strategies.

Stakeholder ownership for M&E.

Seven out of 11 of evaluation reports found positive effects of stakeholder ownership for M&E on the quality of project M&E. The importance of participatory processes emerges, including inception workshops, stakeholder consultations, and partner coordination or project steering committee meetings for enhancing the ownership and quality of M&E.

"As a project manager, I have experienced the importance of the annual Project Steering Committee meetings. This helps to report jointly on the results achieved. The process and format of the meetings are important for reflection and as a sounding board. I participate in the meetings. The minutes help me in follow-up for my project monitoring".

Source: UNIDO Project Manager

M&E capacity building.
Four out of six reports found that M&E capacity building to project implementation partners of counterparts in government or the private sector affected the quality of M&E positively.

"Regarding creating local support and buy-in for monitoring the (…) project showed the importance and usefulness of having had the local team attending a training on M&E and goProve {on-line technology for project monitoring, management and measurement} ".

"In rural areas, it is challenging to find a National Coordinator with good project management capacities. In one of my projects, monitoring was even hampered by insufficient knowledge of how to use Excel spreadsheets".
"Dedicating a portion of the budget to M&E activities such as system development, staff training, and more periodic impact assessments could have been instrumental in documenting the processes and lessons learned from this pilot project in a more comprehensive manner to inform any future attempts at replication and up-scaling."

Sources: UNIDO project evaluations

Lesson learned:

- UNIDO benefits from local project managers with strong technical capacities. Where those capacities are difficult to find, UNIDO should train local project managers on project cycle management, including results-monitoring.

Towards improved M&E in UNIDO

Good practices in results monitoring emerge in UNIDO, including for its contribution to SDGs. UNIDO's Learning and Knowledge Development Facility (LSDF) is such an example. The project applied test-and-fail approach early to take corrective actions rather than waiting for perfect technical solutions. The project right-sized its numerous key performance indicators and facilitated dialogue between partners. Currently, the LSDF tracks job and income related quantitative indicators, with relevance for UNIDO key performance indicators and SDG reporting, complemented with impact stories. Having the common LSDF umbrella allows comparing results across Public Private Development Partnership (PPDP) projects. Systematic results monitoring leads to new projects designed based on evidence, with replication, up-scaling and ultimately systemic change in view.[30]

Besides, the Synthesis review revealed the added value of using established frameworks or standards in M&E where applicable. Two examples are: i) NCPP-Moldova adopted the global frameworks developed under the RECP programme to monitor enterprise level resource productivity and environmental benefits; ii) for a standardised calculation of greenhouse gas emission reductions, approved GEF baseline and monitoring methodologies add value.

Systems put in place: M&E ratings were systematically introduced in UNIDO following the introduction of the UNIDO Evaluation Manual in February 2018. This change seems to contribute to more thoroughly addressing M&E in UNIDO evaluation reports, increasing from 68% of reports published in 2016 to 86% in 2018. Still, as M&E is maturing in UNIDO, ratings on M&E in final project evaluations show a disconnect between the ratings and the narrative evidence from the evaluation reports.

[30] Source: Evaluation report and UNIDO Project Manager

The box below summarizes lesson on improving monitoring and evaluation, based on research by the World Bank (2013)[31] and Measure evaluation, University of North Carolina at Chapel Hill (2001).[32] The lessons are adapted based on the learning emerging from the present UNIDO Performance and Results report.

Box 8

LESSONS ON IMPROVING MONITORING AND EVALUATION

Stakeholder ownership:

- Ensure leadership: identify champions of change in your counterpart organizations and work with them for M&E to strengthen the demand for results and performance data;
- Address sustained use of M&E: build in time and resource requirements for a participatory start-up of an M&E plan;

M&E capacity building: Need for local talent: Identify or strengthen capacities to implement and sustain the efforts of M&E;

M&E budget: Do not forget to budget for monitoring, including data collection and analysis (survey, case studies, database,). Split the budget, one for monitoring and one for evaluation!

M&E governance: Use processes such as the inception workshop and annual project Steering Committee meeting to clarify roles and responsibilities in project M&E;

Logframe quality:

- Access to good data and indicators: use available quality data sources where available and align the number of indicators where own data collection is required to the monitoring budgets available;
- Use incentives that promote the use and generation of results and performance information, as seen in the "competitive" reporting of results achieved by Technical and Vocational Education and Training centers across countries in LSDF.

Sources: World Bank (2013) and Measure evaluation, University of North Carolina at Chapel Hill (2001), adapted with evidence from UNIDO.

[31] World Bank, 2013: Monitoring and Evaluation for Better Development Results.

