



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent terminal evaluation of project

Promoting business models for increasing penetration and scaling-up of solar energy in India

UNIDO ID: 130149
GEF Project ID: 4788

March 2021

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I. PROJECT BACKGROUND AND CONTEXT

1. Project factsheet¹

Project title	Promoting business models for increasing penetration and scaling-up of solar energy in India
UNIDO ID	130149
GEF Project ID	4788
Region	South Asia
Country(ies)	India
Project donor(s)	GEF
Project implementation start date	15 January 2014 (release of grant)
Expected duration	60 months (as at CEO endorsement, operationally completed in 74 months)
Expected implementation end date	31 January 2021 (operational completion)
GEF Focal Areas and Operational Project	GEF 5- CCM3: Promote investments in renewable energy technologies
Implementing agency(ies)	UNIDO
Government coordinating agency	Ministry of New and Renewable Energy (MNRE), Government of India
Donor funding	USD 4,365,174
Project GEF CEO endorsement / approval date	15 January 2014
UNIDO input (USD)	USD 75,000 (grant) and USD 75,000 (in kind)
Co-financing at CEO Endorsement, as applicable	\$ 21,825,870
Total project cost (USD), excluding support costs and PPG	USD 26,191,044
Mid-term review date	November 2017
Planned terminal evaluation date	March – June 2021

(Source: Project document)

2. Project context

India is a lower-middle income country, having population of 1.366 billion. India was until 2019 the fastest-growing trillion-dollar economy in the world and the fifth-largest overall, with a nominal GDP of USD2.87 trillion in 2019. India's economic growth declined to an 11-year low in FY 2019-2020 of 4.4%. India's economy and society have since then been severely impacted by the onset of the COVID-19 pandemic in 2020, the 2.5 months national lockdown resulting in declines and losses of business, incomes and livelihoods.

Under its Nationally Determined Contributions (NDCs) to the Paris climate agreement, India has agreed to reduce the greenhouse gas (GHG) intensity of its economy by 33-35% by 2030, relative to 2005 levels. Therefore, India has stepped up its policy drive and regulatory and market incentives to scale up and speed up both energy efficiency as well as transition to renewable energy. The Ministry of New and Renewable Energy (MNRE) initiates and coordinates the development of the renewable energy sector in India.

¹ Data to be validated by the Consultant

The industrial sector is responsible for 56% of final energy consumption in India. In manufacturing sector segment, some 74% of energy is used for heating and cooling. Of this heating and cooling demand, about half is required in low to medium heat range, not exceeding 380-400°C. This includes diverse 'light' manufacturing sectors which exclusively require low and medium heat typically for heating, drying, sanitizing and alike processes, in sectors as diverse as food processing, textile and garments, leather, pharmaceuticals, metal finishing etc. These low to medium heat applications are particularly targeted in the present project, as candidates for installation of solar process heating and cooling, using so called Concentrated Solar Thermal (CST) technologies (also referred to as Concentrated Solar Heating (CSH)).

CST systems use mirrors to concentrate sunlight onto a receiver, which collects and transforms solar energy into heat which is then transferred into a heat transfer fluid – typically hot water, steam or another thermal fluid. Different designs and shapes of mirrors and receivers are in use and can achieve different temperatures for the heat transfer fluid. This fluid is then conveyed to the heat requiring process for heating or fed into absorption chiller for cooling. Optionally, the heated thermal fluid can be stored in insulated tanks for use during night hours, or so-called thermal energy storage.

The project confirmed a market potential for CST for process heating and cooling in India of 6.5 GW_{th}, whereas by 2017 the cumulative installed capacity was in the range of 50 MW_{th}, hence, less than 0.1% of assessed market potential. Widespread application of CST is still hampered by: unfamiliarity of the technology and its applications; the requirement for custom design and engineering of CST systems to specific heating and cooling requirements ('*integration engineering*'); reliance on imports for specialized components (shaped parabolic and through mirrors, receivers, etc.); and high costs and associated long payback times (despite competitive project lifetime heating and cooling costs). The project was therefore conceived to initiate a market transformation for CST for process heating and cooling in India.

3. Project objective and expected outcomes

The overall project's objective is to develop and promote business models for implementation of solar energy-based heating and cooling applications in selected industrial sectors to reduce greenhouse gas (GHG) emissions. The project deploys a focused approach by zooming in on those (light) industrial sectors that given the technical performance range of solar thermal technologies and the sector's specific heating and cooling requirement, provide the best match, and, hence, offer best potential for short to medium term techno-economic feasibility of solar thermal technologies, particularly of CST. Developing and demonstrating CST applications in those priority sectors constitutes the core of the project, supported by enabling activities aimed at policy and (industry) capacity building through awareness and skills initiatives.

Component 1: Strengthening of policy and institutional framework

Outcome 1: Favorable policy and regulatory environmental created for solar energy applications

Output 1.1: Set of policy recommendations and guidelines for policy makers developed

Component 2: Technology investment and application

Outcome 2: Technical and financial viability of projects confirmed, local manufacturing capability for solar energy systems in industrial applications enhanced and investments in solar energy application in industry increased

Output 2.1: Detailed technology application tools developed, such as: integrated CST with energy storage; detailed project reports (DPRs); CST demonstrations selected, installed and performance evaluated; qualified consultants; and case studies.

Output 2.2: Investment in solar energy applications in industry increased

Component 3: Scale up.

Outcome 3: Investment in solar energy applications in industry multiplied and quality of solar energy components assured

Output 3.1: Business models for CST leading to sustained replication of solar thermal applications in industry and quality assurance and certification framework in place

Output 3.2: Financing facility for scale-up established

Component 4: Awareness raising and capacity building

Outcome 4: Capacity of key players in target industries enhance and technology transfer and information sharing tools established.

