Appendix 1: Comprehensive Evaluation Matrix for DESECE/ECCRAS Project

Project: Enhancing Climate Change Resilience and Adaptation Among Smallholder Farmers (ECCRAS) in Western Kenya

Location: Counties of Bungoma and Trans Nzoia, Kenya

Evaluative Focus: Effectiveness, Relevance, Sustainability, and Generating Learning under the following key evaluation questions for each evaluation criteria:

Effectiveness
1. To what extent did the project achieve its planned outputs and intended outcomes across its five thematic areas, particularly in enhancing participants' ability to cope with climate variability and build climate resilience? What were the major enabling or constraining factors influencing their achievement?
2. Has the intervention achieved inclusive results? Were there differences in the outcomes for women, men, and other social groups?

Relevance
3. How well did different project activities align with the needs and priorities of the project participants, especially in relation to climate resilience, women´s empowerment, and peacebuilding?
4. To what extent did the project contribute to community-level change, beyond the direct beneficiaries (e.g. through peer learning, replication, or awareness raising)? Was the approach of working with selected schools and farmers appropriate for addressing broader community needs?

Sustainability
5. To what extent are the project's outcomes and benefits likely to be sustained after the project ends? What mechanisms or capacities have been established to support the continued functioning of community structures (e.g. farmer groups, school clubs, peace committees)?
6. To what extent are the outcomes of the women's and girls' empowerment and entrepreneurship initiatives likely to be sustained? What is the potential for continuity and scaling of microenterprises?
7. What additional support or future interventions would be needed to deepen or expand the impact of the project should the focus be on scaling up, or enhancing quality in selected areas?

Generate Learning
8. What lessons have emerged on design and implementation of interventions that can inform similar projects?
9. How can successful elements of the project be scaled up or adapted by DECESE, SSF, horizont3000 and other stakeholders?

This matrix breaks down each OECD-DAC criterion into its key evaluation questions. For each question, it provides:

- Data Sources: The specific tools and methods for gathering information.

- Specific Indicators & Lines of Inquiry: The precise metrics from the logframes and tailored questions to probe deeper.

- Methods: How the data will be collected (surveys, KIIs, FGDs, document review, and observations).

- Triangulation Plan: How data from different sources and methods will be cross-verified to ensure validity, reliability, and robustness of the findings.

2.4.1 Effectiveness

i. To what extent did the project achieve its planned outputs and intended outcomes?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Endline Surveys with beneficiaries **- Project M&E Reports** **- Training attendance lists** **- KIIs with staff, farmers, teachers** **- FGDs with beneficiary groups**	Outcome Level (derived from DESECE From Logframe): • O.I.1: Proportion of smallholder farmers adopting sustainable climate resilient farming methods, including measures to improve soils and biodiversity enhancing natural elements (Target: 80%) • O.I.2: # farmers perceive themselves better prepared to deal with the impact of climate change in their farms. (Target: 60%) • O.I.3: % Decrease in resource-based conflicts in the attended communities per year. (Target: 20%/year) O2.I.1: # of cook stoves installed in HH (Target 540) O2.I.2: # /% of women that have started a small enterprise (Target 50%) O2.I.3: #/% of girls in schools (Target 50%) • O3 3.3: % of households in the target communities report more gender equality in decision-making and division of tasks in household and garden (Target 70%) Output Level (derived from DESECE Logframes): Result 1 (Farmers): : Smallholder farmers applying climate resilient agriculture, water and ecosystem conservation practices to ensure their food sovereignty as well as their income. • RI.1.1: # of Farmers trained in topics related to climate change adaptation and practices around food sovereignty, climate resilient farming, ecosystem and water conservation measures, etc, • RI.1.2 :# of Farmers diversifying their production through sustainable farming practices, kitchen gardens and food forests by adding more/new/suitable crops varieties, • RI.1.3 : # of Farmers having additional income from their production., • RI1.4: # of farms with access to rain water for irrigation and a functioning irrigation system	- Document Review - Household Surveys - KIIs & FGDs - Direct Observation (farms, schools)	• Quantitative Triangulation: Compare achievement data from M&E reports with endline survey results. • Qualitative Triangulation: Compare success stories from FGDs with challenges reported in KIIs with staff. • Method Triangulation: Verify reported adoption rates (survey) with physical evidence observed on farms (irrigation systems, diverse crops).

