

Annex 11 Monitoring and evaluation plans

FAO: Strengthening climate Resilience of Vulnerable Agriculture Livelihoods in Iraq (SRVALI)

Programme/ Projects Results	Data/Source	Collection Tool	Frequency	Indicator
<u>ARA1 Most vulnerable people and communities</u>	Independent evaluations based on; external third parties' surveys	<i>Baseline study</i> <i>Government data/records</i> <i>Document review</i> <i>GIS data</i> <i>Key informant interviews</i> <i>Government data/records</i>	mid-term and final	<u>Core 2: Direct and indirect beneficiaries reached</u>
<u>ARA2 Health, well-being, food and water security</u>				<u>Core 4: Hectares of natural resources brought under improved low-emission and/or climate-resilient management practice</u>
<u>ARA2 Health, well-being, food and water security</u>				<u>Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security</u>
<u>ARA2 Health, well-being, food and water security</u>				<u>Supplementary 2.5: Beneficiaries (female/male) adopting innovations that strengthen climate change resilience</u>
<u>ARA3 Infrastructure and built environment</u>				<u>Core 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions</u>
<u>MRA1 Energy generation and access</u>	Annual carbon accounting prepared by the project using the FAO Ex-Ante tool. Independent evaluations (mid-term and final) Reports generated with installed monitoring equipment	<i>Baseline study</i> <i>Survey/questionnaire</i> <i>GIS data</i> <i>Document review</i>	Annually	<u>Core 1: GHG emissions reduced, avoided or removed/sequestered</u>
	Project Report External third-party Inspection after works completion, at midterm and at the final evaluation.	<i>Field observation visits</i> <i>GIS data</i> <i>Document review</i>		<u>Supplementary 1.3: Installed renewable energy capacity</u>
Outcome 1: Increased water availability for women and men farmers	PMU/FAO reports Reports from MoWR	<i>Baseline study</i>	Annual Monitoring	% conveyance efficiency
	National Statistics PMU/FAO reports Data from field sampling methods External and independent analysis	<i>Field observation visits</i>		% Crop intensity in project areas

	External and independent analysis Reports from MoWR	<i>GIS data</i>		% of individual water outlets regulated with prepaid water meters
Output 1.1.1: Open canals shifted from open to closed systems benefiting 8,457 people	Project records Reports from Independent and external experts Annual Performance Reports by DoWR	<i>Key informant interviews</i> <i>Document review</i> <i>Baseline study</i>		Length of canal upgraded
Output 1.2.1: Water canals covered with solar panels, providing 1,000 kW of renewable energy	Performance report of solar systems generated with installed monitoring equipment and monitored by the O&M Report from DoWR PMU an the DoWR reports Independent Expert evaluation	<i>Field observation visits</i> <i>GIS data</i> <i>Key informant interviews</i>	Annual Monitoring and quarterly updates	kWp of solar energy produced to pump water # of staff capacitated to carry out operation and maintenance of solar systems by gender
Output 1.3.1: 500 technical staff trained in design, installation and maintenance of irrigation, drainage and energy technologies	Official publications from partnering schools reporting the use of the new curricula	<i>Government data/records</i> <i>Document review</i>		# of Technicians (disaggregated by gender) trained
Output 1.3.2: 15 WUAs supported in developing and adopting more efficient and climate sensitive water-distribution plans.	Governmental records Official documentation by the WUA			# of gender inclusive WUAs established and strengthened
Outcome 2: Increased adoption of practices and technologies to address climate risks	Reports from the extension officers facilitating the FFS. Reports from the extension officers and civil society organization involved in the CWW activities.	<i>Baseline study</i>	Annual Monitoring	# of farmers (disaggregated by gender) implementing CRA practices and technologies # of farms/home gardens with stabilized / increased production in project areas.
Output 2.1.1: 400 Extension Staff trained on climate resilient agricultural practices and technologies to train 10,000 farmers in adaptive practices and technologies	Individual evaluations of the training process.	<i>Field observation visits</i> <i>GIS data</i> <i>Government data/records</i>		# of extension officers (disaggregated by gender) graduated in CRA practices and technologies from the training programs
Output 2.1.2: Enhanced capacity of 10,000 farmers in Climate Resilient Agriculture	Reports from the extension officers in charge of implementing the FFS Reports from MoWR Reports from MoA Information and data collected in farmers' fields by the FFS facilitators (extension officers' team) Independent surveys at mid-term and terminal evaluations	<i>Key informant interviews</i> <i>Document review</i>	Annual Monitoring and quarterly updates	# of farmers (disaggregated by gender) trained on CRA practices and technologies Changes (+) in percent of irrigation efficiency Changes (+) in percent in wheat yields (kg/ha)