Output 4.1: Trained manufacturers, suppliers and installers

Output 4.2: Awareness raised among the business community

Output 4.3: Technical capacity built through the promotion of industry academic partnership

Output 4.4: CST and project information shared

Output 4.5: Documented project outputs, case studies, best practices and lessons learned

4. Project implementation arrangements

UNIDO is the GEF implementing agency and leading the project in terms of planning, strategic guidance and coordination. MNRE is the execution agency. Project oversight is being provided by the Project Steering and Advisory Committee (PSAC), chaired by the Secretary MNRE, with participation of the Ministry of Environment, Forest and Climate Change (MoEFCC, also GEF Operational Focal Point), Department for Promotion of Industry and Internal Trade (DPIIT, line ministry for UNIDO) and the India Renewable Energy Development Agency (IREDA). Furthermore, a Project Executive Committee (PEC) was established between MNRE and UNIDO, chaired by the Joint Secretary.

At the request of MNRE and with approval of the PSAC, UNIDO provided execution support services, in particular for entering into contracts with service providers for agreed work-packages, including as fund manager for provision on financing support to pilot projects (through IREDA, as previously determined in the project preparation phase and included in the Project Document (/CEO Endorsement Document)) and for technical support and communication and publication services (based on competitive tendering). Within the framework of its execution support services, UNIDO also operated the project management unit (PMU), including its staffing and hosting.

In view of the continued perceived low interest in and techno-economic viability of solar thermal technology, particularly in comparison to the rapid advancement and deployment of photo-voltaic (PV) solar electric technology, promotion of CST did, over the project period, become a posteriority for MNRE, leading to its termination of the solar thermal capital grant support scheme as of 31 March 2020. Moreover, in 2020, the onset of COVID19 pandemic, the necessary lock down and resulting economic crisis, seriously dented both interest in and financial capability of pilot project proponents to invest in CST and complete installations for proposed CST pilot projects. In view thereof, MNRE desired to effectuate the earlier approved end date of 31 January 2021, in preference to requesting a further final extension to allow adequate time for full completion of all planned project activities.

5. Main findings of the mid-term review

In accordance with GEF and UNIDO requirements an independent Mid Term Review (MTR) was conducted by international and national evaluators during November 2017-January 2018. The key findings of the MTR were as follows:

- **The overall rating of the Project at MTR stage was Moderately satisfactory.**
- The Project had made **satisfactory progress on outcomes 1-2** so far, although outcome 2 had been delayed, and a full project pipeline as the planned major output had still to be realised. **Under outcome 3, progress was only moderately satisfactory**, due to the missing investment projects. **Outcome 4 was also rated as moderately satisfactory**, since the Project had yet to provide visible outputs such as a central knowledge management platform on the promotion and capacity building concerning CST technologies across the country. The project had until then decided to use the UNIDO global website (<https://open.unido.org/projects/IN/projects/130149>) instead of creating a project specific website. However, the website provided only limited information on the UNIDO-GEF project and was lacking the functionality and contents of an overarching online information platform on CST technology and applications in the country.
- **Overall, the progress towards outcome achievement followed the project logical frame and indicators provided with the Work Plan.** Special attention was paid until then to the recommendations and guidelines for policy makers developed under Outcome 1 including e.g. the submission of a draft CST Roadmap, and draft policy documents (e.g. boiler regulations) as well demonstration projects (Outcome 2), where a higher number of projects than initially foreseen were then expected to lead to the achievement of direct energy savings as planned.
- **Nevertheless, it was reasonably expected that the project could achieve the implementation of demonstration projects with a target of 45,000 m² of CST plants to be installed**, with a 187 MWh daily energy generated from CST through projects installed over the period 2014-2034 and a cumulative reduction of GHG by about (83,000+ 166000) tCO_{2-eq} over the period 2014-34.
- Scaling-up activities was expected to result in the establishment of a financing facility for the installation of at least another 50 CST projects with 25 MW_{th} installed and approximately 124 MWh energy produced daily from projects
- **The Project was considered Relevant** mainly because of Government's Policy and promotional measures, as well as the catering to the high potential of CST available within the targeted industry sectors in India. Although the Project was not fully on track regarding implementation, the relevance of the topic remained high for the Indian government. Project stakeholders and cooperation partners were fully committed to proceed with the activities according plan, although timing was lagging. Stronger co-ordination between project management and political decision-makers (e.g. through the PSAC and PEC) was considered to be required in the second period to get the necessary political commitments and strategies (e.g. CST Roadmap) off the ground. IREDA had a full-fledged soft loan scheme for supporting CST systems in place which seemed properly for addressing the needs of the market, especially of larger industries. Yet, the number of projects and a confirmed pipeline were lacking and required the Project's deep focus in the remaining implementation period.
- **The Project was Appropriately Designed** providing reasonable coverage to the needful requirements of CST ecosystem development in India and positioning of key stakeholders.
- **Project efficiency was rated Moderately Satisfactory**, even with the successful precedence of the UNDP-GEF CST project. Government subsidy scheme, supportive financing and R&D institution, and ample opportunity for the CST in industrial applications would then still need to be realised. The cost effectiveness of the Project had been 'satisfactory', based on the fact that Project expenditures

achieved so far reflect achievements that (in general) follow the results framework's targets, and seemed to be largely achievable by end of project.