Result 2 (Schools): Schools and vocational training centres show-casing climate resilient agriculture, water and ecosystem conservation practices, providing intergenerational practical learning experiences for students and parents and complementing school lunches.

- RI.2.1: # of functioning[1] Agro-ecology clubs, school-kitchen-gardens and demonstration food forests established in primary and secondary schools and vocational training centers,
- RI.2.2: # staff, students and parents trained in climate change adaptation through agro-ecology,
- RI.2.3 : School lunches complemented on a regular base (average 1x/Week) by products of the school kitchen garden/food forests improving the diet of students.

Result 3 (Peace): Farmer groups using human rights-based approaches and gender focus for improved resolution of resource-based based conflicts.

- RI.3.1: # of human rights and peace committees formed and trained,
- RI.3.2: # of women and girls; and community members trained and feeling equipped for the resolution of resource-based based conflicts,
- RI.3.3: # households of the target communities with more gender equality related to decision making and division of tasks in household and garden.,
- RI.3.4 : # beneficiaries (women, girls, men) being aware of their water and land rights.

Result 4 (Cookstoves - Extension): Households embracing the use of Cook stoves and briquettes as a more efficient source of energy to minimize health risks caused by exposure to carbon monoxide emitted from wood fuel.

- RI 4.2: # of beneficiaries being aware on the negative impacts of using wood fuel respiratory health and climate related impacts ,
- RI 4.3: # of cook stoves installed in HH

Result 5 (Women/Girls - Extension): Vulnerable single mothers running small businesses using the entrepreneurial skills provided, better decision

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[1] Meaning they meet regularly, implement practical activities related to their mandate and take good care of the school kitchen gardens and food forests.

making at the household level and girls staying in school up to the completion level while their rights are respected and protected in the community.

- RI5.1 :# of women and girls that have undergone Training for Transformation and that feel empowered,
- RI5.2: # of single mothers that have undergone the ERI training cycle and have increased entrepreneurial skills,
- RI5.3 : # of school girls that received reusable sanitary towels and retain in school,
- RI5.4 : % of single mothers who received seed funds have set up small enterprises

Lines of Inquiry:
• What is the actual vs. target achievement for each indicator?
• What tangible changes in farming practices, income, and conflict resolution can beneficiaries describe?

ii. What were the major enabling or constraining factors?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Project Risk Log & M&E Reports **- Activity timelines & workplans** **- Meteorological & conflict data** **- KIIs with project staff, partners, community leaders** **- FGDs with beneficiaries**	o Constraining Indicators: # of major drought/flood events during project period vs. historical average. o % of beneficiaries who reported crop/livestock loss due to extreme weather. o Observed impact on project assets (e.g., failed irrigation due to drought, gardens washed away by floods). o Total months of government-mandated restrictions on gatherings/schools. o % of planned activities that were postponed, cancelled (noted as less effective). o # of months of significant political instability or civic unrest (around elections). o % of beneficiaries who reported inability to travel to meetings/markets due to insecurity. o Reported changes in the frequency or intensity of resource-based conflicts.	- FGDs/Surveys with farmers - Direct observation & project reports - Project M&E reports (narrative on adaptations) - KIIs with community leaders - Peace committee records - Project registration records - KIIs with project	• Data Source Triangulation: Compare the project's own risk log (document) with perspectives from staff (KIIs) and beneficiaries (FGDs) on what actually hindered progress. • Perspective Triangulation: Contrast the enabling factors cited by project officials (KIIs) with those cited by community leaders and beneficiaries (FGDs).