Output 2.1.3: 100,000 farmers reached through ICT4CC technologies	Statistics from websites/applications used for activity Independent surveys at mid-term and terminal evaluations			# of farming households reached through ICT4CC
Output 2.2.1: Technical Capacities of 90 stakeholders and knowledge of 12,000 citizens on solar energy increased through trainings and awareness raising events	Reports/Documentation from the organization in charge of the trainings Independent surveys at mid-term and termination of the project.			# of experts (disaggregated by gender) certified on Solar powered irrigation systems
Output 2.3.1: A cadre of 150 Climate Wise Women (CWW) trained as change agents for climate adaptation	Reports/documentation of the organization in charge to carry out the training			# of citizens sensitized on Solar Energy by gender
Output 2.3.2: 40,500 Women adopt for climate adaptive measures.	Reports/documentation of CWW and of the service provider in charge for organizing awareness raising activities Knowledge surveys Experts' evaluation			# of women certified by training courses
Outcome 3: Policy environment for efficient water and energy management is enabled	Data records of MoWR/MoA/MoElectricity Reports from MoE and Chambers of Commerce	<i>Government data/records</i> <i>Document review</i>	<i>Annual Monitoring</i>	# of crops prohibited from being cultivated compared to the reference period (2016-2021).
				# Increased installation of solar panels in rural areas.
Output 3.1.1.: A climate resilient water allocation strategy and its action/legal/coordination plan developed	Formal endorsement from stakeholders via participative workshop . Governmental reports (e.g. Gazette)	<i>Government data/records</i>	Annual Monitoring and quarterly updates	Climate resilient water strategy developed and validated
Output 3.1.2: Improved national compliance practices for management of irrigation water supply				Action plan developed, discussed and validated with stakeholders
Output 3.2.1: Enhanced planning for solar rural electrification	Formal endorsement from stakeholders via participative workshop . Governmental reports (e.g. Gazette)	<i>Other (please specify)</i>	<i>Annual Monitoring</i>	Road map for solar rural electrification developed, discussed and validated with stakeholders
		<i>Other (please specify)</i>		# of private sector stakeholders sensitized on awareness on solar energy opportunities
	Formal endorsement from stakeholders via participative workshop	<i>Other (please specify)</i>		# of Ministries collaborating in elaboration and implementation of road map
Project co-benefit indicators				

Co-benefit 1: Increase in ancillary jobs.	Independent evaluations based on; external third parties' surveys	<i>Baseline study</i> <i>Key informant interviews</i> <i>Document review</i>	mid-term and final	# new jobs related to piped systems created in the water sector and solar energy
Co-benefit 2: Crop diversification	Independent evaluations based on; external third parties' surveys	<i>Baseline study</i> <i>Key informant interviews</i> <i>Document review</i>	mid-term and final	Changes in crop production
Co-benefit 3: Acceptance of role of women in the water user associations	Project reports Official documents of the WuAs	<i>Baseline study</i> <i>Key informant interviews</i> <i>Document review</i>	mid-term and final	# number of women in leading roles in WUAs.
Co-benefit 4: GHG reduction through CRA	Reports from the extension officers in charge of implementing the FFS Annual carbon accounting prepared by the project using the FAO Ex-Ante tool. Independent evaluations (mid-term and final)	<i>Baseline study</i> <i>Survey/questionnaire</i> <i>GIS data</i> <i>Document review</i>	<i>Annually</i>	<u>GHG emissions reduced and sequestered through climate resilient agriculture activities</u>

