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SUSTAINABLE DEVELOPMENT GOALS

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Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development

Office of Evaluation and Internal Oversight

OFFICE OF EVALUATION AND INTERNAL OVERSIGHT
INDEPENDENT EVALUATION UNIT

Independent Evaluation of

Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development

UNIDO Project ID: 150052
GEF Project ID: 5666

UNITED NATIONS
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Abstract

This GEF-funded project in Pakistan aimed to support the establishment of the Sialkot Tannery Zone (STZ) and its central component, the common effluent treatment plant (CETP), to facilitate the relocation of tanneries from urban areas to a designated industrial zone. The overarching objective was to contribute to the greening of the leather production industry in Sialkot, Pakistan, with a view to conserving agricultural land while increasing economic growth. The evaluation findings highlighted the alignment of the project with government policies, the importance of coordination between the STZ and various national and international stakeholders, and the substantive contributions of the project toward climate change adaptation and awareness raising. However, challenges related to project delays, financial constraints for tanneries, and environmental concerns regarding contaminated sites were noted. Key conclusions emphasized the potential economic benefits of the STZ, including increased exports and employment opportunities, as well as environmental improvements for surrounding communities. The project successfully promoted capacity development among tannery owners and workers, while also addressing climate adaptation through infrastructure development and cleaner production processes. Recommendations were provided to enhance future projects, including conducting comprehensive energy feasibility studies, exploring opportunities for female employment in downstream leather industries, and formulating proposals for advanced climate-adapted waste conversion technologies. Lessons learned emphasized the importance of flexibility, inclusiveness, and qualitative monitoring in project implementation. Overall, the independent evaluation rated the project's performance as satisfactory to highly satisfactory, underscoring its potential to contribute to sustainable development in the leather industry and broader environmental goals.

Keywords: industrial waste management, green tanneries, climate adaptation, Pakistan.

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Abbreviations and Acronyms

Abbreviation	Meaning
BAT	Best available technology
BCS	Basic chrome sulphate
^{0}Bé	Baumé grades; traditional measure of liquid/solution density
BOD_5	5 days Biochemical oxygen demand
^{o}C	Degree Celsius
CC	Climate change
CCA	Climate change adaptation
CETP	Central effluent treatment plant
CFC	Common facility centre
COD	Chemical oxygen demand
CP	Cleaner Production
Cr	Chromium
CRU	Chrome recovery unit
D	Day
Dia	Diameter
DIPP	Department of Industrial Policy and Promotion
DS	Dry solids
d.w.	Dry weight
EA	Executive agreement
EDF	Export Development Fund
EIA	Environmental impact assessment
EMS	Environmental management system
EPD	Environment Protection Department
ESSG	Environmental and social safeguards
ETP	Effluent treatment plant
FY	Fiscal year
GCWUS	Government College Women University, Sialkot
GEF	Global Environment Facility
GILT	Government Institute of Leather Technology, Gujranwala
H	hour
Ha	hectare (= 100 m^2 = 2.5 acres)
HDPE	High density polyethylene
HP	Horse power
Id	Indirect worker
IE	Independent evaluation
IEU	Independent Evaluation Unit
ISO	International Standards Organization
IULTCS	International Union of Leather Technologists Society

Kg	Kilogramme
KII	Key informant interview
kWh	Kilowatt hour
L	Litre
LDPI	Leather Products Development Institute, Sialkot
LWG	Leather Working Group
M	Metre
m^2	Square metre
m^3	Cubic metre
MOCC	Ministry of Climate Change
min.	Minute
Mm	Millimetre
Mio	Million
MOI	Ministry of Industry
MOU	Memorandum of understanding
MTR	Mid-term review
NE	National expert
NG	Natural gas
NGO	Non-governmental organization
NT	Normal temperature
O&M	Operation and maintenance
OSA	On-line self-assessment tool
OSH	Occupational safety and health
p.a.	Per annum
Pc	Piece
PDU	Pilot demonstration unit
PF	Power factor
PFI	Power factor improvement
pH	Negative logarithm of hydrogen ion concentration
PIR	Project implementation report
PKR	Pakistani rupee
PMU	Project management unit
PPE	Personal protective equipment
PPP	Public private partnership
PSC	Project steering committee
PSIC	Punjab Small Industries Corporation
RBM	Results-based management
ROE	Rate of exchange
SCCI	Sialkot Chamber of Commerce and Industry
SCP	Sustainable cleaner production
SDY	Sludge disposal yard
SME	Small and medium enterprise

S^{2-}	Sulphide
SO_4^{2-}	Sulphate
sq. ft.	square foot/feet, equivalent to 0.929 square metres (m^2)
SS	Suspended solids
STAGL	Sialkot Tannery Association Guarantee Limited
STZ	Sialkot Tannery Zone
T	Tonne (1,000 kg)
t/d	Tonne per day
TDAP	Trade Development Authority of Pakistan
TDS	Total dissolved solids
TE	Terminal evaluation
TKN	Total Kjeldahl nitrogen
TOR	Terms of reference
TS	Total solids
TSS	Total suspended solids
UNIDO	United Nations Industrial Development Organization
VOC	Volatile organic compound
w/m	work-month
WWF	World Wide Fund for Nature
ZLD	Zero liquid discharge

Glossary of Evaluation Related Terms

Term	Definition
Assumptions	The conditions that need to be in place to achieve the results as will or may affect progress or success at different levels of an intervention's causal pathway. The assumptions can be internal or external to UNIDO or the particular programme or project and usually connect outputs to outcomes, and outcomes to impact.
Baseline	The situation, prior to an intervention, against which progress can be assessed or comparisons made.
Coherence	The compatibility of the intervention with other interventions in a country, sector or institution. The extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the objectives of a development intervention were or are expected to be achieved.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
Environmental and social safeguards (ESS)	The extent to which environmental, climate change and social risks and impacts of a UNIDO product, service or process have been assessed and addressed (in line with respective administrative issuances).
Evaluand	The subject of an evaluation, typically an intervention, organizational programme of work, or system.
Gender mainstreaming	The extent to which an adequate gender analysis has been conducted for a UNIDO product, service or process, its findings have been included in its design and monitoring and reporting data is sex-disaggregated where feasible.
Impact	Positive and negative, primary and secondary, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Independent evaluation	Independent evaluations provide an independent, credible and evidence-based assessment on a given entity under evaluation, such as a project, programme, or an entire strand of activities under a thematic, geographical or institutional heading. Independent evaluations are conducted and/or managed by staff members of the UNIDO Independent Evaluation Unit and conducted by external independent evaluation consultants.
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor. Means by which a change will be measured.

Intervention	An external action to assist a national effort to achieve specific development goals.
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.
Logframe (logical framework approach)	Management tool used most often at the project level. It involves identifying strategic elements (activities, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates designing, planning, execution, monitoring and evaluation of a development cooperation intervention. System based on MBO (management by objectives) also called RBM (results-based management) principles.
Mainstreaming/sustaining	Initiatives are reproduced/adopted in other geographical areas or regions.
Market change	Initiatives catalyze market transformation by influencing the supply and demand for goods and services contributing to global environmental, economic and social benefits.
Means of verification	Data sources for indicators; reliable and cost-effective.
Outcome	The achieved or likely short-term and medium-term effects of an intervention's outputs.
Outputs	The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Policy	A set of ideas or a plan of what to do in particular situations that has been agreed to officially by a group of people, an organization, a business organization, a government, or a political party.
Programme	A collection of organizational resources that is geared to accomplish a certain major result or a set of results in a coordinated manner. Therefore, it is used in the context of development cooperation interventions as well as the organizational programme of work: a) A programme contributing to the organizational programme of work: An official plan of action within the Organization, which is aimed at accomplishing a clear organizational objective, and includes details on what work is to be done, by whom, when, and what means or resources will be used. b) Development cooperation programme: A group of complementary projects or activities designed and managed in a coordinated and coherent way, simultaneously or sequentially, to obtain broader benefits and long-term results (impact) not directly attainable from managing the projects individually. A programme is further typically characterized as a systematic and complex intervention to address a development problem or need to attain

	specific sectoral, national, regional or global development objectives.
Progress to impact	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and the extent to which conditions for trajectory change are being put into place.
Progress/performance measurement and monitoring, reporting & evaluation (M, R & E) systems	The extent to which indicators and means of verification (data sources) as well as M, R & E plans are fit to inform adaptive management and decision-making.
Project	A development cooperation intervention, which is designed to achieve specific objectives (outputs and outcomes) contributing to a higher objective (impact) within a given budget and a specific period of time, i.e. it has a beginning and an end.
Project/programme design	Formulation of the intervention, the plan to achieve a specific purpose.
Project/programme performance	Functioning of a development intervention
Quality	Products, services and processes being free of deficiencies or, in other words, satisfactory in terms of meeting established requirements (i.e. principles, standards and criteria).
Recommendations	Proposals aimed at enhancing the effectiveness, quality, or objectives; and/or at the reallocation of resources.
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
Replication	Initiatives are reproduced/adopted in other geographical areas or regions.
Result	Specific and measurable change (output, outcome and impact) that is derived from a cause-and-effect relationship. The causality relationship between the changes is as important as the results themselves as it reflects the theory of change (see below) and the roles of UNIDO and its partners.
Results-Based Management (RBM)	A management strategy – at project and programme, portfolio, organizational, country, and global levels – based on managing for the achievement of intended results within a given context by integrating a results philosophy and principles into all aspects of management and by integrating good practices and lessons learned from past performance into management decision-making.
Results chain	The causal sequence for a development intervention that stipulates the necessary sequence to achieve desired results – beginning with inputs, moving through activities and outputs, and culminating in individual outcomes and those that influence outcomes for the

	community, goal/impacts and feedback. It is based on a theory of change, including underlying assumptions.
Review	A systematic and evidence-based self-assessment of the performance of a programme or project, aiming at determining performance against established criteria. It can be conducted internally, i.e. by personnel directly involved in a programme or project, or externally, i.e. by personnel hired specifically for the purpose of conducting the review, whereby the overall responsibility for the review rests with the programme or project management. Reviews can be carried out at different stages of the programme or project life cycle, i.e. for programmes and projects with start and end dates as mid-term reviews (MTRs) and terminal self-evaluations, and for open-ended programmes periodically.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Scale-up	Scale-up is defined as the multiplication of an achieved result from an intervention, in which a greater number of beneficiaries (people or institutions) benefit more lastingly from the results. The scaling-up process may be: a) horizontal, expanding geographical reach to cover more people through replication and adaptation; and/or b) vertical, expanding institutional reach to guide principles of practice through mainstreaming. Scaling-up of results may require an integrated approach of horizontal and vertical scaling-up
Self-evaluation	Self-evaluations are reviews (see above). They are an integral part of the project or programme M&R function, which is a management function. They take the form of a systematic, mid-term or final review of projects or programmes. As such, they are carried out or managed by officials who are responsible for their implementation, i.e., management. Independence is not a requirement for self-evaluations, although in keeping with good practice they are often undertaken by external evaluation consultants. Self-evaluations build upon M&R and should take place according to the rules established in project management guidelines. They are the vehicle for steering corrective action by line management, and therefore a management responsibility (under 1st and 2nd Line of the UNIDO Three Lines Model of Defence (3LM)).
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.
Target group	The specific individuals or organizations for whose benefit an intervention is undertaken.
Theory of change	Theory of change or programme theory is similar to a logic model, but includes key assumptions behind the causal relationships and sometimes the major factors (internal and external to the intervention) likely to influence the outcomes.
Transformation	Deep, systemic, and sustainable change with large-scale impact in an area of global environmental concern

Executive Summary

The project "Mainstreaming Climate Change adaptation through Water Resource Management in Leather Industrial Zone Development" has been funded by GEF through UNIDO. The US$ 3.3 million UNIDO-GEF project supported the centre piece, the **common effluent treatment plant (CETP)**, of the much larger Sialkot Tannery Zone (STZ) project (US$ 14 million).

The STZ itself is a prerequisite for the tanneries to be able to relocate from their current premises in the city of Sialkot (estimated to cost US$ 115 million). Without effluent treatment, **relocation of the tanneries** is of limited value. To be able to work in changing climates, the CETP, tanneries and the entire zone have been designed to withstand high water tables in the rainy season. Another element of the UNIDO-GEF project is that tanneries were adopting water saving technologies, occupational safety and health and cleaner production processes. These are incorporated in the bylaws of STZ.

The terminal evaluation assessed project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and it developed a series of findings, lessons, and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The evaluation took place during November 2023 to March 2024 and included an inception phase, document review, field work and primary data collection in Pakistan including group discussions, key informant interviews, site observation, triangulation of data, stakeholder debriefings, and report writing.

Key Findings

Relevance. The project fully aligned with the Government's Policy and strategy documents. The UNIDO-GEF project supported the CETP, which is the centre piece of the STZ. The STZ itself is a prerequisite for the tanneries to be able to relocate from their current premises in the city of Sialkot. Without effluent treatment, relocation of the tanneries is of limited value. There is an expectation that a fully operational STZ will induce compliance with the industry leather working group (LWG) while raising exports and employment opportunities.

Coherence. Both the STZ and UNIDO-GEF projects benefitted from and contributed to synergies in large measure between each other as well as with government, business and community institutions. Progress would have been slow and uncertain without the exemplary pathways for complementarity and coordination demonstrated by the STZ and UNIDO-GEF projects.

Effectiveness. The project's substantive contributions strengthened planning frameworks for drainage, flood protection, forest cover, women's equality, and resilience of leather industry (outcome 1.1). Its continuous interaction, workshops and campaigns raised awareness of climate change adaptation (CCA) concepts and practices among tannery owners, community members, local non-governmental organizations, and government officials, and addressed community apprehensions (outcome 2.1).

The project covered a wide range of recommendations through awareness-raising under outcome 3.1. At the time of the evaluation, the CETP had not been completed. Thus, the targeted tanneries did not have access to the CETP and the Dugri Drain. Many of them were

experiencing shortage of funds for shifting to the STZ and installing the machinery required for relocating, even though the STZ and the project had been making concerted efforts to arrange financial assistance for them. There is no well-informed estimate of how many tanneries will finally shift to the STZ and adopt recommended practices and technologies, and how many will go out of business, when the choice for them by the end of 2024 is to relocate to the STZ or be shut down on government orders if they cannot relocate.

Efficiency. The evaluation team looked at two aspects of efficiency, time and costs. The project implementation was severely affected by global trade disruption and spiralling inflation. It showed remarkable efficiency in a trade-off between cost and time in opting for local procurement and installation of equipment. In addition, the capacity development results are particularly remarkable.

Sustainability. Although challenges remain to be addressed, the likelihood of project benefits continuing beyond project closure are good. Benefits in terms of human capital (acquired through awareness, knowledge and health outcomes) are enduring. The benefits of tanneries adopting recommended practices and technologies can be expected to be sustained by market incentives. The benefits of collective interventions are supported by institutionalization in government and STAGL and, therefore, likely to be sustainable.

Key Conclusions

The STZ – once fully operational – is expected to halt the continuous decline of Pakistan's share of global exports of leather sector - some 20 years ago, Pakistan's share in global exports was 1.4% against today's 0.5%. With abundant availability of high-quality raw materials and the industry being **leather working group compliant** the downward trend will not only be halted but likely reversed and employment and export earnings will increase.

For communities in and around Sialkot, the project – once tanneries are relocated – offers a **healthier and cleaner environment**. Water resources currently used by the tanning industry become available for alternate use in the district, including (urban) agriculture. In the areas surrounding STZ **employment opportunities** will increase. Thus, the communities near STZ will benefit from initially unskilled – construction of factories – and later on skilled jobs.

The capacity development aspects of the project worked very well. Tannery owners and their workers are aware of cleaner production and occupational safety and health practices. These have been institutionalized within the STZ bylaws, but also the government supported Rescue 1122 now has a better understanding of the tanning industry.

The STZ has been supported in its climate adapted design, layout, solid waste management plan and importantly the common effluent treatment plant. The STZ had also been supported through designs for pretreatment of wastewater and segregation of wastewater streams, so that tanneries can send their segregated wastewater to the CETP and reuse chromium. Capacities have been built so that subsequent modules of the CETP can be designed and constructed by key local stakeholders themselves. Actions have been initiated on solid waste management, renewable energy and energy saving.

The delays caused mainly by force majeures prevented the CETP from being operational and most of the tanneries from adopting cleaner production processes. Therefore, the major environmental benefits will materialize only later in the year. The relocation of

industry will likely leave behind contaminated sites in the city, though this needs to be studied in more detail.

The independent evaluation of the UNIDO-GEF project rates the overall project performance as satisfactory tilting to highly satisfactory as per **Error! Reference source not found.** below.

Table 1. Rating against UNIDO project evaluation criteria

	Evaluation criteria	Rating
A	Progress to Impact	Highly satisfactory
B	**Project design**	
B.1	Overall design	Highly satisfactory
B.2	Project results framework/logframe	Moderately satisfactory
C	**Project performance and progress towards results**	
C.1	Relevance	Highly satisfactory
C.2	Coherence	Highly satisfactory
C.3	Effectiveness	Moderately satisfactory
C.4	Efficiency	Highly satisfactory
C.5	Sustainability of benefits	Satisfactory
D	**Gender mainstreaming**	Highly satisfactory
E	**Project implementation management**	
E.1	Results-based management (RBM)	Moderately satisfactory
E.2	Monitoring and Evaluation, Reporting	Moderately satisfactory
F	**Performance of partners**	
F.1	UNIDO	Highly satisfactory
F.2	National counterparts	Satisfactory
F.3	Implementing partner (STAGL)	Highly satisfactory
F.4	Donor (GEF)	Satisfactory
G	**Environmental and Social Safeguards (ESS), Disability and Human Rights**	
G.1	Environmental Safeguards	Highly satisfactory
G.2	Social Safeguards, Disability and Human Rights	Moderately satisfactory
H	**Overall Assessment**	Satisfactory

Key Recommendations

Recommendation 1: UNIDO to conduct a comprehensive energy feasibility study–cum project preparation mission. Capacity development for energy saving may need longer term support.

Recommendation 2: STAGL to investigate the possibility of employing women in downstream industries as leather shoe making, leather garments, goods and products.

Recommendation 3: UNIDO should, in close cooperation with key stakeholders, formulate a project proposal for advanced climate change adapted tannery solid waste conversion technologies and practices.

Recommendation 4: For future proposals, UNIDO should apply a theory of change framework with necessary assumptions, indicators, outputs and outcomes leading to the desired impact.

1. Introduction

The project "Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development" - referred to as UNIDO-GEF project going forward - has been funded by GEF through UNIDO. The UNIDO-GEF project valued at US$3.3 million is part of the Sialkot Tannery Zone (STZ) project valued at US$ 14 million (see Table 2), which is part of the tannery relocation project with an estimated value of US$ 115 million. The history of the STZ goes back some 20 years and UNIDO's support to the tanning industry in Pakistan predates this.

Table 2. Project fact sheet

Project Title	Mainstreaming Climate Change Adaptation through Water Resource Management on Leather Industrial Zone Development
GEF ID	5666
UNIDO SAP ID	150052
GEF Replenishment Cycle	GEF-5
Country	Pakistan
Region	Asia and Pacific
GEF Focal Area	Climate Change Adaptation (CCA)
Executing Agency	UNIDO
Other Project Partners	▫ Sialkot Tannery Association Guarantee Limited (STAGL) ▫ Ministry of Climate Change (MOCC)
Project Type	Full Sized Project
Project Duration (months)	48 months + 36 months
Extension(s)	One
GEF Project Financing (in USD)	3,310,000
GEF PPG (in USD)	90,000
UNIDO co-financing (in USD)	250,000
Total co-financing at GEF CEO endorsement (in USD)	14,450,000
Total project cost (excluding PPG and agency support cost, in USD; i.e., GEF project grant + total co-financing at CEO endorsement)	14,700,000
Mid-term review date	May-July 2020
Planned terminal evaluation date	November 2023 to March 2024
Date of CEO Endorsement/ Approval	10 December 2015
UNIDO Approval Date	1 October 2015
Actual Implementation Start Date	4 March 2016
Cumulative Disbursement 18 December 2023 (including obligations)	3,232,634.26
Expected Completion Date	4 March 2024
UNIDO Project Manager	Mr Ivan Kral

Source: Evaluation terms of reference, citing the project document (UNIDO ERP system), with information added by the evaluation team.

1.1 Evaluation Purpose

This Terminal Evaluation (TE) was carried out as an independent in-depth evaluation using a participatory approach whereby all major key parties associated with the project were informed and consulted throughout the evaluation. The Evaluation Team (ET) comprised one International Team Leader and one National Evaluation Expert.

The evaluation purpose and objectives, the theory of change, and the evaluative requirements of both UNIDO and the GEF all provided the basis for the evaluation framework, which in turn underpinned and guided the whole evaluation approach. The framework was structured against the standard OECD-DAC criteria agreed for the evaluation (relevance, coherence, efficiency, effectiveness, progress to impact, and sustainability). The framework identified key evaluation questions, supported by guiding sub-questions (see Annex 2).

1.2 Evaluation Objectives and Scope

As per UNIDO's Evaluation Manual (p. 11), an evaluation serves three purposes in UNIDO. It assures accountability, supports management and drives learning and innovation. Since it is a terminal evaluation, our main contribution will be on accountability and supporting learning and innovations. A strong focus on these elements in our view minimises potential misuse of the evaluation.

The scope of the evaluation is clearly outlined in the terms of reference. The evaluation has the following specific objectives:

- Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and,
- Develop a series of findings, lessons, and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The evaluation took place during November 2023 to March 2024. Its target audience is staff from all key stakeholders, that is national counterparts, the implementation partner (STAGL), UNIDO and the donor GEF. Additionally, staff from UNIDO and member states involved in public private partnerships and / or industry relocations projects that may benefit from a better understanding and may draw some lessons for their operations. Lastly, UNIDO staff and others involved in evaluations.

1.3 Theory of Change

This project had a detailed logical framework including the overall objective, activities, outputs, outcomes and intended impact (see Annex 5). This information was used to create a reconstructed theory of change for the purpose of this evaluation.**Error! Reference source not found.** The outcomes of interest were the three programmatic outcomes, numbered 1.1, 2.1 and 3.1 in the revised logframe (the fourth outcome focuses on M&E). The background discussion in **Error! Reference source not found.** suggests a reconstructed theory of change for the project as described below.

IF the project delivers the outputs planned for developing capacity for:

- Increasing awareness of recommended management practices and technologies among targeted tanneries and STZ stakeholders.
- Establishing access to CETP and the Dugri Drain as a treated water discharge system for targeted tanneries.

- Increasing awareness of gender equality and adverse impacts of climate change and appropriate responses among targeted community groups and leather business owners.
- Strengthening regulatory and strategic urban planning frameworks.

THEN:

- Targeted tanneries will adopt practices for reducing water use and effluent discharge.
- Industrial-community co-existence, resiliency against climate change and gender equality will be improved.

AND:

- The project could contribute to reducing economic losses [and water pollution] and increasing the resiliency of Pakistan's industrial and agricultural sectors against climate change.

The following assumptions were formulated in considering the theory of change:

- The national stakeholders remain committed to the objectives of the UNIDO-GEF project in Sialkot.
- Tannery enterprises are willing to invest and finance the STZ.
- Restrictions, such as increasing inflation and supply chain bottlenecks, are kept at bay.

This theory of change is illustrated in Figure 1.

1.4 Methodology

The evaluation took place during November 2023 to March 2024 and included an inception phase, field work in Pakistan, stakeholder debriefings, and report writing. It addresses questions (adapted from the UNIDO *Evaluation Manual*) focusing on UNIDO evaluation criteria and assessments required for GEF-funded projects, which were reflected in the evaluation matrix (**Error! Reference source not found.**).

Guided by the questions mentioned above, the evaluation team interrogated documents made available by the project (listed in **Error! Reference source not found.**), starting with the inception phase and continuing throughout the evaluation process, and collected qualitative primary data through interactions with all relevant stakeholders (**Error! Reference source not found.**). The instruments used in primary data collection are reproduced in Annex 6.

Field work included a site visit to the Sialkot Tannery Zone for meetings with STAGL and the PMU, and physical observation of the layout, roads, drains, CETP and tanneries at various stages of construction. Interaction with stakeholders was organized through key informant interviews (KIIs) and group interviews with two-to-five participants at a time.

Three of the group interviews were held with the three categories of tanners – those who had started production in the STZ, those who had started construction but not production, and those who had not yet started construction (who may be experiencing issues in

shifting from their current locations to the STZ). Two separate group interviews for women and men included the potential beneficiaries living in areas surrounding the STZ.[1]

Ensuring engagement with all relevant stakeholders, the evaluation team conducted:

- detailed KIIs with UNIDO staff and the STZ project director, and a group interview with two STAGL Board members (the chairman and the chief executive officer);
- two group interviews with teams of project technical experts representing the consultant master planner of the STZ and the CETP electro-mechanical contractor;
- three group interviews with tannery owners from three categories, as described above;
- group interviews with focal persons from areas surrounding the STZ. These are potential beneficiaries of the STZ project in terms of job opportunities, infrastructure development, land values, etc;
- KIIs and group interviews with Government of Punjab and Government of Pakistan officials in Sialkot, Lahore and Islamabad; and,
- a group interview with a university team that is cooperating with the project on gender mainstreaming and a KII with a cooperating project of the World Wide Fund for Nature (WWF).

The overall analytical framework as well as specific lines of inquiry are provided by the UNIDO evaluation criteria, questions, ratings and GEF-related assessments. Indicators of interest were available in the logframe and the evaluation team's experience. Basic methods of qualitative research, including triangulation across sources of data and stakeholder groups, completed the set of tools the evaluation used for data analysis.

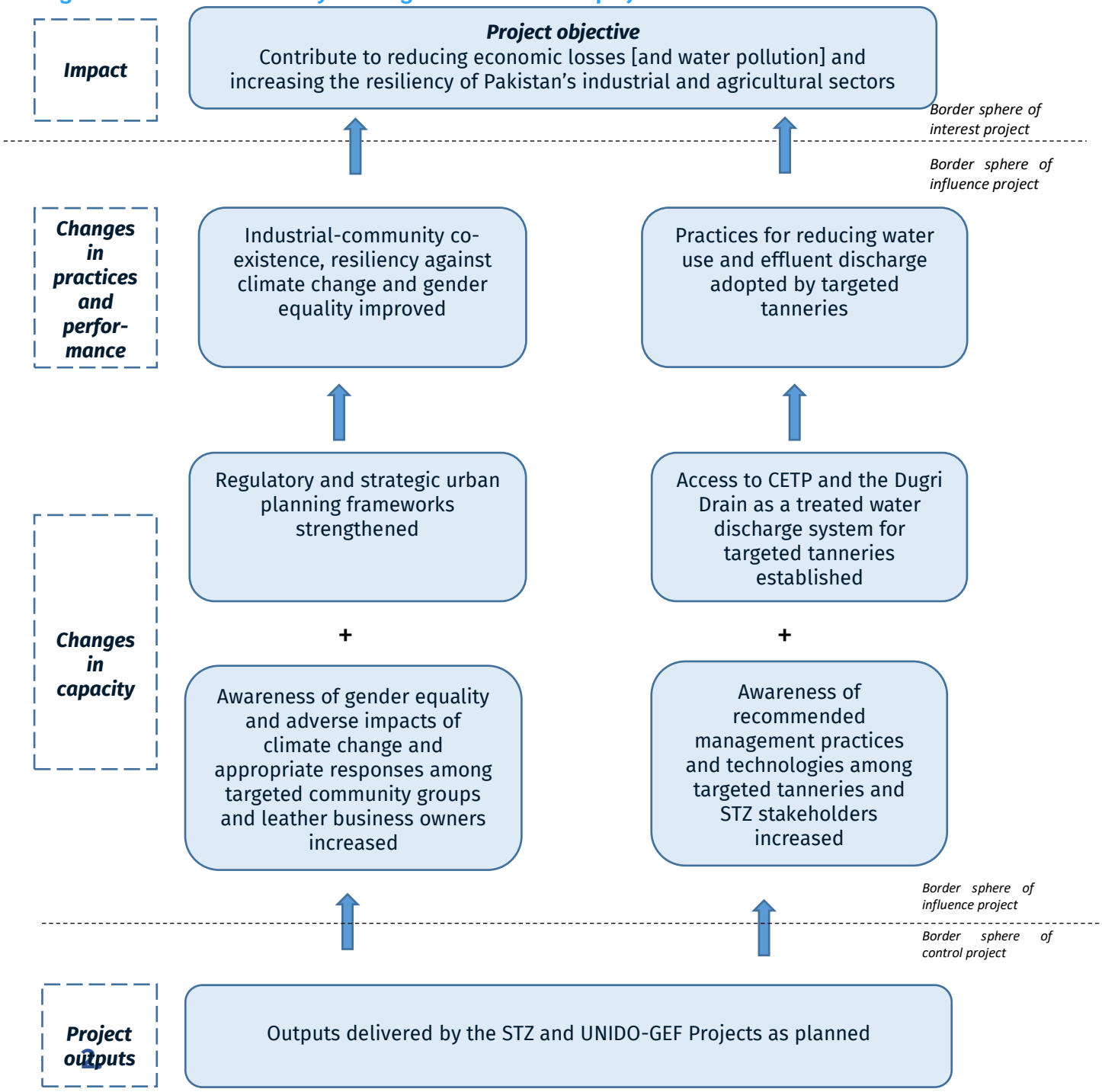
1.5 Limitations

The evaluation team considered – and decided against – an online survey of the 250 tanners associated with the project. Based on their experience in Pakistan, the evaluation team and project management concluded that language and the capacity of the target group would yield a very low response rate. Even with a questionnaire in Urdu, STAGL would have had to be engaged to pursue the tanners to respond, which could have influenced the respondents and undermined the independence of the evaluation.

