GGGI | IMPACT AND EVALUATION UNIT

End Project Evaluation
Green Rehabilitation Investment Project for Karakalpakstan Republic to address impacts of the Aral Sea Crisis

Evaluation Report – Appendices

February 2025

Appendix I. Evaluation matrix

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
Relevance	How well did the Project's objectives align its relevance to overarching goals and strategies with all key stakeholders?	a) Are the project-funded interventions relevant, strategic, and responsive to in-country stakeholder needs and priorities? How did the Project adapt to the changes to stakeholder priorities and strengthen the program design to address these?	Government agencies buy-in Beneficiaries buy-in Project modifications justified	Original project design document is missing	Desktop review Interviews Surveys FGDs	Evidence is available from the PSC minutes and consultation workshop reports	Limited documentation on consultation processes
		b) How has the Project drawn upon the knowledge and lessons from previous development initiatives – not limited to those outlined in the Project proposal?	References to these in the project design document	Original project design document	Desktop review Interviews FGDs	Evidence will be sought from interviews	Lack of clear linkages to other development initiatives
		c) How did GGGI ensure the Project was government-led and maximize the national and local government's involvement in decision-making, approval, and implementation?	Government buy-in Government MOU and endorsement	Evidence that the risk profile report is accepted by the government	Interviews FGDs Desktop review	Evidence is sought primarily from the interviews	Key informants may not be available for interviews

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
Effectiveness	Have project outputs and outcomes been achieved as intended, or are they on track to be achieved?	a) How effectively has the Project delivered its outputs and what progress has been made towards the outcomes? Please compare this based on the Project's logical framework.	Logical framework documents show indicators are met	Some indicators have not been measured	Desktop review Interviews Survey	Gap analysis of project data provided by GGGI for log-frame	Lack of monitoring data collected for some indicators
		b) What were the major factors influencing the achievement or non-achievement of the project objectives?	Changes in project design documents	Limited recorded rationale for project changes	Desktop review Interviews FGDs	Analysis of barriers and challenges to project implementation	Potential lack of access to key project implementation partners or project staff
		c) Were there any unintended consequences or negative outcomes resulting from the project outputs?	Information about any negative outcomes or unintended consequences	No information on this currently	Interviews FGDs	Document and analyse transcript information	Informants may not provide frank answers
		d) Have there been any significant changes or adaptations made to the project design in response to unexpected circumstances or lessons learned?	Updated versions of the project design document	Original design document isn't provided	Interviews FGDs Desktop review	Review the track changes in the project design to see modifications	Lack of monitoring information about changes to the Project
		e) To what extent did GGGI effectively implement the Project, and what unique value did GGGI bring compared to other potential implementation models (such as bilateral arrangements or other organizations)?	Feedback from project partners and beneficiaries	Limited testimonials are provided in the documents	Interviews Desktop review	Document and analyse transcript information and survey results	Informants may not provide frank answers

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
Efficiency	To what extent did the Project ensure efficiency in the achievement of its objectives, and what mechanisms supported to ensure this?	a) How has GGGI planned and managed human and financial resources to ensure the Project is efficient in its delivery and achieved on time and within budget?	Project finance documents	Information on project budget and expenditure	Desktop review	Review budget expenditure and assess value-for- money	Limited financial information is provided
		b) Could similar results have been achieved with fewer resources or a lower cost?	Project finance documents	Information on project budget and expenditure	Desktop review FGDs	Review budget expenditure and assess value-for- money	Limited financial information is provided
		c) To what extent was the delivery of results affected by internal factors (such as staff turnover, procurement challenges) or external factors (such as government priorities, political will COVID)?	Feedback on staff turnover and procurement or external challenges	No data yet on internal or external factors	Interviews FGDs	Document and analyse transcripts	Staff may not provide frank feedback
		d) How effective was GGGI's own project management structure for the management and oversight of the Project?	Feedback from staff and key stakeholders	No data yet on project management and oversight	Interviews	Document and analyse transcripts	Stakeholders and staff may not provide frank feedback
		e) How did the project governance arrangements support coordination and decision making among the Government of Uzbekistan, GGGI, and KOICA?	Feedback from staff and key stakeholders	Data gaps remain in the effectiveness of decision-making arrangements	Desktop review Interviews	Document and analyse transcripts	Stakeholders and staff may not provide frank feedback

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
Sustainability	How sustainable is the Project in terms of continued benefits for the targeted communities and stakeholders beyond the project lifespan?	a) Are the outcomes likely to lead to subsequent impacts, mainly in terms of Operation and Maintenance (O&M) of interventions, after project closure either intended (as per the program log frame) or unintended, and either positive or negative in the future?	Strong buy-in and ownership of outcomes toward positive impact	Data on buy-in is evident from consultation workshop reports, MOUs	Interviews Surveys FGDs Desktop review	Document and analyse transcript information and survey results	Difficult to ascertain if the project buy-in will lead to a positive impact
		b) What measures are/were implemented to ensure the sustainability of project outcomes beyond the project lifecycle? To what extent will financial and economic resources be available to sustain the benefits achieved by the Project?	Exit strategies Resource mobilisation strategies	Business Development Platform planning is underway	Interviews Surveys Desktop review	Document and analyse transcript information and survey results	Resources for a second phase may not yet be secure
		c) Are there any potential social, political, financial, and environmental risks or barriers to long-term sustainability that the evaluation should consider?	Evidence of any risks or barriers	Some risks and barriers are evident in the documents	Interviews FGDs	Document and analyse transcript information	Social-cultural and political barriers could be particularly challenging to overcome
		d) Does the Project have a clear exit strategy to ensure the sustainability of the results achieved by the intervention, and is this exit strategy supported by stakeholders?	Evidence of an exit strategy	Business Development Platform planning is underway	Interviews Surveys Desktop review	Document and analyse transcript information and survey results	If stakeholders buy in is limited it may be difficult to have a good exit strategy

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
Cross cutting sections	How did the Project consider gender equality and social inclusion and human rights in the planning and its delivery of its outputs and outcomes?	a) How were gender-specific needs and priorities identified and incorporated into the project design? In what ways did the Project address the distinct needs and priorities of women and men throughout the implementation? What impact did the Project have on gender equality?	Gender-specific measures in project implementation	Clear evidence of how the consultation processes and capacity building program was targeting gender inclusion	Interviews Surveys Desktop review	Analyse monitoring data on gender information, survey data and interview data	A lack of monitoring data on the ways that gender inclusion was integrated
		b) How did the Project facilitate the meaningful participation of women and youth in decision making processes, including project planning, implementation, and monitoring and evaluation? What challenges were encountered in ensuring their participation and how were these challenges addressed?	Gender and youth specific information in project documents and in interviews	Missing information on how youth were included in consultation processes	Interviews	Analyse interview transcripts to ascertain how youth (and women) were included in the Project	Understanding the socio-cultural dimensions and challenges may require more in-depth study
		c) In what ways did the Project foster collaboration with relevant stakeholders and organizations working on gender-related issues to ensure a comprehensive and coordinated approach to gender mainstreaming?	Evidence of stakeholder collaboration and coordination on gender	Review of PSC meeting minutes and project reports	Interviews FGDs Desktop review	Analyse transcripts and documents to assess the level of collaboration and coordination on gender mainstreaming	Gender mainstreaming may not be a priority for the stakeholders
		d) How did the Project contribute to fostering social inclusion in the agricultural sector? What measures were taken to ensure equitable access to project resources and benefits across different social and demographic groups?	Evidence of different social and demographic groups participating in the Project	Evidence of a workshop targeting people with disabilities is available, but more information is needed	Interviews FGDs Survey data	Analyse transcripts of focus groups and interviews for information on social inclusion	Limited feedback may be provided on this topic in interviews and focus groups