Indicator	Collection Tool	Frequency	Indicative Budget	Tools and Assumptions
<u>Core 1: GHG emissions reduced, avoided or removed/sequestered</u>	<i>Baseline study</i> <i>Government data/records</i>	<i>Yearly</i>	<i>No additional costs. Duty of DOWR and PMU via the M&E Unit to verify performance of solar systems</i>	<i>The project will employ FAO tools like EX-ACT and NEXT to carry out carbon accounting and to report on the indicator</i>
<u>Core 2: Direct and indirect beneficiaries reached</u>	<i>Document review</i> <i>GIS data</i> <i>Key informant interviews</i>	<i>Baseline (Y1)</i> <i>Mid-term (Y4)</i>	<i>USD 196,272</i> <i>Ref: Annex 4, Line Z 179-181</i>	<i>Surveys will be commissioned by the project to external and independent companies at mid-term and termination of the project.</i>
<u>Core 4: Hectares of natural resources brought under improved low-emission and/or climate-resilient management practice</u>	<i>Government data/records</i>	<i>Final Review (Y6)</i>	<i>USD 808,904</i> <i>Ref: Annex 4, Z182-186.</i>	<i>Surveys will be commissioned by the project to external and independent companies at mid-term and termination of the project.</i>

<u>Core 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions</u>				<p><i>Surveys will be commissioned by the project to external and independent companies at mid-term and termination of the project.</i></p> <p><i>The core indicator 3 concerns the rehabilitated canals part of component 1.</i></p>
<u>Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security</u> <u>Supplementary 2.5: Beneficiaries (female/male) adopting innovations that strengthen climate change resilience</u>				<p><i>Surveys will be commissioned by the project to external and independent companies at mid-term and termination of the project.</i></p> <p><i>Supplementary indicator 2.3 accounts for the beneficiaries related to the rehabilitated water canals in component 1.</i></p> <p><i>Supplementary indicator 2.5 accounts for the beneficiaries related to FFS in component 2.</i></p>
Total Monitoring Cost			<i>USD 1,005,176</i>	

Evaluation (total cost already included in the Total reported in the previous table)			
Type	Timing	Independent/Self-evaluation	Indicative Budget
<i>Process</i>	Annual	Self-Assessment	USD 131,484 (1 year) USD 788,904 (6 years)
<i>Process</i>	Baseline (Y1)	Independent	USD 66,000
<i>Process</i>	Mid-Term (Y4)	Independent	USD 66,000
<i>Outcome</i>	End-Term (Y6)	Independent	USD 64,072

In its role as Accredited Entity, FAO (specifically the FAO-GCF project supervision team) will oversee and supervise the implementation of this project in accordance with the Accreditation Master Agreement (AMA) signed between FAO and the GCF.

As per the GCF Monitoring and Accountability Framework, and in accordance with the AMA, FAO will provide the GCF with an Inception Report, Annual Performance Reports, an independent Mid-term Evaluation report, a Project Closure Report, and an independent Final Evaluation report. FAO will also provide semi-annual and annual Financial Reports throughout project implementation. FAO has standard M&E procedures that are compliant with the GCF performance measurement framework. FAO will manage and coordinate reporting to the GCF according to its standards and procedures.

The project monitoring will be conducted by a team of M&E experts and Monitoring and Data Management Specialist. The monitoring and evaluation will take place under the following three levels:

1. Project execution level:

The project will include an implementation of a monitoring system to understand efficacy, targeting and verify its underlying assumptions as well as incorporate elements and lessons emerging from the monitoring systems into the project implementation and planning.