The CETP in the STZ was not operational at the time of the evaluation. Three tanneries had started trial production. It was, however, evident that a point of no-return had been reached and the Government of Punjab was determined that tanneries should shift from their present locations in the Sialkot City to the STZ. Barring any unforeseen stumbling block, many tanneries would relocate in the current year and the first module of the CETP would be operational.

[1] These were planned as focus group discussions with six-to-eight participants each but a total of eight community members (three women and five men) turned up.

Figure 1: Reconstructed theory of change of the UNIDO-GEF project



2. Project Background and Context

The history of Sialkot Tannery Zone goes back many years, well before the UNIDO-GEF project. Tanneries have been operational in different parts of the city of Sialkot for decades. Traditionally, tanneries solve disposal issues of a waste product from the meat industry, hides and skins independently. Tanneries process hides and skins into high quality, high value commodities. In this production process, they use large amounts of water, chemicals, salts and various mechanical operations. Next to wastewater, tanneries produce large amounts of solid waste (more than 50% of the raw material weight).

Most tanneries in Sialkot had neither adopted cleaner tanning processes, nor adequate occupational safety and health practices, nor did they treat their wastewater or their solid waste. As the tanneries are scattered, it is difficult to establish a CETP in Sialkot. Furthermore, tannery wastewater is more difficult to treat than say domestic wastewater, supporting the need for a dedicated treatment plant.

In the early 2000s, within the framework of a Norwegian funded cleaner production project, a survey was made of the 200-odd tanneries. The survey *increased awareness* of industrial pollution as it revealed traditional wasteful practices of water, chemicals and waste without any treatment of wastewater. Those who adopted the cleaner production processes could realise up to 40% reduction in pollution load. Yet for the sector to sustain and grow, treatment facilities are required. As the tanneries are scattered all over the city, industry representatives requested the government in 2004 to establish a special industrial zone. Based on experiences elsewhere, the Government would not take the lead but would support the private sector in doing so.

The Sialkot Chamber of Commerce and Industry (SCCI) envisaged the establishment of a Sialkot Tannery Zone (STZ) and the Sialkot Tannery Association Guarantee Limited (STAGL) Company was formed in 2004.

In 2009, the Government identified 3 potential areas, out of which the current site was selected and followed by an environmental impact assessment. The land acquisition of about 160 hectares started in 2011 and it took three years to complete with an interest-free loan by the Government of Punjab for 75% of the land value (PKR 406 million at time) and 25% contribution by STAGL. The STZ is located near the village of Khumbranwala, approximately 13 km away from Sialkot city and about 5 km away from the Sialkot International Airport.

The climate and social assessment study of 2015 revealed shortcomings in planning and design of the STZ project relating to the effects of climate change. If these shortcomings were not adequately addressed, this would result in significant negative implications for the industry in Sialkot and in STZ as well as for the communities in Sialkot and surrounding the STZ. A negative scenario was foreseen for the employment and export objectives of the government. Therefore, counterparts – government and the industry - requested the most experienced UN agency in tannery relocation in Asia, UNIDO, to further support the process. Consequently, UNIDO with funding from GEF initiated the "*Mainstreaming Climate Change Adaptation through Water Resource Management on Leather Industrial Zone Development*". The project strengthens climate adaptive capacities by incorporating adaptation measures in every step of the STZ, both for its establishment and its management. Table 3 below is the testimonial to its design.

Table 3. Project components, outcomes and outputs

Project Components	Outcomes	Outputs
Component 1: CCA and Gender Equality for Adaptation Mainstreamed into Urban and Rural Development Planning	Outcome 1.1 Regulatory and strategic urban planning frameworks to improve industrial-community co-existence, resiliency against climate change and gender equality are strengthened	▫ Output 1.1.1: Support to mainstream CCA and gender equality into Punjab and Sialkot district urban development plan is provided ▫ Output 1.1.2: Flood management plan for the Sialkot Tannery Zone (STZ) and the pilot Dugri drain in Sialkot is documented and capacities are developed
Component 2: Climate Change Resilience Building of Vulnerable Communities and Leather Business Owners	Outcome 2.1 Awareness among targeted community groups and leather business owners on the need to introduce CCA concepts/practices is raised	▫ Output 2.1.1: Information on CCA measures for STZ is provided to target groups and their needs are understood by project stakeholders ▫ Output 2.1.2: Community-led trainings and actions to overcome CC through water and energy conservation and flood management are delivered ▫ Output 2.1.3: The needs of different target groups to build their resiliency are communicated to each other ▫ Output 2.1.4: Guidelines on best practices and project knowledge disseminated to similar clusters and development projects
Component 3: Sialkot District and Sialkot urban plan implementation, dissemination of information, demonstration of safe, affordable and advance technology for water treatment and water conservation in the pilot Sialkot Tannery Zone (STZ).	Outcome 3.1: Water availability for agricultural use around the STZ is increased	▫ Output 3.1.1: Various alternatives, especially water harvesting and appropriate effluent treatment technology, documented and discussed with all STZ stakeholders ▫ Output 3.1.2: Assistance provided with the preparation of TOR, tender, technical evaluation and supervision of work and installation of Central Effluent Treatment Plant (CETP) including technology for one CETP module ▫ Output 3.1.3: Practical training for improved production efficiency, lower environmental footprint and pollution reduction technologies is delivered to relevant stakeholders ▫ Output 3.1.4: Support is provided to verify and build capacities on using the Dugri Drain as a treated water discharge system that benefits agriculture ▫ Output 3.1.5: Feasible by-products from leather industrial waste and required technology are identified ▫ Output 3.1.6: Water management practices and technologies are demonstrated to tanneries
Component 4: Quality Control Monitoring and Evaluation	Outcome 4.1: Quality control and efficient monitoring and	▫ Output 4.1.1: Timely semi-annual reports prepared; midterm review and final evaluation [using Adaptation Monitoring

Project Components	Outcomes	Outputs
	evaluation of project intervention to support adaptation by CC vulnerable communities	and Assessment Tool] of project activities completed

In the project preparation and its implementation UNIDO worked very closely on the most critical paths with the key stakeholders. Developments post 2011 that have been captured in Table 4 below testify to this close cooperation.

Increased global awareness of environmental impact of the tanning industry and discussions over eco-labelling give impetus to some of the largest buyers of leather, leather goods and shoes coming together under the banner of the Leather Working Group (LWG). The LWG certifies if exporters meet national pollution standards and adhere to international working practices (such as no child labour or use of banned chemicals). Not having effluent treatment facilities hampered exports and sales by Sialkot based tanneries to some of the biggest global brands. Though raw material (hides and skins), production capacities and human resources were available, the export-oriented industry was hampered in its growth and in fact contracted.

The key stakeholders are quite diverse. Some have already been mentioned. From the industry side, the key beneficiaries are STAGL and the tannery units as well as the labour-intensive downstream industries, leather shoes, garments and products. The employees in the factories are direct beneficiaries as their working conditions will improve and they have already benefitted from awareness and increased occupational safety and health training. The communities in Sialkot city are expected to benefit from healthier, cleaner environment and likely healthier produce form urban agriculture. Another key stakeholder consists of the communities surrounding the STZ, as they will benefit from increased employment opportunities. Making women aware of the opportunities in the sector makes them an important beneficiary and stakeholder, too.

There are several government departments and agencies that are key stakeholders. They have also been seriously involved in funding, as **Error! Reference source not found.** below shows.

The Ministry of Climate Change (MoCC) is an Executing Partner and chair of the Project Steering Committee. The Ministry of Commerce (MoC) through the Trade Development Authority of Pakistan's (TDAP) Export Development Fund (EDF) is the main co-financier. It is expected that they will also benefit from increased export earnings. The Punjab Small Industry Cooperation is not only a key stakeholder and project financier, the experience from the UNIDO-GEF project will help them in planning similar industrial estates and industry relocations. Other project stakeholders include the Provincial and District Disaster Management Agency (PDMA/DDMA), Rescue 1122, the Irrigation Department, and the Government College Women University – Sialkot (GCWU) campus. Cooperation with WWF was exemplary. They were both stakeholder and beneficiary. But all other stakeholders benefitted from WWF involvement, too.

Table 4. Sialkot Tannery Zone development, 2009 to 2024

	Project Components	Source of Funds	Status	Design/Tender Documentation	Tendering/ Contract Award	Implement-ation	Delay Due to Funds Not Available	On Hold Awaiting Donor Approvals
				2009 2010 2011	2012 2013 2014	2015 2016 2017	2018 2019 2020	2021 2022 2023 2024
1	Purchase of land	Private, EPD	Completed					
2	Master planning /no objection certificates	Private	Completed					
3	Allotment of plots	Private	Completed					
4	Boundary walls	Private	Completed					
5	Main gate	Private	Completed					
6	Site offices	Private	Completed					
7	Internal road network	Private	65% completed. Top asphalt layer to be done after heavy construction works					
8	Effluent and storm water conveyance system	Private, EDF	Completed					
9	Internal electrification system with temporary supply of electricity	Private	Completed					
10	Construction of dedicated 21 MW grid station	EDF, PSIC	55% completed					
11	Civil works of CETP, 1st Module, 4,000 m^3/day	Private, EDF	80% completed					
12	Electro-mechanical works of CETP, 1st Module, 4,000 m^3/day	Private, UNIDO-GEF, EDF	80% completed, equipment delivered. Installation 15% completed, put on hold due to incomplete civil structures					
13	CETP operation for 6 months on experimental basis	Private, EDF	After completion of CETP					

	Project Components	Source of Funds	Status	Design/Tender Documentation	Tendering/ Contract Award	Implement-ation	Delay Due to Funds Not Available	On Hold Awaiting Donor Approvals
				2009 2010 2011	2012 2013 2014	2015 2016 2017	2018 2019 2020	2021 2022 2023 2024
14	Chrome recovery plant	Private, EDF, PSIC	Design and tender documents completed; tendering started.					
15	Solid waste management (landfill, sludge disposal)	EDF	Under design, 1st draft under review					
16	Common facility cum training centre		Funds not available; however, proposals submitted to MOCC and EAD for grants					
17	Shifting of tanneries	Private	By Feb 2024, construction had started on 175 plots and completed on 4					

Source: UNIDO-GEF Project email communication, 19 February 2024.

Table 5. STZ Project sources of funds, 2016-2023

Private Sector (STZ members): Land, boundary walls, main gate, roads, plotting, electricity, drainage channels, studies, natural gas network, etc.		PKR 1,600 m
Government of Pakistan, Ministry of Commerce, through Export Development Fund Grid station, CETP civil works, CRP, landfill, trial run of CETP, duties and taxes of CETP equipment		PKR 1,170 m Additional PKR 726 m expected on account of price escalation.
Government of The Punjab Through **Punjab Small Industries Corporation**: Grid station, CRP, gas pipeline Through **Environment Protection Department**: Purchase of land (soft loan, interest-free)		PKR 718 m PKR 292 m
Global Environment Facility through UNIDO, with the endorsement of the Ministry of Climate Change, Govt. of Pakistan: Detailed conceptual, civil and electro-mechanical design of CETP, electro-mechanical works of CETP, capacity development, international experts, techno-economic studies, etc.		USD 3.3 m (USD 2.4 m for machinery and equipment)
Federal Govt: PKR 1,896 m	**Punjab Govt:** PKR 1,010 m	**Private sector:** PKR 1,600 m

Source: UNIDO-GEF Project, email communication of 17 February and personal interaction on 20 February 2024.

3. Findings

3.1 Relevance

The UNIDO-GEF project addresses issues identified in the National Climate Change Policy 2012 and the Planning Commission's Vision 2030 document. It has supported development of a flood management plan and increased awareness of climate change adaptation and resilience among the targeted communities. Furthermore, it has engaged women for the implementation of resilience building measures for vulnerable groups. The project also introduced technologies that increase the efficiency of inputs, reduce water consumption, and reduce pollution of water bodies.

Its relevance, however, manifests itself on a different level as well. The UNIDO-GEF project supports the centrepiece of the Sialkot Tannery Zone (STZ), the common effluent treatment plant (CETP). The STZ itself is a prerequisite for the tanneries to be able to relocate from their current premises in the city of Sialkot. Without effluent treatment, relocation of the tanneries is of limited value. In order to be able to work in changing climates, the CETP, tanneries and the entire zone have been designed to withstand high water tables in the rainy season. Another element of the UNIDO-GEF project is that tanneries are adopting water saving technologies and cleaner production processes and these have been incorporated in the bylaws of STZ.

Once operational, the STZ is expected to halt the continuous decline of Pakistan's share of global exports of leather sector - some 20 years ago, Pakistan's share in global exports was 1.4% against today's 0.5%. With abundant availability of high-quality raw materials and the industry being LWG compliant the downward trend will not only be halted but likely reversed.

For communities in and around Sialkot, the project – once tanneries are relocated – offers a healthier and cleaner environment.[2] Water resources currently used by the tanning industry become available for alternate use in the district, including (urban) agriculture. In the areas surrounding STZ employment opportunities will increase. Thus, the communities near STZ will benefit, initially, from unskilled jobs in the construction of factories, and later on skilled jobs.

With environmental safeguards in place, the exports and overall employment will be on the increase. The UNIDO-GEF project has made solid steps in making the industry more attractive for women through increased awareness and improvements in the working environment captured in the bylaws.[3]

Therefore, the UNIDO-GEF project is rated as highly relevant or in terms of scoring, highly satisfactory.

[2] The pollution caused by tanneries to soil and water bodies is part of the Terms of Reference for a consultant that is currently developed by WWF and STAGL in close consultation with the UNIDO-GEF project and will look at the extent of pollution and possible remedial measures.

[3] The general guidelines on occupational health & safety for instance describe proper layout of chemical store, but also which chemicals should never be located close to each other. The guidelines on cleaner leather production techniques to be adopted in tanneries at STZ describes water saving, housekeeping, proper lighting etc.

3.2 Coherence

UNIDO has been involved for several years with interventions in the leather industry of Pakistan, including tanneries in Kasur (in the Punjab Province) and, through an ongoing project, with tanneries in Karachi (in the Sindh Province). According to the UNIDO Country Office, the UNIDO-GEF project is UNIDO's first adaptation initiative.[4]

Globally, UNIDO evidently has wide-ranging experience with tannery zones and relevant best practices, many of which it has introduced in the STZ infrastructure and training for tanners. These practices are aligned with the requirements of the LWG that tanneries in Sialkot need to meet in order to protect and grow their businesses.[5]

The leather industry has been a high priority for decades for Sialkot City, its economy, civil society, and the Federal and Punjab Governments. Civil society activists have campaigned in the past for controlling pollution from the leather and other industries based in the city. The project engaged them for community awareness and addressing apprehensions in the community about the possible negative impacts of the project on the lands and environment around the STZ.[6]

The Punjab and Federal Governments have been concerned for years with the dual challenges of pollution control and export promotion in the leather industry.[7] STAGL engaged them with the support of UNIDO and elected representatives, and both governments provided generous financial support for key components of the STZ.[8]

In addition, the UNIDO-GEF project coordinated and facilitated interaction with:[9]

- Government College Women University, Sialkot, through student internships aimed at facilitating gender mainstreaming;
- Rescue 1122 (the Punjab Government's emergency response service), for safety and first aid training in the tanneries in the city and establishing emergency response units in future in the STZ; and,
- WWF, for CCA training and design of the planned STZ integrated solid waste management system (pooling know-how and funds).

While all components of the STZ are necessary, only having them together qualifies them as necessary and sufficient conditions for achieving the objectives of the STZ and UNIDO-GEF project. For example:

- The tanneries in the STZ and common effluent treatment plants depend on each other.

[4] Information included in this, and next paragraph is based on project reports and interviews with UNIDO staff.
[5] This is evident from the evaluation team's discussion with project and STAGL staff and its review of the project's training reports and green tannery guidelines.
[6] This was confirmed in two group interviews by asking eight civil society activists and community members individually.
[7] With reference to the STZ, this is evident from government financial support as well as government documents used in proposing and approving support for the STZ.
[8] Government and private sector financial contributions are reported in **Error! Reference source not found.**.
[9] This is mentioned in project reports and the evaluation team confirmed it in meetings with the entities mentioned here.

- The same can be said for STZ construction bylaws and UNIDO-introduced green tannery design.

The UNIDO-GEF project is very coherent and in line with national and local priorities or in terms of scoring, highly satisfactory.

3.3 Effectiveness

Following the UNIDO *Evaluation Manual*, as reflected in the evaluation matrix (**Error! Reference source not found.**), the assessment of effectiveness focuses on the extent to which the project achieved, or is expected to achieve, its outcomes and outputs, including any differential results across groups, and the factors that affected these achievements. Understanding differential results helps assess the policy priority to leave no-one behind.[10]

The UNIDO-GEF project has three programmatic outcomes, which have 11 outputs.[11] The project logframe includes 11 outcome-level indicators for the programmatic outcomes and 24 output-level indicators. There are four indicators for outcome 1.1 and five for its two outputs; three indicators for outcome 2.1 and seven for its four outputs; and four indicators for outcome 3.1 and 12 for its six outputs.

The project has been regularly reporting progress in relation to its logframe indicators and the targets for project outcomes and outputs. The project shared its cumulative targets (planned targets) and corresponding achievements for 2016 to 2024 with the evaluation team in December 2023 (reproduced in Annex).[12] All the indicators are quantitative and accompanied by notes on the project's contributions over its duration.

Through outcome 1.1 as a whole, the project contributed a wide range of technical inputs and recommendations through workshops, specialized documents, advocacy, and coordination with STAGL and government decision makers. These led to substantive contributions to strengthening planning frameworks for drainage, flood protection, forest cover, women's equality, and the resilience of the leather industry.

Through continuous interaction, workshops and campaigns under outcome 2.1, the project raised awareness of CCA concepts and practices among tannery owners, community members, local non-governmental organizations (NGOs), and government officials. It also addressed community apprehensions about the STZ: three women and five men in group interviews confirmed that they had attended two meetings at the STZ office that addressed their misgivings.

Outcome 3.1 anticipated increased water availability for agricultural use around the STZ. The site visit and discussion with project managers confirmed that no additional water will be available for agricultural use around the STZ.[13] Moreover, as discussed in section 1.3, this

[10] Detailed findings on effectiveness are provided in Annex .
[11] The project also has one outcome for quality control and monitoring and evaluation (M&E), which is discussed below in the relevant section.
[12] Monitoring matrix communicated by email on 20 December 2023.
[13] The reduction of pollution resulting from the shifting of tanneries to the STZ could increase the water available for agriculture around the city, where the tanneries are located at present.

outcome, judged by its indicators and outputs, is associated with changes in capacity[14] (mainly of tanners, and also of STZ stakeholders) and changes in the practices of tanneries.

The assessment of effectiveness here revolves around the three outcomes described in section 1.3 as outcomes 3.1.a, 3.1.b and 3.1.c, that better reflect the logic of project design. These outcomes are about awareness, the CETP and the Dugri Drain, and the adoption of recommended practices. Data on targets and achievements has been rearranged under the series-three outcomes in the addendum contributed by the evaluation team to Annex .

The project met two of the six targets for increased awareness (outcome 3.1.a),[15] exceeded three targets, and did not meet one target.[16] It met or exceeded five of its seven targets in outcome 3.1.b and fell short by one in delivering two workshops on CETP operation, maintenance and management.

The CETP is expected to be completed by May 2024, after which it will start a six-month experimental operation. This means that the project has been unable so far to achieve outcome 3.1.b. The project informed the evaluation team that only three tanneries had started trial production in the STZ by the time the project closed. Out of the 300 tanneries in Sialkot City, 69 had not yet started construction (including 40 that had not purchased plots in the STZ), 41 had started earth-filling and boundary wall construction, 119 had completed the boundary wall, 55 had completed the foundations of the tannery, and 12 had completed the *lanter* (poured the slab).[17]

These observations have a direct bearing on the third of the series-three outcomes: the project has not yet met any of the targets associated with the three indicators for outcome 3.1.c. This is understandable in view of the fact that the CETP is not yet operational, and the tanneries are still in their original locations.

The assessment of effectiveness in this situation requires an assessment of the likelihood that this outcome will be achieved.

The problem is that many tanners do not have the financial capacity or access to finance that is required for completing construction in the STZ and installing the machinery required for relocating. A government official who has worked in Sialkot City for several years observed that there are approximately 150 small tanneries operating on rented land that will not be able to shift without meaningful financial assistance, and the government is obliged to shut down the tanneries that do not shift by the end of 2024.

The STZ and the project have made concerted efforts to arrange finances for tanneries with inadequate financial resources, and the government has offered soft loans in response. A knowledgeable government official informed the evaluation team that they had received only

[14] Here, changes in capacity mean changes in awareness, knowledge, skills and access, an intermediate step on the way to changes in behaviour and practices.
[15] No study was conducted by the project or the evaluation team for quantifying the increase in awareness. The assumption is made here that some of the people experienced some increase in awareness as a result of their inclusion in the project's awareness-raising activities.
[16] The "number of water management workshops delivered to tanneries" was four compared with the target of five.
[17] Email exchanges with the project, 14 and 15 March 2024.

two or three loan applications.[18] At the same time, the majority of the tanneries have yet to show progress in construction that goes beyond the completion of boundary walls. It is possible that many tanneries will be unable to access the finances required for completing the construction, installing the machinery, and relocating to the STZ by the deadline of December 2024. There is no well-informed estimate of how many tanneries will finally shift to the STZ by then, and how many will be forced to shut down.

Due to the fact that the CETP is not yet operational and most tanneries have not yet shifted, though there is a very high likelihood of tanneries shifting in 2024 and the CETP being fully operational the UNIDO-GEF project scores moderately successful in terms of effectives.

3.4 Efficiency

The evaluation team looked at two aspects of efficiency, time and costs.

The UNIDO-GEF project implementation was – as all global trade and activities – affected by the COVID-19 pandemic. Supply channels and trade were severely disrupted. Gatherings and meetings were cancelled or prohibited. Inflation was on the rise. The war in Ukraine compounded issues with global trade disruption and spiralling inflation.

The time delays meant that the project needed to be budget neutrally extended several times. Cost increases needed to be absorbed within the UNIDO-GEF project budget. In these turbulent times, the project managed to receive only one offer for electro-mechanical equipment for the CETP and this was well above the total project budget. The project management responded to this by changing some of the key project modalities.

Project management thus decided to proceed through local tendering through STAGL. In close coordination with project partners, project management went for local procurement & installation of equipment by STAGL. This resulted in a 40% cost saving compared to the offer received by UNIDO. Naturally changing the procurement process during implementation caused some time delays. Most equipment was still imported but through companies who had local representatives. A local contractor was responsible for this and UNIDO provided oversight.

The selected local contractor recommended some changes in the specifications. These were after careful consideration accepted and resulted in an expected energy saving of 37% per annum. Furthermore, some changes are likely to increase lifespan of some equipment parts.

High inflation also necessitated counterparts to raise additional funds for electricity and civil works. Other cost increases had to be absorbed by key stakeholders STAGL, Government of Pakistan, Ministry of Commerce through Export Development Fund, including an additional PKR 726 million. The fact that key stakeholders managed to absorb the cost increases gives testimony to the joint desire to develop STZ. The successful funding acquisition and its release caused delays. Therefore, realistically CETP will become operational in the second quarter of 2024.

The UNIDO-GEF project raised sufficient awareness and had demonstration sites all resulting in climate change adaptation, technical changes, operational practices, and occupational

[18] Tannery owners in group interviews identified two main reasons for lack of interest in the government loan scheme: one, the amounts offered are highly inadequate, and two, they do not have any property to offer as collateral.

safety and health (OSH), all finding its way into the STZ (design & by-laws including green tannery design). UNIDO project management also ensured that materials were available on-line partially responding to COVID-19 movement restrictions but also ensuring that knowledge was available to interested parties anywhere on the globe. In terms of OSH, local emergency services, Rescue 1122, are much better aware of how to deal with accidents and they have also been allotted a plot in STZ.

In summary, we rate the UNIDO-GEF project as *highly efficient*. If one considers that >70% of the UNIDO-GEF project budget was planned for electro-mechanical equipment, the capacity development results are particularly remarkable.

3.5 Sustainability

Sustainability assesses the extent to which the net benefits generated by the project are likely to continue after major development assistance has been completed. The UNIDO-GEF project has already generated some benefits, and other benefits are expected to emerge once the CETP starts functioning and tanneries start shifting their operations to the STZ.

The project has so far generated benefits related to:

- development of the human capital of tannery owners and other stakeholders;
- adoption of recommended practices and technologies by tanneries;
- a plan for cleaning and rehabilitating the Dugri Drain; and,
- strengthening planning frameworks for drainage, flood protection, forest cover, and the resilience of the leather industry.

The project's awareness-raising, training activities and technical recommendations have developed industry-specific human capital as well as general human capital on CCA. Industry-specific human capital is embedded in tannery owners, STAGL and STZ management, government emergency responders, community focal persons, and female interns. It is expected to remain beneficial as long as the individuals concerned remain in the industry and this knowledge is passed on.

The project has contributed to general human capital with knowledge of the adverse impacts of climate change and appropriate responses, community concerns and planned CCA actions for STZ, and measures against floods and other natural disasters. These contributions are useful for the direct beneficiaries (the participants) and also create a positive externality in society: the knowledge gained is communicated by the direct beneficiaries to others over time. It has enduring benefits for both direct and indirect beneficiaries.

Although only three tanneries have started trial production in the STZ, the project reports that these and some others located in the city have adopted some of the practices and technologies it recommended. These include segregation of effluent channels and installation of grit chambers, screens, solar water heaters, and variable frequency drives. It can be safely assumed that adopters acted on the basis of benefit-cost assessments. Their use is likely to be sustainable as these are tested and profitable measures.

The project developed a management plan for the Dugri Drain, which was followed by its annual cleaning and rehabilitation. The work was implemented in collaboration with project partners, including the STZ and the Sialkot International Airport, both of which are among the

initiatives of the business community of Sialkot. One benefit reported by the project relates to the safety of the STZ during August 2022 flooding in Pakistan. The common interest of multiple partners suggests that they will work together for future benefits.

The project's efforts to strengthen regulatory and strategic urban planning frameworks have already yielded benefits such as protection against flooding and plantation of trees. The project reports that the STZ has been included as a vital installation in the disaster management plan. As a result of this, emergency services and district authorities have taken precautionary steps in the area around the STZ. The benefits of trees and safety from floods are likely to be sustainable as the required measures have been institutionalized.

Benefits in terms of reduced water use and water pollution, solid waste management, better health outcomes, and financial and employment gains from compliance with LWG requirements will start emerging towards the end of 2024. These benefits are sustainable if STAGL retains personnel competent to run the CETP and mobilizes adequate funds from the proposed management fee and water use charges for tanneries in the STZ. STAGL as well as tannery owners have much to gain by meeting these pre-requisites on a continuing basis.

In summary, we rate the UNIDO-GEF sustainability (of benefits) as satisfactory.

3.6 Progress to Impact

The development goal of the UNIDO-GEF project[19] is to contribute to reducing economic losses and increasing resiliency of Pakistan's industrial and agricultural sectors against climate change. It is evident that the industry will suffer huge losses in export revenue and jobs without LWG compliance. STZ will prevent this and also help increase exports and jobs.

The indicators for this objective are quantitative in nature and only specify removal of pollutants. Specifically, the indicators are stated in terms of tons of COD, BOD and TSS[20] removed from wastewater by 2026 (for COD: ≥ 18,000; BOD: ≥ 6,000; TSS: ≥ 10,000).

These targets can be monitored only after completion of CETP in May 2024, start of the production of the first movers, post-trial runs and commissioning leading to full operation of the CETP. These cumulative indicators (from the start of the CETP until end 2026) may be achieved if pollutants are higher as per design parameters, the CETP first module is fully operational and functional, and a second module is operational in 2026.

UNIDO-GEF contribution to this impact is through the following components:

- Component 1: CCA and Gender Equality for Adaptation Mainstreamed into Urban and Rural Development Planning
- Component 2: Climate Change Resilience Building of Vulnerable Communities and Leather Business Owners
- Component 3: Sialkot District and Sialkot urban plan implementation, dissemination of information, demonstration of safe, affordable and advanced technology for water treatment and water conservation in the pilot Sialkot Tannery Zone (STZ)

[19] The official title is "mainstreaming climate change adaptation through water resource management in leather industrial zone development"
[20] COD = Chemical Oxygen Demand; BOD = Biochemical oxygen demand; TSS = Total Suspended Solids.

- Component 4: Quality Control Monitoring and Evaluation

For component 1, the evaluation team verified facts through the documents that are listed in Annex , with the possible exception of the urban development plan report.

With respect to component 2, the evaluation team referred to the documents that are listed in Annex . Tree planting is ongoing and reportedly 14,000 trees out of the 50,000 trees have been planted as of beginning of 2024.

For component 3, the evaluation team referred to all the documents that are listed in Annex . Some tanneries in Sialkot have managed to reduce their water consumption by 20% or more, but the majority of the tanneries are likely to reduce water consumption by well over 20% when they relocate to STZ and need to adhere to the policies and guidelines of the STZ on green tannery design and cleaner production practices. The audits are also not yet taking place, but since the CETP will charge member tanneries on the amount of water used in the process, it is anticipated that 100% of tanneries will adopt cleaner tanning processes.

For component 4, the evaluation team also referred to the documents that are listed in Annex . Based on the exemplary documentation and many reports, the evaluation team considers it very likely that the final report will be issued two months after closure.

Contribution to reduced pollution: Tanneries in Sialkot City have been polluting the environment, damaging human health and aquatic life. The STZ project, when completed, will put a stop to this as tanneries will no longer be allowed to operate without functional effluent treatment facilities. UNIDO-GEF project as a whole contributes to this impact, as it is an essential part of the larger STZ and tannery relocation projects. Hence, the evaluation team also assessed progress to impact of the UNIDO-GEF in relation to the larger projects. This is outlined in Table 6 below.