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
	b. How comprehensive and effective is the Project's M&E (M&E design, implementation, and utilization) in capturing progress towards its objectives?	a) How effectively does the M&E design integrate the theory of change and results framework with the operation's objectives and indicators, ensuring they are comprehensive, specific, measurable, achievable, relevant, and time-bound?	Evidence of monitoring data, evaluation and learning	Project synthesis report is missing Some monitoring data is missing	Desktop review Interviews	Analyse the approach taken by the team to M&E and the opportunities for improvement	High staff turnover or other factors may have limited the data collection effort
		b) How rigorously are M&E data collected and analyzed to reflect accurate, reliable outcomes, and how effectively are methodological flaws addressed and corrected throughout the Project lifecycle?	Evidence of monitoring data, evaluation and learning	Project synthesis report is missing Some monitoring data is missing	Desktop review Interviews	Analyse the approach taken by the team to M&E and the opportunities for improvement	M&E systems may be time consuming and difficult to implement
		c) To what extent is M&E data utilized for making informed management decisions, adjusting project strategies, and influencing the design of future interventions based on performance and outcome evidence? Were there any missing gaps in the MEL data, if so please describe them.	Evidence of monitoring data, evaluation and learning	Project synthesis report is missing Some monitoring data is missing	Desktop review Interviews	Analyse the approach taken by the team to M&E and the opportunities for improvement	There may be a time lag between the collection of monitoring data and decision- making
	c. How did the Project address key environmental, social, and fiduciary issues	a) How did the Project consider safeguards – including labor and working consideration, politically exposed persons – in its engagement with the agri-MSMEs, for instance?	Evidence of safeguard measures being implemented	Limited information on safeguards in the documents	Desktop review Interviews	Analyse transcripts and documents for evidence	Limited information may be available regarding safeguards

OECD DAC Evaluation Criteria	Key Evaluation Question	Sub-questions	Evidence sought	Existing data, and data gaps	Data collection method	Data analysis	Risks and limitations
	that arose during project design and implementation?	b) What were the methodologies, implementation plan, and results for this?	Evidence of safeguard measures being implemented	Limited information on safeguards in the documents	Desktop review Interviews	Analyse transcripts and documents for evidence	Limited information may be available regarding safeguards

Appendix II. GGGI-supplied documents

Project documents (updated 31 January 2025)

Document type	Document name	Published	Date received
Project Document	Project Document	2022	27 Sep 2024
Grant Agreement	Grant Agreement	2021	27 Sep 2024
Beneficiary	Beneficiaries' classification	2021	27 Sep 2024
Annual budget report	Financial report_2021	2022	27 Sep 2024
	Financial report_2022	2023	27 Sep 2024
	Financial report_2023	2024	27 Sep 2024
Biannual budget report	Biannual Report_2022	2022	27 Sep 2024
	Biannual Report_2023	2023	27 Sep 2024
	Biannual Report_2024	2024	4 Dec 2024
PSC Monitoring	PSC minutes_2022_03	2022	27 Sep 2024
	PSC minutes_2022_10	2022	27 Sep 2024
	PSC minutes_2023_4	2023	8 Oct 2024
	PSC minutes_2023_7	2023	8 Oct 2024
	PSC minutes_2024_4	2024	8 Oct 2024
	PSC minutes_2024_11	2024	8 Oct 2024
PIU Monitoring	PIU minutes_2021_12	2022	27 Sep 2024
	PIU minutes_2022_01	2022	27 Sep 2024
	PIU minutes_2022_02	2022	27 Sep 2024
	PIU minutes_2022_03	2022	27 Sep 2024
	PIU minutes_2022_04	2022	27 Sep 2024
	PIU minutes_2022_06&07	2022	27 Sep 2024
	PIU minutes_2022_08	2022	27 Sep 2024
	PIU minutes_2022_11	2022	27 Sep 2024
Other Monitoring	Monthly update_2022_06&07	2022	27 Sep 2024
	Monthly update_2022_12	2023	27 Sep 2024
	Monthly update_2023_04&05	2023	27 Sep 2024
	Monthly update_2023_10	2023	27 Sep 2024

Document type	Document name	Published	Date received
	Monthly update_2023_11	2023	27 Sep 2024
	Monthly update_2023_12	2024	4 Dec 2024
	Monthly update_2024_1	2024	4 Dec 2024
	Monthly update_2024_2	2024	4 Dec 2024
	Monthly update_2024_3	2024	4 Dec 2024
	Monthly update_2024_4	2024	4 Dec 2024
	Monthly update_2024_5	2024	4 Dec 2024
	Monthly update_2024_6	2024	4 Dec 2024
	Monthly update_2024_7	2024	4 Dec 2024
	Monthly update_2024_8	2024	4 Dec 2024
Overall	Baseline report	2022	27 Sep 2024
	CMRK Letter for Project Extension_2024-11-07	2024	Nov 2024
	End of project synthesis report		Not received
Annual Report	2022 Annual Report	2023	27 Sep 2024
	2023 Annual Report	2024	8 Oct 2024
Quarterly Report	2022 Q1 Quarterly Report_220430	2022	27 Sep 2024
	2022 Q3 Quarterly Report_221031	2023	27 Sep 2024
	2024 Quarterly Report_241008	2024	4 Dec 2024
Communications	Stakeholder Engagement Plan	2024	27 Sep 2024
	Publication list	2024	20 Dec 2024
	2022 Newsletter_2209	2022	27 Sep 2024
	GGGI UZB Communications	2024	20 Dec 2024

Logframe-wise documents (updated 31 January 2025)

SN	Document name	Published	Date received
1.1.1-a.	Agricultural Legal and Policy Review	2022	27 Sep 2024
1.1.1-b.	Climate Resilient Green Growth Assessment (CRGG)	2022	27 Sep 2024
1.1.1-c.	Green Recovery Investment Analysis (GRIA)	2022	27 Sep 2024
1.1.1-d.	Whitepaper: Policy recommendations on sustainable landscapes, climate-smart agriculture, and forestry development	2024	27 Sep 2024
1.1.1-d2.	Whitepaper report - final (34 pp.)	2024	20 Dec 2024
1.1.1-e.	CRGG Stocktaking Workshop	2022	27 Sep 2024
1.1.1-f.	Technical Advisory Consultations validating CRGG and GRIA, Nukus	2022	27 Sep 2024
1.1.1-g.	Technical Advisory Consultations validating CRGG and GRIA, Nukus	2022	27 Sep 2024
1.1.1-h.	Technical Advisory Consultations validating CRGG and GRIA, Tashkent	2022	27 Sep 2024
1.1.1-i.	Whitepaper Validation Workshop	2024	27 Sep 2024
1.1.1-j.	Whitepaper workshop article	2024	Not received
1.1.1-k.	Endorsement - 2023-02-24 LoE MinEcon – GGGI GESF Policy Contribution	2023	21 Dec 2024
1.1.1-l.	Endorsement - MoA Letter contribution Policy UP-5853 (2022-12-19)	2022	21 Dec 2024
1.1.1-m.	5. SCEEP's Letter of request for Aral Sea GRIP's support	2022	17 Jan 2025
1.1.2-a.	Green Recovery Investment Analysis (GRIA)	2022	Repeat; 1.1.1-c
1.1.2-b.	Capital Expenditure for Infrastructure Adaptation Measures for Agriculture	2023	27 Sep 2024
1.1.2-c.	Tree nursery capacities and investment mobilization opportunity assessment	2023	27 Sep 2024
1.1.2-d.	Technical Advisory Consultations validating CRGG and GRIA, Nukus	2022	Repeat; 1.1.1-f
1.1.2-e.	Technical Advisory Consultations validating CRGG and GRIA, Nukus	2022	Repeat; 1.1.1-g
1.1.2-f.	Technical Advisory Consultations validating CRGG and GRIA, Tashkent	2022	Repeat; 1.1.1-h
1.1.2-g.	MoA Pipeline_Final_Report_2024-10-29	2024	4 Dec 2024
1.2.1-a.	Green bond concept	2024	27 Sep 2024
1.2.1-b.	Green bond TOR	2024	27 Sep 2024
1.2.1-c.	$400m Sustainable bond issuance article	2024	27 Sep 2024
1.2.2-a.	Green employment assessment report	2024	27 Sep 2024
1.2.2-b.	MOEEPCC RK Endorsement letter	2024	27 Sep 2024
1.2.2-c.	MOEPR RK Endorsement letter	2024	27 Sep 2024
1.2.2-d.	Forestry Committee RK Endorsement letter	2024	27 Sep 2024