		staff on mobilization challenges	
	○ % of targeted beneficiaries who initially declined participation. ○ Anecdotes/Narratives of resistance (e.g., to planting trees on farmland, to new cooking technologies, to women's participation in training). ○ Average delay (in months) between activity planned start date and actual start date. ○ Reasons for delay (e.g., slow procurement, late funding disbursement, staffing gaps). • % of installed technologies (e.g., irrigation, cookstoves) that experienced early failure or required major repair. • Narratives on the complexity of practices for beneficiaries to adopt. Enabling Indicators: - Existence of supportive policies (e.g., climate-smart agriculture subsidies, free primary education) that amplified project goals. - Evidence of collaboration with county government departments (e.g., agriculture, environment). % of community leaders (chiefs, elders) who actively promoted project activities. - Narratives of volunteerism (e.g., community providing free land for demo farms, labour for establishing structures). # of instances where the project significantly adapted its approach based on feedback or monitoring data. % of beneficiaries who report that their feedback was sought and acted upon. - Clarity of roles and effectiveness of communication between partners. % of participants from the most vulnerable groups (e.g., women, single mothers, resource-poor farmers) meeting or exceeding targets. - Narratives on the effectiveness of mobilization strategies (e.g., radio shows, demo farms). Lines of Inquiry): • Constraining: What factors hindered the building of resilience or the uptake of promoted measures? • Enabling: Was there high community acceptance? Did national policies align and support the work? Was the local partner (DESECE) effective?		

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	Lines of Inquiry: • Which assumptions held, and which did not? • How did the project adapt to overcome constraints?		

iii. Has the intervention achieved inclusive results?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Disaggregated monitoring data (by gender, age, location) **- FGDs (separate groups for women, men, youth)** **- KIIs with women leaders, committee members**	Indicators to Disaggregate: • All output and outcome indicators, specifically: - RI.1.1: # of men/women trained - RI.3.2: # of women/girls equipped for conflict resolution - RI.3.3: Gender equality in decision-making - RI5.1/5.2/5.4: All women's empowerment indicators Lines of Inquiry: • Were participation and benefits equitably distributed? • Do women report increased influence in household and community decisions? • Were any groups inadvertently marginalized?	- Analysis of Disaggregated Data - Targeted FGDs & KIIs	• Method Triangulation: Compare quantitative data on female participation (disaggregated data) with qualitative evidence of their influence from women-only FGDs and KIIs with female leaders. • Perspective Triangulation: Contrast men's and women's views (from separate FGDs) on changes in gender equality and decision-making within households.

2.4.2 Relevance

iv. How well did activities align with the needs and priorities of participants?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Project Proposal & Baseline Report **- County Integrated Dev. Plans (CIDPs)** **- KIIs with staff, early beneficiaries** **- FGDs with participant groups** **- Project activity reports**	Design Indicators: •Existence of a participatory needs assessment. • Logical link between baseline problems and project activities. • Alignment of project objectives with CIDP priorities. Process Indicators: • % of beneficiaries reporting involvement in activity design (e.g., crop selection). • Existence of documented feedback mechanisms. Perceptual Indicators: • Average "Perceived Relevance" score (1-5). • Frequency of spontaneous mentions of alignment with needs. • Rate of voluntary participation in activities. Lines of Inquiry: • To what extent were beneficiaries involved in the design and planning of activities (e.g., joint design of food forests)? • Do beneficiaries perceive climate resilience, alternative energy (cookstoves), women's empowerment and conflict resolution as top priorities?	- Document Review - Semi-Structured KIIs - FGDs with beneficiaries - Surveys (for scoring) -disaggregated data	• Temporal Triangulation: Compare stated needs in the baseline study (past document) with current perceptions of relevance from beneficiaries (current FGDs/KIIs). • Data Source Triangulation: Verify community priorities as stated in meeting minutes (document) with those expressed directly by beneficiaries in FGDs.

v. To what extent did the project contribute to community-level change beyond direct beneficiaries?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- KIIs with local leaders, officials **- FGDs in Indirect Beneficiaries** **- Project reports on outreach**	Awareness & Knowledge o Unaided awareness rate of the project. o Channels of diffusion. o Knowledge transfer of key concepts. o Awareness of climate change impacts and adaptation options Replication of Practices o % of indirect beneficiaries adopting practices (replication rate). o Motivations for adoption (peer influence, observed success). Perception of Change o Attribution of community change to the project or its spillovers. o Perceived positive externalities. Influence of Specific Structures o Perceived effectiveness of school clubs as agents of change.	- Semi-Structured KIIs (with leaders) - FGDs (in broader community) - Document Review	• Perspective Triangulation: Triangulate claims of replication from project reports (document) with replication rate (%) from the survey, direct testimony from non-beneficiary community members (KIIs/FGDs), and visual evidence from community walks. • Method Triangulation: Compare the perceived reputation of groups from leader KIIs with evidence of their actual activity and influence from community walks and FGDs.