Table 6. UNIDO-GEF project and its impact on Sialkot City, STZ, district and country

Elements	Sialkot	STZ	District	Country
Long-term primary effects (positive)	Healthier environment, cleaner production (CP), use of solar energy, occupational safety and health (OSH) demonstration	Well designed and equipped CETP CCA designs and increased awareness industry (bylaws incl. OSH, CP) and practices LWG certification allowing for growth and exports	Increased opportunities for women employment District flooding plan	Increased exports; long-term industry survival
Long-term primary effects (negative)	Few adopted cleaner processes due to pending relocation	Expected to be operational Q2 2024 Increased energy consumption	Employment increases will materialize only after relocation	After relocation
Long-term secondary effects (positive)	Tanning industry no longer pollutes water, air and soil, solid	By products made from tannery solid waste	Functional public private	Exchange and learning for other clusters

Elements	Sialkot	STZ	District	Country
	waste outside the city easing municipal solid waste management Relocation industry – much healthier city, sites require cleaning up for which data is needed (ToR study WWF /STAGL)	Nonreusable fraction safely disposed in engineered landfill Attention to drain Increased use of solar energy	partnership (PPP)	and development partners PPP showcase
Long-term secondary effects (negative)	Contaminated sites need rehabilitation	Funds and area allocated but landfill to be implemented		
Transformational change	Rescue 1122 equipped with tannery accident responses	Industry LWG certification Design capacity modules 2 and 3		Capacity for tannery CETP design in country; capacity for zone designs

3.7 Gender Mainstreaming

In South Asia, tanneries traditionally employ very few women. This is due to its image as a heavy and dirty industry. Compounding that, in many more traditional tanneries the working conditions are not conducive for women, participation of women on the work floor is normally absent, but also at more senior functions it is normally very low.

Thus, a concerted effort is required to (i) improve working conditions at the tanneries and (ii) raising awareness of work in the tanneries that may support a changing perception of the industry.

The UNIDO-GEF project targeted both trajectories. At current locations in Sialkot occupational safety and health trainings were given that supported improvements in current locations but importantly became part of the bylaws for the STZ. Green tannery designs may lead to more female employment in tanneries.

The second trajectory on improving the image is pursued through a Memorandum of Understanding with the Government Women College and STAGL.[21] This MOU was closely linked to the internship programs for female students. Fifty interns from the university completed research on environmental topics relevant for the tannery sector. Reportedly two of them are now working for tanneries. The internship programme and actual employment contributed to improving the image of the industry. This is considered a big achievement in the view of traditional social cultural beliefs and even more considering the image of the tanning industry.

Many tanneries in Sialkot, including the three tanneries currently doing trail runs in STZ, further process leather made into leather goods and products, for instance gloves. Typically,

[21] Government Women College University (GCWU), Sialkot Campus, Department of Environmental Sciences and STAGL

the downstream leather sector employs many women,[22] but this was not in the scope of the evaluation mission and is not further investigated (though further investigation is one of our recommendations). This seems to be a good opportunity as from the climate and social assessment study for STZ of 2015, it appeared that of the households in the area surrounding STZ almost 99.5% are male earning members while only 0.5% was female.

In summary, we rate the UNIDO-GEF gender mainstreaming in the tannery sector as highly satisfactory.

3.8 Environmental Impacts

Historically, Sialkot used to be known for the water quality.[23] This attracted industry that required large amounts of water such as tanneries and in turn these have negatively affected the water quality. The UNIDO-GEF project is one of many efforts to reduce the environmental impact of industry in Sialkot.

Tanneries use water that gets contaminated in the industrial processes and requires treatment before it can be released into the environment. This explains UNIDO-GEF project's focus on the common effluent treatment plant (CETP). The CETP is a critical component of the Sialkot Tannery Zone (STZ). UNIDO supported the study for combined effluent treatment (2018) and the environmental impact assessment report of the CETP (2019). The STZ with its CETP is critical for relocation of the industry from the city of Sialkot to STZ. This means that only with all this in place, will the pollution by the tanning industry in Sialkot city in terms of air, water and soil pollution be halted.

Additionally, solid waste from the tanneries will be centralised and not dispersed all over the city, easing pressure on municipal solid waste management collection, disposal and possible reuse. All this will contribute to making the city more liveable, have a positive effect on people's health, and make water sources available for alternative uses.

Yet at the same time, the pollution that had already been caused (mainly soil and water) in Sialkot needed to be studied and possible mitigation measures needed to be identified. The UNIDO-GEF project has been working with WWF and STAGL on the terms of reference for a consultant who will study pollution at existing location and suggest remedial measures. This process has started.

The UNIDO-GEF project supported the environmental screening and assessment procedure for the selected site near Khambranwala village.[24] From the study it appeared that the site was flood prone, hence climate adaptation measures were recommended (e.g. heightened discharge channels for wastewater preventing mixture with floodwater) and these have been

[22] In most countries in South Asia female employment is quite high in leather shoe making, leather garments, goods and products

[23] Reviving Sialkot's Sweet Water Heritage: Tree Plantation Initiative Battles Industrial Pollution from GEFID_5666 -XXXVIII-DFT Success Story Plantation.pdf

[24] Climate and Social Assessment (CSA) Study for STZ Leather Sector and Sialkot District Profile, Survey and Analysis of Existing Tanneries in Sialkot, Hazardous profiling baseline and vulnerability assessment, Industry profiling baseline and vulnerability assessment, Environmental profiling baseline & vulnerability assessment, Socio economic profiling & Vulnerability assessment, adaptation plans and interventions, In-Consult 2015.

included in the Sialkot Tannery Zone bylaws.[25] Furthermore, the embankment and roads have been raised to make them climate adapted.

Nevertheless, it would not be correct to assume that the site will not have any impact on the environment. Therefore, the following additional measures have been implemented:

- Modular effluent treatment: the UNIDO-GEF project supported the setting up of the first module of the common effluent treatment plant. Having a modular design allows for more efficient use of resources.[26]
- The CETP charging the member tanneries for the amount of water released will provide a monetary incentive for further reducing the water consumption.[27]
- In the CETP, alterations were made from the original designs that reduce electricity consumption by 30%.
- Tertiary treatment option using chemicals at the CETP in case effluent does not meet required discharge standards, hence this allows for optimal use of chemicals.
- The guidelines on occupational safety and health prescribe good housekeeping measures. Amongst others, this reduces the chances of accidental chemical spills.[28]
- The bylaws recommend cleaner tanning processes. These reduce the amount of fresh water consumed and also reduce the amount of chemicals used in the process as compared to the current practices in Sialkot.
- It is prescribed to segregate chromium streams from other waste streams, thereby allowing for reuse of chromium in the process and preventing chromium from entering the wastewater streams and eventually in the treatment plant landing in tannery sludge. This allows for possible reuse options for tannery sludge instead of disposal only.[29]
- For reuse of chromium in the leather processing, a site has been earmarked, technology has been identified, and funding allocated by the Government for the same.
- Though several solid waste conversion and reuse technologies have been proposed, the most important one is the engineered landfill for which the site is earmarked, design made, and funding approved.
- A tannery solid waste technology that has been identified is fat recovery plant. The viability of the same depends on how many tanneries starting manufacturing process from raw hides and skins are moving to STZ.
- The Ministry of Climate Change has requested international support for leather waste conversion technologies.[30]
- At the perimeter of the STZ tree planting has started. Also, tree planting has commenced along internal roads. As per bylaws, tanneries are also required to plant trees. The collective effect of these strategically planted trees significantly contributes to the reduction of the carbon footprint of the entire Leather Industry of Sialkot. Furthermore, it has allocated green areas within the STZ.

[25] STZ Construction By-Laws - CCA measure included.docx

[26] Actual water consumption may be lower than design value, relocation of tanneries from Sialkot will be at different times, difficult to predict if and when relocation of industry from further away (e.g. Kasur) to STZ will happen. Having a very large treatment plant that receives limited amount of effluent is wasting energy and resources used for construction.

[27] Experiences from elsewhere (e.g. Ranitec) indicate that water consumption may reduce by >50%.

[28] Guidelines on occupational safety and health aspects of leather manufacture

[29] Guidelines on cleaner leather production techniques to be adopted in tanneries at STZ

[30] Vide letter from the Ministry of Climate Change of 17 July 2023 addressed to the World Bank, Asian Development Bank and UNDP.

- The tanneries, the CETP and some of the common facilities in the STZ use relatively large amounts of energy in the form of electricity and gas. The UNIDO-GEF project demonstrated use of solar energy in the industrial processes in tanneries in Sialkot city and energy savings.[31] Capacity development for energy saving is not an isolated activity, it requires amongst others, behavioral changes of owners and staff and may need longer term support. UNIDO has significant experience with the use of solar energy for water heating and solar energy for air heating.
- These practices and interaction between stakeholders regarding use of solar energy has been floated with and endorsed by the Ministry of Climate Change for a solar electricity power unit for the CETP of 1.5 MW[32]. Having an externally financed PV solar plant will greatly reduce the need for external energy sources, thus making the system more climate adapted and significantly reduce the operational cost of the CETP and thereby make the industry more viable and climate resilient.
- The UNIDO-GEF project recommended that the discharge channel be rehabilitated to avoid blockages and possible inundation of adjacent lands with treated tannery effluent. The treated wastewater that contains high levels of salt needs to be diluted in the Chenab River so that it can be reused.
- The UNIDO-GEF project quite correctly focused on most pollution that can be addressed relatively easily. More complicated cleaner production and effluent treatment may only be addressed once the tanneries are relocated, and the tanneries and CETP are fully operational. These will include automated process control but also energy saving measures and integrating renewable energy into production processes.

In summary, the project directly addressed some of the most obvious challenges, environmental impact assessment, climate adapted construction, cleaner production, use of solar power, housekeeping, effluent treatment and identified adverse environmental risks such as solid waste management, the drainage canal and assessment of environmental damage and remediation at the existing locations in Sialkot City. We rate the UNIDO-GEF environmental safeguards as highly satisfactory.

3.9 Social Impact

Social impacts are assessed with reference to guidelines provided in the UNIDO *Evaluation Manual* (p. 94), which focus on human rights, including disability. The most recent project implementation report states that the project did not undergo screening and assessment for UNIDO environmental and social safeguards policies and procedures (ESSPP), but "used both the environmental and social impact assessments conducted by the project served to guide the overall project in mitigating related risks."

As noted above, the project made a systematic effort to engage community members and addressed community apprehensions about the STZ. Dialogue with the community facilitated the participation of community members in tannery construction, which is an activity under the STZ project. Community members also gave credit to this dialogue for motivating them to unite and approach candidates in the February 2024 elections with their demands for a main road and a natural gas pipeline.

[31] Energy Efficiency and Waste-to-Energy Solutions for the Pakistani Tannery Industry (UNIDO, 2022)
[32] Vide letter of the Ministry of Climate Change dated 17 July 2023 requesting external support for amongst other a PV solar plant for the CETP.

At the same time, UNIDO-GEF project document and reports are silent about the poor, indigenous and physically challenged, women, men and other disadvantaged and marginalized groups. Moreover, as discussed in the effectiveness section, the project recognized small tannery owners as a group in distress and advocated relief through government interest-free loans (that small tanners consider inadequate for saving their businesses in the process of relocating from the city to the STZ). The project did not identify the endangered small tanneries, count them, assess their predicament systematically. It did give technical support, however, to STAGL on developing the concept of common facility centre(s) that could be equipped with the larger more expensive machinery and allowing small tannery owners to use the facilities against a fee.

Overall, the project did well in reaching out to people living in the communities around the STZ and addressing their concerns. It is counting on the common facility centre(s) to act as training centre(s) for community members' access to on-the-job trainings. We rate the UNIDO-GEF social impact as moderately satisfactory.

3.10 Performance of Partners

UNIDO is well known in the leather industry globally. It has a solid track record in tannery pollution control, effluent treatment, occupational safety and health, solid waste management and tannery relocation.

Its long association with the Sialkot Tannery Zone project both from UNIDO HQ, Vienna and the country office, assisted in securing the GEF funding. Against a relatively small budget UNIDO has been able to make that expertise available to key stakeholders. The expertise rendered ranges from: climate change adapted design both for the industry and the STZ; increase of the role of women in the industry; design and layout of the STZ; application of solar energy; demonstration of and use of personal protective equipment, occupational safety and health and dealing with hydrogen sulphide gas, cleaner production processes in the tannery reducing both water and chemicals used; solid waste management for tannery waste; effluent treatment within factories; design of common effluent treatment plant; operation and maintenance of common effluent treatment plant; options to deal with discharge of treated tannery effluent (Dugri Drain); advisory on common facility centre for smaller tanneries; common chrome recovery and reuse; to flagging the need for cleaning up the existing sites in Sialkot once the industry has been relocated.[33]

Perhaps the most important of all this was capacity development of key stakeholders. This was a gradual process ranging from being able to learn first-hand the experiences of tannery zones elsewhere, such as Turkey, India, Bangladesh and Italy, to providing final checks on designs, reports, and so on, while making sure that key stakeholders were in the lead.

[33] Official titles of the reports are: (1) Climate & Social Assessment (CSA) Study for STZ (2015); Assessment of Waste Water & Energy Efficiency leading towards compliance of LWG Standards (2017): Review of technical proposal for recommendations for management and mandatory cleaner technologies for STZ (2017); Combined Effluent Treatment Plant (2018); Environmental Impact Assessment of Combined Effluent Treatment Plant (2019); Typical Tannery Design Guidelines for Sialkot Tannery Zone (2019); Green Tannery Designs for Sialkot Tannery Zone (2020); Suggestions and Improvements with Technical Justification for CETP at Sialkot Tannery Zone (2021); Energy Efficiency and Waste-to-Energy Solutions for the Pakistani Tannery Industry (2022)

The presence of UNIDO also helped in facilitating working relationships between key stakeholders and ensured that government, industry and donor priorities and interests were aligned with the government financing significant parts of the STZ. The government chaired the project steering committee and the industry adopted many of the recommendations in the guidelines for construction factories at the STZ.

Lastly, the project is extremely well documented, many of its reports are available on LeatherPanel.org, and therefore available to local and global audiences. Pakistan ranked 7th in downloads from the LeatherPanel.org.[34]

National counterparts

The involvement of national counterparts in the STZ and UNIDO-GEF projects, particularly for financial support, has been described in the coherence section as well as earlier parts of the report. In following their rules, government organizations as well as the project faced challenges and bottlenecks in the process. Based on this and two or three similar experiences, the Export Development Fund affiliated with the Ministry of Commerce reportedly streamlined its implementation approach.

The Environment Protection Department of the Government of Punjab maintained an active working relationship with the project through all the key phases. It acted in exemplary coordination with the project and the district administration for key actions related to enforcement. Rescue 1122 of the Government of Punjab also made its presence felt and readily adopted responding to specific tannery health hazards[35]. The district administration coordinated planning for adaptive measures to be adopted by district-level authorities. The Government of Punjab through the Punjab Small Industries Corporation made also significant financial contributions to the STZ. It has set up financial support schemes for relocating factories that may need to be tweaked further to maximize utilization.

The project also had evidently problem-free, mutually beneficial relationships with local NGOs and the WWF. This includes pooling funds with the WWF for CCA training and the design of integrated solid waste management in the STZ, and engagement of local NGOs in the project's community awareness campaigns.

Implementation partners

STAGL has been the key implementation partner. Their performance has been highly satisfactory and contributed to retaining the same personnel responsible for coordination of the STZ project from its initial stages to today. Continuity in senior management of STAGL also contributed to STAGL being the main counterpart for all technical, social, environmental institutional and financial support from UNIDO. STAGL has captured all of these in its zonal planning and its by-laws. It is looking into supporting the smaller scale tanneries who have difficulties in relocation and the unskilled communities surrounding STZ by a common facility cum training centre. Furthermore, STAGL's capacity has been built to oversee design and construction of subsequent modules of the CETP.

[34] Downloads form Pakistan in 2019, Total events 1,533 (3.90%) with unique events 1,120 (3.85%), source: UNIDO Leather Panel

[35] For instance hydrogen sulfide gas poisoning.

Some tanneries in Sialkot have adopted cleaner production processes and occupational safety and health measures. They have not incorporated all of these as some require investment and with the imminent relocation and having the opportunity to do it right from the beginning using the STAGL prescribed green tannery designs, cleaner production occupational safety and health measures are likely to be implemented and enforced in STZ.

3.11 Results-based Management

The project's M&E system, by design, was not intended to track progress towards the development goal (or impact) statement,[36] which is a major omission, considering that progress to impact is one of the mandatory requirements of UNIDO evaluations and aid effectiveness. While the full impact of an intervention might take longer to materialize, emerging impact can be tracked during implementation once the project starts achieving some of its outcomes.

The project did, however, pay attention to results at the outcome and output levels by means of the M&E system discussed in the next section. Moreover, project reports and conversations with project staff reveal that useful lessons were learned from other countries and other cities in Pakistan, partly from exchange visits. There was, however, no attention to lessons learned in the project implementation reports.

Adaptive management in the project was a necessity due to factors mentioned earlier in the report. The project invariably discussed all situations with STAGL, the STZ project and, where necessary, with relevant government decision-makers. The project steering committee was involved in all important matters and its decisions were recorded.

3.12 Monitoring and Reporting

The project document included a costed M&E plan that includes the statement that M&E will be "conducted in accordance with established UNIDO and GEF procedures." Thus, it includes all the elements required for GEF and UNIDO approval, including periodic monitoring and progress reports, annual reports, mid-term review, terminal evaluation, and terminal report.

The budget allocated 52% of the total for routine monitoring and reporting activities (including studies and training on indicators), 35% of the mid-term review and independent terminal evaluation, and 13% for the terminal report. The plan also assigned responsibilities to the STZ and UNIDO-GEF project managers, as well as short-term consultants. It noted that:

> The project implementation report (PIR) is a formal … and periodic mechanism for … discussion between parties involved in the project implementation. The PSC [project steering committee] will discuss the progress of the project and shall record if the performance is according to plan or not. The reason for any problems and non-achievement should be recorded. The PIR is prepared by the STZ PD [project director] and should capture progress of the STZ … as a whole and the additional project components.

[36] This is discussed in the next section.

The PIR was expected to report on output, outcome and objective indicators, baseline data and end-of-project targets (cumulative), lessons learned, and risks and adaptive management. The project document included a results framework in an annex that included indicators, sources of verification and assumptions. The plan also anticipated field-based special studies through short-term consultants, subject to budget constraints:

> The management may consider contracting external/independent consultants (evaluators) considering budget constraints. Data from the social monitoring, health etc., and other developments or impact on the communities of relevance to the project should be included in these reports.

The project subsequently developed a comprehensive logframe, which was revised after a recommendation to this effect in the MTR. All 41 indicators of the logframe are quantitative (numerical). It is not clear why the project did not consider qualitative indicators where appropriate (e.g. for assessing changes in resilience and industrial-community co-existence using standard qualitative research methods).

It is also not clear why the indicators for the development goal are limited to the quantities of pollutants removed from wastewater, which is not part of the development goal. At the same time, there are no indicators for economic losses and the resilience of industrial and agricultural sectors, which are important elements of the development goal. Additional issues in logframe construction are illustrated in **Error! Reference source not found.**.

During project implementation, the M&E system was implemented and used more-or-less as proposed in the project document. Evidently, the project met all the basic monitoring, reporting and evaluation requirements of UNIDO. This assessment is based on the monitoring reports shared by the project. It is not possible, however, to assess the accuracy of monitoring reports without a comprehensive audit-cum-survey type of exercise.

4. Conclusions, Recommendations & Lessons Learned

4.1 Conclusions

This independent terminal evaluation assesses the project titled "M*ainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development,"* funded by GEF through UNIDO, in short, the UNIDO-GEF project. The UNIDO-GEF project valued at US$3.3 million is the cornerstone of the Sialkot Tannery Zone (STZ) project valued at US$ 14 million.

The STZ itself is a prerequisite for the tanneries to be able to relocate from their current premises in the city of Sialkot (estimated to cost US$ 115 million). Without effluent treatment, relocation of the tanneries is of limited value. To be able to work in changing climates, the CETP, tanneries and the entire zone have been designed to withstand high water tables in the rainy season. Another element of the UNIDO-GEF project is that tanneries were adopting water saving technologies, occupational safety and health and cleaner production processes. These are incorporated in the bylaws of STZ.

The terminal evaluation assessed project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and it developed a series of findings, lessons, and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The project implementation was severely affected by two major global events or force majeures, COVID-19 and the war in Ukraine. Global supply chains and trade were disrupted and inflation globally reached unprecedented heights. The time delays meant that the project needed to be budget-neutrally extended several times. Cost increases needed to be absorbed within the UNIDO-GEF project budget. UNIDO in close cooperation with national counterparts (STAGL and the Government) responded well by changing the purchase of CETP electro-mechanical equipment routing and responsibilities to STAGL whilst maintaining UNIDO's technical oversight.

In terms of overall design, it considered the areas where UNIDO's inputs would have maximum impact. Though the UNIDO-GEF project did not manage to develop a theory of change during implementation, with its own log frame and result framework the project delivered impressive results, hence it clearly worked for key project stakeholders. The project used adaptive and consultative management practices involving all key stakeholders. The project steering committee was involved in all important matters and its decisions were recorded. The development objective could have been captured better with qualitative indicator(s) coupled with indicators for economic losses and the resilience of industrial and agricultural sectors.

In terms of relevance the project strongly contributes to making the industry compliant with the Leather Working Group (LWG) requirements, after which exports and employment opportunities will increase once the STZ is fully operational. The project demonstrated exemplary pathways for complementarity and coordination making it highly coherent. Due to the effects of the global crisis referred to above, its current effectiveness could not be properly assessed, though there is a high likelihood that it will be effective. The management and key stakeholders' responses to the unparalleled crisis referred to above was highly efficient. Incorporating many of the best practices demonstrated under the UNIDO-GEF project in the bylaws of STZ by STAGL and the global environmental pressure underscored the sustainability.

Though by the end of the evaluation, three factories had started trail production and the CETP was not yet commissioned, in our view, the tipping point for relocation has been reached and more and more tanneries will relocate production to the STZ in 2024. Progress of many other indicators has exceeded their targets. In this very traditional industry and with prevailing social-cultural norms the project made remarkable progress in gender mainstreaming. The project handled the environmental safeguards very well and took a multifaceted approach from energy and water saving, to climate adaptation, use of renewable energy and use of less chemicals, amongst others. Though people were empowered to make demands to politicians, there is little mention of disadvantaged and marginalized groups. Perhaps UNIDO's biggest achievement was the capacity development of key stakeholders.

4.2 Recommendations

Recommendation 1: UNIDO to conduct a comprehensive energy feasibility study–cum project preparation mission. Capacity development for energy saving may need longer term support.

Recommendation 2: STAGL to investigate the possibility of employing women in downstream industries as leather shoe making, leather garments, goods and products.

Recommendation 3: UNIDO should, in close cooperation with key stakeholders, formulate a project proposal for advanced climate change adapted tannery solid waste conversion technologies and practices.

Recommendation 4: For future proposals, UNIDO should apply a theory of change framework with necessary assumptions, indicators, outputs and outcomes leading to the desired impact.

4.3 Lessons Learned

Lesson 1: time horizon on industry relocation (tanneries) typically exceeds project cycles
The interdependency between the relocation of tanneries, start of production and at the same time the effluent treatment plant starting up requires strong coordination, commitment and time. The time easily exceeds typical project cycles of 4-5 years. Both donor and host stakeholders need to be aware of this and take this into consideration when designing supporting projects and be prepared to allow for multiple extensions of the project.

Lesson 2: flexibility during implementation
Long time horizons may imply changing conditions. Project partners should be prepared to change implementation modalities if circumstances so desire. UNIDO may even consider changing some of its procurement rules, as the use of local enterprises for purchase of electro-mechanical equipment may reduce costs while building local capacities.

Lesson 3: attention to inclusiveness and equity
In pursuing environmental objectives, key project stakeholders need to pay attention to inclusiveness and equity of small industry as this may enhance environmental objectives, buy-in of all stakeholders, and reduce chances of small industry losing assets and livelihood.

Lesson 4: qualitative monitoring
Incorporating qualitative assessment may increase the learning potential of projects and can augment monitoring of progress while contributing to the balancing of perspectives.

5. Management Response Sheet

#	Recommendation	Management Actions	Responsible Entity	Target Date
1.	UNIDO to conduct a comprehensive energy feasibility study–cum project preparation mission. Capacity development for energy saving may need longer term support.	Study will be prepared in case funds allocated for this activity. Date of this action will depend on availability of funds.	UNIDO Project Manager UNIDO Country Representative	30/06/2024 (if funds are available)
2.	STAGL to investigate the possibility of employing women in downstream industries as leather shoe making, leather garments, goods and products.	STAGL has an existing policy approach to promote, train and assist leather manufacturing units to engage women in the sector. Building on progress made during the project, STAGL will i) continue collaboration with Government Women College to offer internship programs and trainings and expand to other faculty disciplines; ii) collaborate with Leather products Development Institute to promote training of female workforce and recruitment of graduates to the private sector; and iii) continue to hold awareness raising workshops with industry partners and women top change perception of work in the industry for women.	CEO STAGL UNIDO Project Director	31/12/2024
3.	UNIDO should, in close cooperation with key stakeholders, formulate a project proposal for advanced climate change adapted tannery solid waste conversion technologies and practices	Project proposal in progress/ consultation.	UNIDO Project Manager UNIDO Project Director UNIDO Country Representative	31/08/2024
4.	For future proposals, UNIDO should apply a theory of change framework with explicit assumptions for one level of results leading to the next one, interlinkages across and within results shown explicitly, that is duly reflected in quantitative and qualitative logframe indicators that measure outcomes and impact in all their dimensions, and allocate the resources required for qualitative or quantitative assessment of these indicators during project implementation.	Theory of change has been included into UNIDO Guidelines for the project development. Within internal approval process quality and completeness of this is reviewed. In case any new project development, this will be addressed.	UNIDO Project Manager UNIDO Project Director UNIDO Country Representative	31/12/2024

Annexes

Annex 1. Evaluation Terms of Reference

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent terminal evaluation of project

MAINSTREAMING CLIMATE CHANGE ADAPTATION THROUGH WATER RESOURCE MANAGEMENT IN LEATHER INDUSTRIAL ZONE DEVELOPMENT

UNIDO ID: 150052
GEF Project ID: 5666

10/2023

6. Contents

Acronyms

Climate change	CC
Climate change adaptation	CCA
Combined Effluence Treatment Plant	CETP
Executive Agreement	EA
Global Environment Facility	GEF
Government Institute of Leather Technology, Gujranwala	GILT
Independent evaluation	IE
Leather Products Development Institute, Sialkot	LPDI
Leather Working Group	LWG
Ministry of Climate Change	MoCC
Ministry of Industry	MoI
Project management unit	PMU
Sialkot Chamber of Commerce and Industry	SCCI
Sialkot Tannery Association (Guarantee) Limited	STAGL
Sialkot Tannery Zone	STZ
Terminal evaluation	TE
United Nations Industrial Development Organization	UNIDO

PROJECT BACKGROUND AND CONTEXT

Project factsheet[37]

Project Title	Mainstreaming Climate Change Adaptation (CCA) through Water Resource Management in Leather Industrial Zone Development
UNIDO ERP ID and/or project No.	150052
GEF project ID	5666
Region	Asia
Country/-ies	Pakistan
GEF focal area(s) **and operational programme**	Climate Change Adaptation GEF 5
GEF implementing agency(ies)	UNIDO
GEF executing partner(s	Sialkot Tannery Association Guarantee Ltd (STAGL) – Lead Executing Partner Ministry of Climate Change (MoCC)
Project size (FSP, MSP, EA)	Full-sized Project
Project CEO endorsement / Approval date	10 December, 2015
Project implementation start date (first PAD issuance date)	04 March, 2016
Expected implementation end date (indicated in CEO endorsement/Approval document)	04 March, 2020
Revised expected implementation end date	04 March, 2024
GEF project grant (excluding PPG, in USD)	3,310,000
GEF PPG (in USD)	90,000
UNIDO co-financing (in USD)	250,000
Total co-financing at GEF CEO endorsement (in USD)	14,450,000
Total project cost (excluding PPG and agency support cost, in USD; i.e., GEF project grant + total co-financing at CEO endorsement)	14,700,000
Mid-term review date	May-July 2020
Planned terminal evaluation date	Novermber 2023 to March 2024

(Source: Project document, UNIDO ERP system)

Project context

Pakistan is situated in the arid and semi-arid regions of the world and remains severely impacted by the negative effects of climate change (CC). The drought and excessive floods (2010-2011) have raised the enormity of dealing with the issue.

While CC is expected to increase vulnerabilities in temperature, precipitation, water, agriculture, urbanisation, livelihoods, and communities, the government is ill-prepared to handle the situation, and the lack of urban planning combined with the rapid industrialization and urbanization of Sialkot, has caused a major threat to its environment.

[37] Data to be validated by the Consultant

Toxic industrial and non-industrial waste poses a real threat to resources (e.g. soil, groundwater, etc.), as does the lack of effluent treatment facilities. The lack of waste water treatment, especially during floods, may contaminate farm land and hamper successful harvests and farmers' income. In recent years, this problem has been addressed, but the majority of the people, especially the rural communities, are still unaware of the dangers and threats they are exposed to. Concerted efforts for the timely implementation of adaptation measures are needed in order to prepare and protect the already poor and vulnerable population from the worst impacts of CC.