SN	Document name	Published	Date received
1.2.2-e.	Endorsement letters translated into English	2024	27 Sep 2024
1.2.2-f.	20230708_MoEPR to GGGI_LoE_Green Job	2023	20 Dec 2024
1.2.2-g.	20240814_20230708_MoEPR to GGGI_LoE_Green Job	2023	20 Dec 2024
1.2.3-a.	GGGI-UNRO Joint action plan article	2024	27 Sep 2024
1.2.3-b.	Whitepaper Validation Workshop	2024	Repeat; 1.1.1-j
1.2.3-c.	ICM Action Plan	2024	28 Oct 2024
2.1.1-a.	Risk profile	2024	27 Sep 2024
2.1.1-a2.	Risk profile - final, with dashboard	2024	20 Dec 2024
2.1.2-a.	Concept of Capacity building modules	2022	27 Sep 2024
2.1.2-b.	Module 1. CC and Aral Sea region	2022	27 Sep 2024
2.1.2-c.	Module 2. Health	2022	27 Sep 2024
2.1.2-d.	Module 3. Climate-smart farms	2022	27 Sep 2024
2.1.2-e.	Module 4. Drought-adapted farming and water	2022	27 Sep 2024
2.1.2-f.	Module 5. Agroforestry	2022	27 Sep 2024
2.1.2-g.	Module 6. Climate-resilient agribusiness	2022	27 Sep 2024
2.1.2-h.	White paper - Policy recommendations (Aug 2024)	2024	4 Dec 2024
2.1.2-i.	InfoBrief: Building Climate Change Awareness and capacity in the Aral Sea region	2024	20 Dec 2024
2.1.3-a.	Student training article	2024	27 Sep 2024
2.1.3-b.	Microgreen training article	2024	27 Sep 2024
2.1.3-c.	20241205_Qudrat Media_Final Report	2024	20 Dec 2024
2.1.3-d.	20240813_CMRK_Appreciation_on_videos_EN_17_08_283_13_08_2024r	2024	20 Dec 2024
2.1.3-e.	20240814_MoWRKK_Appreciation of videos_EN_01-15-3-343	2024	20 Dec 2024
2.1.3-f.	LoE_MoEEPCC-to GGGI Media Campaign_2023-08-15	2023	28 Jan 2025
2.1.3-g.	20240423_Media Campaign_Approval MEEPCC	2024	28 Jan 2025
3.1.1-a.	Value chain analysis_apple and apricot	2022	27 Sep 2024
3.1.1-b.	Value chain analysis_melon and watermelon	2022	27 Sep 2024
3.1.1-c.	Value chain analysis_Tomato and cucumber	2022	27 Sep 2024
3.1.1-d.	Value chain analysis_sorghum	2022	27 Sep 2024
3.1.1-f.	Market system analysis report		27 Sep 2024
3.1.1-g.	Endorsement - MoA Letter contribution Policy UP-5853 (2022-12-19)	2022	repeat; 1.1.1-l.

SN	Document name	Published	Date received
3.1.2-a.	CRA business model feasibility study (FS)		27 Sep 2024
3.1.2-b.	FS mission report	2022	27 Sep 2024
3.1.2-c.	FS mission presentation	2022	27 Sep 2024
3.1.3-a.	Jusbazi Implementation Note	2024	27 Sep 2024
3.1.3-a.	Juzbazi site report	2024	27 Sep 2024
3.1.3-a.	MCHS Implementation Note	2024	27 Sep 2024
3.1.3-b.	MCHS site report	2024	27 Sep 2024
3.1.3-d.	AgroImpex site report	2023	27 Sep 2024
3.1.3-f.	Aktuba Jaylo site report	2024	27 Sep 2024
3.1.3-g.	Asxat Rufat site report	2023	27 Sep 2024
3.1.3-h.	Bozataw site report	2023	27 Sep 2024
3.1.3-i.	Karauzyak site report	2023	27 Sep 2024
3.1.3-j.	Tree windbreak Implementation Note	2023	27 Sep 2024
3.1.3-k.	Karatal Implementation Note	2023	27 Sep 2024
3.1.3-l.	Greenhouse training Implementation Note	2023	27 Sep 2024
3.1.3-m.	Greenhouse training	2023	27 Sep 2024
3.1.3-n.	Press release - 20 greenhouse graduates	2023	20 Dec 2024
3.1.3-o.	Global Ties US	2024	20 Dec 2024
3.1.3-p.	C3_CSA_IMPLEMENTATION TABLE V2.3 Oct 29 2024	2024	27 Dec 2024
3.1.3-q.	Hose reel irrigation equipment		17 Jan 2025
3.2.1-a.	BDP Establishment and Operational Plan	2024	27 Sep 2024
3.2.1-b.	2024 BDP report	2024	27 Sep 2024
3.2.1-c.	BDP Info Brief	2024	27 Sep 2024
3.2.1-d.	BDP assessment document	2024	22 Oct 2024
3.2.1-e.	BDP Sustainability Strategy	2024	17 Jan 2025
3.2.1-f.	BDP Financial Sustainability Scenarios report	2024	17 Jan 2025
3.2.2-a.	BDP launch	2022	27 Sep 2024
3.2.2-b.	Technical Advisory Consultation	2022	27 Sep 2024
3.2.2-c.	Agri-consultancy Expo_2023 report	2023	27 Sep 2024
3.2.2-d.	BDP session at Microgreen training	2024	27 Sep 2024

SN	Document name	Published	Date received
3.2.2-e.	Technical Advisory Consultation	2024	27 Sep 2024
3.2.2-a.	BDP Manual_Instructions for Registration	2024	27 Sep 2024
3.2.3-a.	BDP Piloting result	2022	27 Sep 2024
3.2.3-b.	GreenAral consultant opinion	2022	27 Sep 2024
4.1.1-a.	Article on MOU signing with SQB	2024	27 Sep 2024
4.1.1-b.	Agrobank Green Finance Framework	2024	22 Oct 2024
4.1.1-c.	CSA facility design (Nov 2024)	2024	4 Dec 2024
4.1.1-d.	CSA Credit Financing Facility Final Report 2 (Sep 2024)	2024	4 Dec 2024
4.1.1-e.	CSA Information Memorandum (Nov 2024)	2024	4 Dec 2024
4.1.1-f.	Final report for Credit Financing Facility	2024	29 Dec 2024
4.1.2-a.	Article on MOU with MoA	2024	27 Sep 2024
4.1.2-b.	Deliverable-6_Final_Report_2024 [Green pipeline of investment projects]	2024	10 Jan 2025
4.2.1-a.	Green finance training article	2023	27 Sep 2024
4.2.1-b.	Green finance training report		Not received

Appendix III. Survey analysis

Executive summary

The evaluation survey was designed to obtain feedback from participants in the Project's capacity building program, under Outcome 2. The survey was distributed to 465 people across four districts in the Republic of Karakalpakstan and received 194 responses over the period of November 12 to November 23, 2024.

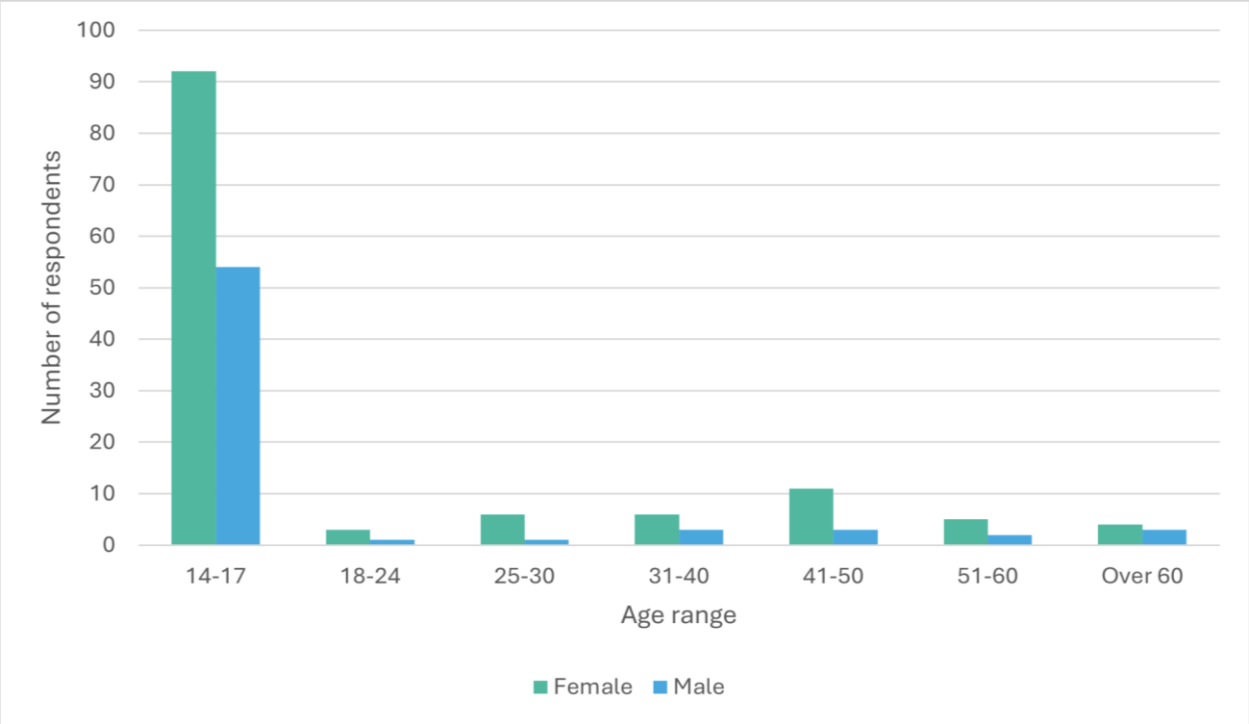
Overall, results were driven by a high proportion of youth and student respondents, given that a large portion of the trainees were students. As a result, findings for most other occupations should be considered with a level of caution as they potentially may not represent the wider population who participated in the training.