The monitoring at this level will be coordinated by the monitoring expert(s) and overseen by the PMU. Data will be stored in a database accessible to the GCF, the counterpart, as well as to FAO. Georeferencing will enhance the monitoring and evaluation of outcomes and assist in making available for the project, its partners and the GCF precise geospatial analysis that will be paramount in assessing impacts and contribution to approved targets at midterm and completion. Additionally, it will improve the project's capacity to provide technical assistance to beneficiaries and monitor advancements and impacts. Georeferenced activities and resulting intervention areas will be also analyzed via remote sensing and photointerpretation techniques so to ensure Results based M&E and support Result Based Management of the project. Results of the different analysis will be presented annually via a dedicated "Project's Implementation Atlas". Data, supervision reports and conclusions obtained by the above-mentioned process will be presented annually to the GCF as well as to the other stakeholders.

2. Supervision, Support level:

FAO will support the project team in reviewing and analyzing progress reports and to assess performance against baseline and targets. FAO will also secure, according to its rules and regulations, financial control and midterm evaluation and final evaluation phases via an independent and external evaluation expert.

In accordance with the AMA between FAO and GCF, the FAO Office of Evaluation (OED) will be responsible for the independent interim and final evaluations. The evaluations will be conducted using a question-driven approach, and may include assessments against the criteria of relevance, effectiveness, and sustainability, among others. The interim evaluation will be instrumental in contributing – through operational and strategic recommendations – to improve implementation, setting out any necessary corrective measures for the remaining period of the project. The final evaluation will assess the relevance of the intervention, its overall performance, as well as sustainability and scalability of results, differential impacts and lessons learned. The evaluation should also assess the extent to which the intervention has contributed to the Fund's higher-level goal of achieving a paradigm shift in adaptation to climate change in Serbia. The evaluation will draw on mixed methods, using qualitative methods (e.g. participatory rural appraisal) in combination with counterfactual analysis, depending on the existence of reliable control group data from the project's baseline and endline surveys. In addition to primary data collected by the evaluators and secondary national and subnational statistics, both interim and final evaluations will draw on the monitoring reports and activities prepared by project staff. Careful attention will be paid to the disaggregation of data, results, and outcomes by gender, considering different level of vulnerability of project beneficiaries.

3. Strategic level:

Annual results and related analysis, jointly prepared by FAO and project team will provide the base for each annual planning exercise. This will be presented to the steering committee to support its strategic role and to secure transparency and result based strategy development.

The project will include a baseline, a midterm review, and a final evaluation. This will be conducted with the OED Unit in FAO in accordance with FAO and GCF rules.

4. Formal Evaluation by Accredited Entity (interim and final)

To provide an external viewpoint on the progress of the Project and the achievement of its objectives, the FAO Office of Evaluation (OED) will conduct two project evaluations, an interim evaluation, and a final evaluation. Costs related to the interim and final evaluation will be covered by the AE fee of the project. In line with the AMA, the FAO Office of Evaluation (OED) will oversee the interim and final evaluation of the project.

The evaluations will be conducted using a question driven and according to the GCF evaluation criteria. The interim evaluation will be instrumental in contributing – through operational and strategic recommendations – to improve implementation, setting out any necessary corrective measures for the remaining period of the project. The final evaluations will assess the relevance of the intervention, its overall performance, as well as the sustainability and scaling up of the results obtained, coherence in climate finance delivery with other multilateral agencies, gender equity, innovativeness in results areas and the lessons learned. The evaluation should also assess the extent to which the intervention has contributed to the Fund's higher-level goal of achieving a paradigm shift in adaptation to climate change in the country. The evaluations will be based on a rigorous evaluation methodology drawing on the most suitable evaluation methods and tools. In addition to the primary data collected by evaluators and the secondary national data available, the interim and final evaluations will be based on monitoring activities and reports prepared by project staff, including surveys to be implemented at baseline, interim and project completion. Careful attention will be paid to the disaggregation of data, results, and outcomes by gender.