Most industries discharge their polluted effluents directly into the storm drains without any pre-treatment. This includes wastes from leather tanning industries. As a result, the natural water bodies have turned into putrid and toxic gutters and are the reason for water borne diseases. Solid waste also finds its way into the natural water resources, which are used for irrigation. A chemical analysis reveals that there are traces of heavy metals such as chromium and nickel found in vegetables and fruits.

The leather sector is an important employment opportunity for the people and therefore the negative environmental effects are often neglected. Tanneries use and pollute large quantities of water; fertile soil is contaminated, and the toxic substances used in leather production often cause skin diseases for the employees. The inefficient water use in the tanneries forces farmers to minimize their irrigation efforts or to use the polluted water. None of the 250 tanneries scattered around Sialkot in 10 clusters have an appropriate waste water treatment facility.

The threat to the sustainability of leather exports and foreign exchange revenues for Pakistan can already be seen through the decline in exports in recent years. The critical requirements for international trade and exporting leather goods relate to environmental and social compliance. Potential buyers anywhere in the world are forced to comply with their national laws and can and will only import goods from manufacturers who possess internationally accredited certifications.

Due to missing policy and lack of flood management measures, as well as, non-existing treatment facilities, agricultural land is contaminated, especially during flood events. Most likely this also affects ground water and irrigation schemes, again putting more stress on rural farmers. Considering that, due to CC, more frequent and more severe flood events will occur, there is an urgent need to introduce adaptation measures in order to build resilience against water stress and reduce the vulnerability of the population in Sialkot. At present there is no controlled and monitored treatment of discharged effluents and tannery waste water. Those effluents are either collected in pounds around the factories or discharged into unlined drains or even into irrigation channels, polluting the crops. Solids & sludge accumulate in these drains causing blockages and localized flooding of adjacent agricultural land. This hampers appropriate development of the tanning industry in Sialkot and compliance with international buyer requirements.

Project objective and expected outcomes

One major step in addressing the problem of 250 (scattered) tanneries that do not have appropriate environmental facilities in place, is the construction of a concentrated tannery zone, i.e. the STZ in Sialkot and with it, the establishment of a CETP and common waste management system. This intervention is intended to contribute towards the greening of the leather production system in Pakistan to ultimately satisfy the prerequisites for the survival and growth of this export-oriented sector, which is vital for Pakistan's economy and for conserving the region's agricultural land.

The STZ establishment is a mega development project executed as a Public Private Partnership (PPP) and amounting to around 47 Million USD (costs are comprised of land, building of infrastructure, utilities, treatment facilities, and relocation of tanneries). The financing of the conveyance system, STZ infrastructure, civil works on the CETP, and fees of various experts, etc. have been considered as co-financing for this project.

The private sector is being represented by a non-profit organization, called the Sialkot Tannery Association (Guarantee) Limited (STAGL). The STAGL was established to lay out, establish, and maintain the STZ to resolve the environmental problems and to meet the requirements of WTO/ISO 9000 for the industries engaged in leather tanning/manufacturing. STAGL has specifically been established for the baseline project and land has been purchased with financing from the Government of Punjab (75% of the cost of land has been covered by a soft loan from the government and 25% from the private sector). The main purpose of this baseline project is to move the scattered tannery industry from the heart of the city to a single cluster (zone) with improved industrial and business facilities and further, to make Sialkot city clean and unpolluted from harmful chemicals and waste that are used in the tannery industry. The project, which has now reached an advanced stage, aims to encourage focused industrial growth in Sialkot.

STAGL invited applications from prospective investors and submitted one-fourth of the cost of the acquisition of land for the project to the Government. The Government of Pakistan provided three fourth of the cost as an interest-free loan. The land (384 acres) was acquired by the GoP and transformed according to STAGL's requirements. 50 of these acres are allotted for foreign investors. The physical possession of the land and the planning process is already in advanced states.

The programme activities are implemented through three core components:

#	Component	Expected result
1	Mainstreaming CCA and Gender Equality for Adaptation into Urban and Rural Development Planning	Climate resilient urban development in Punjab/Sialkot District and reduced vulnerability of rural, urban, and other communities affected by CC (e.g. droughts, floods) through improved adaptation measures – water retention, flood management, etc.
2	Climate Change Resilience Building of Vulnerable Communities and Leather Business Owners	Increased awareness among targeted community groups and leather business owners on CCA concepts/practices and dissemination of information and expansion of the CCA strategy and project benefits.
3	Sialkot District and Sialkot urban plan implementation, dissemination of information, demonstration of safe, affordable, and advanced technology for water treatment and water conservation in the pilot Sialkot Tannery Zone (STZ)	Increased resilience of the most vulnerable groups in rural and urban areas by introduction of advanced, safe, affordable, and resource efficient technologies for water and waste water treatment within leather industries in the STZ, thereby preserving water availability for agricultural use.
4	Quality Control Monitoring and Evaluation	The project is quality controlled and monitored accordingly.

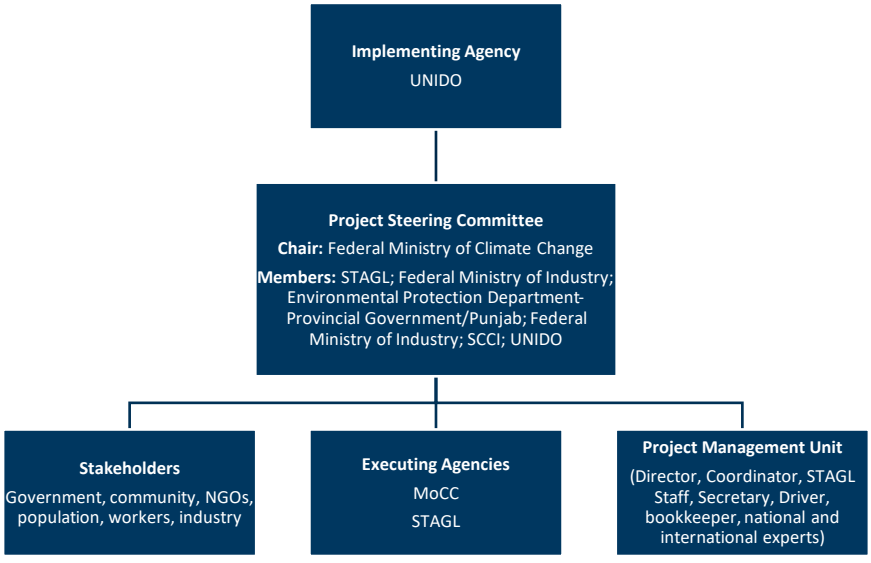
Project implementation arrangements

Location of the project

The geographical location of the STZ is near the village Khumbranwala, approx. 13 km from the District Government Headquarters, Sialkot, and about 5 km from Sialkot International Airport. The project area falls under the jurisdiction of Union Council No. 32 of Tehsil Sialkot and Union Council No. 6 of Tehsil Sambrial. The geographical coordinates of the site are 32032'57.41"N; 74024'54.23"E.

Project organigram

The below diagram represents the project structure:



Main stakeholders

The project engages several stakeholders:

Sr. No	Category	Stakeholder
1	Implementation	UNIDO
2	National Executing Partner	MCC
3		STAGL
4	National Government	Environment Protection Department (EPD), Provincial Government, Punjab
5		Irrigation Department, Provincial Government, Punjab
6		Federal Ministry of Industries (MoI)
7		Federal Ministry of Commerce (MoC)
8	Local Government	District Authorities
9	Private Sector	Sialkot Chamber of Commerce and Industry (SCCI)
10		Industry Owners
11		Technology providers
12		Agriculture-dependent communities, including farmers
13	NGO/Civil Society	NGOs and non-profit organizations (IULTCS, LWG, ICT, CDC, WWF
14	Other Partners	Training Institutions / Providers (Government Institute of Leather Technology, Gujranwala (GILT); Leather Products Development Institute, Sialkot (LPDI)

1. Main findings of the Mid-term review (MTR)

UNIDO undertook a mid-term evaluation in September 2020. The overall objective of the mid-term report was to independently assess the project and provide the project management team with feedback on the project's performance so far, along with identifying early risks to progress toward results and project outcomes. The evaluation covered the criteria of Relevance, Effectiveness, Efficiency, Sustainability, and Impact. In addition, the Project Design, Project Management, Planning, Monitoring and Reporting, Finance/Co-Finance, Stakeholder Engagement, Environmental and Social Safeguards, Performance of Partners, and Gender Mainstreaming were also reviewed. Accordingly, a set of conclusions and recommendations has been provided to inform future programming.

The following table provides an overview of the project's performance ratings.

	EVALUATION CRITERIA	RATING
A.	**PROJECT DESIGN ASSESSMENT**	
1	Project Design	Moderately Satisfactory
2	Project Results Framework/Logframe	Moderately Satisfactory
B.	**PROJECT PERFORMANCE AND PROGRESS TOWARD RESULTS**	
1.	Relevance	Highly Satisfactory
2.	Effectiveness and Progress Toward Results	Moderately Unsatisfactory
3.	Efficiency	Moderately Unsatisfactory
C.	**PROJECT IMPLEMENTATION MANAGEMENT**	
1.	Project Management	Satisfactory
2.	Results-based Work Planning, Monitoring and Evaluation Systems, Reporting	Moderately Satisfactory
3.	Financial Management and Co-finance	Moderately Unsatisfactory
4.	Stakeholder Engagement and Communication	Satisfactory
D.	**SCALE-UP, SUSTAINABILITY AND RESILIENCE**	Moderately Unsatisfactory
E.	**GENDER MAINSTREAMING**	Satisfactory
F.	**ENVIRONMENTAL AND SOCIAL SAFEGUARDS**	Moderately Satisfactory
G.	**PERFORMANCE OF PARTNERS**	Moderately Satisfactory
H.	**REMAINING BARRIERS TO ACHIEVING THE PROJECT EXPECTED RESULTS**	
	OVERALL PROJECT RATING	**Moderately Unsatisfactory**

The mid-term review provided a set of recommendations to course correct and mitigate risks to the outcomes and results of the project as follows:

Recommendations for STAGL PMU:

1. Common Effluent Treatment Plant (CETP): To ensure sustainable operations of the CETP, the MTR team recommends that:

a. Key stakeholders, especially STAGL, make a concerted effort to ensure the timely establishment and operation of the CETP as on the one hand, there is a risk some larger tanneries may lose interest in the STZ and expand operations at their current facility. On the other hand, some tanners may start operations in the STZ without proper CCA practices causing damage to the environment.
b. STAGL remains vigilant of the construction of the civil and electro-mechanical components of the CETP between separate contractors to ensure harmonization and compatibility and utilizes the services of a third-party expert to oversee the operation.
c. A comprehensive plan for spare parts availability and operations and maintenance of the electro-mechanical equipment being imported be put in place.
d. The proposed tertiary treatment of waste water using wetlands should be avoided at all costs as it risks attracting birds which could disrupt the Sialkot International Airport's flight operations.

2. Waste-to-Energy Plant: STAGL has started reviewing different technologies for setting up a waste to energy plant in the future, and the close circuit pyrolysis option has been shortlisted. However, the company proposing this option has a dismal record of delivering on its promises to other similar projects of the Government of Punjab. It is therefore recommended that STAGL practice vigilance if it decides to proceed with this option.

3. Engagement with Women in the Community: Since the project is working as a trendsetter, it is important that under its Gender Mainstreaming activities, the project starts promoting women's broader engagement in the industry immediately to establish a ready foundation for Gender Mainstreaming upon operationalization of the STZ. It is recommended that, at the very least, the project undertakes a detailed Gender Assessment and designs a Gender Strategy for the STZ.

Recommendations for UNIDO:

1. Supervision of CETP Establishment: An international expert environmental engineer on behalf of UNIDO/GEF assesses the macro-level impacts on the environment of the proposed CETP process and its siting.

2. Solid Waste Management: It is recommended that a detailed Waste Amount and Characterization Study (WACS) be conducted before finalizing available treatment options.

3. Stakeholder Engagement: The current project and the UNIDO-implemented project in Karachi (UNIDO ID: 160069) have had informal and unofficial coordination. It is recommended that the two projects develop a regular coordination mechanism to exchange observations and lessons learned.

4. Capacity Building: To further enhance the effectiveness and sustainability of the capacity-building and awareness-raising component of the project, the following measures are recommended: a) Development of a capacity building strategy or framework under which the remaining such activities are undertaken; b) Development of a sustainable exit strategy for capacity building component as there is a high risk of discontinuation of activities upon project closure; and c) Incentivizing participation of tanneries across the industry by linking them to tangible benefits.

5. Gender: It is also recommended that some gender balance is sought within the PMU senior/program staffing as there is a complete absence of women staff.

6. Monitoring and Reporting: It is recommended the project's logical framework is reviewed to rectify the gaps identified including resolution of duplications in outputs and inclusion of gender indicators. Additionally, per the revised logical framework, a monitoring framework be developed comprising of a monitoring matrix, risk assessment, and impact assessment methods, outlining who, what, when, where, and how data is collected and analyzed.

To learn more about the MTR findings and recommendations to course correct and mitigate risks to the outcomes and results of the project, please see:
https://downloads.unido.org/ot/21/72/21723727/150052_FINAL%20MTR%20Report%20-%20UNIDO%20150052.pdf.

2. Scope and purpose of the evaluation

The purpose of the evaluation is to independently assess the project to help UNIDO improve the performance and results of ongoing and future programmes and projects. The TE will cover the whole duration of the project from its starting date in March 2016 to the estimated completion date in March 2024.

The evaluation has two specific objectives:

i) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and
ii) Develop a series of findings, lessons, and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The TE will focus mainly on implementation and processes; and on the review criteria design, relevance, coherence, effectiveness, efficiency, management, and other cross-cutting issues such as gender, human rights, and environmental social safeguards; while assessing progress towards the potential impact and sustainability of the project.

The TE concerns the duration of the project from March 2016 until project termination in March 2024.

The TE will also focus on management processes and structures to identify and mitigate problems in implementation, including acceptance of the project amongst stakeholders, conflicts due to differing interests, sufficiency of qualified personnel, adequacy of communication and coordination amongst implementing partners and with target groups, and adequacy of project duration and funding.

3. Evaluation approach and methodology

The TE will be conducted in accordance with the UNIDO Evaluation Policy[38], the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle[39], and UNIDO Evaluation Manual. In addition, the GEF Guidelines for GEF Agencies in Conducting Terminal Evaluations, the GEF Monitoring and Evaluation Policy and the GEF Minimum Fiduciary Standards for GEF Implementing and Executing Agencies will be applied.
The evaluation will be carried out as an independent in-depth exercise using a participatory approach whereby all key parties associated with the project will be informed and consulted throughout the process. The evaluation team leader will liaise with the UNIDO Independent Evaluation Unit (EIO/IEU) on the conduct of the evaluation and methodological issues.
The evaluation will use a theory of change approach[40] and mixed methods to collect data and information from a range of sources and informants. It will pay attention to triangulating the data and information collected before forming its assessment. This is essential to ensure an evidence-based and credible evaluation, with robust analytical underpinning.
The theory of change will depict the causal and transformational pathways from project outputs to outcomes and longer-term impacts. It also identifies the drivers and barriers to achieving results. Learning from this analysis will be useful for the design of future projects so that the management team can effectively use the theory of change to manage the project based on results.

4. Data collection methods

Following are the main instruments for data collection:

(a) **Desk and literature review** of documents related to the project, including but not limited to:
- The original project document, monitoring reports (such as progress and financial reports, mid-term review report, technical reports, back-to-office mission report(s), end-of-contract report(s) and relevant correspondence.
- Notes from the meetings of committees involved in the project.

(b) **Stakeholder consultations** will be conducted through structured and semi-structured interviews and focus group discussions. Key stakeholders to be interviewed include:
- UNIDO Management and staff involved in the project; and
- Representatives of donors, counterparts, and other stakeholders.

(c) **Field visit** to project sites in Sialkot, Pakistan.
- On-site observation of results achieved by the project, including interviews of actual and potential project beneficiaries.
- Interviews with the relevant UN Resident Coordinator and UNIDO Country offices' representative to the extent that he/she was involved in the project and the project's management members and the various national [and sub-regional] authorities dealing with project activities as necessary.

(d) **Online data collection** methods will be used to the extent possible.

[38] UNIDO. (2018). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/2018/08)
[39] UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI.17/Rev.1, 24 August 2006)
[40] For more information on Theory of Change, please see chapter 3.4 of UNIDO Evaluation Manual

Users
The direct users of the TE result (conclusions, lessons learned, and practical recommendations) are the project manager and project team, UNIDO GEF coordination unit, project stakeholders, and GEF. In addition, lessons learnt must be shared within UNIDO to further feed into project design and formulation of similar projects, thus enhancing learning within the Organization.

5. Key evaluation questions and criteria

The key evaluation questions (corresponding to the six OECD/DAC criteria) are the following:

1) Relevance: Has the project done the right things? How does the project relate to the main objectives of the GEF focal area of climate change adaptation?
2) Coherence: How does the project fit with international norms and standards? To what extent does the institutional/policy environment support the project and its objectives?
3) Effectiveness: What are the project's key results (outputs, outcome, and impact)? To what extent have the expected results been achieved or are likely to be achieved?
   3.1 What are the key drivers and barriers to achieving the long-term objectives? To what extent has the project helped put in place the conditions likely to address the drivers, overcome barriers and contribute to the long term objectives?
4) Efficiency: To what extent was the project implemented efficiently? How efficiently were the resources utilized?
5) Sustainability: To what extent are the achieved results to be sustained after the completion of the project?
   5.1 What are the key risks (e.g. in terms of financial, socio-political, institutional, and environmental risks) and how may these risks affect the continuation of results after the project ends?
6) Lessons learned: What lessons can be drawn from the successful and unsuccessful practices in designing, implementing, and managing the project?
7) Gender mainstreaming: How did the project contribute to gender equality and women's empowerment?
8) To what extent does the project generate or is expected to generate higher-level effects (impact)?
9) How well has the project performed in terms of environmental and social safeguards, human rights)?

The table below provides the key evaluation criteria to be assessed by the evaluation. The detailed questions to assess each evaluation criterion are in annex 2 of UNIDO Evaluation Manual.

Table 5. Project evaluation criteria

#	Evaluation criteria	Mandatory rating
A	**Progress to Impact**	**Yes**
B	**Project design**	**Yes**
1	• Overall design	Yes
2	• Project results framework/log frame	Yes
C	**Project performance and progress towards results**	Yes
1	• Relevance	Yes
2	• Coherence	Yes
3	• Effectiveness	Yes
4	• Efficiency	Yes
5	• Sustainability of benefits	Yes
D	**Gender mainstreaming**	Yes
E	**Project implementation management**	Yes
1	• Results-based management (RBM)	Yes
2	• Monitoring and Evaluation, Reporting	Yes
F	**Performance of partners**	
1	• UNIDO	Yes
2	• National counterparts	Yes
3	• Implementing partner (if applicable)	Yes
4	• Donor	Yes
G	**Environmental and Social Safeguards (ESS), Disability and Human Rights**	Yes

1	• Environmental Safeguards	Yes
2	• Social Safeguards, Disability and Human Rights	Yes
H	**Overall Assessment**	Yes

Other assessments required by the GEF for GEF-funded projects, for non GEF projects these topics should be covered as applicable:
The terminal evaluation will assess the following topics, for which ***ratings are not required***:

a. **Need for follow-up**: e.g. in instances of financial mismanagement, unintended negative impacts or risks.

b. **Materialization of co-financing**: e.g. the extent to which the expected co-financing materialized, whether co-financing was administered by the project management or by some other organization; whether and how shortfall or excess in co-financing affected project results. At the terminal evaluation point, the Project Manager will update table 3 on co-financing and add two more columns to submit to the evaluation team: 1) Amount of co-financing materialized at mid-term review (MTR); and 2) Amount of co-financing materialized at terminal evaluation (TE). The evaluation team has the responsibility to validate and verify the co-financing amount materialized during the evaluation process. This table MUST BE included in the terminal evaluation report, as per requirement by the GEF.

c. **Environmental and Social Safeguards**[41]: appropriate environmental and social safeguards were addressed in the project's design and implementation, e.g. preventive or mitigation measures for any foreseeable adverse effects and/or harm to environment or to any stakeholder.

d. **Updated Monitoring and Assessment tool of core-indicators:** The project management team will submit to the evaluation team the up-to-date core-indicators or tracking tool (for older projects) whereby all the information on the project results and benefits promised at approval and actually achieved at completion point must be presented. The evaluation team has the responsibility to validate and verify updated core-indicators during the evaluation process. This table MUST BE included in the terminal evaluation report, as per requirement by the GEF.

e. **Knowledge Management Approach:** Information on the project's completed Knowledge Management Approach that was approved at CEO Endorsement/Approval.

6. Rating system

In line with the practice adopted by many development agencies, the UNIDO Independent Evaluation Unit uses a six-point rating system, where 6 is the highest score (highly satisfactory) and 1 is the lowest (highly unsatisfactory) as per the table below.

Table 6. Project rating criteria

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

[41] Refer to GEF/C.41/10/Rev.1 available at: http://www.thegef.org/sites/default/files/council-meetingdocuments/ C.41.10.Rev_1.Policy_on_Environmental_and_Social_Safeguards.Final%20of%20Nov%2018.pdf

7. Evaluation process

The evaluation will be conducted from 1 November 2023 to 30 March 2024. The evaluation will be implemented in five phases, which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

1) Inception phase: The evaluation team will prepare the inception report providing details on the evaluation methodology and include an evaluation matrix with specific issues for the evaluation to address; the specific site visits will be determined during the inception phase, taking into consideration the findings and recommendations of the mid-term review.
2) Desk review and data analysis;
3) Interviews, survey and literature review;
4) Country visits (whenever possible) and debriefing to key relevant stakeholders in the field;
5) Data analysis, report writing and debriefing to UNIDO staff at the Headquarters; and
6) Final report issuance and distribution with management response sheet, and publication of the final evaluation report in UNIDO website.

8. Time schedule and deliverables

The evaluation is scheduled to take place from1 November 2023 to 30 March 2024. The evaluation field mission is tentatively planned for 27 November to 11 December 2023. At the end of the field mission, the evaluation team will present the preliminary findings for key relevant stakeholders involved in this project in the country. The tentative timelines are provided in the table below.

After the evaluation field mission, the evaluation team leader will arrange a virtual debriefing and presentation of the preliminary findings of the terminal evaluation with UNIDO Headquarters. The draft TE report will be submitted 4 to 6 weeks after the end of the mission. The draft TE report is to be shared with the UNIDO Project Manager (PM), UNIDO Independent Evaluation Unit, the UNIDO GEF Coordinator and GEF OFP and other stakeholders for comments. The Evaluation team leader is expected to revise the draft TE report based on the comments received, edit the language and submit the final version of the TE report in accordance with UNIDO EIO/IEU standards.

Table 7. Tentative timelines

Timelines (tentative)	Tasks
1-17 November 2023	Desk review and preparation/submission of the inception report
20 November 2023	Briefing online between team leader, UNIDO Independent Evaluation Unit, UNIDO Project Manager and Project Evaluation Coordinator
27 November -11 December 2023 (including travel days)	Field visits and presentation of preliminary findings to project stakeholders
15 December 2024	Debriefing online with UNIDO Independent Evaluation Unit, UNIDO Project Manager and Project Evaluation Coordinator
15 January 2024	The first draft evaluation report shared with the UNIDO Project Manager, project management team, Project Evaluation Coordinator & Evaluation Manager
26 January 2024	UNIDO Project Manager, Project Evaluation Coordinator, Project Management Team and Evaluation Manager provide their comments and correction of factual errors
2 February 2024	Revised draft report by the evaluation team to be shared with the donors and national stakeholders
16 February 2024	Comments and feedback on the draft report by all stakeholders
26 February 2024	Workshop in Pakistan to present the evaluation findings, conclusions, and recommendations.
3 March 2024	Final report by the evaluation team.

9. Evaluation team composition

The evaluation team will be composed of one international evaluation consultant acting as the team leader and one national evaluation consultant. The evaluation team members will possess a mixed skill set and experience including evaluation, relevant technical expertise, social and environmental safeguards and gender. Both consultants will be contracted by UNIDO.

The tasks of each team member are specified in the job descriptions annexed to these terms of reference.

According to UNIDO Evaluation Policy, members of the evaluation team must not have been directly involved in the design and/or implementation of the project under evaluation.

The UNIDO Project Manager and the project management team in Kenya will support the evaluation team.

An evaluation manager from UNIDO Independent Evaluation Unit will provide technical backstopping to the evaluation team and ensure the quality of the evaluation. The UNIDO Project Manager and national project teams will act as resourced persons and provide support to the evaluation team and the evaluation manager.

10. Reporting

a) Inception report

The evaluation team will be expected to review the project documents to enable the team understand the MARKUP Project. The documents to be reviewed include the following: Markup annual reports; KAP Baseline Survey Report; KAP Final Survey Report; and Value Chain Studies Report among other project documents. After reviewing the project documentation and initial interviews with the project manager, the Team Leader will prepare a short inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO Evaluation Manager. The Inception Report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework ("evaluation matrix"); division of work between the evaluation team members; field work plan, including places to be visited, people to be interviewed and possible surveys to be conducted, and a debriefing and reporting.

b) Evaluation report format and review procedures

The draft report will be delivered to UNIDO Independent Evaluation Unit and circulated to UNIDO staff and key stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report will be sent to UNIDO Project Team for collation and onward transmission to the evaluation team who will be advised of any necessary revisions. Based on this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feedback in preparing the evaluation report. An online presentation of preliminary findings will be given to UNIDO HQ afterwards.

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

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner.

Quality assurance

All UNIDO evaluations are subject to quality assessments by UNIDO Independent Evaluation Unit. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO Independent Evaluation Unit, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO's Independent Evaluation Unit).