The responses were generally positive for nearly all survey questions, with very few negative outcomes reported. The "Basic Agri-Business and Entrepreneurial Skills" module participants, however, consistently indicated lower outcomes/ratings than participants of other modules. Of some note was the finding that most respondents (65%) said the training increased their knowledge and awareness of climate change and disaster risks to a large or exceptional extent; however, less than half of the respondents (42%) reported applying this knowledge completely or to a large extent.

Respondent characteristics

Of the survey responses received, a significant majority (75%, n=146) were received from young people (aged 14-17 years), and 65% (n=127) of the total respondents were female (shown in **Figure A3.1**). In most age categories there were more than double the number of female respondents to male respondents, with the greatest disparity in the 25-30 years age category (six female respondents to one male) and the least in the over 60 age category (four female respondents to three male).

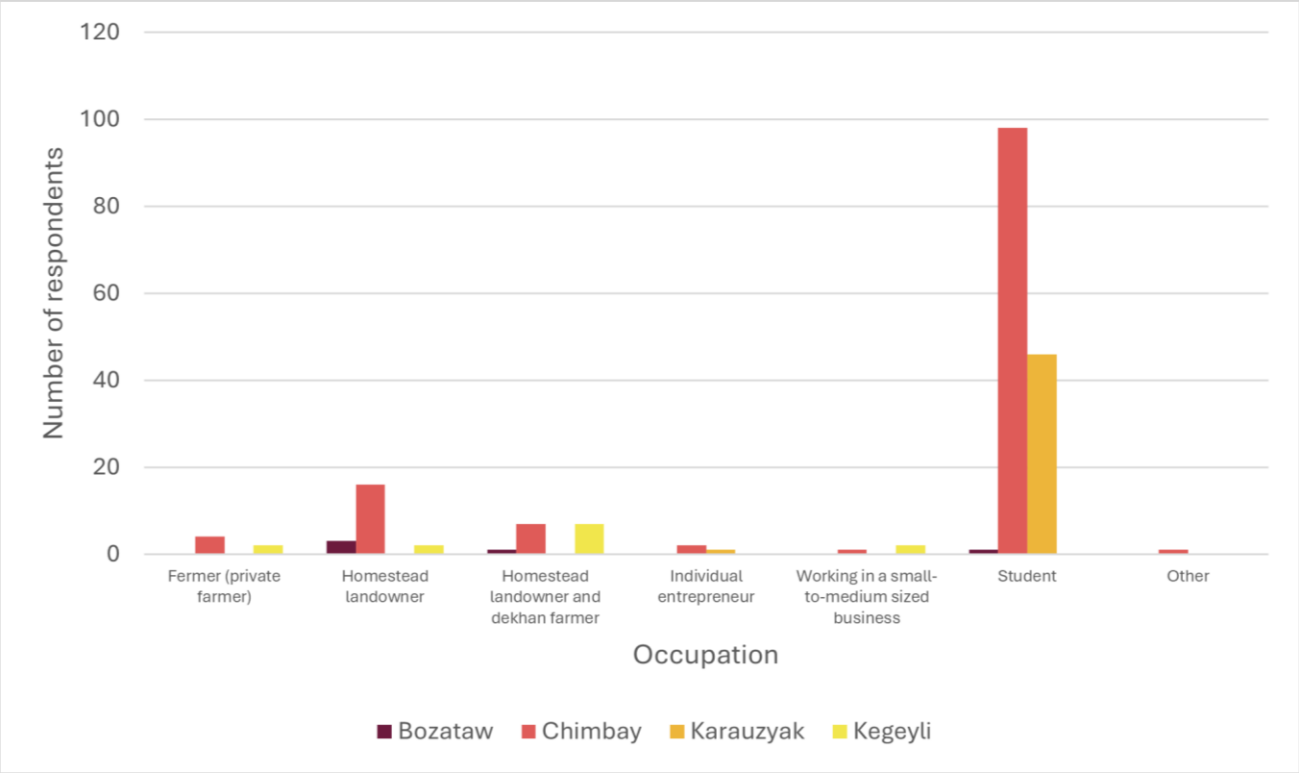
Figure A3.1: Survey respondents by age range and gender



A majority (66%, n=129) of respondents reported that they currently reside within the Chimbay district, followed by the Karauzyak district (24%, n=47) (see **Figure A3.2**). Most of the Chimbay district respondents were students (76%, n=98), and the proportion of students in the Karauzyak district was even higher (98%, n=46). Overall, a

large majority of respondents were students (75%, n=145). The next most frequent occupations were that of homestead landowners (11%, n=21), and homestead landowners and dekhan farmers (8%, n=15).

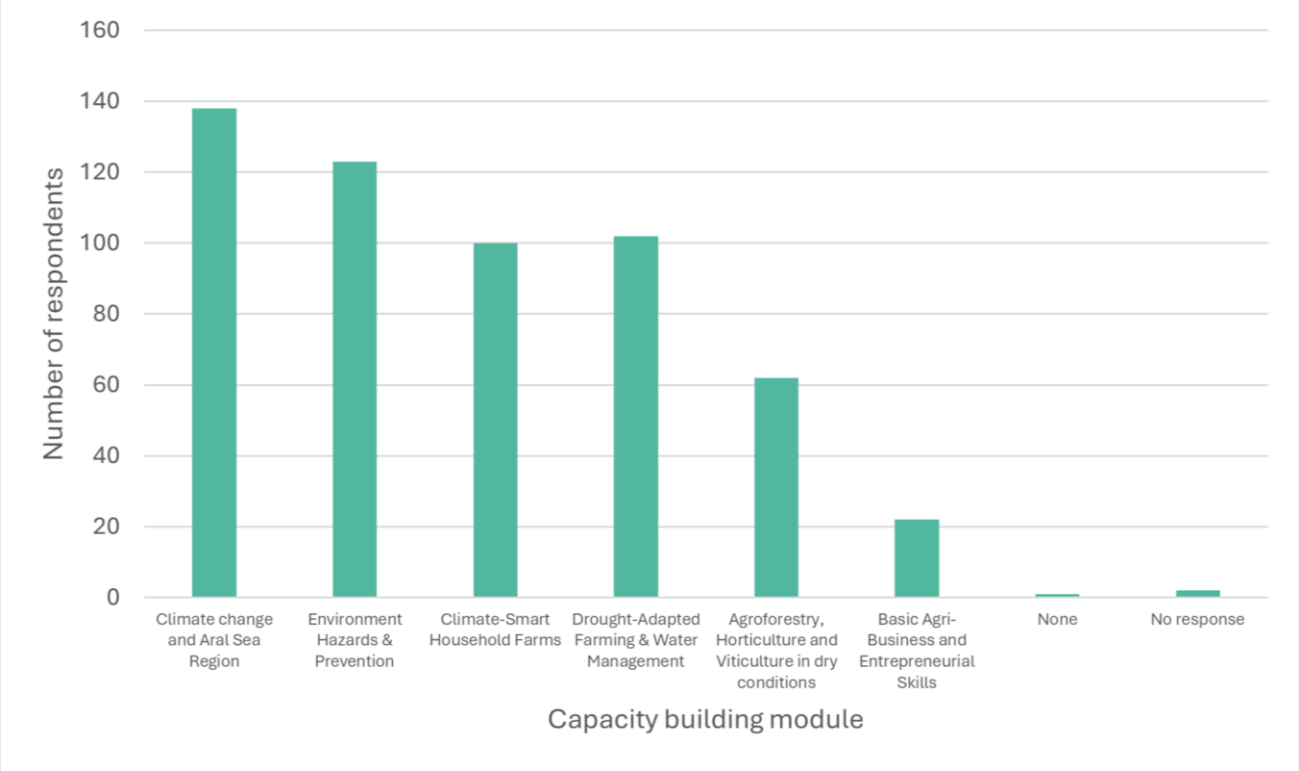
Figure A3.2: Survey respondents by occupation and district of residence