o Perceived role and impact of peace committees. Access to Benefits o Indirect access to project resources and knowledge Lines of Inquiry: • Has there been any replication of practices (e.g., kitchen gardens, cookstoves) by indirect beneficiaries? • What is the reputation of the farmer groups, agro-ecology clubs, and peace committees within the wider community? • Was the selection of model schools and farmer groups an effective strategy for sparking broader change?	

2.4.3 Sustainability

vi. & vii. To what extent are outcomes likely to be sustained? What mechanisms support continuity?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- KIIs with group leaders, committee chairs, school heads **- FGDs with member groups** **- Group records (constitutions, minutes, bank records)** **- Direct observation of assets and practices** **- KIIs with local government officials**	Financial: • Existence of group savings/funds. • % of members generating marketable surplus. Technical: • Ability to troubleshoot technical problems. • Presence of local "expert" trainers. • Observed functionality of key assets. Institutional: • Existence of formal group structures and rules. • Regularity of meetings without facilitation. • Links to local government structures. Motivational: • High perceived net benefit score (1-5).. • Stated intent to continue practices. Lines of Inquiry: • Financial: Do farmer groups/micro-enterprises have access to capital or savings? Are they profitably marketing surpluses? • Technical: Can beneficiaries maintain irrigation systems, cookstoves, and gardens without project support? • Institutional: Are groups (farmers, peace committees, school clubs) formally registered? Do they have leadership structures and meet regularly? • Motivational: Do members see continued value in the groups and activities?	- Document Review (records) - Structured KIIs - FGDs - Direct Observation - Surveys	• Method Triangulation: Cross-check groups' self-reported sustainability (FGDs) with tangible evidence of capacity: existence of bank accounts/records (document review), observed leadership structures (KIIs), and technical ability to maintain assets (direct observation). • Data Source Triangulation: Compare the project team's assessment of a group's sustainability (KII) with the group's own assessment (FGD) and that of an external stakeholder, like a local government official (KII).

viii. & ix. Sustainability of women's empowerment & microenterprises

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Survey with beneficiaries **- Follow-up on seed fund recipients (RI5.4)** **- FGDs with women's groups** **- KIIs with women entrepreneurs** **- FGDs (separate women's & girls' groups)** **- Simple business records** **- KIIs with local leaders** **- Project reports on economic activities**	Indicators for Empowerment & Entrepreneurship Sustainability o % of women entrepreneurs who independently make decisions on how to use their business income. o Average monthly profit from the microenterprise over the last 3-6 months. o Change in the distribution of domestic and garden chores (as measured by RI.3.3) since the start of the project. o % of women who report increased confidence to speak in public forums or community meetings. o # of women from the project who have taken on formal leadership roles in community groups, committees, or cooperatives. o % of women who can correctly articulate key business concepts (e.g., cost calculation, pricing, profit) or rights training messages. Microenterprise Continuity & Scaling Potential o % of women who state a definite intention to continue their enterprise after the project ends. o Existence of a simple business plan or future vision for the enterprise o Access to raw materials: Can they reliably source inputs (e.g., clay for stoves, seeds, fabric) without project support? o % of entrepreneurs who can independently produce/repair the product (e.g., build a cookstove, make briquettes) without assistance. o Existence of a customer base beyond the project network. o Number of unsolicited orders received in the last month o % of entrepreneurs interested in and having ideas for scaling (e.g., adding new products, hiring help, increasing production). o Identification of key barriers to scaling (e.g., lack of capital, limited market size, transportation costs, competition).	- Small Enterprise Documentation - Targeted KIIs - Focused FGDs with women	• Method Triangulation: Verify claims of business success from surveys with evidence of continued operation from follow-up KIIs and observation of business activity. • Data Source Triangulation: Triangulate the entrepreneur's perspective on barriers to growth (KII) with perspectives from a market linkage expert or local business owner (KII).