The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO Independent Evaluation Unit should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by UNIDO Independent Evaluation Unit, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

Annex 1 Project Logical Framework

Intervention Logic	Verifiable Indicators	Sources of Verification	Assumptions
Impact			
Increased resilience to CC in the leather sector and urban development planning	At least 250 tanneries adopting adaptation technologies At least 250 tanneries (and targeted community groups) adopting CCA measures	Baseline and impact assessment studies	
Objective			
Reducing Vulnerability and Building Resilience through integration of CCA into Urban Development and ensure a modernized and environmentally sound leather production industry	#individuals, households and businesses with increased capacities to respond to impacts of CC	Inception baseline, midterm and final reports SCCI reports National statistics reports	Government continues to priorities development of the leather industry as a means to poverty reduction
Component 1: CCA and Gender Equality for Adaptation Mainstreamed into Urban and Rural Development Planning			
Outcome 1. Climate resilient urban development in Punjab/Sialkot District and reduced vulnerability of rural, urban and other communities affected by CC (e.g. droughts, floods) through improved adaptation measures – water retention, flood management etc.	% of development frameworks and sectoral strategies that reach adaptation targets # of workshop attendees and stakeholder groups represented # recommendations for adaptive measures incorporated into urban development planning at district level (regulatory) Policy environment and regulatory framework for adaptation-related technology transfer established or strengthened Type and # of relevant policies and frameworks developed or strengthened on the transfer of adaptation technology	Workshop and seminar material and reports report with recommendations for district authorities on climate resilient urban planning Flood management plan Minutes of meetings	Government stakeholders and private sector partners are willing to engage in the development of CCA strategies
Component 2: Climate Change Resilience Building of Vulnerable Communities and Leather Business Owners			
Outcome 2. Increased awareness among targeted community groups and leather business owners on CCA concepts/practices and dissemination of information and expansion of the CCA strategy and project benefits.	Targeted population awareness of predicted adverse impacts of climate change and appropriate responses, disaggregated by gender Type and # of adaptation actions introduced at local level # of workshop attendees	Workshop and seminar material and reports Awareness raising material Revised STZ plan Minutes of meetings	CCA benefits successfully transmitted to project beneficiaries Successful implications of proposed project for vulnerable communities and leather business owners Ease in replication

	# of people sensitized on dealing with floods and other natural disasters #of community-based trainings on adaptive technologies held #of trainings for urban planners and local communities on flood management #of households and tanneries deploying water supply resilient strategies, water harvesting, conservation and effluent treatment plant management and treatment technologies		
Component 3: Sialkot District and Sialkot urban plan implementation, dissemination of information, demonstration of safe, affordable and advance technology for water treatment and water conservation in the pilot Sialkot Tannery Zone (STZ).			
Outcome 3. Increased resilience of the most vulnerable groups in rural and urban areas by introduction of advanced, safe, affordable and resource efficient technologies for water and waste water treatment within leather industries in the STZ, thereby preserving water availability for agricultural use.	# targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability # staff trained on technical adaptation themes # individuals trained in adaptation-related technologies % of population covered by adequate risk reduction measures, disaggregated by gender # people trained on UNIDO benchmarking toolkit Water availability for agriculture (% of population) for targeted region %increase in safe water resources % decrease of contaminated water use for irrigation % increase of households and industries with access to safe water resources for domestic use Type and # of water management practices introduced to increase access to irrigation water #households and businesses flood protected	RECP technology guidance report for tanneries Minutes of meetings, workshop reports ToR and tender document for CETP Bill of Quantities ToR and tender document for common facilities CETP conceptual design CETP approved design Tender for civil works of CETP Tender for CETP equipment Evaluation of Bids CETP infrastructure and installed equipment Training materials and manuals Assessment reports Solid waste feasibly study Technology package Project midterm and final reports	Suitable technology and service providers will be identified Tannery owners are willing to shift towards climate resilient development, while being aware of costs involved STZ will meet international standards for export Industry willing to invest into climate resilient technologies

	#of jobs created CETP commissioned # pilot demonstration units completed # companies adopting recommended technologies % of targeted population with sustained climate-resilient livelihoods ($US) Type and # climate resilient income sources for households % targeted groups adopting transferred adaptation technologies by technology type, disaggregated by gender Strengthened capacity to transfer appropriate adaptation technologies, disaggregated by gender Type and # of adaptation technologies transferred to targeted groups		
Component 4: Quality Control Monitoring and Evaluation			
Outcome 4. Quality control and efficient monitoring and evaluation of project intervention to support adaptation by CC vulnerable communities	Inception Workshop held Financial audit completed Annual reports and PIRs completed Annual RSTC and TPR meetings held TE evaluation completed Annual financial audits conducted Annual visits carried out PSC established Final external evaluation conducted Project Terminal Report completed	Inception report Periodic project reports Midterm report Final reports	Full commitment from project stakeholders and understanding of project objective PMU will ensure the smooth execution and coordination of all project activities, to update and ensure stakeholder participation

Annex 2 Project budget information
Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development (5666/150052)

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
Private Sector	Sialkot Tannery Association Guarantee Limited (STAGL) through STZ project	Cash	13,950,000
Private Sector	Sialkot Tannery Association Guarantee Limited (STAGL) through STZ project	In-kind	500,000
GEF Agency	UNIDO	In-kind	200,000
GEF Agency	UNIDO	Cash	50,000
Total Co-financing			14,700,000

Project Objective: Reducing Vulnerability and Building Resilience through integration of Climate Change Adaptation into Urban Development						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Grant Amount ($)**	**Confirmed Cofinancing ($)**
1. Mainstreaming Climate Change Adaptation (CCA) and gender equality for adaptation into urban and rural development planning	TA	1. Climate resilient urban development in Punjab/Sialkot District and reduced vulnerability of rural, urban and other communities affected by CC (e.g. droughts, floods) through improved adaptation measures – water retention, flood management etc.	1.1. CCA and gender equality mainstreamed into Punjab and Sialkot district urban development plan 1.2.Flood management plan for the Sialkot Tannery Zone (STZ) and the pilot Dugri drain in Sialkot developed	SCCF	460,000	400,000
2. Climate Change resilience building of vulnerable communities and leather buisness owners.	TA	2. Increased awareness among targeted community groups and leather business owners on CCA concepts/practices and dissemination of information and expansion of the CCA strategy and project benefits.	2.1. Awareness raising activities for target groups - with representatives from rural and urban communities, policy makers, industry and agriculture, to sensitize all involved goups and better understand and incorporate CCA concepts into urban, rural and industrial planning and processes, undertaken. 2.2. Community based trainings on CCA, to overcome CC, through water and energy conservation and flood management undertaken 2.3. Sensitization and joint dissemination activities and workshops for all target groups to have a better	SCCF	320,000	250,000

			understanding of target group needs towards building resilience to CC prepared 2.4. Guidelines on best practices and project knowledge disseminated within Pakistan and other countries in the Sub-region through websites, guidelines and communication products in various languages prepared			
3. Sialkot District and Sialkot urban plan implementation, dissemination of information, demonstration of safe, affordable and advance technology for water treatment and water conservation in the pilot STZ.	Inv	3. Increased resiliance of the most vulnerable groups in rural and urban areas by introduction of advanced, safe, affordable and resource efficient technologies for water and waste water treatment within leather industries in the STZ, thereby preserving water availability for agricultural use.	3.1. Various alternatives, especially water harvesting and appropriate effluent treatment technology for the pilot STZ verified and adopted. 3.2.Assistance provided with the preparation of the ToR, tender, technical evaluation and supervision of work and installation of Central Effluent Treatment Plant (CETP) including technology for one CETP module. 3.3. Practical training for improved production efficiency, lower environmental footprint and pollution reduction technologies demonstrated 3.4. Opportunities to use a treated water discharge system, useful and available for agriculture purposes verified and adopted. 3.5. Segregation of useful by-products of leather industrial waste, for further use, mostly by agriculture. 3.6. Water conservation practices/technologies for tanneries to increase resiliance of the most vulnarable groups are introduced and adopted	SCCF	2,270,000	13,700,000

4. Quality Control Monitoring and Evaluation	TA	4. Quality control and efficient monitoring and evaluation of project intervention to support adaptation by CC vulnerable communities	4.1. Timely semiannual reports prepared; midterm review and final evaluation [using Adaptation Monitoring and Assessment Tool (AMAT)] of project activities completed	SCCF	124,000	150,000
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					3,174,000	14,500,000
Project management Cost (PMC)[42]				SCCF	136,000	200,000
Total project costs					3,310,000	14,700,000

[42] PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Annex 2. Quality Checklist Criteria

Project Title:
UNIDO Project No. /ID:
Evaluation team leader:
Quality review done by:
Date:

	Quality criteria	UNIDO EIO/IEU assessment notes	Rating
1	The inception report is well structured, logical, clear and complete.		
2	The evaluation report is well structured, logical, clear, concise, complete and timely.		
3	The report presents a clear and full description of the 'object' of the evaluation.		
4	The evaluation's purpose, objectives and scope are fully explained.		
5	The report presents a transparent description of the evaluation methodology and clearly explains how the evaluation was designed and implemented.		
6	Findings are based on evidence derived from data collection and analysis, and they respond directly to the evaluation criteria and questions.		
7	Conclusions are based on findings and substantiated by evidence and provide insights pertinent to the object of the evaluation.		
8	Recommendations are relevant to the object and purpose of the evaluation, supported by evidence and conclusions, and developed with the involvement of relevant stakeholders.		
9	Lessons learned are relevant, linked to specific findings, and replicable in the organizational context.		
10	The report illustrates the extent to which the evaluation addressed issues pertaining to a) gender mainstreaming, b) human rights, and c) environmental impact.		

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly satisfactory = 6, Satisfactory = 5, Moderately satisfactory = 4, Moderately unsatisfactory = 3, Unsatisfactory = 2, Highly unsatisfactory = 1, and unable to assess = 0.

Annex 3. Outline of an in-depth Project Evaluation Report

Abstract

Contents

Acknowledgements

Abbreviations and acronyms

Executive summary

1. Introduction
   - 1.1 Evaluation purpose
   - 1.2 Evaluation objectives and scope
   - 1.3 Theory of change
   - 1.4 Methodology
   - 1.5 Limitations
2. Project background and context
3. Findings
   - 3.1 Relevance
   - 3.2 Coherence
   - 3.3 Effectiveness
   - 3.4 Efficiency
   - 3.5 Sustainability
   - 3.6 Progress to impact
   - 3.7 Gender mainstreaming
   - 3.8 Environmental impacts
   - 3.9 Human rights
   - 3.10 Performance of partners
   - 3.11 Results-based Management
   - 3.12 Monitoring & Reporting
4. Conclusions and recommendation
   - 4.1 Conclusions
   - 4.2 Recommendations
5. Lessons learned
6. Annexes
   - Annex 1: Evaluation terms of reference
   - Annex 2: Evaluation framework /matrix
   - Annex 3: List of documentation reviewed
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   - Annex 5: Project Theory of Change/Logframe
   - Annex 6: Primary data collection instruments
   - Annex 7: Survey/questionnaire
   - Annex 8: Statistical data from evaluation survey/questionnaire analysis

Annex 4. GEF Minimum Requirements for M&E[43]

Minimum Requirement: Design of Monitoring and Evaluation Plans
All projects must include a concrete and fully budgeted Monitoring and Evaluation Plan by the time of CEO endorsement for full-sized projects and CEO approval for medium-sized projects. Program Monitoring and Evaluation Plans describing the intended approach to monitoring and evaluation across the program, program rationale, the theory of change, results frameworks and indicators, and ways to ensure coherence across the child projects, must be included at program framework document (PFD) approval. Concrete and fully budgeted Program Monitoring and Evaluation Plans must be further detailed in the child project which supports the coordination, knowledge sharing, and monitoring and evaluation activities of the program, where applicable.
Logical frameworks and/or theories of change should align, where appropriate, to the GEF's results frameworks. Program Monitoring and Evaluation Plans must ensure coherence between program and child project objectives, indicators, and outcomes. Monitoring and evaluation Plans build in the possibility to adapt to changing conditions, if needed. Project and Program Monitoring and Evaluation Plans should contain the following:

- SMART indicators for results and implementation linked appropriately to the GEF results frameworks, and including the following:
    - Applicable GEF indicators on global environmental benefits identified at each replenishment cycle
    - Socioeconomic co-benefits and sex-disaggregated / gender-sensitive indicators (where relevant)
    - Project site geographic coordinates (where feasible and appropriate)
    - Additional process and/or performance indicators that can deliver reliable and valid information to management
- Project and program baselines, with a description of the problem to be addressed and relevant indicators
- Periodic implementation reports, midterm reviews, and terminal evaluations
- Organizational set-up and budgets for both monitoring and evaluation, where the budget for evaluation should be explicit and distinguished from monitoring activities

Minimum Requirement 2: Application of Monitoring and Evaluation Plans
Project and program monitoring will include implementation of the Monitoring and Evaluation Plan, comprising the following:

- The identified indicators are actively measured, or if not, a reasonable explanation is provided
- The baseline for the project or program is fully established and data are compiled to review progress, and evaluations are undertaken as planned
- The organizational set-up for monitoring and evaluation is operational, and its budget is spent as planned

[43] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C56_02_Rev01_GEF_Evaluation_Policy_June_2019_0.pdf

11. Annex 5 Detailed questions to assess evaluation criteria

#	Evaluation criteria
A	Project design assessment
1	Project design The project design was adequate to address the problems at hand? Is the project consistent with the Country's priorities, in the work plan of the lead national counterpart? Does it meet the needs of the target group? Is it consistent with UNIDO's Inclusive and Sustainable Industrial Development? Does it adequately reflect lessons learnt from past projects? Is it in line with the donor's priorities and policies? Is the applied project approach sound and appropriate? Is the design technically feasible and based on best practices? Does UNIDO have in-house technical expertise and experience for this type of intervention? To what extent the project design (in terms of funding, institutional arrangement, implementation arrangements…) as foreseen in the project document still valid and relevant? Does the project document include a M&E plan? Does the M&E plan specify what, who and how frequent monitoring, review, evaluations and data collection will take place? Does it allocate budget for each exercise? Is the M&E budget adequately allocated (see a M&E sample) and consistent with the log frame (especially indicators and sources of verification)? Risk management: Are critical risks related to financial, social-political, institutional, environmental and implementation aspects identified with specific risk ratings? Are their mitigation measures identified? Where possible, are the mitigation measures included in project activities/outputs and monitored under the M&E plan?
2	Project results framework/log frame Expected results: Is the expected result-chain (impact, outcomes and outputs) clear and logical? Does impact describe a desired long-term benefit to a society or community (not as a mean or process), do outcomes describe change in target group's behaviour/performance or system/institutional performance, do outputs describe deliverables that project will produce to achieve outcomes? Are the expected results realistic, measurable and not a reformulation or summary of lower level results? Do outputs plus assumptions lead to outcomes, do outcomes plus assumptions lead to impact? Can all outputs be delivered by the project, are outcomes outside UNIDO's control but within its influence? Indicators: Do indicators describe and specify expected results (impact, outcomes and outputs) in terms of quantity, quality and time? Do indicators change at each level of results and independent from indicators at higher and lower levels? Do indicators not restate expected results and not cause them? Are indicators necessary and sufficient and do they provide enough triangulation (cross-checking)? Are they indicators sex-disaggregated, ifapplicable? Sources of verification: Are the sources of verification/data able to verify status of indicators, are they cost-effective and reliable? Are the sources of verification/data able to verify status of output and outcome indicators before project completion?
B	Project performance and progress towards results

#	Evaluation criteria
1	Relevance So far, how relevant is the project to the: target groups' needs development priorities of the country (national poverty reduction strategy, sector development strategy, etc.) UNIDO comparative advantages and project's donor policies and priorities Are appropriate beneficiaries' groups being targeted by the project? Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have then been revised? Are the revised objectives still valid in today context?
2	Effectiveness and progress towards expected results SO FAR, what are the main results (mainly outputs and if possible, outcomes) of the project? What have been the quantifiable results of the project to-date? To what extent did the project achieve their objectives (outputs and outcomes), against the original/revised target(s)? Please provide a brief analysis on the project progress in achieving the objectives. What is the quality of the results? How do the stakeholders perceive them? What is the feedback of the beneficiaries and the stakeholders on the project effectiveness? Please provide evidence/examples from the project to back up the statements. Were the right target groups reached? Can the project attain it objectives and utilize the resources assigned for this within the remaining period?
3	Efficiency Comment on how economically the project resources/inputs (in terms of funding, expertise, time…) are being used to produce results (outputs and outcomes) SO FAR? Comment on the quality of expertise/technical assistance provided; whether the expected results were achieved within the original budget, if no please explain why. How timely is the project in producing outputs, initial outcomes and delivering inputs (with least delays)? Based on the work plan, comment on the delay or acceleration of implementation period of the project. Were the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Were the disbursements and project expenditures in line with budgets? Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements? Is the project cost-effective compared to similar interventions? Could the project have produced more with the same resources, or the same with less money, or with less delay? Wherever possible, the MTE team should also compare the costs incurred and the time taken to achieve outcomes with that for similar projects?

#	Evaluation criteria
4	Gender mainstreaming Did the project/programme design adequately consider the gender dimensions in its interventions? If so, was gender considered at the level of project outcome, output or activity? Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators? How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries? Have women and men benefited equally from the project's interventions? Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)? Are women/gender-focused groups, associations or gender units in partner organizations consulted and/or included in the project? To what extent were socioeconomic benefits delivered by the project at the national and local levels, including consideration of gender dimensions? Are environmental aspect related to the protection of the environment and/or adaptation to climate change taken into account? Are social issues addressed to ensure inclusiveness of the project beneficiaries?
5	Cross-cutting aspects Are environmental aspect related to the protection of the environment and/or adaptation to climate change taken into account? Have environmental and social safeguards been incorporated? Are social issues addressed to ensure inclusiveness of the project beneficiaries? Have Human rights and rights of vulnerable communities been taken into consideration?
C	Project implementation management
1	Project management Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement. Review whether the national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions)? The UNIDO HQ- based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits

#	Evaluation criteria
2	Results-based work planning, M&E, reporting Results-based work planning Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved. Are there any annual work plans? Are work-planning processes results-based? Has the log frame been used to determine the annual work plan (including key activities and milestone)? If not, suggest ways to re-orientate work planning to focus on results? Examine the use of the project's results framework/ log frame as a management tool and review any changes made to it since project start. Results-based M&E Verify whether an M&E system is in place and facilitated timely tracking of progress toward project objectives by collecting information on selected indicators continually throughout the project implementation period; annual project reports are complete and accurate, with well-justified ratings; the information provided by the M&E system is used to improve performance and to adapt to changing needs; and the project has an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project completion. Are monitoring and self- evaluation carried out effectively, based on indicators for outputs, outcomes and impact in the log frame? Is any project steering or advisory mechanism put in place? Do performance monitoring and reviews take place regularly? Review the monitoring tool currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively? How has the log frame been used for Monitoring and Evaluation purposes (developing M&E plan, setting M&E system, determining baseline and targets, annual implementation review by the Project Advisory Board…) to monitor progress towards expected outputs and outcomes? Do project team and manager make decisions and corrective actions based on analysis from M&E system and based on results achieved? Is information on project performance and results achievement being presented to the Project Advisory Board to make decisions and corrective actions? Do the Project team and managers and PAB regularly ask for performance and results information? How well have risks outlined the project document and in the log frame been monitored and managed? How often have risks been reviewed and updated? Has a risk management mechanism been put in place? Results-based reporting Assess how adaptive management changes have been reported by the project management and shared with the PAB. Assess how well the Project Team and partners undertake and fulfil donor and UNIDO reporting requirements (i.e. how have they addressed delays or poor performance, if applicable?)

#	Evaluation criteria
	Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.
3	Financial management and co-financing Review the financial management of the project, with specific reference to the cost-effectiveness of interventions. Did the project have appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds? Was there due diligence in the management of funds and financial audits? Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions. Did promised co-financing materialize? Is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?
4	Stakeholder engagement and communication Stakeholder engagement Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders? Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives? Communication Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results? Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?) For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits
5	Sustainability of benefits The MTE should validate whether the risks identified in the Project Document and progress reports or implementations reviews are the most important and assess the following risks to sustainability:

#	Evaluation criteria
	Financial risks: What is the likelihood of financial and economic resources not being available once the project ends? (Such resources can be from multiple sources, such as the public and private sectors or income-generating activities; these can also include trends that indicate the likelihood that, in future, there will be adequate financial resources for sustaining project outcomes.)? *Socio-political risks:* Are there any social or political risks that may jeopardize the sustainability of project outcomes? What is the risk that the level of stakeholder ownership and engagement (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the project's long-term objectives? *Institutional framework and governance risks:* Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits? Are requisite systems for accountability and transparency and required technical know-how in place? *Environmental risks:* Are there any environmental risks that may jeopardize the sustainability of project outcomes? Are there any project outputs or higher-level results that are likely to have adverse environmental impacts, which, in turn, might affect the sustainability of project benefits?
D	Performance of partners
1	UNIDO *Project team in the field* Has the project team discharged its project implementation and management functions adequately (in terms of work planning and executing, monitoring and reviewing performance, allocating funds, and following up agreed/corrective actions)? Has an effective M&E system been put in place, was it closely link with the log frame, does it generate information on performance and results which is useful for project managers and PAB to make critical decisions? Has the management of flow of funds and procurement been suitable for ensuring timely implementation?

#	Evaluation criteria
	How proactive and prompt the project team was to ensure timely implementation of recommendations from experts of support missions and HQ-based project managers? *UNIDO HQ-based management* Timely recruitment of project staff
	Project modifications following changes in context or after the TE Review Follow-up to address implementation bottlenecks Role of UNIDO country presence (if applicable) supporting the project Engagement in policy dialogue to ensure up-scaling of innovations Coordination function Exit strategy, planned together with the government
2	National counterparts Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? Has the government assumed ownership and fulfilled responsibility for the project? Were counterpart resources (funds and staffing) provided as planned in the project design? Did the government ensure suitable coordination of the various departments involved in the project implementation?
3	Donor How active has the donor been in reviewing the project performance and implementation? How proactive and prompt has the donor been in providing necessary support to the project implementation (in terms of decisions on fund installment, approval/rejection of request from project team…)? Does the donor ask for information related to project performance and results? To what extent does the donor make decisions based on performance and results information?

Annex 5. UNIDO Statement of Confirmation

TO: **UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO)**

Wagramerstrasse 5, A-1400 Vienna, Austria

SECTION 1

On behalf of _____ [insert name of the legal entity and delete this highlighted text in brackets] (hereafter referred to as "Declarant"[44]), I hereby represent and warrant that Declarant:

a) Possesses the legal status and capacity to enter into legally binding contracts with UNIDO for the supply of equipment, supplies, services or work.

b) Has not been involved in any situation that may appear as an actual or a potential conflict of interest, including, but not limited to, any of the following situations:

i. None of Declarant's key personnel is associated - financial, family or employment wise - with concerned UNIDO personnel, including UNIDO experts/consultants recruited under the relevant project or with UNIDO's counterpart;
ii. No fees, gratuities, rebates, gifts, commissions, offers of employment or any other payments, other than those shown in the offer, have been, directly or indirectly, given, received or promised in connection with the subject procurement process;
iii. Declarant has not participated in the preparation of the concerned procurement process, its design or its bidding documents, including, but not limited to, the technical specifications, terms of reference, and/or scope of works, being subsequently used by UNIDO;
iv. Declarant does not, directly or indirectly, control, is not controlled by or is not under common control with another bidder;
v. Declarant does not receive or has not received any direct or indirect subsidy from another bidder;
vi. Declarant does not have the same legal representative as another bidder;
vii. Declarant does not have a relationship with another bidder, directly or indirectly (except declared sub-contractors), that puts it in a position to influence the bid of another bidder, or influence the decisions of UNIDO regarding this procurement process;
viii. Declarant has not submitted more than one bid in the procurement process, for example, on its own and separately as a joint venture partner (except as declared sub-contractor) with another bidder (a bidder's submission of more than one bid will result in the disqualification of all bids in which such bidder is involved); or
ix. Declarant finds itself involved in any other situation that may appear as an actual or a potential conflict of interest, understood by UNIDO to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a fraud and corruption under UNIDO's Procurement Manual.

c) Accepts to abide by the terms of the UNIDO Policy on Exclusion from Funding (DGB/2021/15), available at https://www.unido.org/sites/default/files/files/2021-12/DGB_UNIDO_Policy_on_Exclusion_from_Funding_0.pdf (hereinafter referred to as the "Policy", as may be amended from time to time) and represents and warrants that Declarant is not and has not been the subject of any of the exclusion criteria stated in the Policy. Further, Declarant covenants and agrees to notify UNIDO promptly in the event that Declarant becomes subject to any of the exclusion criteria stated in the Policy during

[44] Declarant includes reference, as applicable, to any person or entity having powers of representation, or exercising ownership, decision-making or control over another person or entity, or which is owned or controlled by or under common ownership or control with, such person or entity, whether directly or indirectly and in whole or in part, such as a parent, subsidiary or associate company, or as a member of their administrative, management or supervisory body.

the term of this procurement process and eventually, if applicable, during the term of the Declarant's contract or agreement with UNIDO.

SECTION 2

[Please note that this section is to be completed only in case one or more of the statements under Section 1 above cannot be confirmed or attested to. After consideration of the information and documentation provided under this Section 2, UNIDO reserves the right to disqualify the bidder from any further participation in the procurement process and take any other pertinent action pursuant to the UNIDO Policy on Exclusion from Funding and to the specific procedures set out in UNIDO's Procurement Manual.]

On behalf of Declarant, I hereby represent and warrant that Declarant:

[Indicate here below the statement that cannot be confirmed or attested to and provide the reasons and all detailed related information, e.g. date of conviction of a criminal offence, court, jurisdiction, etc., together with all related documentation. Moreover, if relevant, also indicate any mitigating measure(s) taken to remedy the statement that cannot be confirmed or attested to]

Name (print): _____ Signature: _____

Title/Position: _____

Place (City and Country): _____Date: _____

Annex 6. Financial Statement and Certification

FINANCIAL STATEMENT AND CERTIFICATION
Must be completed and submitted by Suppliers as an integral part of their Offers

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1. The information requested in the Tables below must be provided with your Offer, please complete accordingly:

Table 1

A.	Name of Company/organization	
B.	Address of Head Office	
C.	Fax and E-mail Numbers	
D	Date Established and/or Registered	
E.	Paid up Capital	
F.	Date of the Latest Balance Sheet	
G.	Fixed Assets	
H.	Current Assets	
I.	Long Term Liabilities	
J.	Current Liabilities	
K.	Net Worth	
L.	Solvency Ratio (Current Assets/Current Liabilities)	
M.	Profit Margin Ratio	
L.	Name of Principal Officer	
M.	Where Applicable - Name and address of your Representative in the Country of the Project (if any) -	

Table 2

Please state your Yearly Total Value of Business for the last three (3) Years in US$			
YEAR	DOMESTIC	EXPORT	US$ TOTAL

Table 3

Please Provide Details of the Services/Goods Provided in the Advertised Sector during the last three (3) Years, if any				
Category/description of goods/services	Value US$	1st Year	2nd Year	3rd Year

2. Please provide the Name and address of your company/organization's bank:
_____
_____

3. Litigation in progress
Please provide brief information regarding on-going arbitration and other pending legal action, if any
_____
_____

4. Please provide details of Consortium or Group to which company/organization belongs, if any:

_____
_____

5. Please provide any other information (chronology and business line, organization structure, etc.):
_____
_____

We, the below, hereby certify to the best of our knowledge that the foregoing statements are true and correct and all available information and data have been provided herein, and that we agree to show you documentary proof thereof upon your request.

_____ _____
(Date) (Signature of Authorized Representative)

_____
(Printed Name of Authorized Representative)

_____
(Position of Authorized Representative)

_____
(Telephone No. And Fax No.)

Certified:

_____ _____
(Date) (Signature of Authorized Representative)

_____
(Printed Name of Authorized Representative)

_____
(Position of Authorized Representative)

_____
(Name of Certifying Authority and Telephone No. And Fax No.)

Annex 7. Job Descriptions

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	Senior evaluation consultant, team leader
Main Duty Station and Location:	Home-based
Missions:	Mission to Pakistan
Start of Contract (EOD):	November 2023
End of Contract (COB):	March 2024
Number of Working Days:	30 working days spread over the above mentioned period

1. ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

2. PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.
The international evaluation consultant/team leader will evaluate the project in accordance with the evaluation-related terms of reference (TOR). S/he will perform, inter alia, the following main tasks:

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
1. Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data). Define technical issues and questions to be addressed by the national technical evaluator prior to the field visit. Determine key data to collect in the field and adjust the key data collection instrument if needed. In coordination with the project manager, the project management team and the national technical evaluator, determine the suitable sites to be visited and stakeholders to be interviewed.	• Adjusted table of evaluation questions, depending on country specific context; • Draft list of stakeholders to interview during the field missions. • Identify issues and questions to be addressed by the local technical expert	5 days	Home-based
2. Prepare an inception report which streamlines the specific questions to address the key issues in the TOR, specific methods that will be used and data to collect in the field visits, confirm the evaluation methodology, draft theory of change, and tentative agenda for field work.	• Draft theory of change and Evaluation framework to submit to the Evaluation Manager for clearance. • Guidance to the national evaluator to	2 days	Home based

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
Provide guidance to the national evaluator to prepare initial draft of output analysis and review technical inputs prepared by national evaluator, prior to field mission.	prepare output analysis and technical reports		
3. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ (included is preparation of presentation).	• Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; • Division of evaluation tasks with the National Consultant.	1 day	Through skype
4. Conduct field mission to Pakistan[45].	• Conduct meetings with relevant project stakeholders, beneficiaries, the GEF Operational Focal Point (OFP), etc. for the collection of data and clarifications; • Agreement with the National Consultant on the structure and content of the evaluation report and the distribution of writing tasks; • Evaluation presentation of the evaluation's preliminary findings, conclusions and recommendations to stakeholders in the country, including the GEF OFP, at the end of the mission.	6 days	Pakistan
5. Present overall findings and recommendations to the stakeholders at UNIDO HQ	• After field mission(s): Presentation slides, feedback from stakeholders obtained and discussed.	1 day	Home-based / online
6. Prepare the evaluation report, with inputs from the National Consultant, according to the TOR; Coordinate the inputs from the National Consultant and combine with her/his own inputs into the draft evaluation report. Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments.	• Draft evaluation report.	10 days	Home-based
7. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit the	• Final evaluation report.	5 day	Home-based

[45] The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and the country counterparts.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
language and form of the final version according to UNIDO standards.			

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education:

Advanced degree in environment, energy, engineering, development studies or related areas.

Technical and functional experience:

- Minimum of 15 years' experience in evaluation of development projects and/or relevant sector experience
- Good working knowledge in Pakistan.
- Knowledge about GEF operational programs and strategies and about relevant GEF policies such as those on project life cycle, M&E, incremental costs, and fiduciary standards
- Experience in the evaluation of GEF projects and knowledge of UNIDO activities an asset
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks
- Familiarity with gender analysis tools and methodologies an asset
- Working experience in developing countries

Languages:

Fluency in written and spoken English is required. All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.

REQUIRED COMPETENCIES

Core values:

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.
WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.
WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

Core competencies:

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.
WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.
WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.
WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	National evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Travel to potential sites within Pakistan
Start of Contract:	November 2023
End of Contract:	March 2024
Number of Working Days:	30 days spread over the above-mentioned period

ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Unit (EIO/IEU) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. EIO/IEU is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation. The national evaluation consultant will evaluate the projects according to the terms of reference (TOR) under the leadership of the team leader (international evaluation consultant). S/he will perform the following tasks:

MAIN DUTIES	**Concrete/measurable outputs to be achieved**	**Expected duration**	**Location**
• Desk review • Review and analyze project documentation and relevant country background information; in cooperation with the Team Leader, determine key data to collect in the field and prepare key instruments in English (questionnaires, logic models). • If need be, recommend adjustments to the evaluation framework and Theory of Change in order to ensure their understanding in the local context.	• Evaluation questions, questionnaires/interview guide, logic models adjusted to ensure understanding in the national context; • A stakeholder mapping, in coordination with the project team.	5 days	Home-based
• Carry out preliminary analysis of pertinent technical issues determined by the Team Leader. • In close coordination with the project team, verify the extent of achievement of project outputs prior to field visits. • Develop a brief analysis of key contextual conditions relevant to the project.	• Report addressing technical issues and question previously identified with the Team leader • Tables that present extent of achievement of project outputs • Brief analysis of conditions relevant to the project	7 days	Home-based
• Coordinate the evaluation mission agenda, ensuring and setting up the required meetings with project partners and government counterparts, and organize and lead site visits, in close cooperation with project staff in the field.	• Detailed evaluation schedule. • List of stakeholders to interview during the field missions.	3 days	Home-based
• Coordinate and conduct the field mission with the team leader in cooperation with the Project Management Unit, where required.	• Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission.	7 days (including travel days)	In Pakistan

MAIN DUTIES	**Concrete/measurable outputs to be achieved**	**Expected duration**	**Location**
• Consult with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks. • Conduct the translation for the Team Leader, when needed.	• Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.		
• Follow up with stakeholders regarding additional information promised during interviews. • Prepare inputs to help fill in information and analysis gaps (mostly related to technical issues) and to prepare tables to be included in the evaluation report as agreed with the Team Leader. • Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Unit and stakeholders and proof read the final version.	• Final evaluation report for publication	8 days	Home-based

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in environmental science, engineering or other relevant discipline like economic, developmental studies, industrial energy efficiency and/or climate change.

Technical and functional experience:
- Excellent knowledge and competency in local economic development, agribusiness and or industry
- Evaluation experience, including evaluation of development cooperation in Pakistan
- Exposure to the development needs, conditions and challenges in their country and region.
- Familiarity with gender analysis tools and methodologies and asset
- Familiarity with the institutional context of the project is desirable.