Capacity building module training and perceived relevance

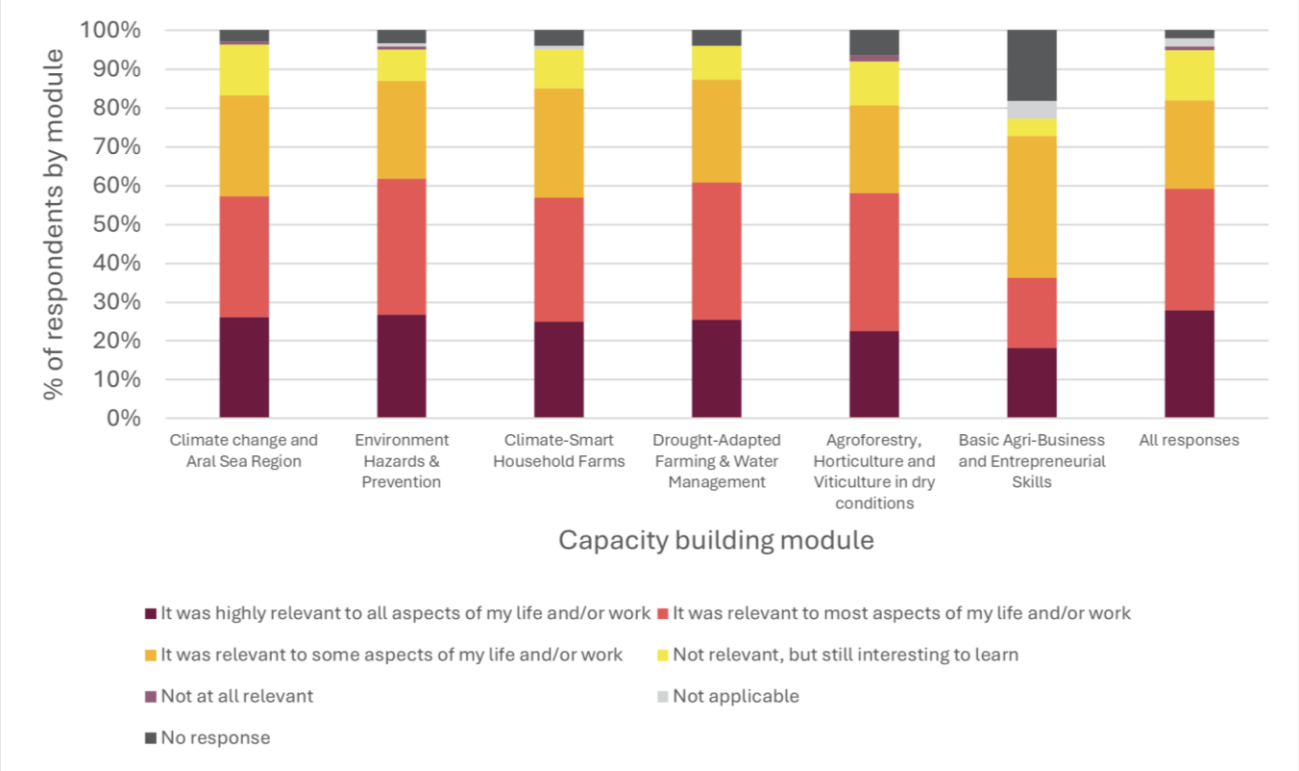
Most survey respondents said they had been trained for awareness-raising and sensitization for climate and disaster risk resilience in the "Climate change and Aral Sea Region" capacity building module (71%, n=138) (see **Figure A3.3**). Over half of the respondents reported receiving training in the "Environmental Hazards & Prevention" (63%, n=123), "Drought-Adapted Farming & Water Management" (63%, n=102), and "Climate-Smart Household Farms" (52%, n=100) modules. 27% of respondents (n=53) reported being trained in one module only, while 17% reported being trained in two modules (n=33) and 23% reported being trained in three modules (n=44).

Figure A3.3: Survey respondents by reported training in specified capability module



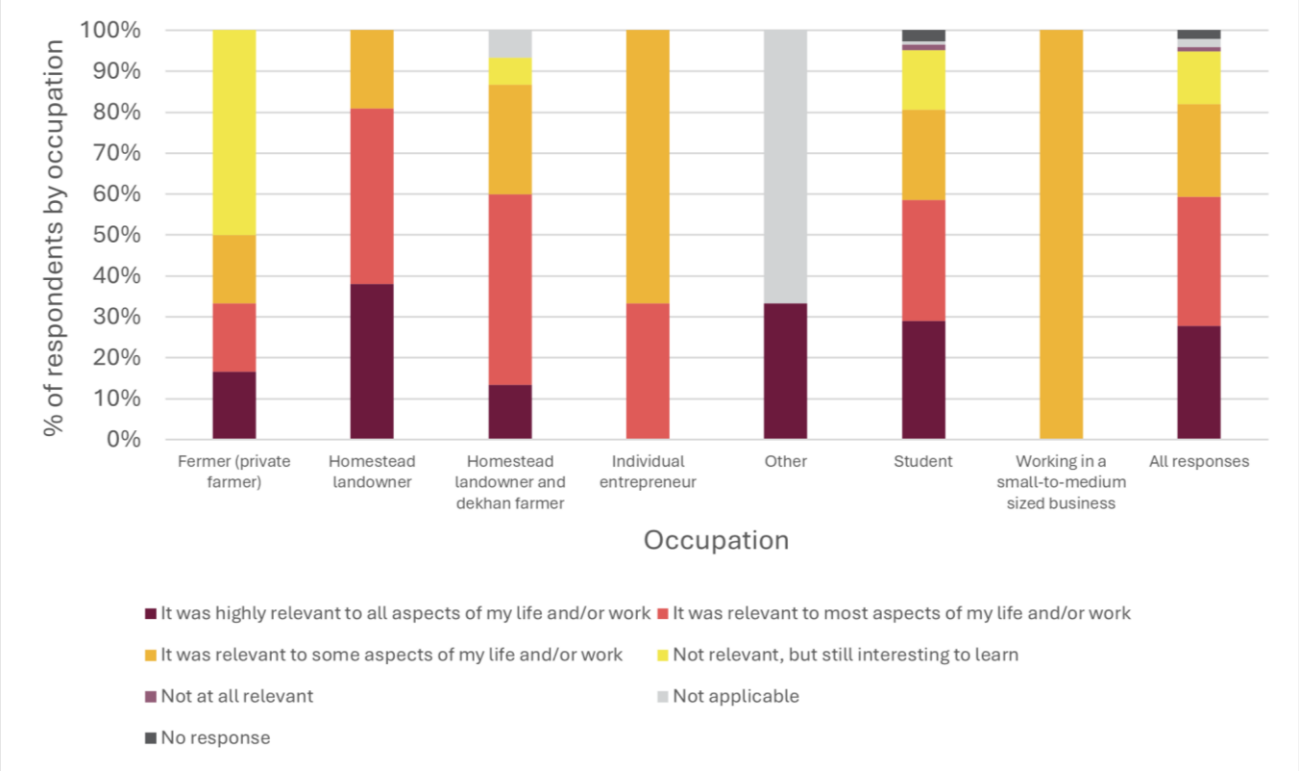
A high proportion of respondents were positive regarding the relevance of the training they received, with 59% of the total 194 respondents reporting that it was relevant to most or all aspects of their life and/or work (see **Figure A3.4**). A further 23% (n=44) said the training was relevant to some aspects, leading to a total of 82% (n=159) who reported that the training they received was at least somewhat relevant to their life and/or work. The "Climate change and Aral Sea Region" module was most frequently (14%) reported as either "Not relevant, but still interesting to learn" or "Not at all relevant"; however, overall reported training relevance did not differ significantly across modules. Less than half of respondents (32%, n=62) reported being trained in the "Agroforestry, Horticulture and Viticulture in dry conditions" module, but this module's relevance was rated approximately equal to that of the other modules. The number of respondents who reported being trained in the "Basic Agri-Business and Entrepreneurial Skills" module was the lowest for any specific module (11%, n=22), and training relevance was reported the lowest by respondents for this module, with less than half (36%, n=8) saying it was relevant to all or most aspects of their life and/or work, and the same number saying it was relevant to some aspects only.