	o Personal or group savings invested/re-invested in the business.
	Lines of Inquiry:
	• Are the small enterprises established by single mothers still operational and profitable?
	• What is the scalability of these enterprises? What barriers to growth exist (market access, capital, skills)?
	• Has the reduction in time spent on fuel collection (due to cookstoves) been sustained, allowing for more economic activity?

x. What additional support or future interventions are needed?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Surveys with beneficiaries & non-beneficiaries **- FGDs with beneficiaries & non-beneficiaries** **- KIIs with project staff, government officials, private sector** **- Capacity assessment of local institutions** **- Market mapping** **- Stakeholder workshop**	Deepening Impact (Enhancing Quality) o % of beneficiaries requesting advanced training o Identified technical gaps in current practices o Level of access to tailored financial products o Rate of technology failure/abandonment Expanding Impact (Scaling Out/Up) o % of indirect beneficiary community members expressing demand for project services o # of other communities/villages requesting project intervention based on seeing results. o Capacity of existing local structures (e.g., cooperatives, government extension services) to take over training and mentorship roles. o Evidence of successful replication by non-beneficiaries without support. Systemic Change (Policy & Integration) o Level of interest and commitment from local government to adopt and fund project models in their plans and budgets. o Existence of private sector linkages for inputs, outputs, or services (e.g., buyers for organic produce, suppliers for cookstove parts).	- KIIs - FGD -Surveys -Document reviews	• Perspective Triangulation: Synthesize recommendations from all stakeholder levels: beneficiaries (FGDs), implementers (KIIs), and government partners (KIIs) to identify common priorities and divergent views. • Method Triangulation: Compare gaps identified through independent interviews (KIIs) and document review of M&E findings.

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o   Identification of advocacy issues that beneficiaries see as critical barriers (e.g., land rights for women, access to credit).

Stakeholder Prioritization

o   Ranked list of future support needs as prioritized by beneficiaries, staff, and government partners.

Lines of Inquiry:
• Should future efforts focus on scaling out (geographic expansion) or scaling up (influencing policy/institutions)?
• What is the most critical capacity gap that remains? (e.g., advanced business skills, market linkages, advocacy skills)
• How can local government agencies better take ownership and provide ongoing support?
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2.4.4 Generate Learning

xi. and xii. What lessons emerged on design and implementation?

Data Sources	Specific Indicators & Lines of Inquiry	Methods	Triangulation Plan
- Disaggregated project data (by type of intervention) **- Beneficiary feedback from FGDs and surveys** **- Outcome data on resilience, empowerment, cohesion**	1. Comparative Analysis: • Group beneficiaries by the primary strategy they engaged with and compare their outcome indicators. 2. Beneficiary Assessment: • Ask beneficiaries to rank the most useful strategies themselves. 3. Identify Synergies: • Look for strategies that were most effective when combined (e.g., TFT + seed funding). Thematic Lines of Inquiry for Learning: • Agroecology/Resilience: What was the most effective mix of training (theory vs. practical on demo farms)? • Peacebuilding/Gender: How effective was the TFT approach in transforming conflicts and gender relations? • Cookstoves/Entrepreneurship: What was the key to the adoption of cookstoves? Was the ERI approach effective? • Scale & Sustainability: What is the most viable model for sustaining community structures? What is the role of the private sector? • Partnership: How effective was the partnership between	- Comparative statistical analysis - Participatory ranking exercises in FGDs - Most Significant Change methodology	• Triangulate Quantitative with Qualitative: Compare the quantitative data showing that Strategy A had the highest adoption rate with qualitative stories from FGDs explaining *why* it was so effective. • Triangulation Perspective: Compare the project staff's view on the most effective strategy (KII) with the beneficiaries' view (FGD ranking) and the hard outcome data (M&E). • Comprehensive Triangulation: Lessons are derived from the triangulated findings across all prior criteria and questions. This is the highest level of synthesis. • Stakeholder Validation: Present preliminary lessons in learning to allow stakeholders (beneficiaries, staff, partners) to confirm, refute, or refine them, ensuring credibility and ownership.

	DESECE, SSF, and h3000? Output: Specific, actionable recommendations for DESECE, partners, and other NGOs for future programming in Western Kenya and comparable contexts.		