Languages: Fluency in written and spoken English and in Urdu is required.

Absence of conflict of interest:
According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Unit.

REQUIRED COMPETENCIES

Core values:
WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.
WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.
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Core competencies:
WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.
WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.
WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.
WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

Annex 8. Evaluation Matrix

Evaluation Criteria and Questions	Data Collection Methods	Sources
A. Progress to impact: Positive and negative, primary and secondary long-term effects produced by the project, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and the extent to which conditions for trajectory change are being put into place.		
The three UNIDO impact dimensions are: ▫ **Safeguarding environment:** Biophysical changes in reduction of threats emanating from action of humans and changes in the status of the environment. ▫ **Economic performance:** Changes in the functioning and management of the resources, finances, income, and expenditure of, for example, a community, business or enterprise, contributed to by the intervention. ▫ **Social inclusiveness:** Changes in the provision of certain rights to all individuals and groups in society, such as employment, education, and training.		
Mainstreaming: To what extent are information, lessons learned, or specific results of the project incorporated into broader stakeholder mandates and initiatives such as laws, policies, regulations and project?	Desk review KIIs, group interviews and FGDs	▫ Project implementation reports (PIRs) and MTR ▫ STAGL, project team, government officials, WWF, tannery owners, community members, In-consult, 3W Systems, Government College Women University, Sialkot (GCWUS)
Replication: To what extent are the project's specific results (for example methodology, technology or lessons learned) reproduced or adopted?		
Scaling-up: To what extent are the project's initiatives and results implemented at larger geographical scale?		
What difference has the project made to the beneficiaries?		
What is the change attributable to the project? To what extent?		
What are the social, economic, environmental and other effects, either short-, medium- or long-term, on a micro- or macro-level?		
What effects are intended or unintended, positive or negative?		
B. Project design: Formulation of the project, the plan to achieve a specific purpose.		
B.1. Overall design. Assessment of the design in general		

Evaluation Criteria and Questions	Data Collection Methods	Sources
Is the problem, need or gap to be addressed by the project clearly identified, with clear target beneficiaries?	Desk review KIIs, group interviews and FGDs	▫ Project document, MTR and logframe ▫ UNIDO, STAGL, project team, government officials, tannery owners, community members, In-consult, 3W Systems
Was the project design adequate to address the problems at hand?		
Is the project consistent with the country's priorities, in the work plan of the lead national counterpart?		
Does it meet the needs of the target group?		
Is it consistent with UNIDO's Inclusive and Sustainable Industrial Development?		
Is it in line with the donor's priorities and policies?		
Does it adequately reflect lessons learnt from past projects?		
Is the applied project approach sound and appropriate?		
Is the design technically feasible and based on best practices?		
Does UNIDO have in-house technical expertise and experience for this type of intervention?		
To what extent is the project design (in terms of funding, institutional arrangement, implementation arrangements, etc.) as foreseen in the project document still valid and relevant?		
Does it include M&E plan and adequate budget for M&E activities?		
Risk management: Are critical risks related to financial, sociopolitical, institutional, environmental and implementation aspects identified with specific risk ratings?		
Are their mitigation measures identified?		
Where possible, are the mitigation measures included in project activities/outputs and monitored under the M&E plan?		
To what extent does the project design contribute to gender equality, the empowerment of women and the human rights-based approach?		
B.2 Project results framework/logframe: Assessment of the logical framework aimed at planning the project.		
Expected results: Is the expected results chain (impact, outcomes and outputs) clear and logical?	Desk review KIIs	▫ Project document, MTR, logframe and PIRs
Does impact describe a desired long-term change or benefit to a society or community (not as a mean or process), do outcomes describe change in target group's		

Evaluation Criteria and Questions	Data Collection Methods	Sources
behaviour/performance or system/institutional performance, do outputs describe deliverables that project will produce to achieve outcomes?		▫ UNIDO RBM guidelines (to be obtained) ▫ Project director, effluent treatment expert
Are the expected results realistic, measurable and not a reformulation or summary of lower-level results?		
Do outputs plus assumptions lead to outcomes, do outcomes plus assumptions lead to impact?		
Can all outputs be delivered by the project, are outcomes outside UNIDO's control but within its influence?		
Indicators: Do indicators describe and specify expected results (impact, outcomes and outputs) in terms of quantity, quality and time?		
Do indicators change at each level of results and independent from indicators at higher and lower levels?		
Do indicators not restate expected results and not cause them?		
Are indicators necessary and sufficient and do they provide enough triangulation (cross-checking)?		
Are indicators sex-disaggregated, if applicable?		
Are indicators SMART?		
Sources of verification: Are the sources of verification/data able to verify status of indicators, are they cost-effective and reliable?		
Are the sources of verification/data able to verify status of output and outcome indicators before project completion?		
Are key assumptions properly summarized and reflecting the proper level in the results chain in the logframe?		
C. Project performance and progress towards results		
C.1 Relevance: The extent to which the project is suited to the priorities and policies of the target group, recipient and donor.		
How does the project fulfil the urgent target group needs?	Desk review KIIs and group interviews	▫ Project document, MTR and logframe ▫ UNIDO, STAGL, project team,
To what extent is the project aligned with the development priorities of the country (national poverty reduction strategy, sector development strategy)?		
How does the project reflect donor policies and priorities?		

Evaluation Criteria and Questions	Data Collection Methods	Sources
Is the project a technically adequate solution to the development problem? Does it eliminate the cause of the problem?		government officials, tannery owners, In-consult, 3W Systems
To what extent does the project correspond to UNIDO's comparative advantages?		
Are the original project objectives (expected results) still valid and pertinent to the target groups? If not, have they been revised? Are the revised objectives still valid in today's context?		
C.2 Coherence: The compatibility of the project with other interventions in a country, sector or institution. The extent to which other interventions (particularly policies) support or undermine the project, and vice versa.		
How consistent is the project with the relevant international norms and standards to which the supported institution/government adheres?	Desk review KIIs and group interviews	▫ Project document, MTR and logframe ▫ UNIDO, STAGL, project team, government officials, In-consult, 3W Systems
How consistent is the project with other actors' interventions in the same context?		
How does the project ensure complementarity, harmonization and coordination with others?		
To what extent is the project adding value while avoiding duplication of effort?		
To what extent did UNIDO adopt gender-sensitive, human rights-based approaches?		
C.3 Effectiveness: The extent to which the development project's objectives were achieved, or are expected to be achieved, taking into account their relative importance.		
What are the main results (mainly outputs and outcomes) of the project? What have been the quantifiable results of the project?	Desk review KIIs, group interviews and FGDs	▫ PIRs, project monitoring matrix, MTR ▫ STAGL, project team, government officials, WWF, tannery owners, community members, In-consult, 3W Systems, GCWUS
To what extent did the project achieve its objectives (outputs and outcomes), against the original/revised target(s)?		
What are the reasons for the achievement/non-achievement of the project objectives?		
What is the quality of the results? How do the stakeholders perceive them? What is the feedback of the beneficiaries and the stakeholders on project effectiveness?		
To what extent is the identified progress result of the project attributable to the intervention rather than to external factors?		
What can be done to make the project more effective?		
Were the right target groups reached?		
C.4 Efficiency: A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.		

Evaluation Criteria and Questions	Data Collection Methods	Sources
How economically are the project resources/inputs (concerning funding, expertise, time…) being used to produce results?	Desk review KIIs and group interviews	▫ PIRs, project financial data, MTR, Board minutes, correspondence record with government and other organizations ▫ STAGL, project team, government officials, In-consult, 3W Systems, tannery owners
To what extent were expected results achieved within the original budget and timeframe? If no, please explain why.		
Are the results being achieved at an acceptable cost? Would alternative approaches accomplish the same results at less cost?		
What measures have been taken during planning and implementation to ensure that resources are efficiently used? Were the project expenditures in line with budgets?		
Could more have been achieved with the same input?		
Could the same have been achieved with less input?		
How timely was the project in producing outputs and outcomes? Comment on the delay or acceleration of the project's implementation period.		
To what extent were the project's activities in line with the schedule of activities as defined by the project team and annual work plans?		
Have the inputs from the donor, UNIDO and government/counterpart been provided as planned, and were they adequate to meet the requirements?		
C.5 Sustainability of benefits: The continuation of benefits from the project after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.		
Will the project results and benefits be sustained after the end of donor funding?	Desk review KIIs and group interviews	▫ PIRs, exit strategy, MTR, Board minutes, correspondence record with government and other organizations ▫ STAGL, project team, government officials, WWF, tannery owners, community members, In-
Does the project have an exit strategy?		
To what extent have the outputs and results been institutionalized?		
Financial risks: What is the likelihood of financial and economic resources not being available once the project ends?		
Socio-political risks: Are there any social or political risks that may jeopardize the sustainability of project outcomes?		
a) What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained?		
b) Do the various key stakeholders see that it is in their interest that project benefits continue to flow?		

Evaluation Criteria and Questions	Data Collection Methods	Sources
c) Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?		consult, 3W Systems, GCWUS
d) To what extent do mechanisms, procedures and policies exist to carry forward the results attained on gender equality, empowerment of women, and human rights by primary stakeholders?		
D. Gender mainstreaming		
Is the gender marker assigned to this project representative of reality?	Desk review KIIs and group interviews	▫ PIRs, MTR ▫ STAGL, project team, government officials, tannery owners, community members, In-consult, 3W Systems, GCWUS
Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators?		
Are women/gender-focused groups, associations or gender units in partner organizations consulted/ included in the project?		
How gender-balanced was the composition of the project management team, the Project Steering Committee (PSC), experts and consultants and the beneficiaries?		
Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)?	Desk review KIIs, group interviews and FGDs	
To what extent were socioeconomic benefits delivered taking into consideration the gender dimensions?		
E. Project implementation management		
E.1 Results-based management (RBM): Assessment of issues related to results-based work planning, results-based M&E and reporting based on results.		
E.1.1 Results-based work planning: Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.	Desk review KIIs and group interviews	▫ Logframe, annual work plans, M&E framework and tools, minutes of PSC meetings, PIRs, MTR, Board minutes, correspondence record with government and other organizations
Are there any annual work plans? Are work-planning processes results-based? Has the logframe been used to determine the annual work plan (including key activities and milestone)?		
Examine the use of the project's results framework/ logframe as a management tool and review any changes made to it since project start.		
Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners?		
Are they aligned or mainstreamed with national systems?		

Evaluation Criteria and Questions	Data Collection Methods	Sources
Do they use existing information? Are they efficient? Are they cost-effective?		▫ STAGL, project team
Are additional tools required?		
How could they be made more participatory and inclusive?		
Do project team and manager make decisions and corrective actions based on analysis from M&E system and based on results achieved?		
Is information on project performance and results achievement being presented to the PSC to make decisions and corrective actions?		
Do the project team and managers and PSC regularly ask for performance and results information?		
E.1.2 Results-based reporting: Assess how adaptive management changes have been reported by the project management and shared with the PSC.		
Assess how well the project team and partners undertake and fulfil donor and UNIDO reporting requirements (i.e. how have they addressed delays or poor performance, if applicable?)		
Assess how results and lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.		
E.2 Monitoring and evaluation, reporting: Refers to all the indicators, tools and processes used to measure if a development intervention has been implemented according to the plan (monitoring) and is having the desired result (evaluation).		
E.2.1 M&E at design: Was the M&E plan included in the project document? Was it practical and sufficient at the point of project approval?	Desk review	▫ Logframe, annual work plans, M&E framework and tools, minutes of PSC meetings, PIRs, MTR, survey reports
Did it include baseline data and specify clear targets and appropriate indicators to track environmental, gender, and socioeconomic results?		
Did it include a proper M&E methodological approach; specify practical organization and logistics of the M&E activities including schedule and responsibilities for data collection?		
Does the M&E plan specify what, who and how frequent monitoring, review, evaluations and data collection will take place?		
Is the M&E plan consistent with the logframe (especially indicators and sources of verification)?		
Does it allocate adequate budget for M&E activities?		

Evaluation Criteria and Questions	Data Collection Methods	Sources
E.2.2 M&E in implementation: How was the information from M&E system used during project implementation?	Desk review KIIs and group interviews	▫ Logframe, annual work plans, M&E framework and tools, minutes of PSC meetings, PIRs, MTR, survey reports ▫ STAGL, project team
Was an M&E system in place and did it facilitate timely tracking of progress toward project results by collecting information on selected indicators continually throughout the project implementation period?		
Did project team and manager make decisions and corrective actions based on analysis from M&E system and based on results achieved?		
Are annual/progress project reports complete, accurate and timely?		
Was the information provided by the M&E system used to improve performance and adapt to changing needs?		
Was information on project performance and results achievement being presented to the PSC to make decisions and corrective actions?		
Do the project team and managers and PSC regularly ask for performance and results information?		
Are monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impact in the logframe?		
Do performance monitoring and reviews take place regularly?		
Were resources for M&E sufficient?		
How has the logframe been used for M&E purposes (developing M&E plan, setting M&E system, determining baseline and targets, annual implementation review by the Project Steering Committee) to monitor progress towards expected outputs and outcomes?		
How well have risks outlined the project document and in the logframe been monitored and managed? How often have risks been reviewed and updated? Has a risk management mechanism been put in place?		
F. Performance of partners: Assessment of partners' roles and responsibilities engaged in the project.		
F.1 UNIDO		
Mobilization of adequate technical expertise for project design	Desk review KIIs and group interviews	▫ PIRs, exit strategy, MTR, Board minutes, correspondence record with
Inclusiveness of project design (with national counterparts)		
Previous evaluative evidence shaping project design		
Planning for M&E and ensuring sufficient M&E budget		

Evaluation Criteria and Questions	Data Collection Methods	Sources
Timely recruitment of project staff		government and other organizations ▫ UNIDO, STAGL, project team, government officials, In-consult, 3W Systems
Project modifications following changes in context or after the Mid-Term Review		
Follow-up to address implementation bottlenecks		
Role of UNIDO country presence (if applicable) supporting the project		
Engagement in policy dialogue to ensure up-scaling of innovations		
Coordination function		
Exit strategy, planned together with the government		
Review overall effectiveness of project management as outlined in the project document. Have changes been made and are they effective?		
Are responsibilities and reporting lines clear?		
Is decision-making transparent and undertaken in a timely manner?		
To what extent the project has a proper and operational governance system (e.g. PSC with clear roles and responsibilities)?		
Review whether the national management and overall coordination mechanisms have been efficient and effective.		
Did each partner have assigned roles and responsibilities from the beginning?		
Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions)?		
The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?		
F.2 National counterparts: Assessment of roles and responsibilities of national counterparts such as government ministries, NGOs, civil society and the private sector where appropriate.		
E.2.1 Design: Responsiveness to UNIDO's invitation for engagement in designing the project	Desk review KIIs and group interviews	▫ PIRs, Board minutes, correspondence record with government and other organizations
E.2.2 Implementation		
Ownership of the project		
Provide financial contribution as planned (cash or in-kind)		

Evaluation Criteria and Questions	Data Collection Methods	Sources
Support to the project, based on actions and policies		▫ UNIDO, STAGL, project team, government officials, WWF, In-consult, 3W Systems, GCWUS
Counterpart funding		
Internal government coordination		
Exit strategy, planned together with UNIDO, or arrangements for continued funding of certain activities		
Facilitation of the participation of NGOs, civil society and the private sector where appropriate		
Engagement with UNIDO in policy dialogue to promote the up-scaling or replication of innovations		
F.3 Implementing partner		
Timely recruitment of project staff	Desk review KIIs and group interviews	▫ PIRs, MTR, Board minutes, correspondence record with government and other organizations ▫ STAGL, project team, In-consult, 3W Systems
Suitable procurement procedures for timely project implementation		
Project modifications following changes in context or after the mid-term review		
Follow-up to address implementation bottlenecks		
Review overall effectiveness of project management as outlined in the project document.		
Have changes been made and are they effective?		
Are responsibilities and reporting lines clear?		
Is decision-making transparent and undertaken in a timely manner?		
To what extent the project has a proper and operational governance system (e.g. PSC with clear roles and responsibilities)?		
Review whether the national management and overall coordination mechanisms have been efficient and effective.		
Did each partner have assigned roles and responsibilities from the beginning?		
Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/ corrective actions)?		
F.4 Donor		
Timely disbursement of project funds	Desk review	▫ PIRs, Board minutes
Feedback to progress reports, including Mid-Term Evaluation, if applicable		

Evaluation Criteria and Questions	Data Collection Methods	Sources
Support by the donor's country presence (if applicable) supporting the project for example through engagement in policy dialogue	KIIs and group interviews	▫ STAGL, project team, In-consult, 3W Systems
G. Environmental and Social Safeguards (ESS), Disability and Human Rights		
G.1 Environmental safeguards		
Did the project use an environmental screening and assessment procedure?	Desk review KIIs and group interviews	▫ PIRs and MTR ▫ STAGL, project team, government officials, WWF, tannery owners, community members, In-consult, 3W Systems, GCWUS
To what extent did the project identify and realize opportunities to strengthen environmental sustainability?		
To what extent did the project assess adverse environmental impacts and risks?		
How did the project mitigate adverse environmental impacts and risks?		
G.2 Social safeguards, disability and human rights		
Did the project use a social screening and assessment procedure?	Desk review KIIs, group interviews and FGDs	
To what extent have poor, indigenous and physically challenged, women, men and other disadvantaged and marginalized groups benefited from the work of UNIDO in the country?		
To what extent did the project identify and realize opportunities to strengthen social sustainability?		
To what extent did the project assess adverse social impacts and risks?		
How did the project mitigate adverse social impacts and risks, based on the social safeguards specified in the UNIDO environmental and social safeguards policies and procedures (ESSPP) (which include human rights)?		
How did the project address disability inclusion?		

Annex 9. List of Documentation Reviewed

Year	
2024	MOCC Letter to Donors for Solar Power - July 2023 (1).jpg Final Notices Issued by CEO STAGL - Aug 2023 and Feb 2024.docx Events_2019_Analytics LeatherPanel.org Top Events 20190101-20191231.pdf Analytics LeatherPanel.org Top Events 20190101-20191231 (3).pdf Feedback How to Deal with Hydrogen Sulphide Gas (3).xlsx Online Feedback Survey (course evaluation) (1).xlsx STZ Project infrastructure components.docx STZ Project sources of funds 2016-2023.docx STZ Financial Arrangments.pptx 150052- 4th PSC MOM Complete.pdf 150052-Annexure 4- Revised LogFrame - v02- Final.pdf Monitoring Matrix.docx Presentation - UNIDO 16-02-2024.pptx STZ ByLaws Final 17-05-2019 R3 (3).pdf Construction by-Layws - CCA measure included.docx Safety Trainings- Urdu Version 02.pdf Safety Trainings.pdf General Guidelines on Occupational Health.docx Cleaner Leather Production Techniques to be adopted in Tanneries at STZ.docx
2023	GEFID_5666 -XXXVIII-DFT Success Story Plantation.pdf GEFID_5666-I- Training Report.docx GEFID_5666-II- Workshop Report.docx GEFID_5666-III- Awareness Raising Literature Distributed.pdf GEFID_5666-IV- Reports Prepared Under UNIDO.pdf GEFID_5666-IX- TanneryBenchmarkingExpertToRs.docx GEFID_5666-V- Project Pictorial Progress.pptx GEFID_5666-VI- Project Factsheet.pdf GEFID_5666-VII- STZ Funding Details - Cofinancing -Gaps.pdf GEFID_5666-VIII - GenderCommunity Mobilizer ToRs.pdf GEFID_5666-X- SolidWasteManagemnetToRs.docx GEFID_5666-XI- ToRsforPreShipmentInspections.pdf GEFID_5666-XII- CETPEquipmentInspectionReports.pdf GEFID_5666-XIII- CETPEquipDeliveryStatus.pdf GEFID_5666-XIV- List of GreenTanneryDesignsIssued.pdf GEFID_5666-XIX- 5thPSC-MOM.pdf GEFID_5666-XV- DDMPFlood22-23.pdf GEFID_5666-XVI- RECP Loan Scheme PGDP-PSIC.pdf GEFID_5666-XVII- List of TanneriesUnderConstructionSTZ.pdf GEFID_5666-XVIII- PriceEscalationCaseEDF.pdf GEFID_5666-XX- ConceptPaper-PIF-GEF8.pdf GEFID_5666-XXI- STAGLBOD-MOMs.pdf GEFID_5666-XXII- EDP CorrespondanceRecord.pdf GEFID_5666-XXIII- PSIC CorrespondanceRecord.pdf GEFID_5666-XXIV- SCCI Correspondances.pdf GEFID_5666-XXIX-MoU STAGL-GCWUS.pdf GEFID_5666-XXV- NoticetoTanneriesEDP-STAGL.pdf GEFID_5666-XXVI- LoanSchemes&MoUPSIC.pdf GEFID_5666-XXVII- STZCETPOperationsTeam.pdf

	GEFID_5666-XXVIII-CETP-SpareParts.pdf GEFID_5666-XXX- WorldBankMissionEmail.pdf GEFID_5666XXXI- Correspondance with Contractors.pdf GEFID_5666-XXXII- NewspapersPrintMediaCoverage.pdf GEFID_5666-XXXIII- Twitter.pdf GEFID_5666-XXXIV- EidUlAzha2023Awareness.pdf GEFID_5666-XXXV- TUSSDC.pdf GEFID_5666-XXXVI- GEO MAP.pdf **150052_5666_ProDoc_approval\Annexes\TOR_CETP\150052** Annex_J_CETP_conceptualDesign.pdf Annex_L_TOR21_CETP_v3.docx CETP_TOR_21_Annex_workPlan.docx TOR_CETP_Annex_NEQS Final Document 01.03.2016.docx TOR21_CETP_STZ.docx NEQS EPA.pdf ANNEX_A_LogicalFramerwork.doc Annex_A_Project Results Framework.docx Annex_F_Budget.xlsx Annex_G_WorkPlan_v2.xls Annex_H_Final STZ CSA March 2015-1.pdf Annex_I_Final EIA Report of STZ.pdf Annex_J_CETP_conceptualDesign.pdf Annex_K_UNIDO_CETP_references.pdf Annex_L_TOR21_CETP.docx Annex_L_TOR21_CETP.pdf Annex_L_TOR21_CETP_v2.docx Annex_L_TOR21_CETP_v2.pdf Annex_L_TOR21_CETP_v3.docx Annex_M_STAGL_CoFinancingLetter.pdf Annex_MoCC_EndorsementLetter.jpg Annex_MoCC_EndorsementLetter.pdf Annex_N_overview_of_technologies.doc Annex_N_overview_of_technologies.pdf Annex_O_Endorsement_Letter_FMoCC.pdf Annex_O_UNIDO_CoFinancing.docx Annex_O_UNIDO_Cofinancing.pdf CETP_TOR_21_Annex_workPlan.docx ProDoc_ListofAnnexes.docx ProDoc_ListofAnnexes_b.docx ProDoc_ListofAnnexes_b.pdf TOR_CETP_Annex_NEQS Final Document 01.03.2016.docx Annex_STAGL_CO-FINANCE_letter.JPG CCA Tracking Tool_Pakistan_150052_ 5666.xls Co-financing Letter GEF 3 June-15.jpg Letter_of_Commitment UNIDO - SCCF December 2015.pdf 5666_CEO endorsement letter.pdf 5666_Council letter_approval.pdf 5666-2015-12-14-111532-GEFReviewSheetGEF52 (2).pdf UNIDO GEF-5 CEO end Pakistan 5666 signed re-submission_final_01Dec2015.doc UNIDO GEF-5 CEO end Pakistan 5666 signed re-submission01December2015.pdf ANNEX_A_LogicalFramerwork_Sabine.doc

	Revised_logframe\150052_revised LogFrame_updated 23062021.docx GEF_Progress_Report_2023\5666_2023_PIR_UNIDO_Pakistan.pdf
2022	GEF_Progress_reports_2022\150052-PIR _FY22_MSP and FSP R03.docx GEF_Progress_reports_2022\150052-PIR _FY22_MSP and FSP R07.docx GEF_Progress_reports_2022\150052-PIR _FY22_MSP and FSP R08.docx GEF_Progress_reports_2022\150052-PIR _FY22_MSP and FSP R08_as_hbs.docx GEF_Progress_reports_2022\150052-PIR _FY22_MSP and FSP R09.docx **Annexes:** Anx-I- Workshop Report.pdf Anx-II -Training Report.pdf Anx-III- Reports Prepared Under UNIDO.pdf Anx-IV - Awareness Raising Literature Distributed.pdf Anx-V-DDMP 2021.pdf Anx-VI- CETP Suggestions with Technical Justification.pdf Anx-VII - CETP Inspection Reports.pdf Anx-VIII- Sigra Report.pdf Anx-X - 4th PSC minutes.pdf Anx-XI - Minutes of Meetings & Activity Reports.pdf Anx-XII -STAGL Brochure.pdf Anx-XIII - Co-Financing Details.pdf Anx-XIV - CETP LOA.pdf Anx-XV- Logical Frame Work.pdf Anx-XVI - EIA Report of STZ.pdf Anx-XVII - STZ CSA.pdf
2021	PIR FY21_MSP and FSP_ finaldocx Comments MS_f.docx PIR FY21_MSP and FSP_ finaldocx.docx PIR FY21_MSP and FSP_ V 03.docx ProgReport_FY20_final_03082021.docx 160069_Annex_budget_expenditure_as 30062021.pdf Early Start GEF Implementation Reporting Exercise for Fiscal Year 2021 (1 July 2020 30 June 2021).msg PIR Template_FY21_MSP and FSP.docx RE 150052 - 160069 progress reports + PSC.msg Annexes: 150052_Project Delivery Report as of 03062021.pdf Anx - I- Reports Prepared Under UNIDO.pdf Anx-II- Workshop Report.pdf Anx-III-Training Report.pdf Anx-IV- Green Tannery Design.pdf Anx-V- Letter of Award Acceptance - CETP Civil Works - 14.09.2020.pdf Anx-VI - CETP Civil Works.pdf Anx-VII - CETP Electromechanical Works Tender Notice.pdf Anx-VIII - CETP Electromechanical Works Pre Bid Meeting.pdf Anx-IX- CETP Electromechanical Works - Tech Bid Evaluation Report.pdf Anx-X - CETP Electromechanical Works - Committee meeting.pdf Anx-XI- CETP Electro-Mechanical – Financial Evaluation Report.pdf Anx-XII- PCI for STZ under PSCI - PGDP.pdf Anx-XIII - Dugri Drain GIS Mapping.pdf Anx-XIV- letter of consent to MoCC.pdf

	Anx-XV - Details of Literature Distributed.pdf Anx-XVI - Awareness Banners on Hides Skin Preservation (1).pdf
2020	150052_ProgReport_FY20_finalDraft.docx 150052_Project_Delivery_Report_30062020.pdf Annex CETP Electromechanical Tender Notices 7 July 2020 Nationwide.pdf GEF_Progress_reports_2020\Annexes\CETP Tender Documents- 2020.pdf GEF_Progress_reports_2020\Annexes\STAGL - Extension Request to UNIDO.pdf GEF_Progress_reports_2020\Annexes\STZ Construction ByLaws Final.pdf GEF_Progress_reports_2020\Annexes\STZ Final Report CETP EIA Report.pdf GEF_Progress_reports_2020\Annexes\TORs for CCA Expert- R001.pdf GEF_Progress_reports_2020\Annexes\TORs for Solid Waste Management - R02.pdf Annexes Knowledge management (GEF_Progress_reports_2020\Annexes\KM) Anx - I- Details of Reports Prepared Under UNIDO.pdf Anx-II- Details of Workshop Report.pdf Anx-III-Details of Training Report.pdf Anx-IV- Details of Literature Distributed.pdf Anx V STAGL Brochure.pdf Anx -VI Pakistan Leather Show - magazine 2020.pdf Anx - VII a Safety Trainings- English Version.pdf Anx - VII b Safety Trainings- Urdu Version 02.pdf Annexes Stakeholders MoM 1st PSC - Minutes of Meeting.pdf 2nd PSC- Minutes of Meeting.pdf 3rd PSC - Minutes of Meeting - Approved by MoCC.pdf 150052- Typical Tannery Design Guidelines- Activity Report v003.pdf 150052- Workshop CCA Report V04.pdf Workshop Report - BAT 18 Sep 2019.pdf District Administration - NDMA MIRA Letter.pdf District Administration- Correspondence Letters.pdf District Administration- Minutes of Meeting - Commissioner Office.pdf EDF Additional Fund Letter 17 09 2019.pdf EDF Letter Minutes of 14 meeting 13.01.2020.pdf EDF- Minutes of Meeting - approval of additional funds.pdf EPD- EIA CETP- Minutes of Meeting of Public Hearing Session.pdf EPD -Invitation Letter for Public Hearing.pdf NOC for WWF 23.07.2019.pdf PGDP - Correspondence letters with Industries Dept.pdf PGDP -Letter- PSIC.pdf Templates (*not relevant for the end term evaluation*) Co-financing template for MTR and TE_FY20.doc Core Indicator template for MTR and TE_FY20.docx MTR_FY20 .docx MTR_FY20 _Explanations.docx PIR_FY20 .docx PIR_FY20 _Explanations.docx PIR_FY20_EA .docx

	PIR_FY20_EA_Explanations.docx TE_FY20 _Explanations.docx TE_FY20.docx UNIDO_Projects list_FY20.xlsx
2019	150025-Workshop Details.pdf 150052 - Mid Term Report (Jan -June 2019) R01F.docx 150052 - Mid Term Report (Jan -June 2019) R01F.pdf 150052 - Report -Workshop on CETP for STZ Project - (28Sep2018).pdf 150052- Annual Progress Report(Jan-Dec 2019)-R09.pdf 150052- AR Report(Jan-Dec 2019)-R09 - Cp.docx GEF_Progress_reports_2019\150052 STAGL Brochure.pdf **GEF_Progress_reports_2019** 150052- Training Details.pdf ProgRep_FY19.doc 150052_OSH Workshop Report v006.pdf 150052-BAT_BEP workshop Report v002.pdf 150052-Minutes from Second PSC_24Nov18_v01.docx 150052-STAGL Newsletter (1).pdf Annex_delivery_150052.docx Annex_delivery_150052_5666.pdf Annexures Complete.pdf District Disaster Management Plan.pdf PIR Template_FY19 (150052-5666) R004.docx UNIDO_FY19 Template for Implementation Module_AGR.xlsx UNIDO_FY19 Template for Implementation Module_AGR_IK.xlsx

Annex 10. List of Stakeholders Consulted

Name	Position
Zulfiqar Ahmed Hayat	CEO STAGL
Muhammad Atif	UNIDO Project Director
Adeel Sohail	UNIDO Effluent treatment expert / coordinator
Ivan Kral	UNIDO Project Manager
Jonathan Eischen	UNIDO project evaluation team
Elham Mc Manus	UNIDO Independent Evaluation Division
Malik Naseer	Chairman STAGL
Syed Kamal Abid	Head Sialkot, Rescue 1122
Muhammad Waseem	Public Relations Officer, Rescue 1122
Dr Adeel Mehmood	Head of Department, Environmental Sciences, Government College Women University, Sialkot (GCWUS)
Dr Afshan Urooj	Assistant Professor, Department of Environmental Sciences, Government College Women University, Sialkot (GCWUS)
Dr Zarrin Fatima Rizvi	Vice Chancellor, Government College Women University, Sialkot (GCWUS)
Ahsan Javed	Technical Director In Consult
Khawaja Imran	Director Planning, Punjab Small Industries Corporation (PSIC)
Arshad Mahmood Malik	CEO, 3W Systems, CETP Contractor
Muhammad Saqib	General Manager (Technical), 3W Systems, CETP Contractor
Iqbal Pir Sheikh	CEO In-consult, STZ Consultant Master Planner
Ahsan Javed	Technical Director, In-consult, STZ Consultant Master Planner
Khalid Rasool	Director Sialkot, Trade Development Authority of Pakistan (TDAP)
Waseem Cheema	Deputy Director, Environment Protection Department (EPD), Government of The Punjab
Nadia Aftab	UNIDO Country Representative
Adeel Younis	Manager FW/ILES, World Wide Fund for Nature (WWF)
Group interviews	Group 1: tanneries that started production in the STZ
Group interviews	Group 2: those who have started construction but not production
Focal group discussions	Local stakeholders (women and men separate)
Joint Secretary	Focal Person, Climate Finance Unit, Federal Ministry of Climate Change and Environmental Coordination (MOCC)
Group interviews	Group 3: 3-4 tanners who have not yet started construction (who may be experiencing issues in shifting)

Annex 11. Project Theory of Change Background Discussion on the Logframe

Outcome 1.1 is phrased as "Regulatory and strategic urban planning frameworks to improve industrial-community co-existence, resiliency against climate change and gender equality are strengthened." This formulation may be queried with reference to a question included in Annex 2 of the UNIDO *Evaluation Manual* under project results framework/logframe, which asks, "Do outcomes describe change in target group's behaviour/performance or system/institutional performance?"