[32] Measure evaluation, University of North Carolina at Chapel Hill, 2001: Best Practices in Monitoring and Evaluation: Lessons from the USAID Turkey Population Program.

9. CONCLUSIONS, LESSONS LEARNED, AND AREAS OF IMPROVEMENT

Conclusions

The Synthesis concluded that UNIDO project performance in the portfolio was strong across international standard evaluation criteria, namely relevance, effectiveness, efficiency and sustainability. UNIDO projects were stronger in terms of relevance and effectiveness, but weaker in efficiency and sustainability. UNIDO organizational performance in terms of project design, management and backstopping was also assessed satisfactorily. However, a deeper analysis of project-level M&E and benchmarking with other development agencies suggest that ratings by UNIDO independent evaluations were somewhat overstated, in comparison to the qualitative assessment from the evaluation reports.

The overall performance of UNIDO projects funded by the Global Environment Facility (GEF); as verified by the GEF Independent Evaluation Office in 2018[33], indicates that 95% (21) of UNIDO projects are in satisfactory range, consisting of highly satisfactory, satisfactory and moderately satisfactory ratings.
Results in terms of intermediate outcomes were integrated across the three UNIDO thematic priorities: namely Advancing Economic Competitiveness, Safeguarding the Environment and Creating Shared Prosperity. Overall, the flow of evidence on results from the evaluated projects was more qualitative than quantitative.

The 65 independent evaluations between 2015 and 2018 indicated evidence of intermediate development outcomes (qualitative but not quantitative) and showed that results are integrated across the three UNIDO thematic priorities. Contribution to impacts is stronger in economic and environmental areas, but less in social sector. Local-scale economic, environmental and social impacts on direct beneficiaries have emerged from some projects at completion point. Yet very limited system-scale impact has been observed, as system transformations rarely take place within the time span of a project. Catalysing broader adoption initiatives (e.g. mainstreaming, replication, scaling-up and market change) would help bring about system-scale impacts.

Broader adoption initiatives to replicate and scale up pilot projects were not systematically planned and implemented. Many UNIDO interventions are pilot or demonstration projects but it remains unclear how successful pilots could be replicated and up-scaled by others to transform project outcomes and local-scale impacts into system-scale impacts. Some broader adoption initiatives (e.g. mainstreaming, replication, scaling-up and market change) required by the GEF for the projects it funded have been planned, partially implemented and adopted in few projects, but some projects did not indicate intention to engage in significant broader adoption initiatives.

Good project design is critical. The most positive results achieved across the portfolio were generated when the project design was strategic in line with government priorities, well-structured, with clear roles and responsibilities and clear causal results-chains (impact, outcomes, outputs) and indicators. This was demonstrated by the consistently higher performance in GEF projects where a more structured approach is taken.

Stakeholder engagement is crucial for achieving performance and results. A high-degree of stakeholder engagement was necessary for achieving project success. The extent to which

33 GEF 2018. Annual Performance Report 2017.

projects and UNIDO staff engaged with stakeholders, particularly national governments and private sector actors, contributed significantly to the relevance, effectiveness, and sustainability of a project. Where this did not occur effectively, implementation challenges occurred and results were affected.

Co-financing is important but appears to be under-reported. UNIDO's capacity to leverage co-financing seems to be higher than currently perceived. Projects with materialized co-financing from government and private sector tended to display higher relevance, effectiveness, efficiency and higher potential for better and wider impact. Yet, there is little tracking of co-financing and uncertainty as to what works and what does not work in terms of confirming and mobilizing co-financing.

Cross-cutting issues such as gender, partnership and policy work were not systematically mainstreamed into projects. UNIDO programmes and projects are leading to positive results in cross-cutting issues such as gender, partnership and policy work, despite insufficient attention in project design. Projects supporting women and young people are achieving good results, but tend to be isolated initiatives with low sustainability because they are not mainstreamed into on-going processes. Similarly policy work and building partnerships help put in place the right conditions and mechanisms to lead to system-scale impacts but were not systematically included in project design.

Quality of project-level M&E is suboptimal. Results of the quality of project M&E design and the implementation of the M&E plan are mixed with no positive trends emerging. However, encouraging evidence of cases emerge where M&E was used for adaptive management in some UNIDO projects. There are positive correlations between the quality of M&E and the performance of UNIDO projects based on evaluation ratings.

Ratings by independent project evaluations were overstated. A deeper analysis of project-level M&E performance and more critical evidence in internal and external reports indicate that the ratings by independent project evaluations do not always reflect the qualitative evidence in the evaluation reports and seem to be overrated.