- **The project was overall professionally managed and administered, and had delivered satisfactory results by now.** As for the planned remaining activities, continuous review of work plan against available resources and likeliness of timely implementation needed to be properly taken care of and results evaluated and monitored against their outcomes and impacts.
- **The likelihood of CST Project achieving its expected impact was Moderately Likely (ML).** Given its focus on addressing policy and technical capacity barriers, this project would be expected to generate the biggest share of GHG emission savings after the project implementation period, when the CST Roadmap, new guidelines and policies would be in place, capacity built, and the training programmes established that will deploy their full impact in terms of new CST projects.
- Taking into consideration the prevailing risks and the mitigation strategies to be considered by the Project, the **sustainability prospects are rated Likely.** Factors affecting sustainability in the long-term were identified as a fully supportive policy and institutional framework being in place, continued focus on industrial sectors' needs (awareness, capacity, financing models, standards) and knowledge management platform in place ("one-stop-shop" information source about CST). Manufacturers and Suppliers had progressed with installations even during the no subsidy period. A few activities on awareness raising and capacity building had been implemented. UNIDO had partnered with National Institute for Solar Energy (NISE) to propose a skill development programme for the CST sector under the capacity building initiatives, which was delayed but seemed to be moving forward at time of MTR. Under the partnership with NISE, an international organization would be expected to be involved in the capacity building activities towards industrial integration of CST.
- The completion date of the Project had been initially foreseen for December 2018. Given the previous delays in the project launch, resulted delays during implementation so far and longer gestation time required for the larger-scale pilots to be implemented, a project extension opportunity seemed necessary. A date for realistic finalization would need to be proposed by the PMU in accordance with the executing partners and UNIDO. MTR experts suggested at least 12 months (considering 10 months delayed project start the overall duration will increase from 60 to 72 months).

The MTR team provided the following recommendations

1. The Project had been acknowledged as Highly Relevant from all the corners, and is well positioned to facilitate a sustainable growth for the industrial sector. The **Project however required a higher visibility and support from its partners and stakeholders.**
2. In addition, **parallel progress on all the project components would be required moving forward** to avoid a risk of 'time run outs' for its lagging components and improve on its overall efficiency.
3. **The Project would require greater engagement of stakeholders** so as to capitalise upon active and synergistic multi-stakeholder dynamics to achieve its planned outcomes and ensure lasting effectiveness. Specifically, from Ministry of MSME, NISE, Industry Associations and successful technology suppliers.
4. **Project has High Sustainability prospects, however the same required successful pilots to showcasing** on a broad geographic and sectoral landscape and not just on limited horizon.
5. **Project needed to directly reach out to industrial units,** building their confidence, to realize and demonstrate synergistic and successfully engineered approach in bringing together contributing actors and making initial pilots take off successfully on the ground.
6. The **Project would have to demonstrate technical solutions and technical assistance support** to overcome initial technology barriers by **providing engineering specifications for different CST systems integrated into industrial processes, standardised equipment and technical standards** for them to comply with and all consideration regarding maintenance works

7. Like the case of Indian Tea Association (ITA), the **Project could reach out to various targeted sector specific associations in the Industrial Clusters for assessing opportunities for CST applications and work out innovative business models** over and above the present financing model.
8. Industrial sector could be engaged to utilise CST applications within their mandatory Corporate Social Responsibility (CSR) projects. This might help industry to gain technical confidence on CST for direct integration within their industrial applications.

Specifically, in regards to project management, the MTR experts highly recommended:

1. To formally revise project log frame to be in line with component/output descriptions in CEO Endorsement Document, and align the structure of Project Implementation Reports (PIRs) and Annual Work Plans (AWPs) accordingly;
2. Generally, to improve the AWPs: the timeline for the different tasks are very generic and not specific time-bound (e.g. no dates when individual tasks shall be achieved, tasks repeating over years);
3. To develop a Monitoring and Evaluation (M&E) strategy for the pilot projects and keep an eye on monitoring results, included targeted indicators **Develop a specific awareness and public outreach strategy considering the development of a CST web portal and overall knowledge management platform.** This mainly, in order to increase the public perception of CST technologies and improve awareness and knowledge.

6. Budget information

Table 1. Financing plan summary

Description	Project Preparation	Project	Total (USD)
Financing (GEF /)	80,000	4,365,174	4,445,174
Co-financing (Cash and In-kind), UNIDO and others	55,766	21,825,870	21,881,636
Total (USD)	135,766	26,191,044	26,326,810

Source: CEO endorsement document

Table 2. Financing plan summary - Outcome breakdown

Project components	Donor (GEF/) (USD)	Co-Financing (USD)	Total (USD)
PC1- Policy framework	150,000	750,000	900,000
PC2- Technology investment and application			
• Technical assistance	500,000	2,500,000	3,000,000
• investment	1,875,000	9,375,000	11,250,000
PC3- Scaling up			
• Technical assistance	207,309	1,036,545	1,243,854
• Investment	1,000,000	5,625,000	6,625,000
PC4- Awareness and capacity building	275,000	1,350,000	1,625,000
PC5- Monitoring, Evaluation and knowledge management	150,000	150,000	300,000
Total (USD)	4,365,174	21,825,870	26,191,044

Source: CEO endorsement document

Table 3. Co-Financing source breakdown

Name of Co-financier (source)	In-kind	Cash	Total (USD)
MNRE			
<i>National Government</i>	300,000	6,432,192	6,732,192
IREDA			
<i>National Government</i>		14,943,678	14,943,678
UNIDO			
<i>Implementing Agency</i>	75,000	75,000	150,000
Total Co-financing (USD)	375,000	21,450,870	21,825,870

Source : Project document

Table 4. UNIDO budget execution in USD (Grant 2000002554)

Year	Payments (USD)	Expenditures (USD)
2014	46,249	49,736
2015	150,844	2,183,092
2016	232,312	301,005
2017	289,699	394,646
2018	297,646	308,479
2019	217,075	189,577
2020	255,727	288,688
2021	14,848	29,244
total	1,504,400	3,744,448