The answer is in the negative. This observation may be elaborated with the help of RBM guidelines available from the United Nations Development Programme, which state that:[46]

> An outcome statement should avoid phrases such as "to assist/support/develop/monitor/identify/follow up/prepare X or Y." Similarly, an outcome should not describe how it will be achieved and should avoid phrases such as "improved through" or "supported by means of."

The effective part of the outcome 1.1 statement would be "Industrial-community co-existence, resiliency against climate change and gender equality are improved." This change would be expected to follow from an outcome embedded at present in outcome 1 that is aimed at strengthening regulatory and strategic urban planning frameworks. This may be treated as an immediate outcome focusing on institutional strengthening and capacity development that is directly generated by outputs 1.1.1 and 1.1.2.

It may be useful for conceptual reasons as well as a balanced evaluation to make appropriate use of the difference between immediate and intermediate outcomes that is elaborated in Global Affairs Canada's RBM guidelines:[47]

> Immediate (short-term) outcome – change in capacities: A change that is expected to occur once one or more outputs have been provided or delivered by the implementer. In terms of time frame and level, these are short-term outcomes, and are usually changes in capacity, such as an increase in knowledge, awareness, skills or abilities, or access to … among intermediaries and/or beneficiaries. Note: Changes in access can fall at either the immediate or intermediate outcome level, depending on the context of the project and its theory of change.
>
> Intermediate (medium-term) outcome: A change that is expected to logically occur once one or more immediate outcomes have been achieved. In terms of time frame and level, these are medium-term outcomes that are usually achieved by the end of a project, and are usually changes in behaviour, practice or performance among intermediaries and/or beneficiaries.

[46] See UNDP 2009. *Handbook on Planning, Monitoring and Evaluating for Development Results* (p. 57). Available at http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf.
[47] Global Affairs Canada 2016. *Results-Based Management for International Assistance Programming at Global Affairs Canada: A How-to Guide, Second Edition* (pp. 16 and 17). Available at http://www.international.gc.ca/world-monde/assets/pdfs/funding-financement/results_based_management-gestion_axee_resultats-guide-en.pdf.

With this distinction between two levels of outcomes:

- The logframe indicators for the project's outcome 1.1, if queried in view of standard RBM guidelines, may be equated with indicators of change in capacity, an immediate outcome as defined above. The outputs suggest that they are intended to lead to institutional strengthening and capacity development of strategic urban planning frameworks.
- This leaves the effective part of the outcome 1.1 statement ("Industrial-community co-existence, resiliency against climate change and gender equality are improved") without indicators. The matter is further complicated by the fact that "resiliency against climate change" is also part of the project objective, which is at a higher level than outcome 1.1
- The project's outcome 2.1, as evidenced by its formulation, indicators and outputs, is also an immediate outcome.
- Outcome 3.1, judged by its indicators and outputs, is partly an immediate outcome associated with changes in capacity and partly an intermediate outcome with changes in the practices of tanneries.
- The indicators and outputs of outcome 3.1 suggest that it needs to be split as:
    - Outcome 3.1.a: Awareness of recommended management practices and technologies among targeted tanneries and STZ stakeholders is increased. This is an immediate outcome, a change in capacity.
    - Outcome 3.1.b: Access to CETP and the Dugri Drain as a treated-water discharge system for targeted tanneries is established. This is also an immediate outcome, one resulting from the completion of the CETP and rehabilitation of the Dugri Drain.
    - Outcome 3.1.c: Practices for reducing water use and effluent discharge are adopted by targeted tanneries. This is an intermediate outcome resulting from immediate outcomes 3.1.a and 3.1.b.

Turning now to the project objective ("Contribute to reducing economic losses and increasing the resiliency of Pakistan's industrial and agricultural sectors against climate change"), it is observed that:

- It overlaps, as indicated above, with outcome 1.1's "increasing the resiliency" part.
- The indicators associated with the objective are for reduced pollution in waste water, which is not an explicit element of the project objective.
- There are no indicators for the reduced economic losses and increased resilience that are explicitly mentioned on the objective.

Annex 12. Primary Data Collection Instruments

1. Research ethics

The evaluation team will uphold the principles of voluntary participation, confidentiality, do no harm, and respect. Each interaction will start with an introduction of the evaluation team and the purpose of the evaluation (to assure accountability, support management and drive learning and innovation).

At each meeting, the team will explain the nature of the study to the respondents and describe the advantages and risks of participation. Furthermore, they will inform the participants that their participation is fully voluntary, and they can withdraw their participation at any time during or after the interview.

Oral informed consent will be obtained from the participants before the start of a meeting. All personal information collected throughout the course of the fieldwork will be kept confidential. This information will not be shared with anyone not on the research team, and all data will be anonymised before it is shared with a third party through the evaluation report or any other means.

The research will not involve any situation that might result in physical or emotional harm to the respondents as a result of their participation in the research. All personnel involved in data collection must respect the right of others to hold values, attitudes, and opinions that differ from their own and must observe cultural norms.

2. Discussion points for the project director

Progress to impact

If you agree, we would like to start by understanding the long-term effects of the project on the community, its economy and the environment.

2.1. Which groups of people are the beneficiaries of the project and what kind of benefits (not inputs) have they received – or likely to receive – as a result of the project? *[Prompts: higher or more secure income, employment, training, health benefits, land values]*

2.2. Which groups, if any, have been adversely affected and in what ways?

2.3. What can we say about the environmental impact of the project? *[Prompts: reduced pollution, protection from floods, resilience for climate change]*

2.4. To what extent have entities outside the project – businesses, projects and government organizations – taken any useful steps based on project experiences? *[Prompts: technology adoption, scaling up, laws, policies, regulations]*

Project design

Overall design

2.5. Why was this project needed and why does it have the components and activities it has? What experiences influenced its design?

2.6. What do you think it has been missing? What kind of mistaken assumptions made their way into project design?

2.7. In addition to your own experience, what were the sources of ideas that helped prepare the project design? *[Prompts: SCCI, UNIDO, customers, beneficiaries]*

Project results framework/logframe

2.8. What would you say are the main features of the project logframe?

Project performance and progress towards results

Effectiveness

2.9. While the project monitoring matrix gives a comprehensive report on targets and achievements, we would like to understand how you see progress in terms of outcomes:

- Outcome 1.1: Regulatory and strategic urban planning frameworks to improve industrial-community co-existence, resiliency against climate change and gender equality are strengthened
- Outcome 2.1: Awareness among targeted community groups and leather business owners on the need to introduce CCA concepts/practices is raised
- Outcome 3.1: Water availability for agricultural use around the STZ is increased

Please share any evidence you have in support of your assessment.

2.10. What factors (internal or external to the project) facilitated and hindered progress in achieving outputs and outcomes? In what ways did project partners and stakeholders help?

2.11. How does the project ensure the quality of its outputs? What evidence is available on quality?

2.12. How does the project obtain and assess beneficiary feedback? What does it tell us?

Sustainability of benefits

2.13. Please help us identify the benefits generated – or likely to be generated – by the project.

2.14. How do you think the beneficiaries will sustain these benefits? What kind of help have they received (or could receive) from the project and its partners and stakeholders?

2.15 What are the risks to the sustainability of project outcomes?

2.16. What is the status of the exit strategy? What are its main points and to what extent have actions been taken on them?

Relevance

2.17. Do you think the project is a technically adequate solution to the development problem? Does it eliminate the cause of the problem?

2.18. To what extent is it still relevant to the beneficiaries and the government?

Coherence

2.19. To what extent has the project ensured complementarity, harmonization and coordination with other relevant actors and projects and avoid duplication?

Efficiency

2.20. To what extent have the inputs from the donor, UNIDO and government been provided as planned, and were they adequate to meet the requirements?

2.21. What factors (internal or external to the project) influenced the timeliness of delivery compared with the original timeframe? What steps did the project take to mitigate the effects of delays?

2.22. What is your assessment of the unit costs of project outputs and administration in comparison with similar projects?

2.23. What steps does the project take to ensure cost effectiveness and with what results? Please give examples.

Project implementation management

Results-based management (RBM)

Results-based work planning

2.24. What kind of changes were made to the logframe during implementation and why?

2.25. Please explain the project's work-planning process and the extent to which it is based on the project logframe.

2.26. To what extent do project management and the PSC review performance and results information and use it in their decisions, particularly for course corrections? Please give examples.

Results-based reporting

2.27. To what extent has the project met donor and UNIDO reporting requirements over time (for example, for addressing delays or poor performance, if applicable)?

2.28. To what extent have results and lessons derived from the adaptive management process been documented, shared with key partners and internalized by partners? Please give examples.

Monitoring and evaluation, reporting

M&E in implementation

2.29. How quickly did the project put its M&E system in place? What kind of difficulties were encountered in developing and implementing it and how were they overcome?

2.30. To what extent are the annual/progress project reports complete, accurate and timely? Who is responsible for quality assurance?

2.31. How are M&E-related studies, surveys and the MTR designed, outsourced and supervised, and how is quality assurance undertaken?

2.32. To what extent have project management and the PSC used the M&E system, particularly for monitoring progress towards expected outputs and outcomes?

2.33. Has the project put in place a risk management mechanism? To what extent have risks been monitored and managed?

Performance of partners

UNIDO

2.34. To what extent did UNIDO support the project through provision of technical expertise for project design, engaging with national counterparts in the design process, contributing previous evaluative evidence for shaping project design, planning for M&E and ensuring sufficient M&E budget, and timely recruitment of project staff?

2.35. How did UNIDO facilitate project modifications following changes in context and after the MTR?

2.36. In what ways did UNIDO support coordination, policy dialogue for scaling up innovations, and an exit strategy with government participation?

2.37. How efficient, timely and effective was UNIDO HQ-based management, coordination, monitoring, quality control and technical input (e.g. problems

identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?

National counterparts

2.38. To what extent and what effect did the project engage with national counterparts such as government organizations, non-profit entities, and the private sector (other than project consultants)?

2.39. To what extent did national counterparts support the project through financial contributions, technical expertise, policy dialogue, formulating an exit strategy, and other supportive actions?

Implementing partner

2.40. To what extent was the project successful in the timely recruitment, capacity development and retention of project staff? What difficulties did it face and how did it overcome them?

2.41. What kind of procurement procedures has the project used to ensure transparency, value for money, and timely project implementation?

2.42. To what extent did the project accept and implement MTR recommendations? What kind of recommendations proved difficult to implement, and why?

2.43. To what extent did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/ corrective actions)?

Donor

2.45. To what extent did the donor ensure timely disbursement of project funds and provide feedback on progress reports and the MTR?

2.46. To what extent did the donor provide support through its country presence (for example, through engagement in policy dialogue)?

Environmental and Social Safeguards (ESS), Disability and Human Rights

Environmental safeguards

2.47. To what extent did the project identify and realize opportunities to strengthen environmental sustainability?

2.48. To what extent did the project assess and mitigate adverse environmental impacts and risks?

Social safeguards, disability and human rights

2.49. To what extent did the project identify and realize opportunities to strengthen social sustainability?

2.50. To what extent did the project assess and mitigate adverse social impacts and risks, based on the social safeguards specified in the UNIDO environmental and social safeguards policies and procedures (ESSPP), which include human rights?

2.51. In what ways and to what effect did the project address disability inclusion?

Gender mainstreaming

2.52. Is the gender marker assigned to this project representative of reality?

2.53. Was a gender analysis included in a baseline study or needs assessment (if any)? Were there gender-related project indicators?

2.54. Are women/gender-focused groups, associations or gender units in partner organizations consulted/ included in the project?

2.55. How gender-balanced was the composition of the project management team, the PSC, experts and consultants and the beneficiaries?

2.56. What steps did the project take for promoting women's participation in project activities and the leather industry?

2.57. Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)?

2.58. To what extent were socio-economic benefits delivered taking into consideration the gender dimensions?

Lessons and recommendations

2.59. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

3. Discussion points for the chairman and chief executive officer of STAGL

Progress to impact

3.1. If you agree, we would like to start by asking what you see as the long-term effects of the project on the community, its economy and the environment.

Project design

3.2. In what ways was this project important for Sialkot when it was designed?

3.3. What does the project have to do to make sure that it is responding to what was needed?

Project performance and progress towards results

Effectiveness

3.4. Please share your assessment of progress in terms of outcomes:

- Outcome 1.1: Regulatory and strategic urban planning frameworks to improve industrial-community co-existence, resiliency against climate change and gender equality are strengthened
- Outcome 2.1: Awareness among targeted community groups and leather business owners on the need to introduce CCA concepts/practices is raised
- Outcome 3.1: Water availability for agricultural use around the STZ is increased

3.5. What factors (internal or external to the project) facilitated and hindered progress in achieving outputs and outcomes? In what ways did project partners and stakeholders help?

Sustainability of benefits

3.6. How do you see the future of STAGL, the STZ project and its beneficiaries?

Relevance

3.7. To what extent is the project still relevant to the beneficiaries and the government?

Coherence

3.8. How has the project coordinated with other relevant actors and projects and avoided duplication?

Efficiency

3.9. How does the project ensure cost effectiveness and with what results?

Project implementation management

3.10. To what extent have you found project monitoring, evaluation and reporting to be useful?

Performance of partners

3.11. In what ways have you received significant support from UNIDO, the government, the business community and donors? To what extent have some of them hindered the project?

Environmental and Social Safeguards (ESS), Disability and Human Rights

3.12. What steps have you taken to ensure that the project implements environmental and social safeguards?

Gender mainstreaming

3.13. What steps have you introduced to increase women's participation in the project and the industry?

3.14. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

4. Discussion points for tannery owners

Progress to impact

4.1. Please tell us about your products and customers and the size of your business.

4.2. Where is your tannery located now, what is the size of the land on which it is constructed, and was it previously in a different location?

4.3. In what way has the project affected your business and wellbeing? *[Prompts: higher or more secure income, employment, training, health benefits, land values]*

4.4. Which groups of people do you think have benefitted the most from the project and which ones the least?

4.5. In what way, if any, have you or others you know been adversely affected by project?

4.6. What environmental impact of the project, if any, has affected you or your tannery? *[Prompts: reduced pollution, protection from floods, resilience for climate change]*

Project performance and progress towards results

Relevance

4.7. What kind of project activities do you think respond to your needs and priorities? What else could the project have done – or done differently – to respond to your priorities?

Effectiveness

4.8. What kind of project activities have you been involved in? *[Prompt: include support provided by project partners]*

4.9. Let us discuss the extent to which you think the project has helped tannery owners and their employees:

- To what extent has the project helped improve your access, awareness, knowledge and skills? *[Prompts: adverse impacts of climate change and*

appropriate responses; water and energy conservation and flood management; gender equality]

- To what extent has the project helped improve your practices and behaviour? *[Prompts: appropriate responses; water and energy conservation and flood management; gender equality]*

4.10. What are the limitations of what the project is doing to help the tanneries?

Efficiency

4.11. What are your views about the efficiency of the project and the timeliness of its actions?

4.12. What factors outside the project have affected the efficiency of your activities and shifting to the STZ?

Sustainability of benefits

4.13. How do you plan to sustain the benefits you have received from the project, once the project ends in a few weeks?

4.14. What kind of help have you received (or expect to receive) from the project for sustaining the benefits?

5. Discussion points for FGDs with potential beneficiaries in the community

Progress to impact

5.1. In what way has the project affected your wellbeing? *[Prompts: higher or more secure income, employment, training, health benefits, land values]*

5.2. Which groups of people in the community do you think have benefitted the most from the project and which ones the least?

5.3. In what way, if any, have you or others you know been adversely affected by project?

5.4. What environmental impact of the project, if any, has affected you? *[Prompts: reduced pollution, protection from floods, resilience for climate change]*

Project performance and progress towards results

Relevance

5.5. What kind of project activities do you think respond to your needs and priorities? What else could the project have done – or done differently – to respond to your priorities?

Effectiveness

5.6. What kind of project activities have you been involved in? *[Prompt: include support provided by project partners]*

5.7. Let us discuss the extent to which you think the project has helped tannery owners and their employees:

- To what extent has the project helped improve your access, awareness, knowledge and skills? *[Prompts: adverse impacts of climate change and appropriate responses; water and energy conservation and flood management; gender equality]*
- To what extent has the project helped improve your practices and behaviour? *[Prompts: appropriate responses; water and energy conservation and flood management; gender equality]*

5.8. What are the limitations of what the project is doing to help the community?

Efficiency

5.9. What are your views about the efficiency of the project and the timeliness of its actions?

6. Discussion points for Environment Protection Department

6.1. Please tell us about EPD's involvement with the project and how it has supported and regulated project initiatives.

6.2. What is your assessment of project design and implementation arrangements?

6.3. What are the main strengths and limitations of the project in relation to its objective and outcomes?

6.4. What have been the benefits of EPD's support for the project, the government and the leather industry?

6.5. What kind of difficulties did you encounter in your engagement with the project, and how were they managed?

6.6. What is EPD's role in facilitating the sustainability of project initiatives, and is it likely to be successful?

6.7. What more could be done to strengthen the effectiveness and sustainability of the project?

6.8. How do you see the future of STAGL, the STZ project and its beneficiaries?

7. Discussion points for Rescue 1122

7.1. Please tell us about 1122's cooperation with the project.

7.2. What have been the benefits of this cooperation for 1122, the project, the community and the leather industry?

7.3. What kind of difficulties did you encounter during your cooperation, and how were they managed?

7.4. How do you think the benefits of your cooperation could be sustained once the project ends in a few weeks?

8. Discussion points for Government College Women University, Sialkot

8.1. Please help us understand the purpose of your collaboration with the STZ project and how this is reflected in the objectives of the MOU between the two parties.

8.2. What kind of activities did your institution undertake as part of its collaboration with the STZ project?

8.3. What have been the benefits of this collaboration and how do they relate to the objectives of the MOU between the two parties?

8.4. What were the contributions of the parties that helped generate these benefits?

8.5. What kind of difficulties did you face in making progress and how were they resolved?

8.6. What more could be done to strengthen the effectiveness and sustainability of your support to the STZ project?

9. Discussion points for Trade Development Authority of Pakistan

9.1. Please tell us about TDAP's involvement with the project and how it has supported project initiatives.

9.2. What is your assessment of project design and implementation arrangements? How different is this project from others that the TDAP generally comes across?

9.3. What are the main strengths and limitations of the project in relation to its objective and outcomes?

9.4. What have been the benefits of TDAP's support for the project, the government and the leather industry?

9.5. What kind of difficulties did you encounter in your engagement with the project, and how were they managed?

9.6. What is the TDAP's role in facilitating the sustainability of project initiatives, and is it likely to be successful?

9.7. What more could be done to strengthen the effectiveness and sustainability of the project?

9.8. How do you see the future of STAGL, the STZ project and its beneficiaries?

9.9. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

10. Discussion points for STZ Consultant Master Planner, In-consult, and the CETP Contractor, 3W Systems [48]

Progress to impact

10.1 What difference do you think the project has made to the beneficiaries?

10.2 To what extent are the project's specific results (for example methodology, technology or lessons learned) reproduced or adopted?

10.3. To what extent are the project's initiatives and results implemented at larger geographical scale?

10.4. What positive and negative long-term effects do you foresee from the project?

Project design

Overall design

10.5 Was the project design adequate to address the problems at hand?

10.6. Does it meet the needs of the target group?

10.7. Does it adequately reflect lessons learnt from past projects?

10.8 Is the design technically feasible and based on best practices?

10.9. What do you think it has been missing? What kind of mistaken assumptions made their way into project design?

10.10. Does UNIDO have in-house technical expertise and experience for this type of intervention?

10.11. To what extent is the project design (in terms of funding, institutional arrangement, implementation arrangements, etc.) as foreseen in the project document still valid and relevant?

[48] The discussion will be limited to the consultant's scope of work.

Project performance and progress towards results

Effectiveness

10.12. What in your opinion are the main outputs and outcomes of the project so far?

10.13. What factors (internal or external to the project) facilitated and hindered progress in achieving outputs and outcomes? In what ways did project partners and stakeholders help?

10.14. How does the project ensure the quality of its outputs? What evidence is available on quality?

10.15. What can be done to make the project interventions more effective (more likely to meet their objectives)?

Sustainability of benefits

10.16. How do you think the beneficiaries will sustain the tannery-level and common facilities and their benefits?

10.17. What kind of help have they received (or could receive) from the project and its partners and stakeholders?

10.18. What are the risks to the sustainability of project outcomes?

Relevance

10.18. How does the project fulfil the urgent target group needs?

10.19. Do you think the project is a technically adequate solution to the development problem? Does it eliminate the cause of the problem?

10.20. To what extent is it still relevant to the beneficiaries and the government?

Efficiency

10.21. What factors (internal or external to the project) influenced the timeliness of delivery compared with the original timeframe? What steps did the project take to mitigate the effects of delays?

10.22. What is your assessment of the unit costs of project outputs and administration in comparison with similar projects?

Environmental and Social Safeguards (ESS), Disability and Human Rights

Environmental safeguards

10.23. To what extent did the project identify and realize opportunities to strengthen environmental sustainability?

10.24. To what extent did the project assess and mitigate adverse environmental impacts and risks?

Lessons and recommendations

10.25. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

11. Discussion points for Punjab Small Industries Corporation

11.1. Please tell us about PSIC's involvement with the project and how it has supported project initiatives.

11.2. What is your assessment of project design and implementation arrangements? How different is this project from others that PSIC generally comes across?

11.3. What are the main strengths and limitations of the project in relation to its objective and outcomes?

11.4. What have been the benefits of PSIC's support for the project, the government and the leather industry?

11.5. What kind of difficulties did you encounter in your engagement with the project, and how were they managed?

11.6. What is PSIC's role in facilitating the sustainability of project initiatives, and is it likely to be successful?

11.7. What more could be done to strengthen the effectiveness and sustainability of the project?

11.8. How do you see the future of STAGL, the STZ project and its beneficiaries?

12. Discussion points for World Wide Fund for Nature

12.1. Please tell us about WWF's cooperation with the project.

12.2. What have been the benefits of this cooperation for WWF, the project, the community and the leather industry?

12.3. What kind of difficulties did you encounter during your cooperation, and how were they managed?

12.4. How do you think the benefits of your cooperation could be sustained once the project ends in a few weeks?

12.5. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

13. Discussion points for Federal Ministry of Climate Change and Environmental Coordination

13.1. Please tell us about the Ministry's involvement with this project.

Progress to impact

13.2. What do you see as the long-term effects of the project on the community, its economy and the environment?

Project design

13.3. What is your assessment of project design and implementation arrangements?

13.4. What are the main strengths and limitations of the project in relation to its objective and outcomes?

Project performance and progress towards results

Effectiveness

13.5. Please share your assessment of the progress made by the project.

13.6. What factors (internal or external to the project) do you think facilitated and hindered progress in achieving outputs and outcomes? In what ways was the Ministry able to help?

Sustainability of benefits

13.6. How likely is it that the benefits of the project will be sustained once the project comes to an end in a few weeks?

13.7. What could be done to enhance sustainability?

Relevance

13.8. To what extent is the project still relevant to the beneficiaries and the government?

Coherence

13.9. To what extent has the project coordinated with other relevant actors and projects and avoided duplication?

Efficiency

13.10. What is your assessment of the efficiency of the project?

Lessons and recommendations

13.10. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

14. Discussion points for the UNIDO Country Representative

Progress to impact

14.1. What do you see as the long-term effects of the project on the community, its economy and the environment?

Project design

14.2. What are the main strengths and limitations of the project in relation to its objective and outcomes?

Project performance and progress towards results

Effectiveness

14.3. Please share your assessment of the progress made by the project.

Sustainability of benefits

14.4. How likely is it that the benefits of the project will be sustained once the project comes to an end in a few weeks?

14.5. What could be done to enhance sustainability?

Relevance

14.6. To what extent is the project still relevant to the beneficiaries and the government?

Coherence

14.7. To what extent has the project coordinated with other relevant actors and projects and avoided duplication?

Efficiency

14.8. What is your assessment of the efficiency of the project?

Lessons and recommendations

14.9. What kind of lessons do you find in this project, and what kind of recommendations would you like to offer?

Annex 13. UNIDO-GEF Project Achievements 2016-2024

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
Development goal: Contribute to reducing economic losses and increasing the resiliency of Pakistan's industrial and agricultural sectors against climate change																					
1	Tons of COD, BOD and suspended solids removed from waste water by 2026 – ENV.2	Metric tons	0																		
	* COD			≥ 18,000	/	/	/	/	/	/	/	/	/	/	/	/	900	0	≥ 18,000	
	* BOD			≥ 6,000	/	/	/	/	/	/	/	/	/	/	/	/	300	0	≥ 6,000	
	* TSS			≥ 10,000	/	/	/	/	/	/	/	/	/	/	/	/	500	0	≥ 10,000	
	Notes:	Under UNIDO-GEF technology delivered equipment/machinery), installation was started but civil works are delayed on part of STAGL-EDF/TDAP due to financial issues raised by countrywide inflation.																			
Outcome 1.1: Regulatory and strategic urban planning frameworks to improve industrial-community co-existence, resiliency against climate change and gender equality are strengthened																					
2	# of recommendations for adaptive measures adopted by district level authorities	#	0	6	/	/	1	1	2	3	4	4	5	5	5	5	6	6	/	/	
	Notes:	FY17-18: Rehabilitation of Dugri Drain FY18-19: Safe Flood Shelters & Disaster Management Plan FY19-20: Clean & Green Punjab - Tree Plantation FY20-21: Combine Sewage Treatment Plant FY22-23: New Flood Protection Embarkment near STZ to protect STZ, Airport & Adjoining areas																			
3	# of internal policies developed by STZ for CCA and gender mainstreaming	#	0	4	/	/	2	2	3	3	3	3	3	3	3	3	3	3	4	3	
	Notes:	FY17-18: Tree Plantation & Flood Protection Measures for STZ. FY18-19: Female Students Internship Programme FY21-22: Training & induction of Females in tannery work-force.																			
4	# of recommended resilient infrastructure measures adopted by STAGL to prevent against economic losses	#	0	5	/	/	2	2	4	4	4	4	4	4	4	4	5	4	5	4	
	Notes:	FY17-18: Widening & De-Silting of Dugri Drain & Embankment of STZ project site to protect it from flash flood. FY18-19: Elevated road levels within STZ project boundary to create barrier for flash flood. Addition in construction by-laws that the finish floor level of tannery/factory much be one foot above the road level.																			