Figure A3.4: Perceived relevance of training by capacity building module



The spread of the results of the perceived relevance of training was wider when compared by occupation, although this finding may be skewed due to small numbers of respondents in occupations other than that of student (see **Figure A3.2**). As shown in **Figure A3.5**, this leads to the overall response for training relevance closely matching that of the response from students, whereas other outcomes differ significantly. Of all occupations, respondents who were homestead landowners rated the relevance of the training they received highest, with 81% (n=17) rating it as relevant to most or all aspects of their life and/or work, followed by homestead landowner and dekhan farmer respondents, of whom 60% (n=9) rated the training as relevant to most or all aspects of their life and/or work. In contrast, half (50%, n=3) of fermers (private farmers) reported that the training was not relevant to their life and/or work, but that it was still interesting to learn. There was, however, only a total of six fermers survey respondents, so this finding should be treated with caution as it may not be representative of the wider group. Individual entrepreneurs (n=3) and small-to-medium sized business workers (n=1) all reported the training was relevant to some (n=3) or most (n=1) of their life and/or work; however, the implications of the low sample size should again be considered in regard to this finding.

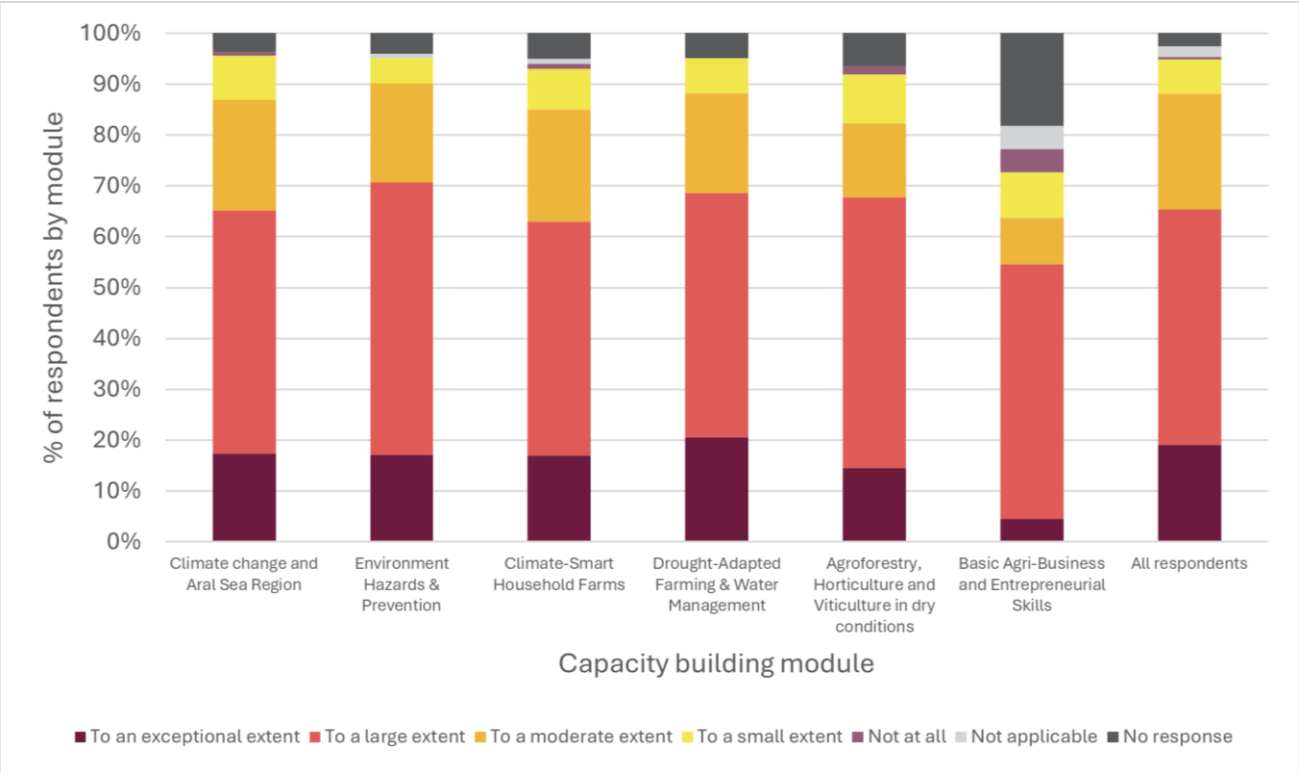
Figure A3.5: Perceived relevance of training by respondent occupation



Climate change and disaster risk knowledge, awareness, and resilience improvement

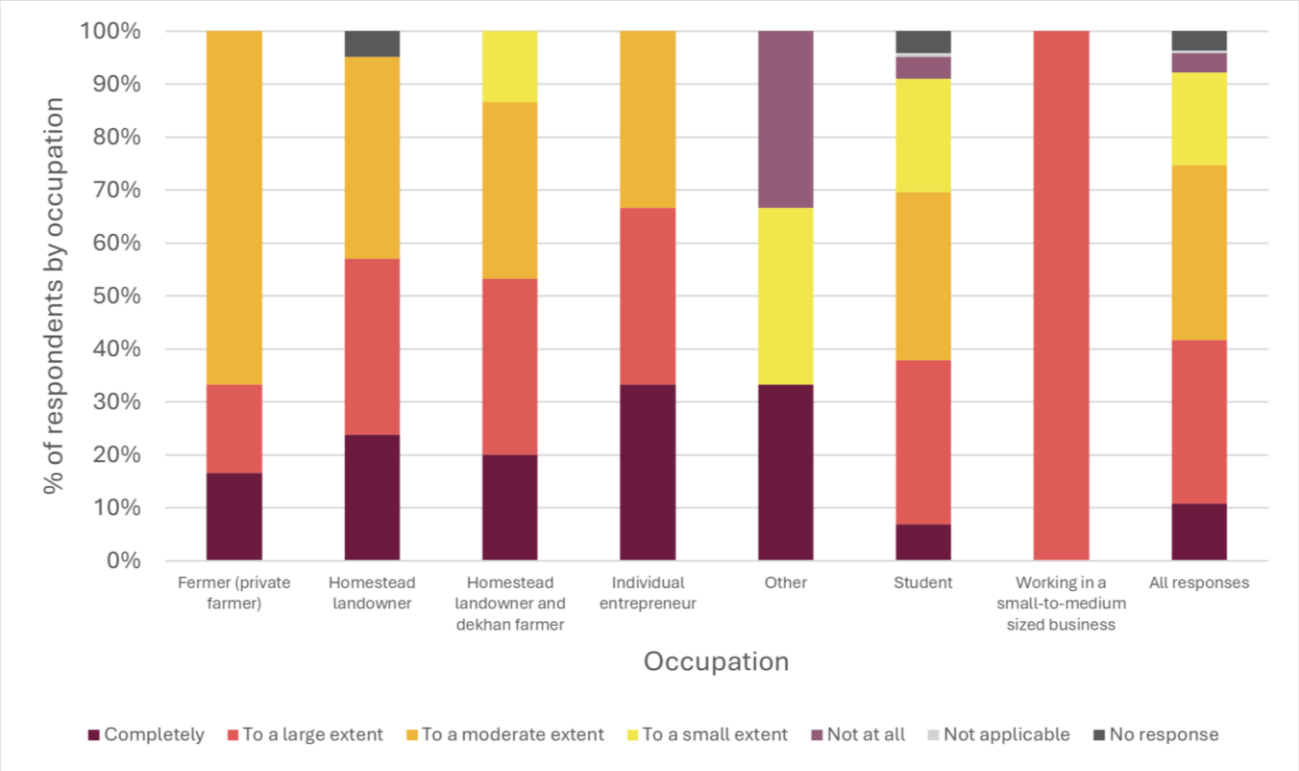
Both overall and for each individual capacity-building module, more than half of the respondents reported that the training they received increased their knowledge and awareness of climate change and disaster risks. As shown in **Figure A3.6**, module-specific findings generally reflected the overall results, in which a total of 88% (n=171) said their knowledge and awareness was increased to at least a moderate extent. Of these, 19% (n=37) of respondents said their knowledge and awareness was increased to an exceptional extent, 46% (n=90) said it was increased to a large extent, and 23% (n=44) said it was increased to a moderate extent. Those who were trained in the "Basic Agri-Business and Entrepreneurial Skills" module reported the lowest increase on average, although the total number of respondents reporting a moderate or greater increase in knowledge and awareness was still more than half (64%, n=14).