Component	Budget	Payments made	Expenditures (incl payments)	Funds Available	% expended
Evaluation	45,000			45,000	0.0%
Output 1	148,583	100,084	124,729	23,854	83.9%
Output 2	2,713,357	588,200	2,569,865	143,492	94.7%
Output 3	608,895	195,799	329,052	279,844	54.0%
Output 4	450,501	259,781	359,199	91,302	79.7%
Output 5	398,838	360,536	361,603	37,235	90.7%
Grand Total	4,365,174	1,504,400	3,744,448	620,726	85.8%

Source: UNIDO SAP, as of 31 January 2021 (accessed 19 Feb 2021)

II. Scope and purpose of the evaluation

The purpose of the evaluation is to independently assess the project to help UNIDO, Government of India and GEF to improve performance and results of ongoing and future programmes and projects. The independent terminal evaluation (TE) will cover the whole duration of the project from its starting date in January 2014 until its mid-course operational discontinuation as of 31 January 2021.

The evaluation has two specific objectives:

- (i) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability 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.

III. Evaluation approach and methodology

This TE will be conducted in accordance with the UNIDO Evaluation Policy² and the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle³. 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 evaluation using a participatory approach whereby all key parties associated with the project will be informed and consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Independent Evaluation Division (ODG/EIO/IED) on the conduct of the evaluation and methodological issues. *In view of ongoing COVID19 pandemic, no mission of international evaluator is foreseen. The national evaluator will conduct fact finding interviews with stakeholders and – where reasonably and safely possible - field visits to project sites. Whenever it is necessary the interviews will be conducted virtually, with the participation of the international evaluator.*

The evaluation will use a theory of change approach 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 identify causal and transformational pathways from the project outputs to outcomes and longer-term impacts, and drivers as well as barriers to achieve them. The learning from this analysis will be useful to feed into the design of the future projects so that the management team can effectively manage them based on results.

1. 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, output 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.

² UNIDO. (2015). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/(M).98/Rev.1)

³ UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGA1.17/Rev.1, 24 August 2006)

- (b) **Stakeholder consultations** will be conducted through structured and semi-structured interviews and focus group discussion. Key stakeholders to be interviewed include:
- UNIDO Management and staff involved in the project; and
 - Representatives of donors, counterparts and stakeholders.
- (c) **Field visit** to project sites in India, subject to assessment and clearance of COVID associated travel risks.
- On-site observation of results achieved by the project, including interviews of actual and potential beneficiaries of installed pilot projects;
 - Interviews with the representatives of the UNIDO Regional Office 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.

2. Evaluation key questions and criteria

The key evaluation questions are the following:

- (a) What are the key drivers and barriers to achieve 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?
- (b) How well has the project performed? Has the project done the right things? Has the project done things right, with good value for money?
- (c) What have been the project's key results (outputs, outcome and impact)? To what extent have the expected results been achieved or are likely to be achieved? To what extent the achieved results will sustain after the completion of the project?
- (d) What lessons can be drawn from the successful and unsuccessful practices in designing, implementing and managing the project?

The evaluation will assess the likelihood of sustainability of the project results after the project completion. The assessment will identify key risks (e.g. in terms of financial, socio-political, institutional and environmental risks) and explain how these risks may affect the continuation of results after the project ends.

Table 5 below provides the key evaluation criteria to be assessed by the evaluation. The details questions to assess each evaluation criterion are in annex 2 of the UNIDO Evaluation Manual.

Table 5. Project evaluation criteria

Index	Evaluation criteria	Mandatory rating
A	Progress to Impact	Yes
B	Project design	Yes
1	• Overall design	Yes
2	• Logframe	Yes
C	Project performance	Yes
1	• Relevance	Yes
2	• Effectiveness	Yes
3	• Efficiency	Yes
4	• Sustainability of benefits	Yes
5	• Coherence*	Yes
D	Cross-cutting performance criteria	
1	• Gender mainstreaming	Yes
2	• Environment and socio-economic aspects ⁴	
2	• M&E: (focus on Monitoring) ✓ M&E design ✓ M&E implementation	Yes
3	• Results-based Management (RBM)	Yes
E	Performance of partners	
1	• UNIDO	Yes
2	• National counterparts	Yes
3	• Donor	Yes
F	Overall assessment	Yes

* Coherence is added reflecting the changes in the updated DAC evaluation criteria.

Performance of project partners

The assessment of performance of partners will ***include*** the quality of implementation and execution of the GEF Agencies (hence UNIDO) and project executing agencies (EAs, hence MNRE) in discharging their expected roles and responsibilities. The assessment will take into account the following:

- Quality of Implementation, e.g., the extent to which the agency delivered effectively, with focus on elements that were controllable from the given GEF Agency's perspective and how well risks were identified and managed.
- Quality of Execution, e.g., the appropriate use of funds, procurement and contracting of goods and services.

Other Assessments required by the GEF for GEF-funded projects:

The terminal evaluation will assess the following topics, for which ***ratings are not required:***

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

⁴ All GEF-4 and GEF-5 projects have incorporated relevant environmental and social considerations into the project design / GEF-6 projects have followed the provisions specified in UNIDO/DGAI.23: UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP)

- 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.
- c. **Environmental and Social Safeguards⁵:** 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.

3. Rating system

In line with the practice adopted by many development agencies, the UNIDO Independent Evaluation Division uses a six-point rating system, where 6 is the highest score (highly satisfactory) and 1 is the lowest (highly unsatisfactory) as per **Error! Reference source not found.**

Table 6. Project rating criteria

Score		Definition	Category
6	Highly satisfactory	Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets).	SATISFACTORY
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).	UNSATISFACTORY
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).	