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
5	# of people gaining knowledge on integrating CCA and gender equality into urban planning - KASA.1	#	0	10 (3F)	5 (1F)	4 (0F)	10 (2F)	18 (3F)	10 (3F)	18 (3F)	10 (3F)	53 (28F)	10 (3F)	53 (28F)	10 (3F)	53 (28F)	10 (3F)	53 (28F)	10 (3F)	127 (30F)
	Notes:	CSA Workshop Flood Management Climate Change																		
Output 1.1.1: Support to mainstream CCA and gender equality into Punjab and Sialkot district urban development plan is provided																				
6	# of workshops on CCA and gender equality delivered - TCO.1	#	0	3	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	
	Notes:	CSA Workshop Flood Management Workshop Climate Change Workshop Green Tannery Designs Workshop																		
7	# of reports with recommendations for improved urban development planning and CC provided to district authorities - PAO.1	#	0	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	/	/
	Notes:	FY16-17: CSA ReportFY18-19: STZ Construction By-laws FY21-22: STZ Typical / Green Tannery Designs																		
Output 1.1.2: Flood management plan for the Sialkot Tannery Zone (STZ) and the pilot Dugri drain in Sialkot is documented and capacities are developed																				
8	# of flood management plans for STZ developed	#	0	1	/	/	/	/	1	1	/	/	/	/	/	/	/	/	/	/
	Notes:	DDMA																		
9	# of plans for Dugri drain management developed	#	0	1	/	/	1	1	/	/	/	/	/	/	/	/	/	/	/	/
	Notes:	Annual Cleaning & Widening of DD Remodelling Study of DD – Planned																		
10	# of workshops for emergency preparedness delivered – TCO.1	#	0	1	/	/	1	1	/	/	/	/	/	/	/	/	/	/	/	/
	Notes:	Flood Management Workshop																		
Outcome 2.1: Awareness among targeted community groups and leather business owners on the need to introduce CCA concepts/practices is raised																				
11	# of people gaining awareness of predicted adverse	#	0	150 (25F)	30	39	90	103 (3F)	120 (3F)	103 (3F)	150 (25F)	175 (28F)	/	/	/	/	/	/	/	/

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	impacts of climate change and appropriate responses – KASA.1																			
	Notes:	CCA Workshop Flood Management Climate Change																		
12	# of tannery staff gaining knowledge on BAT/BEP – KASA.1	#	0	100 (5F)	/	/	50	70	170 (10)	230 (21F)	280 (21F)	337 (21F)	347 (21F)	344 (21F)	344 (21F)	344 (21F)	390 (21F)	418 (F21)	418 (F21)	418 (F21)
	Notes:	Training BAT/BEP Workshop OSH Workshop BAT/SEMP Workshop																		
13	# of people reached by awareness campaigns – REA.1	#	0	50000	/	/	150	500	8500	10500	17000	25500	25500	40500	34000	60500	42500	103000	50000	
	Notes:	Previous publications and circulation figures Outreach all medias																		
Output 2.1.1: Information on CCA measures for STZ is provided to target groups and their needs are understood by project stakeholders																				
14	# of awareness raising materials on CC matters disseminated	#	0	5	/	/	1	1	2	2	4	4	5	5	5	6	5	6	5	6
	Notes:	(i) Safety Charts on Hydrogen Sulphide Gas (ii) Booklet in Urdu language on "How to Deal with Hydrogen Sulphide Gas" (iii) Reducing the pollution loads in Leather Processing demonstrating – A Case Study of Cleaner Technologies in Kanpur, India (iv) Best Available Techniques Reference Document – Review of EU normative documents and legislation and their relevance for the tanning industry in developing countries (v) Introduction to Treatment of Tannery Effluents (vi) The Framework for Sustainable leather manufacturers- 2nd Edition																		
15	# of workshops to understand community concerns and planned CCA actions for STZ delivered – TCO.1	#	0	1	1	1	1	1	1	2	1	3	1	4	1	6	1	7	/	/
	Notes:	CSA, CC, EIA, Environmental Compliance, Shifting Plan, Awareness session on Guidelines on shifting & construction of tanneries in Sialkot Tannery Zone. Attendance: 350 from tanneries, villagers from surrounding areas of STZ, Environment Dept, NGOs, Academia.																		
Output 2.1.2: Community-led trainings and actions to overcome CC through water and energy conservation and flood management are delivered																				
16	# of workshops on CCA delivered by community leaders who were trained as trainers – TCO.1	#	0	3	/	/	1	1	1	1	1	1	1	1	1	1	1	1	3	2

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	Notes:	Awareness Session arranged by rescue 1122 to give safety briefing to their team members on how to deal with hydrogen sulphide gas in tanneries based on the training and materials provided to trainers. Attendees: 11 rescue persons of rescue 1122. Community focal point: Mr. Masoomi December 2023																		
17	# of workshops on dealing with floods and other natural disasters delivered to the community STZ – TCO.1	#	0	2	/	/	1	1	1	1	1	1	1	1	1	1	2	1	2	1
	Notes:	Flood Management																		
18	# of trees planted in the planned STZ green belt area as part of the Clean and Green Punjab initiative	#	0																	
	* STZ (project)			50000	6250	2400	12500	4800	18750	7200	25000	9600	31250	12000	37500	13100	43750	14300	50000	14300
	* DG (scale up):			0	/	/	/	/	0	11300	0	22600	0	33900	0	33900	0	33900	0	0
Output 2.1.3: The needs of different target groups to build their resiliency are communicated to each other																				
19	# of CC awareness workshops delivered – TCO.1	#	0	3	1	1	1	1	1	1	2	3	3	4	3	5	3	6	3	7
	Notes:	CSA, CC, EIA, Environmental Compliance, Energy Efficiency, Community CCA																		
Output 2.1.4: Guidelines on best practices and project knowledge disseminated to similar clusters and development projects																				
20	# of publications on best practices and project knowledge disseminated – TCO.3	#	0	3	/	/	1	/	1	1	2	2	3	3	3	3	3	3	3	4
	Notes:	STZ Construction By-laws,Typical Tannery Design Guidelines and Green Tannery Designs were prepared under the project and shared with Government Counterparts for their awareness. Solid Waste Management Report of STZ																		
Outcome 3.1: Water availability for agricultural use around the STZ is increased																				
21	% reduction in water use by targeted tanneries	% reduction	0	20	/	/	/	/	/	/	/	/	/	/	/	/	5	0	20	
	Notes:	Installing water taps, Installation of individual water meters, utilization of high-pressure nozzles for cleaning. Review is planned near end of project, subject to shifting & operations of tanneries in STZ																		
22	% of targeted tanneries adopting	%	0	60	/	/	/	/	/	/	/	/	/	/	5	4	30	4	60	

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	at least a) 50% of recommended practices and b) technologies – TEC.3, BUS.1																			
	* **a)** % of targeted tanneries adopting at least 50% of recommended practices	%	0	60	/	/	/	/	/	/	/	/	/	/	5	4	30	4	60	
	* **b)** % of targeted tanneries adopting at least 50% of recommended technologies	%	0	60	/	/	/	/	/	/	/	/	/	/	5	4	30	26.4	60	
	Notes:	Segregation of Effluent Channels Installation of VFDs			Installation of Grit Chambers		Installation of Screens		Establishment of ETP		Installation of Solar Water Heaters									
23	% of targeted tanneries using 4 benchmarking self-assessment checklists within 6-9 months of training – BUS.1	%	0	50	/	/	/	/	/	/	/	/	/	/	/	/	25	0	50	
	Notes:	Review is planned near end of project, subject to shifting & operations of tanneries in STZ.																		
24	# of people gaining knowledge on management practices and resource efficient technologies for improved water and waste water treatment including CETP – KASA.1	%	0	100 (5F)	/	/	/	/	70	173	100	287	100	362	100	362	100	436	100	436
	Notes:	CETP, BAT, CRP TTD, SEMP, CRP GTD3																		
Output 3.1.1: Various alternatives, especially water harvesting and appropriate effluent treatment technology, documented and discussed with all STZ stakeholders																				
25	# of studies on common effluent	#	0	2	1	1	2	2	2	2	2	3	2	3	2	4	2	4	/	/

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	treatment technologies conducted and discussed with STZ stakeholders – PAO.2																			
	Notes:	(i) Assessment of Waste Water & Energy Efficiency leading towards compliance of LWG Standards. (ii) CETP Report & Design, (iii) EIA of CETP (iv) Report - Suggestions to improve performance of CETP by 3W systems.																		
26	# of Typical Tannery Design guidelines with various alternatives prepared and discussed with STZ stakeholders – TCO.3	#	0	1	/	/	/	/	/	/	1	1	1	2	/	/	/	/	/	/
	Notes:	TTD & GTD																		
Output 3.1.2: Assistance provided with the preparation of ToR, tender, technical evaluation and supervision of work and installation of Central Effluent Treatment Plant (CETP) including technology for one CETP module																				
27	% of ToRs, tenders and tender evaluations related to CETP tender produced with UNIDO support	%	0	100	/	/	100	100	100	100	100	100	100	100	/	/	/	/	/	/
	Notes:	Completed																		
28	# of CETP modules constructed (civil works) and equipped with UNIDO supervision	#	0	1	/	/	/	/	/	/	/	/	/	/	/	/	1	1	1	1
	Notes:	In progress																		
29	# of workshops delivered to relevant staff on CETP operation, maintenance and management – TCO.1	#	0	2	/	/	/	/	1	1	1	1	1	1	1	1	2	1	2	1

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	Notes:	CETP																			
Output 3.1.3: Practical training for improved production efficiency, lower environmental footprint and pollution reduction technologies is delivered to relevant stakeholders																					
30	# of workshops on technical adaptation themes/processes, UNIDO benchmarking toolkit or RECP technology delivered – TCO.1	#	0	4	/	/	1	1	2	3	4	4	4	5	4	7	4	8	4	8
	Notes:	Starka Report, Best Acceptable Techniques / Best Environment Practices (BAT/BEP), Chrome Recovery Plant, Best Acceptable Techniques / Smart Environment Management practices (BAT/SEMP) Green Tannery Designs, Guideline on Shifting & Construction of Tanneries in STZ, Energy Efficiency & CO2 reduction.																			
Output 3.1.4: Support is provided to verify and build capacities on using the Dugri Drain as a treated water discharge system that benefits agriculture																					
31	# of reports verifying possibilities for discharging treated water into the Dugri drain documented and presented to stakeholders – PAO.2	#	0	1	1	2	1	2	1	2	1	3	1	3	1	3	1	3	1	3
	Notes:	CSA of STZ EIA of STZ EIA of CETP at STZ																			
32	# of workshops delivered for communities and STAGL on appropriate Dugri Drain maintenance – TCO.1	#	0	1	1	1	1	2	1	2	1	3	1	3	1	3	1	3	1	3
	Notes:	CSA Workshop Flood Management EIA of CETP at STZ																			
Output 3.1.5: Feasible by-products from leather industrial waste and required technology are identified																					
33	# of reports with feasible by-products from leather industrial waste developed for tannery	#	0	1	/	/	/	/	/	/	/	/	/	/	1	1	1	1	1	2

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	management staff – PAO.2																			
	Notes:	Solid Waste Study by Sigra Comprehensive Solid Waste Study – Planned STZ Solid Waste Management Plan in which Fat Extraction unit is proposed																		
34	# of reports with possible technologies for minimizing solid waste – PAO.2	#	0	1	/	/	/	/	/	/	/	/	/	/	1	1	1	1	1	2
	Notes:	Sigra Study Land fill + fat extraction report in Solid Waste Management Plan of STZ																		
Output 3.1.6: Water management practices and technologies are demonstrated to tanneries																				
35	# of practices proposed to tanneries to reduce water use	#	0	1	0	3	1	5	1	6	1	7	/	/	/	/	/	/	/	/
	Notes:	(i) Centralized Water Supply System (ii) water metering (iii) batch rinsing (iv) high pressure water nozzles for cleaning of floors drums & equipment (v) installation of overhead tanks (vi) use of small taps (vii) recycling/reuse of soak & lime floats.																		
36	# of water management workshops delivered to tanneries – TCO.1	#	0	5	/	/	/	/	2	2	4	4	4	4	4	4	5	4	5	4
	Notes:	FY18-19: CRP, CP FY19-20: BAT, CRP																		
Outcome 4.1: Quality control and efficient monitoring and evaluation measures are embedded into the project																				
37	% of key stakeholders satisfied with UNIDO intervention – REACT.1	%	0	80	/	/	/	/	/	/	/	/	/	80	80	80	80	80	80	
Output 4.1.1: Monitoring and evaluation conducted																				
38	# of Inception reports prepared and discussed with stakeholders	#	0	1	1	1	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39	# of PSC meetings conducted and PIRs and annual reports prepared	#	0	8	1	1	2	2	3	3	4	4	5	5	6	5	7	5	8	5
	* PSC meetings	#	0	8																

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	* PIRs + annual reports	#	0	8	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	7
40	Mid-term and independent terminal evaluation completed on time																			
	MTR completed on time	Y/N	0	Y	/	/	/	/	/	/	/	/	Y	Y	/	/	/	/	/	/
	Independent terminal evaluation completed on time	Y/N	0	Y	/	/	/	/	/	/	/	/	/	/	/	/	/	/	Y	
41	Project Final Report completed within 2 months of project closure	Y/N	0	Y	/	/	/	/	/	/	/	/	/	/	/	/	/	/	Y	

Source: Project Management Unit, Monitoring Matrix communicated by email on 20 December 2023.

Evaluation team addendum: outcome 3.1 reclassified as three outcomes:

- Outcome 3.1.a: Awareness of recommended management practices and technologies among targeted tanneries and STZ stakeholders is increased. This is an immediate outcome, a change in capacity.
- Outcome 3.1.b: Access to CETP and the Dugri Drain as a treated water discharge system for targeted tanneries is established. This is also an immediate outcome, one resulting from the completion of the CETP and rehabilitation of the Dugri Drain.
- Outcome 3.1.c: Practices for reducing water use and effluent discharge are adopted by targeted tanneries. This is an intermediate outcome resulting from immediate outcomes 3.1.a and 3.1.b.

Data rearranged under these three outcomes is reproduced below.

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
Outcome 3.1.c: Practices for reducing water use and effluent discharge are adopted by targeted tanneries. (This is an intermediate outcome resulting from immediate outcomes 3.1.a and 3.1.b.)																					
21	% reduction in water use by targeted tanneries	% reduction	0	20	/	/	/	/	/	/	/	/	/	/	/	/	5	0	20		
	Notes:	Installing water taps, Installation of individual water meters, utilization of high-pressure nozzles for cleaning. Review is planned near end of project, subject to shifting & operations of tanneries in STZ																			
22	% of targeted tanneries adopting at least a) 50% of recommended practices and b) technologies – TEC.3, BUS.1	%	0	60	/	/	/	/	/	/	/	/	/	/	5	4	30	4	60		
	*** a)** % of targeted tanneries adopting at least 50% of recommended practices	%	0	60	/	/	/	/	/	/	/	/	/	/	5	4	30	4	60		
	*** b)** % of targeted tanneries adopting at least 50% of recommended technologies	%	0	60	/	/	/	/	/	/	/	/	/	/	5	4	30	26.4	60		
	Notes:	Segregation of Effluent Channels Installation of VFDs							Installation of Grit Chambers		Installation of Screens			Establishment of ETP				Installation of Solar Water Heaters			
23	% of targeted tanneries using 4 benchmarking self-assessment checklists within 6-9 months of training – BUS.1	%	0	50	/	/	/	/	/	/	/	/	/	/	/	/	25	0	50		
	Notes:	Review is planned near end of project, subject to shifting & operations of tanneries in STZ.																			
Outcome 3.1.a: Awareness of recommended management practices and technologies among targeted tanneries and STZ stakeholders is increased. (This is an immediate outcome, a change in capacity, where capacity includes access to knowledge produced by the UNIDO-GEF Project.)																					
Outcome 3.1 indicator																					

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
24	# of people gaining knowledge on management practices and resource efficient technologies for improved water and waste water treatment including CETP – KASA.1	%	0	100 (5F)	/	/	/	/	70	173	100	287	100	362	100	362	100	436	100	436
	Notes:	CETP, BAT, CRP TTD, SEMP, CRP GTD3																		
Output 3.1.3: Practical training for improved production efficiency, lower environmental footprint and pollution reduction technologies is delivered to relevant stakeholders																				
30	# of workshops on technical adaptation themes/processes, UNIDO benchmarking toolkit or RECP technology delivered – TCO.1	#	0	4	/	/	1	1	2	3	4	4	4	5	4	7	4	8	4	8
	Notes:	Starka Report, Best Acceptable Techniques / Best Environment Practices (BAT/BEP), Chrome Recovery Plant, Best Acceptable Techniques / Smart Environment Management practices (BAT/SEMP) Green Tannery Designs, Guideline on Shifting & Construction of Tanneries in STZ, Energy Efficiency & CO2 reduction.																		
Output 3.1.5: Feasible by-products from leather industrial waste and required technology are identified																				
33	# of reports with feasible by-products from leather industrial waste developed for tannery management staff – PAO.2	#	0	1	/	/	/	/	/	/	/	/	/	/	1	1	1	1	1	2
	Notes:	Solid Waste Study by Sigra Comprehensive Solid Waste Study – Planned STZ Solid Waste Management Plan in which Fat Extraction unit is proposed																		
34	# of reports with possible technologies for minimizing solid waste – PAO.2	#	0	1	/	/	/	/	/	/	/	/	/	/	1	1	1	1	1	2
	Notes:	Sigra Study Land fill + fat extraction report in Solid Waste Management Plan of STZ																		
Output 3.1.6: Water management practices and technologies are demonstrated to tanneries																				

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
35	# of practices proposed to tanneries to reduce water use	#	0	1	0	3	1	5	1	6	1	7	/	/	/	/	/	/	/	/
	Notes:	(i) Centralized Water Supply System (ii) water metering (iii) batch rinsing (iv) high pressure water nozzles for cleaning of floors drums & equipment (v) installation of overhead tanks (vi) use of small taps (vii) recycling/reuse of soak & lime floats.																		
36	# of water management workshops delivered to tanneries – TCO.1	#	0	5	/	/	/	/	2	2	4	4	4	4	4	4	5	4	5	4
Outcome 3.1.b: Access to CETP and the Dugri Drain as a treated water discharge system for targeted tanneries is established. (This is also an immediate outcome, one resulting from the completion of the CETP and rehabilitation of the Dugri Drain.)																				
Output 3.1.1: Various alternatives, especially water harvesting and appropriate effluent treatment technology, documented and discussed with all STZ stakeholders																				
25	# of studies on common effluent treatment technologies conducted and discussed with STZ stakeholders – PAO.2	#	0	2	1	1	2	2	2	2	2	3	2	3	2	4	2	4	/	/
	Notes:	(i) Assessment of Waste Water & Energy Efficiency leading towards compliance of LWG Standards. (ii) CETP Report & Design, (iii) EIA of CETP (iv) Report - Suggestions to improve performance of CETP by 3W systems.																		
26	# of Typical Tannery Design guidelines with various alternatives prepared and discussed with STZ stakeholders – TCO.3	#	0	1	/	/	/	/	/	/	1	1	1	2	/	/	/	/	/	/
	Notes:	TTD & GTD																		
Output 3.1.2: Assistance provided with the preparation of ToR, tender, technical evaluation and supervision of work and installation of Central Effluent Treatment Plant (CETP) including technology for one CETP module																				
27	% of ToRs, tenders and tender evaluations related to CETP tender	%	0	100	/	/	100	100	100	100	100	100	100	100	/	/	/	/	/	/

Identification				Planned (P) and Achieved (A) Cumulative Values																	
#	Indicator	Metric	Baseline	Final Target	Y1 (FY 16/17)		Y2 (FY 17/18)		Y3 (FY 18/19)		Y4 (FY 19/20)		Y5 (FY 20/21)		Y6 (FY 21/22)		Y7 (FY 22/23)		Y8 (FY 23/24)	
					P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
	produced with UNIDO support																			
	Notes:	Completed																		
28	# of CETP modules constructed (civil works) and equipped with UNIDO supervision	#	0	1	/	/	/	/	/	/	/	/	/	/	/	/	1	1	1	1
	Notes:	In progress																		
29	# of workshops delivered to relevant staff on CETP operation, maintenance and management – TCO.1	#	0	2	/	/	/	/	1	1	1	1	1	1	1	1	2	1	2	1
	Notes:	CETP																		
Output 3.1.4: Support is provided to verify and build capacities on using the Dugri Drain as a treated water discharge system that benefits agriculture																				
31	# of reports verifying possibilities for discharging treated water into the Dugri drain documented and presented to stakeholders – PAO.2	#	0	1	1	2	1	2	1	2	1	3	1	3	1	3	1	3	1	3
	Notes:	CSA of STZ		EIA of STZ					EIA of CETP at STZ											
32	# of workshops delivered for communities and STAGL on appropriate Dugri Drain maintenance – TCO.1	#	0	1	1	1	1	2	1	2	1	3	1	3	1	3	1	3	1	3
	Notes:	CSA Workshop		Flood Management					EIA of CETP at STZ											
	Notes:	FY18-19: CRP, CP		FY19-20: BAT, CRP																

Source: Evaluation Team

Annex 14. Detailed Findings on Effectiveness

The UNIDO-GEF Project has three programmatic outcomes, which have 11 outputs.[49] The project logframe includes 11 outcome-level indicators for the programmatic outcomes and 24 output-level indicators. There are four indicators for outcome 1.1 and five for its two outputs; three indicators for outcome 2.1 and seven for its four outputs; and, four indicators for outcome 3.1 and 12 for its six outputs.

The project has been regularly reporting progress in relation to its logframe indicators and the targets for project outcomes and outputs. The project shared its cumulative targets (planned targets) and corresponding achievements for 2016 to 2024 with the evaluation team in December 2023 (reproduced in Annex).[50] All the indicators are quantitative and accompanied by notes on the project's contributions over its duration.

Outcome 1.1 aimed to strengthen regulatory and strategic urban planning frameworks and, thereby, improve industry-community co-existence, resilience against climte change, and gender equality. The project achieved or exceeded targets for two of the four outcome indicators. It achieved 75% of the target for one indicator[51] and 80% for another[52]. The project also met or exceeded targets for all five of the output indicators.

Notable achievements include:

- the adoption of adaptive measures by district-level authorities, of policies for CCA and gender mainstreaming by the STZ, and of resilient infrastructure measures by STAGL;
- the rehabilitation, widening and de-silting of the Dugri Drain;
- workshops on CCA, gender equality and emergency preparedness, and recommendations for improved urban development planning, climate change and flood management plans for district authorities; and,
- the inclusion of 28 women among the 53 people who "gained knowledge on integrating CCA and gender equality into urban planning".

A government official observed that the Dugri Drain, which is polluted by industries in the city and flows past the STZ, is subject to overflow and blockage (in addition to being smelly), which leads downstream communities (10 villages) to protest. He emphasized the drain's importance to sustainability and acknowledged that the UNIDO-GEF Project recommended and facilitated its widening and realignment.

Through outcome 1.1 as a whole, the project contributed a wide range of technical inputs and recommendations through workshops, specialized documents, advocacy, and coordination with STAGL and government decision makers. These led to substantive contributions to strengthening planning frameworks for drainage, flood protection, forest cover, women's equality, and the resilience of the leather industry.

[49] The project also has one outcome for quality control and monitoring and evaluation (M&E), which is discussed below in the relevant section.
[50] Monitoring matrix communicated by email on 20 December 2023.
[51] Number of internal policies developed by STZ for CCA and gender mainstreaming.
[52] Number of recommended resilient infrastructure measures adopted by STAGL to prevent economic losses.

Outcome 2.1 aimed to raise awareness of the need to introduce CCA concepts and practices among community groups and leather business owners. The project exceeded the targets for all three of the outcome indicators. It met or exceeded targets for five of the seven output indicators. It fell short in two workshop-related indicators, one for community leaders to be trained as trainers and the other for dealing with natural disasters.

Notable achievements include:

- plantation of more than 48,000 trees, 14,000 of them planted by the STZ and 34,000 by the district government;
- awareness-raising on a wide range of climate change matters for the leather industry,[53] for understanding community concerns, and for dealing with floods;
- awareness-raising of the Rescue 1122 emergency services team for dealing with hydrogen sulphide gas in tanneries; and,
- dissemination of publications on best practices and project knowledge to government counterparts.

Through continuous interaction, workshops and campaigns under outcome 2.1, the project raised awareness of CCA concepts and practices among tannery owners, community members, local NGOs, and government officials. It also addressed community apprehensions about the STZ: three women and five men in group interviews confirmed that they had attended two meetings at the STZ office that addressed their misgivings.

Outcome 3.1 anticipated increased water availability for agricultural use around the STZ. The site visit and discussion with project managers confirmed that no additional water will be available for agricultural use around the STZ.[54] Moreover, as discussed in section 1.3, this outcome, judged by its indicators and outputs, is associated with changes in capacity[55] (mainly of tanners, and also of STZ stakeholders) and changes in the practices of tanneries.

The assessment of effectiveness here revolves around the three outcomes described in section 1.3 as outcomes 3.1.a, 3.1.b and 3.1.c, that better reflect the logic of project design. These outcomes are about awareness, the CETP and the Dugri Drain, and the adoption of recommended practices. Data on targets and achievements has been rearranged under the series-three outcomes in the addendum contributed by the evaluation team to Annex .

The project met two of the six targets for increased awareness,[56] exceeded three targets, and did not meet one target[57]. The project covered a wide range of recommendations for improved water and wastewater treatment, reducing water use, a benchmarking toolkit, by-products from leather industrial waste, and minimizing solid waste. A group of three tanners who had started trial production in the STZ remarked that they could not think of any technical information that was omitted.

[53] These included treatment of tannery effluents, cleaner technologies, and safety in dealing with hydrogen sulphide gas.
[54] The reduction of pollution resulting from the shifting of tanneries to the STZ could increase the water available for agriculture around the city, where the tanneries are located at present.
[55] Here, changes in capacity mean changes in awareness, knowledge, skills and access, an intermediate step on the way to changes in behaviour and practices.
[56] No study was conducted by the project or the evaluation team for quantifying the increase in awareness. The assumption is made here that some of the people experienced some increase in awareness as a result of their inclusion in the project's awareness-raising activities.
[57] The "number of water management workshops delivered to tanneries" was four compared with the target of five.

The next outcome is about establishing access for targeted tanneries to the CETP and the Dugri Drain as a treated-water discharge system. The project met or exceeded five of its seven targets in this outcome and fell short by one in delivering two workshops on CETP operation, maintenance and management. Notable achievements include imparting knowledge to STZ stakeholders on common effluent treatment technologies, tannery designs, the CETP tender, and possibilities for and maintenance of the Dugri Drain.

The project report shows that the CETP has been constructed and equipped with UNIDO supervision. As informed by the project, however, the CETP is expected to be completed by May 2024, after which it will start a six-month experimental operation. This means that the project has been unable so far to achieve the outcome assessed here. Moreover, only three tanneries had started trial production in the STZ by the time the project closed.

These observations have a direct bearing on the third of the series-three outcomes: the project has not yet met any of the targets associated with the three indicators for this outcome. This is understandable in view of the fact that the CETP is not yet operational and the tanneries are still in their original locations. The assessment of effectiveness in this situation requires an assessment of the likelihood that this outcome will be achieved.

The project does not have data on the size and financial and risk status of tanneries. Interviews with three tannery owners who have not yet started construction in the STZ reinforced the project's observation that most of the owners are small enterprises and can be expected to face serious constraints in shifting to the STZ.

The risk and its mitigation was discussed in the project risk management section of the Project Implementation Report (1 July 2022–30 June 2023). The proposed mitigation, evidently, has not solved the problem. According to the three tannery owners, they would like to shift and appreciate the benefits of the STZ, but:

- Business has been slow in recent years, the cost of production has increased substantially, and payments from buyers are often delayed. More than one tanner expressed the dilemma by saying, "I have difficulty deciding whether to do business or invest in shifting to the STZ."
- Regular bank loans require collateral, generally in the form of property, and carry very high interest rates (27% per year).
- The interest-free loans offered by the government for helping with the move to the STZ are highly inadequate.[58]

A government official who has worked closely with the STZ on enforcement issues for 10 years observed that there are approximately 150 small tanneries operating on rented land that will not be able to shift without meaningful financial assistance. The government is obliged to shut down the tanneries that do not shift.

The perspective, at present, is that tannery owners are polluters and, therefore, subject to the polluter pays principle. The problem is that the financial market is imperfect and does not provide financing for the transition from pollution-emitting to pollution-free production for small enterprises that cannot offer the required collateral. In this situation, these enterprises are deprived of the required funds because of a market failure.

[58] PSIC, the Government of Punjab organization that announced the soft-loans scheme, has reportedly received only two or three applications.

There is a real possibility that the planned shift from the city to the STZ may force financially-pressed small tannery owners to close their businesses as an unintended consequence of the STZ and UNIDO-GEF Projects. The project has not yet determined how widespread is the risk, how many small tanneries are in danger of losing their assets and livelihoods, and what meaningful options are available for helping them.

The project's substantive contributions strengthened planning frameworks for drainage, flood protection, forest cover, women's equality, and resilience of leather industry (outcome 1.1). Its continuous interaction, workshops and campaigns raised awareness of CCA concepts and practices among tannery owners, community members, local NGOs, and government officials, and addressed community apprehensions (outcome 2.1).

The project covered a wide range of recommendations through awareness-raising under outcome 3.1. The targeted tanneries, however, do not have access to the CETP and the Dugri Drain so far. There is no well-informed estimate of how many tanneries will shift to the STZ and adopt recommended practices and technologies, how many will go out of business for financial reasons, and how that could be avoided. Given the importance of shifting and adopting recommended measures, the situation cannot be considered satisfactory.