Potential areas for improvement

As the Synthesis put a strong focus on organizational learning and continuous improvement, the following are potential areas for improvement:

1. **Replication and up-scaling**. UNIDO should further capitalize on its strengths in technology and knowledge strengthening to define broad adoption initiatives to achieve broader impact at system level. The sustaining, mainstreaming, replication and up-scaling of UNIDO pilot demonstrations by government and private sectors need to be planned at project design and take place during implementation before project completion.

2. **National context**. UNIDO should take a more structured approach to project design and implementation. It is important to consider the strategic priorities of key stakeholders, particularly of national governments, tailoring technical concepts and approaches to national contexts. Investment in a more structured design approach, including clearer and more realistic results chains and targets to contribute to improved performance. This may require more consideration of phased approaches towards expected results.

3. **Stakeholder engagement**. UNIDO should put higher value and invest specifically in stakeholder engagement at project design and during implementation. Valuing and investing in stakeholder engagement as a specific activity generates benefits in terms of strong performance and foundations for sustainability. Unless UNIDO had ensured that stakeholders have ownership, understand and agree to take on the expected roles and responsibility, performance is not likely to reach targets. This requires specific expertise and approaches, including allocation of time and resources at design and during implementation; including a multi-stakeholder plan for phase-out, transition to a following phase and/or mainstreaming for sustainability. Stakeholders engagement at early stages in defining prospective mechanisms for broader adoption is important for country-level ownership.

4. **Co-financing and resource leveraging**. UNIDO needs to take a more proactive approach to leverage co-financing resources. This also needs innovative approaches to identify and track whether co-financing materializes as planned and how the benefits of co-financing can be activated towards achieving greater impact. This may need a specific study and approach to generate guidelines and capacity development within the organization.

5. **Mainstreaming cross-cutting issues**. Higher impact can be achieved with targeted attention towards achieving better performance in cross-cutting issues, particularly when they are mainstreamed into project designs. This can be achieved with an intensified approach towards mainstreaming cross-cutting issues. It may require specific expertise to ensure mainstreamed approaches in design.

6. **M&E budget**. UNIDO should allocate budget for M&E explicitly in project budgets at design; including separate allocation for: i) monitoring, ii) evaluation and iii) training local partners on project cycle and M&E.

7. **Corporate M&E system**. UNIDO should put in place a more rigorous and consistent corporate M&E system for defining and tracking results across UNIDO portfolio to aggregate and analyze performance and results for adaptive management. An institutional Monitoring, Reporting and Evaluation system is needed, together with practical tools to be used by project managers

8. **Realistic ratings by independent evaluations**. UNIDO IED should scrutinize more systematically ratings by project terminal evaluation teams and ensure that assessment and ratings are rigorous and realistic and are in line with the Evaluation Manual introduced in February 2018.

Lessons learned

- **Ownership of agreements amongst project partners is important.** Projects are more likely to be successful if discussions and agreements on project objectives, activities and responsibilities are fully owned by participating institutions and if this commitment is established prior to the initiation of the project. This ownership also extends to clear communication between project beneficiaries and key stakeholders. This is vital to manage expectations and avoid misunderstandings. The host government is also an important part of the ownership of the project. If a host government takes an active interest in the project, its processes can be streamlined to minimise the risk of delays in project implementation.

- **The role of UNIDO as a neutral convenor of partners influences effective implementation.** UNIDO's role, especially during the early stages of project design and implementation encourages partners to engage with a new initiative, even those who have

not previously worked together. The knowledge and networking potential of UNIDO involvement can streamline project processes and prevent potential hurdles. A close relationship between project staff and UNIDO staff, with UNIDO staff taking an advisory role, contributed to stronger, more efficient and more successful outcomes in several projects. Furthermore, UNIDO was identified as helping to raise the profile of project results by convening events (e.g. Cleantech activities)

- **Gender mainstreaming actions accelerate and widen results.** Women have been shown to be powerful drivers of development and economic growth in projects evaluated. There is an increasing recognition of the role that women entrepreneurs can play as engines for inclusive and sustainable industrial growth. Gender-related aspects of industrial development, which are a high priority for UNIDO, are however not consistently integrated into project design or implementation.

- **Scope of results and sustainability is affected by not sufficiently considering the whole chain of influence for results.** Clear project design frameworks are important to both guide project design, and to allow for the accurate reflection of achievement and impacts. Relevant objectives address hindering factors that may limit the value of a project within a value chain. Projects aiming at increasing local value added within a value chain need to consider the entirety of the value chain context. Major challenges that prevent the unleashing of value within the chain need to be addresses comprehensively. Projects, in which the achievement of final results depends on intermediate results, need to be divided into phases. Within these phases a clear sequencing of services is needed. In particular, the delivery of technically strong pilot projects are needed to achieve and demonstrate success, especially in market transformation projects before market actors will consider investing in the proposed technology.

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