IV. Evaluation process

The evaluation will be conducted during March – June 2021. The evaluation will be implemented in five phases which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

- i. Inception phase: The evaluation team will prepare the inception report providing details on the methodology for the evaluation and include an evaluation matrix with specific issues for the evaluation; the specific site visits will be determined during the inception phase, taking into consideration the findings and recommendations of the mid-term review.
- ii. Desk review and data analysis;
- iii. Interviews, survey and literature review;
- iv. Field visit;
- v. Data analysis and report writing.

IED will be responsible for the final evaluation report issuance and distribution with the respective management response sheet and further follow-up, and publication of evaluation report in UNIDO intra/internet sites

⁵ 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

V. Time schedule and deliverables

The evaluation is scheduled to take place from March to June 2021. The tentative timelines are provided in **Error! Reference source not found.**

The evaluation team will give an online debriefing and presentation of the preliminary findings of the terminal evaluation to the relevant stakeholders. The draft TE report is to be shared with the Government executing agency (MNRE), UNIDO PM, UNIDO Independent Evaluation Division, the UNIDO GEF Coordinator and GEF OFP and other stakeholders for receipt of comments. The TE leader is expected to revise the draft TE report based on the comments received, edit the language and form and submit the final version of the TE report in accordance with UNIDO ODG/EIO/EID standards.

Table 7. Provisional planning

Timelines	Tasks
February 2021	Recruitment of the evaluation team
March – Mid April 2021	Desk review Writing of inception report and on line briefing with UNIDO project manager and the project team based in Vienna/Delhi On line consultations and fact finding with project stakeholders and beneficiaries
Mid April 2021	Field visits – subject to COVID19 travel and site access clearances
Mid May 2021	Preparation of first draft evaluation report Online debriefing Internal peer review of the report by UNIDO’s Independent Evaluation Division and other stakeholder comments to draft evaluation report
Mid June 2021	Final evaluation report

VI. Evaluation team composition

The evaluation team (ET) will be composed of one international evaluation consultant acting as the team leader and one national evaluation consultant. The evaluation team members will possess relevant strong experience and skills on evaluation management and conduct together with expertise and experience in innovative clean energy technologies. 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. The ET is required to provide information relevant for follow-up studies, including terminal evaluation verification on request to the GEF partnership up to three years after completion of the terminal evaluation.

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 team in India will support the evaluation team. The UNIDO GEF Coordinator and GEF OFP(s) will be briefed on the evaluation and provide support to its conduct. GEF OFP(s) will, where applicable and feasible, also be briefed and debriefed.

An evaluation manager from UNIDO Independent Evaluation Division 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.

VII. Reporting

Inception report

This Terms of Reference (ToR) provides some information on the evaluation methodology, but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the Team Leader will prepare, in collaboration with the national consultant, a short inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type of 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 International Evaluation Consultant and national consultant; people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable⁶.

Evaluation report format and review procedures

The draft report will be delivered to UNIDO's Independent Evaluation Division (the suggested report outline is in Annex 4) and circulated to UNIDO staff and national 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 provided by the stakeholders will be sent to UNIDO's Independent Evaluation Division for collation and onward transmission to the project evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The ET will present its preliminary findings to the local stakeholders and take into account their feedback in preparing the evaluation report. The presentation of preliminary findings will take place through virtual platform.

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

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given in annex 4.

VIII. Quality assurance

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

⁶ The evaluator will be provided with a Guide on how to prepare an evaluation inception report prepared by the UNIDO ODG/EVQ/IEV.

The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality, attached as Annex 5. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO Independent Evaluation Division 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 Division, 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

Project strategy		Objectively verifiable indicators				
		Indicator (quantified and time bound)	Baseline	Target	Source of verification	Risks and assumptions
Objectives of the project	To reduce greenhouse gas (GHG) emissions through the use of CST for process heating and cooling	CO ₂ -eq emission reduction (tonnes of CO ₂ -eq) Energy generated from solar concentrators (in Kcal/KWhrs)	Direct CO ₂ -eq emission reductions Indirect CO ₂ -eq emission reductions 91 projects generating approximately 28,000,000 kcal daily (baseline energy generated from solar concentrators)	Cummulative reductions of GHG by about 83,000 - 166,000 tCO ₂ -eq over the period 2014-2034 187 MWh daily energy generated from CST through projects installed over the period 2014-2034	GEF project tracking tool	The Government of India remains committed in the medium and long term to development of renewable energy. Implementation of project activities will foster investment in CST and reduce CO ₂ emissions. Execution of planned activities with adequate resources mobilized.
Project component 1: Policy						
Outcome 1	Favourable policy and regulatory environment created for solar energy applications in industry	Extent to which relevant policies and regulations are proposed and adopted				Institutional and policy barriers can be overcome through analysis and tailored proposals Sustained government support to agreed project activities
Outputs	Set of recommendations and guideliens for policy makers developed	Solar heating and cooling policy and roadmap	No of specific policy for CST for industrial purposes	Clear solar heating and cooling policy and roadmap published	Projects reports MNRE	Sustained government support to agreed project activities Effective collaboration with
		State specific policy to incentivize CST manufacturing	No of incentives for CST manufacturers	Clear manufacturing policy for CST	MNRE	