Figure A3.6: Perceived increase in knowledge and awareness of climate change and disaster risks by capacity building module



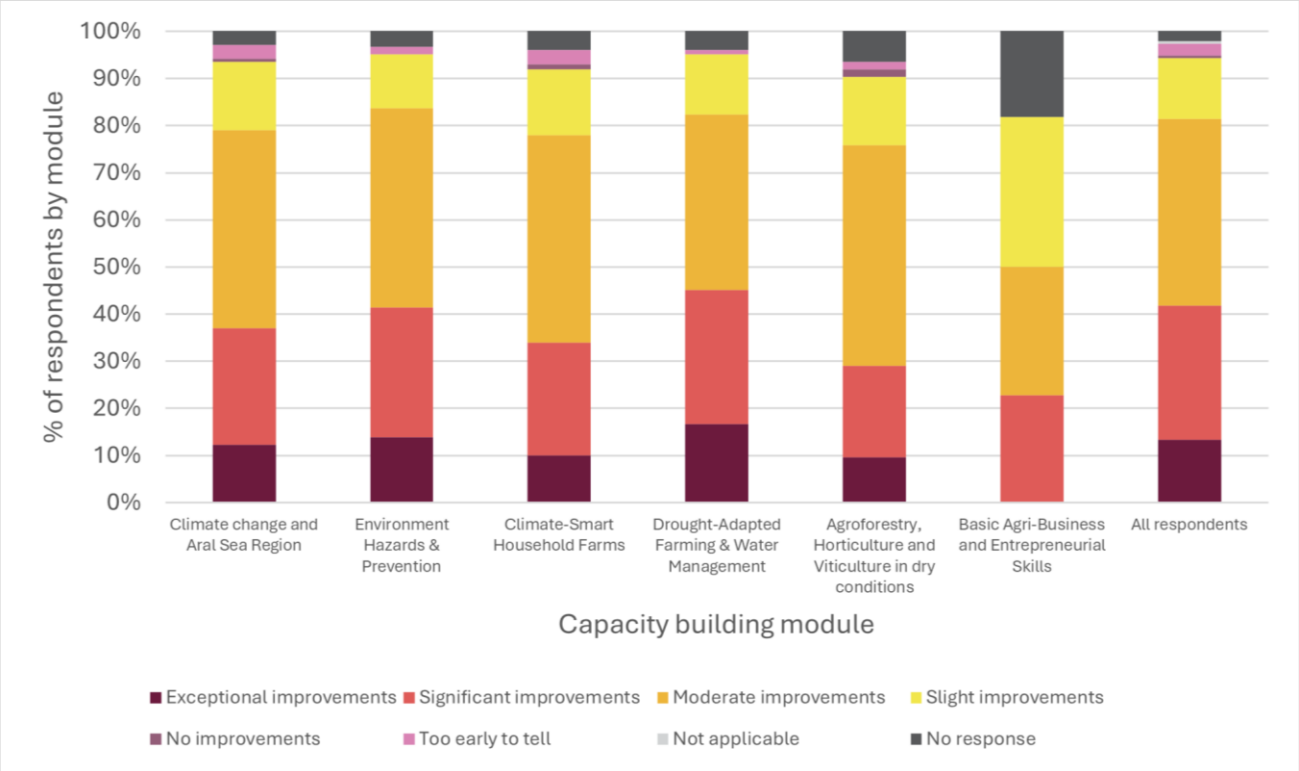
Application of knowledge gained from the training received was reported as slightly lower, on average, than the perceived increase in knowledge and awareness of climate change and disaster risks. Where a total of 65% of respondents (n=127) reported a large or exceptional increase in knowledge, less than half (42%, n=81) reported they had applied the knowledge they had gained completely or to a large extent (see **Figure A3.7**). The proportion of respondents who reported applying the knowledge gained completely or to a large extent, however, increased to 53% (n=26) when students were excluded, and the proportion who had applied the knowledge gained to only a small extent or not at all decreased from 21% (n=41) of the overall response pool to 8% (n=4) of the respondents other than students. Most respondents from occupations other than student reported application of knowledge gained to a moderate or large extent, although the proportion who said they had completely applied their knowledge gained remained low (22%, n=11).

Figure A3.7: Reported application of knowledge gained from capacity-building module in day-to-day life and/or agricultural business by occupation



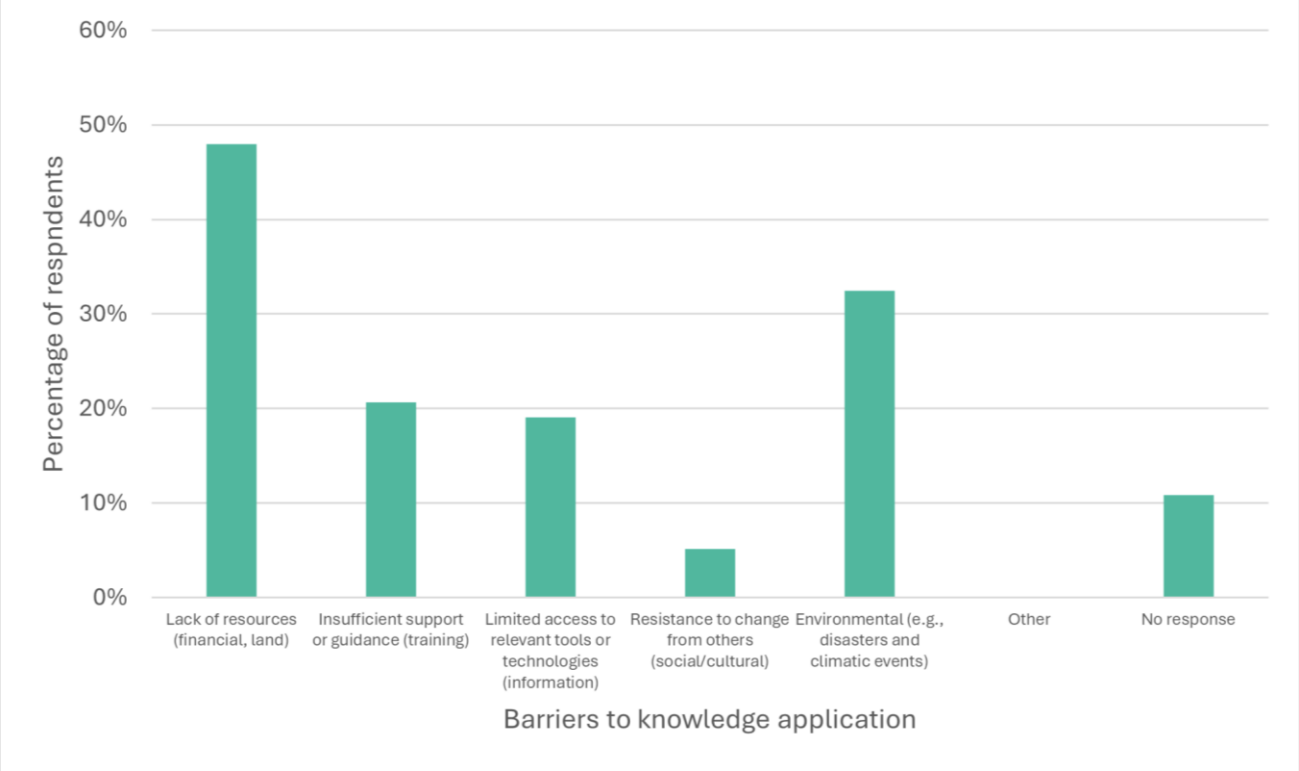
A significant majority (81%, n=158) of respondents reported a moderate or greater improvement in household farm and/or agri-business resilience to climate change and disaster risks as a result of implementation of the knowledge they gained from participating in capacity building training (see **Figure A3.8**). The distribution of responses was again relatively even when analysed across capacity building module type, with the greatest improvement reported by those who participated in the "Drought-Adapted Farming & Water Management" and "Environmental Hazards & Prevention" modules. The "Basic Agri-Business and Entrepreneurial Skills" module again received the lowest ranking, with only 50% (n=11) reporting a moderate or greater improvement compared to the 81% of overall respondents reporting the same.

Figure A3.8: Perceived improvement in resilience of household farm and/or agri-business to climate change and disaster risks as a result of knowledge implementation by capacity building module



When asked if any barriers had been encountered to the application of the knowledge respondents had gained from resilience enhancement training, the most cited difficulty was a lack of resources (48%, n=93), followed by environmental events (32%, n=63) (see **Figure A3.9**). Insufficient support or guidance (21%, n=40) and limited access to relevant tools or technologies (19%, n=37) were indicated with a similar frequency, and social/cultural resistance to change was only indicated in 5% of survey responses (n=10).

Figure A3.9: Reported barriers to the application of resilience enhancement training knowledge



Implementation of specific actions

When asked what actions they had implemented following training in the "Climate Change and the Aral Sea Region" module, 121 respondents (62%[1]) indicated that they had reduced their water consumption (see **Table A3.1**). The next most frequently implemented actions were making and using compost to improve soil quality (n=77; 40%), reducing use of packaging (n=74; 38%), and mulching crop residue to keep soil moisture (n=53; 27%).