Project strategy		Objectively verifiable indicators				
		Indicator (quantified and time bound)	Baseline	Target	Source of verification	Risks and assumptions
		Due diligence guidelines for project approval	No of due diligence guidelines for MNRE project approval Limited number fo projects approved and no of clear criteria for approval	Due diligence guidelines published	MNRE website	industry regarding proposed changes
		Proposal to modify boiler regulations and acts		Clear modifications to boiler regulations incorporating CST	CBB records	
		Proposal to modify building regulations to consider the use of CST	No of regulations to consider CST for new industry	Proposal for consideration of CST for new designated industry	Project reports	
Project component 2 Technology and Demonstration						
Outcome 2	Technical and financial viability of projects confirmed Local manufacturing capability for solar energy systems in industrial applications enhanced Investment in solar energy applications in industry increased	Volume of investment mobilized Tonnes of CO2-eq avoided	No of project 15 channel partners	25 projects 14 industry associations 20 channel partners	GEF project tracking tool Financing partner data Independent evaluation reports Project reports Project website	Fossil fuel prices remain high in the medium and long term Beneficiary industries have co-finance to implement projects and there is technical capacity to install projects Industrial associations engage with project
Output 2.1	Detailed technology application tools developed: integrated CST with storage; detailed project reports (DPR); CST demonstration project selected; qualified consultants	Number of industry specific reporting parameters for CST systems	No performance standards for CST	Standards developed for all 5 CST technologies from all channel partners	Copies of standards developed	Availability of DNI data for selected zones Cooperation between users and suppliers to develop standard conditions Agreements on financial parameters to be included
		Number of performance benchmarks	No benchmarks	Benchmarks developed for 10 zones	Report on benchmarking for 10 DNI zones	
		Number of standardised financial models for CST	No standard model	Standard financial model developed	Copy of financial model	

Project strategy		Objectively verifiable indicators					
		Indicator (quantified and time bound)	Baseline	Target	Source of verification	Risks and assumptions	
selected; 25 demonstration projects installed; performance monitoring and analysis of projects; and case studies prepared		Number of CST packages developed	No of CST packages and guidelines	10 CST packages and guidelines	Copies of the CST packages and guidelines	Cooperation between users and suppliers to develop guidelines	
		Number of process information booklets	No of process information booklets	11 process information booklets	Copies of the process information booklets		
		Number of CST projects implemented with support from GEF	91 systems installed	25 additional projects implemented with direct support from GEF	GEF project tracking tool Project implementers' records Independent evaluation reports Project reports Copies of case studies	Co-finance is available for each project and there is the technical capacity to install the project	
		Installed capacity of new CST projects (Kw and area)	0 installed	Installed capacity of more than 12.5 MW and 20,000m ²			
		Performance monitoring, evaluation reports and case studies on each GEF supported project	No dissemination material on CST	25 case studies			
		Output 2.2	Investment in solar energy applications in industry increases	Number of pilot systems of solar technologies installed Investment mobilized (USD)	Limited pilots and investment on solar thermal applications in industry		Up to 25 pilot systems
Project Component 3 – Scale up							
Outcome 3	Investment in solar energy applications in industry multiplied Quality of solar energy components assured	No of CST projects installed and operating No of organisations applying to financing facility for CST projects					

Project strategy		Objectively verifiable indicators				
		Indicator (quantified and time bound)	Baseline	Target	Source of verification	Risks and assumptions
Output 3.1	Business models for CST leading to sustained replication of solar thermal applications in industry Quality assurance and certification framework in place	Business models in place Number of MNRE standards developed Number of recommended certification schemes	No business business models 5 standards developed None	Up to 3 models developed Up to 8 standards developed Certification schemes recommended	Report on business models for CST and case studies of examples Project reports and copies of proposed standards Copies of proposed certification schemes	Alternative business models trialled Sufficient interest from industry and MNRE in developing standards and certification schemes
Output 3.2	Financing facility for scale up established	Financing facility established	No financing facility available for CST	50 projects with 25 MW _{th} installed and approximately 40,000m ² 124 MW _{th} energy daily from projects A financing facility established	Project implementers' records Independent evaluation reports Details of financing facility and deal flow	Co-finance is available for each project and there is the technical capacity to install the project Interest from beneficiaries in accessing a financing facility and from FI in establishing
Project Component 4 – Awareness raising and capacity building						
Outcome 4	Capacity of key players in target industries enhanced Technology transfer and information sharing tools established	No of trained personnel No of training sessions provided Advice given to stakeholders				
Output 4.1	Trained manufacturers, suppliers and installers	No of installation, operation, maintenance and trouble-shooting manuals for CST	No manuals	11 manuals	Participants logs and evaluation forms Copies of training material Copies of manuals	Targeted stakeholders show willingness for training Growth in industry leading to growth in training demand Training programme successfully implemented
		No of training sessions targeted at manufacturers, suppliers, installers and academics on CST	0	6		

Project strategy		Objectively verifiable indicators				
		Indicator (quantified and time bound)	Baseline	Target	Source of verification	Risks and assumptions
		No of trained manufacturers, suppliers and installers	0	120		
		No of trainig sessions for it is and maintenance staff	0	10		
		No of trained ITI students and maintenance staff	0	200		
Output 4.2	Awareness raised among the business community	No of workshops and field visits targeted at industry	none	20	Participants logs and evaluation forms	Targeted stakeholders show willingness for training Growth in industry leading to growth in training demand Training programme succesfully implemented Beneficiaries happy to receive visitors
		Number of organisations attending awareness raising sessions	none	1000		
Output 4.3	Technical capacity built through promotion of industry-academic partnerships	No of field fisits for academics	none	20	Participants logs and evaluation forms Knowledge platform and user statistics Dicussion archieve and membership lists Institution report on no of researchers in CST Annual reports of MNRE	Growth in industry leading to growth in training demand Academia will be interested in CST research areas Sufficient topics are identified by industry and academica Stakeholders will engage with knowledge platforms
		No of academic institutions attending field visits	0	200		
		No of guest lectures given on CST	0	20		
		Knowledge platform establishment	no	Knowledge platform establisied		
		Number of users of knowledge platform	none	200		
		Number of joint industry-academic applied research projects initiated	none	5		
Output 4.4	CST and project information shared	CST webportal established	none	1	Website and use statistics	Web portal established

Project strategy		Objectively verifiable indicators				
		Indicator (quantified and time bound)	Baseline	Target	Source of verification	Risks and assumptions
		Number of users of website per year	0	1000		
Output 4.5	Documented project outputs, case studies, best practices and lessons learned	Number of newsletters produced	0	20	Copies of newsletters and distribution list Copies of brochures Advertising agency records Copies of adverts MNRE project records Participants logs and evaluation forms	Project information captures and results documented for publicity Industrial clusters engage with the project to advertise CST
		Number of recipients of newsletters	0	2000		
		Number of brochures developed	0	20		
		Number of industrial clusters advertising CST	0	15		
		Number of adverts in national press	0	10		
		National workshop	0	1		

Annex 2: Job descriptions



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	International evaluation consultant, team leader
Main Duty Station and Location:	Home-based
Start of Contract (EOD):	1 March 2021
End of Contract (COB):	15 June 2021
Number of Working Days:	28 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 factual information about result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling 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.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
<p>1. Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); determine key data to collect in the field and adjust the key data collection instrument if needed;</p> <p>Define technical issues and questions to be addressed prior to the field visit.</p> <p>Determine key data to collect in the field and adjust the key data collection instrument if needed.</p>	<ul style="list-style-type: none"> Adjust table of evaluation questions, depending on country specific context; Prepare a map of stakeholders to interview during the field missions; 	3	Home-based

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
In coordination with the project manager, the project management team and the technical evaluators, determine the suitable sites to be visited and stakeholders to be interviewed.			
<p>2. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders to prepare for the evaluation inception workshop online.</p> <p>Prepare materials, tools and method to collect data in the field visits by the national consultant, detailed evaluation methodology confirmed, draft theory of change, and tentative agenda for field work.</p>	<ul style="list-style-type: none"> • The inception report submitted to evaluation manager. • Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; • Division of evaluation tasks with the team members. 	3	Home-based, online
<p>3. Provide technical support to the national evaluator while conducting field mission.</p> <p>Participate in interviews, as agreed with the team member online, when possible</p> <p>Take part as a resource person to answer questions and provide clarification to the focus group meetings on identifying conditions necessary for transformational changes to take place</p> <p>Review meeting and workshop notes prepared by the national evaluator during field work; provide national evaluator substantive advice to collect appropriate data and information in a real time manner; and to keep abreast with feedback from the stakeholders from the field.</p>	<ul style="list-style-type: none"> • Agreement with the national evaluator on the structure and content of the evaluation report and the distribution of writing tasks; 	6	Home-based
<p>5. Prepare the evaluation report, with inputs from the team member, according to the TOR; Coordinate the inputs from the national evaluator 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.</p>	<ul style="list-style-type: none"> • Draft evaluation report. 	12	Home-based
<p>4. Prepare and present overall findings and recommendations to the stakeholders online.</p>	<ul style="list-style-type: none"> • After field mission(s): Presentation slides, feedback from stakeholders obtained and discussed 	2	Home-based, online
<p>6. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit</p>	<ul style="list-style-type: none"> • Final evaluation report. 	2	Home-based

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

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education:

Advanced degree in business management, value-chain, environment, energy, engineering, development studies or related areas.

Technical and functional experience:

- Minimum of 15 years’ experience in evaluation of development projects and programmes
- Good working knowledge in (renewable) energy and/or environmental management
- 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
- 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; field mission in India to be separately confirmed
Start of Contract:	1 March 2021
End of Contract:	15 June 2021
Number of Working Days:	28 days spread over the above-mentioned period

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 factual information about result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling 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.

PROJECT CONTEXT

The national evaluation consultant will evaluate the project 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, logical models); Adjust 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 pertaining technical issues determined with the Team Leader. In close coordination with the project staff team verify the extent of achievement of project outputs prior to field visits.	Report addressing technical issues and question previously identified with the Team leader Tables that present extent of achievement of project outputs	5 days	Home-based

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
Develop a brief analysis of key contextual conditions relevant to the project	Brief analysis of conditions relevant to the project		
Support the Team Leader in prepare materials, tools and method to collect data in the field. 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.	Key tools and materials Detailed evaluation schedule. List of stakeholders to interview during the field missions.	3 days	Home-based, online
Conduct the field mission to meet and discuss with project key-stakeholders and beneficiaries, to the extent possible these meetings should be organized so that the Team Leader could participate online. Consult with the Team Leader on the meeting/interview protocol and guide to collect data and information in the format agreed in advance with the team leader. Design, administer, and analyze open-ended interviews and focus groups to gather qualitative information Prepare meeting notes and data based on the format requested by the team leader. Close exchange and discussion with the team leader on data and information collected from the field	Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks. Systematic data and information from the field	7 days (including travel days)	India (the sites to be identified later)
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 of 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 Division and stakeholders and proof read the final version.	Part of draft evaluation report prepared.	8 days	Home-based

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in agriculture, environmental science, engineering or other relevant discipline like developmental studies.

Technical and functional experience:

- Experience in evaluation, or monitoring and evaluation.
- Excellent knowledge and competency in the field of agriculture and environmental management.
- Evaluation experience, including evaluation of development cooperation in developing countries is an asset.
- Exposure to the needs, conditions and problems in developing countries.
- Familiarity with the institutional context of the project is desirable.

Languages: Fluency in written and spoken English and Hindi 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 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.

Annex 3- Outline of an in-depth project evaluation report

Executive summary (maximum 5 pages)

- Evaluation purpose and methodology
- Key findings
- Conclusions and recommendations
- Project ratings
- Tabular overview of key findings – conclusions – recommendations

1. Introduction

- 1.1. Evaluation objectives and scope
- 1.2. Overview of the Project Context
- 1.3. Overview of the Project
- 1.4. Theory of Change
- 1.5. Evaluation Methodology
- 1.6. Limitations of the Evaluation

2. Project's contribution to Development Results - Effectiveness and Impact

- 2.1. Project's achieved results and overall effectiveness
- 2.2. Progress towards impact
 - 2.2.1. Behavioral change
 - 2.2.1.1. Economically competitive - Advancing economic competitiveness
 - 2.2.1.2. Environmentally sound – Safeguarding environment
 - 2.2.1.3. Socially inclusive – Creating shared prosperity
 - 2.2.2. Broader adoption
 - 2.2.2.1. Mainstreaming
 - 2.2.2.2. Replication
 - 2.2.2.3. Scaling-up

3. Project's quality and performance

- 3.1. Design
- 3.2. Relevance
- 3.3. Efficiency
- 3.4. Sustainability
- 3.5. Gender mainstreaming

4. Performance of Partners

- 4.1. UNIDO
- 4.2. National counterparts
- 4.3. Donor

5. Factors facilitating or limiting the achievement of results

- 5.1. Monitoring & evaluation
- 5.2. Results-Based Management
- 5.3. Other factors
- 5.4. Overarching assessment and rating table

6. Conclusions, recommendations and lessons learned

- 6.1. Conclusions
- 6.2. Recommendations
- 6.3. Lessons learned
- 6.4. Good practices

Annexes (to be put online separately later)

- Evaluation Terms of Reference
- Evaluation framework
- List of documentation reviewed
- List of stakeholders consulted
- Project logframe/Theory of Change
- Primary data collection instruments: evaluation survey/questionnaire
- Statistical data from evaluation survey/questionnaire analysis

Annex 4: Checklist on evaluation report quality

Project Title:

UNIDO ID:

Evaluation team:

Quality review done by:

Date:

Report quality criteria	UNIDO IED assessment notes	Rating
a. Was the report well-structured and properly written? (Clear language, correct grammar, clear and logical structure)		
b. Was the evaluation objective clearly stated and the methodology appropriately defined?		
c. Did the report present an assessment of relevant outcomes and achievement of project objectives?		
d. Was the report consistent with the ToR and was the evidence complete and convincing?		
e. Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible? (Including assessment of assumptions, risks and impact drivers)		
f. Did the evidence presented support the lessons and recommendations? Are these directly based on findings?		
g. Did the report include the actual project costs (total, per activity, per source)?		
h. Did the report include an assessment of the quality of both the M&E plan at entry and the system used during the implementation? Was the M&E sufficiently budgeted for during preparation and properly funded during implementation?		
i. Quality of the lessons: were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
j. Quality of the recommendations: did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can these be immediately implemented with current resources?		
k. Are the main cross-cutting issues, such as gender, human rights and environment, appropriately covered?		
l. Was the report delivered in a timely manner? (Observance of deadlines)		

Rating system for quality of evaluation reports

A rating scale of 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 5: Guidance on integrating gender in evaluations of UNIDO projects and Projects

A. Introduction

Gender equality is internationally recognized as a goal of development and is fundamental to sustainable growth and poverty reduction. The UNIDO Policy on gender equality and the empowerment of women and its addendum, issued respectively in April 2009 and May 2010 (UNIDO/DGB(M).110 and UNIDO/DGB(M).110/Add.1), provides the overall guidelines for establishing a gender mainstreaming strategy and action plans to guide the process of addressing gender issues in the Organization's industrial development interventions.

According to the UNIDO Policy on gender equality and the empowerment of women:

Gender equality refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not suggest that women and men become 'the same' but that women's and men's rights, responsibilities and opportunities do not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. It is therefore not a 'women's issues'. On the contrary, it concerns and should fully engage both men and women and is a precondition for, and an indicator of sustainable people-centered development.

Empowerment of women signifies women gaining power and control over their own lives. It involves awareness-raising, building of self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discriminations and inequality.

Gender parity signifies equal numbers of men and women at all levels of an institution or organization, particularly at senior and decision-making levels.

The UNIDO projects/projects can be divided into two categories: 1) those where promotion of gender equality is one of the key aspects of the project/project; and 2) those where there is limited or no attempted integration of gender. Evaluation managers/evaluators should select relevant questions depending on the type of interventions.

B. Gender responsive evaluation questions

The questions below will help evaluation managers/evaluators to mainstream gender issues in their evaluations.

B.1. Design

- Is the project/project in line with the UNIDO and national policies on gender equality and the empowerment of women?
- Were gender issues identified at the design stage?
- Did the project/project design adequately consider the gender dimensions in its interventions? If so, how?
- Were adequate resources (e.g., funds, staff time, methodology, experts) allocated to address gender concerns?
- To what extent were the needs and priorities of women, girls, boys and men reflected in the design?

- Was a gender analysis included in a baseline study or needs assessment (if any)?
- If the project/project is people-centered, were target beneficiaries clearly identified and disaggregated by sex, age, race, ethnicity and socio-economic group?
- If the project/project promotes gender equality and/or women's empowerment, was gender equality reflected in its objective/s? To what extent are output/outcome indicators gender disaggregated?

B.2. Implementation management

- Did project monitoring and self-evaluation collect and analyse gender disaggregated data?
- Were decisions and recommendations based on the analyses? If so, how?
- Were gender concerns reflected in the criteria to select beneficiaries? If so, how?
- How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?
- If the project/project promotes gender equality and/or women's empowerment, did the project/project monitor, assess and report on its gender related objective/s?

B.3. Results

- 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)?
- In the case of a project/project with gender related objective/s, to what extent has the project/project achieved the objective/s? To what extent has the project/project reduced gender disparities and enhanced women's empowerment?