[1] More than one response was possible for the questions illustrated by tables A3.1 to A3.6; hence, the percentages reported don't add to 100

Table A3.1: Actions implemented following participation in the "Climate Change and the Aral Sea Region" training module

Action	Number of respondents
Reduce water consumption	121
Make and use compost to improve soil quality	77
Reduce use of packaging	74
Retain crop residue on soil to keep soil moisture (mulching method)	53
Eco-friendly travel	40
Reduce consumption (e.g., more vegetables, less meat)	39
Protect windows outdoors and reduce heat indoors	29
Access digital resources on climate change to learn more	14
Other	0
Not applicable	1
No response	5

Participants in the "Climate Change Adaptation and Health" program (modules 1a and 2) most frequently reported implementing measures to prevent infection - water purification (n=137; 71%) and regular exercise (n=75; 39%) - as the actions implemented following the training (see **Table A3.2**). Avoiding burning trash or leaves (to protect against air pollution) was the next most frequently mentioned action (n=65; 34%), followed by spending time in fresh air (to prevent infection) (n=61; 31%) and planting trees on the windy side of land to block incoming dust (to protect against air pollution) (n=55; 28%).

Table A3.2: Actions implemented following participation in the "Climate Change Adaptation and Health" training program

Action	Number of respondents
Measures to prevent infection – purify water	137
Measures to prevent infection – regular exercise	75
Self-protection measures against air pollution – don't burn trash or leaves	65
Measures to prevent infection – spend time in fresh air	61
Self-protection measures against air pollution – plant trees on windy side of land to block incoming dust	55
Measures to prevent infection – sufficient sleep	40
Self-protection measures against air pollution – open windows when cooking	37
Measures to prevent infection – eat a variety of food	30
Self-protection measures against air pollution – wear a mask	26
Self-protection measures against air pollution – use fans and ventilate house	17
Self-protection measures against air pollution – don't smoke inside	16
Other	2
Not applicable	0
No response	5

Participants in the "Climate-Smart Households" program (modules 1b and 3) most frequently indicated actions including composting (n=102; 53%), planting trees to create windbreaks (n=85; 44%) and planting drought/salt-tolerant fruit trees (n=80; 41%) as those most implemented following the training they received, as shown in **Table A3.3**.

Table A3.3: Actions implemented following participation in training on "Climate-Smart Households"

Action	Number of respondents
Composting	102
Trees / windbreaks	85
Planting drought and salt-tolerant fruit trees	80
Drip-irrigation systems	63
Rainwater harvesting	35
Making fodder	30
Biological plant protection measures to reduce pests	27
Measures to reduce animal diseases and treat common farm animals	25
Mini-greenhouse (hotbed)	22
Mini-hydroponic systems	6
Other	1
Not applicable	5
No response	4

Respondents who were trained on “Farming in dry conditions” (modules 4 and 5) most commonly implemented crop rotation (n=73; 38%), measures intended to protect trees and gardens from pests and diseases (n=55; 28%), the creation of windbreaks (n=54; 28%), and the planting of drought-tolerant trees and shrubs (n=53; 27%) following the training they received (see **Table A3.4**).

Table A3.4: Actions implemented following participation in training on "Farming in dry conditions"

Action	Number of respondents
Conservation agriculture – crop rotation	73
Measures to protect trees and gardens from pests and diseases	55
Agroforestry – windbreaks	54
Agroforestry – planting drought-tolerant trees and shrubs	53
Conservation agriculture – mulching	36
Viticulture adapted to dry conditions	26
Conservation agriculture – no-tillage	11
Other	1
Not applicable	4
No response	5

Respondents who were trained on "Climate-Resilient Farm Management" (modules 1b and 6) most commonly implemented drip irrigation (n=118; 61%) following the training they received (see **Table A3.5**). Introducing mulching (n=55; 28%) and preparing a climate-smart agribusiness plan (n=54; 28%) were selected about half as often, and making an assessment of the effectiveness of their entrepreneurial activities in climate-smart agriculture was selected by only 17 (9% of) respondents.

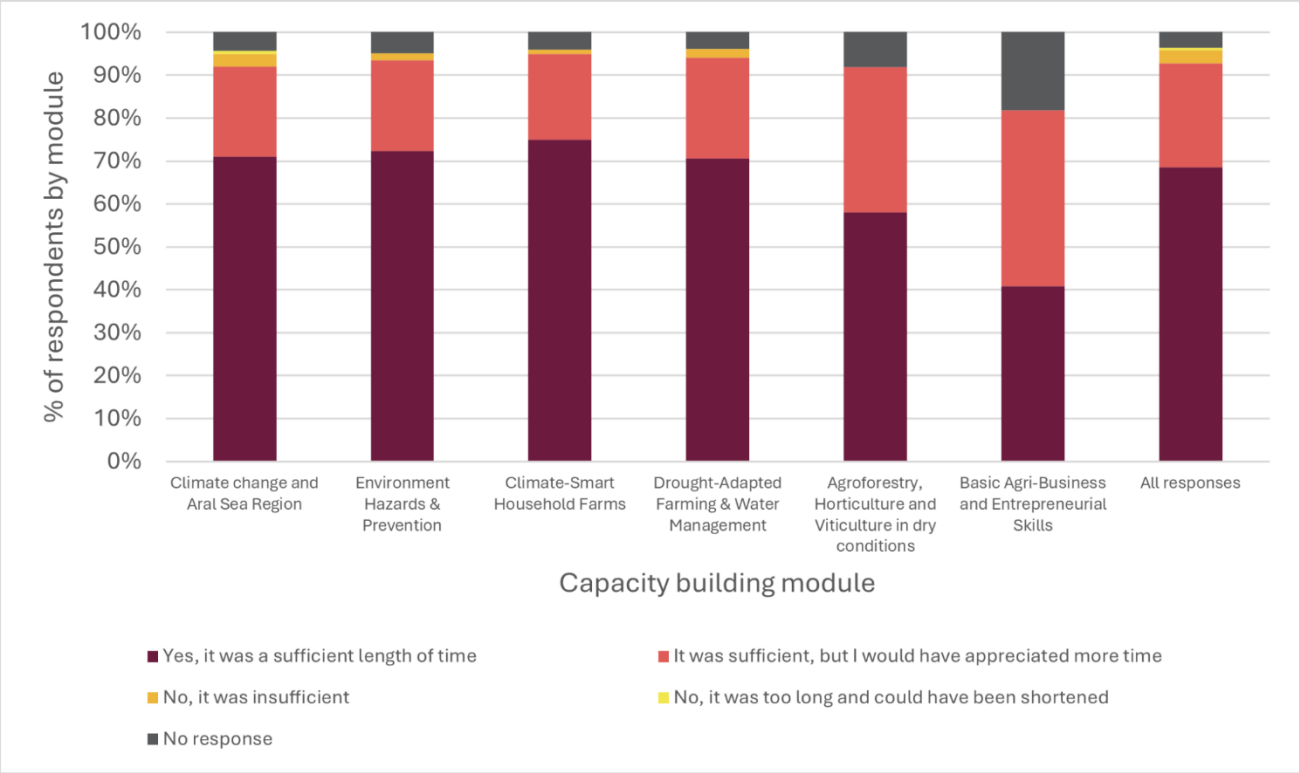
Table A3.5: Actions implemented following training on "Climate-Resilient Farm Management"

Action	Number of Respondents
Introducing climate-smart agricultural practices - drip irrigation	118
Introducing climate-smart agricultural practices - mulching	55
Preparing a business plan for a climate-smart agribusiness	54
Assess the effectiveness of your entrepreneurial activity in climate-smart agriculture	17
Other	2
Not applicable	11
No response	7

Capacity building training review and ratings

Respondents were positive regarding the quality of the training module and materials, as shown in **Figure A3.10**, with a significant majority (77%, n=150) reporting the quality was good, high, or excellent, and a further 19% (n=36) rating the quality as sufficient. Only one respondent (1%) said the training module and materials quality was low. Similar ratings were received across respondents who participated in most capacity building modules; however, the respondents who completed the "Basic Agri-Business and Entrepreneurial Skills" module rated the training module and materials quality as lower than the other modules, on average. A total of 64% (n=14) of these respondents still rated the quality as good or higher, with a further 18% (n=4) rating as sufficient; the remaining 18% (n=4) provided no response to this survey question.

Figure A3.10: Rating of training module and material quality by capacity building module

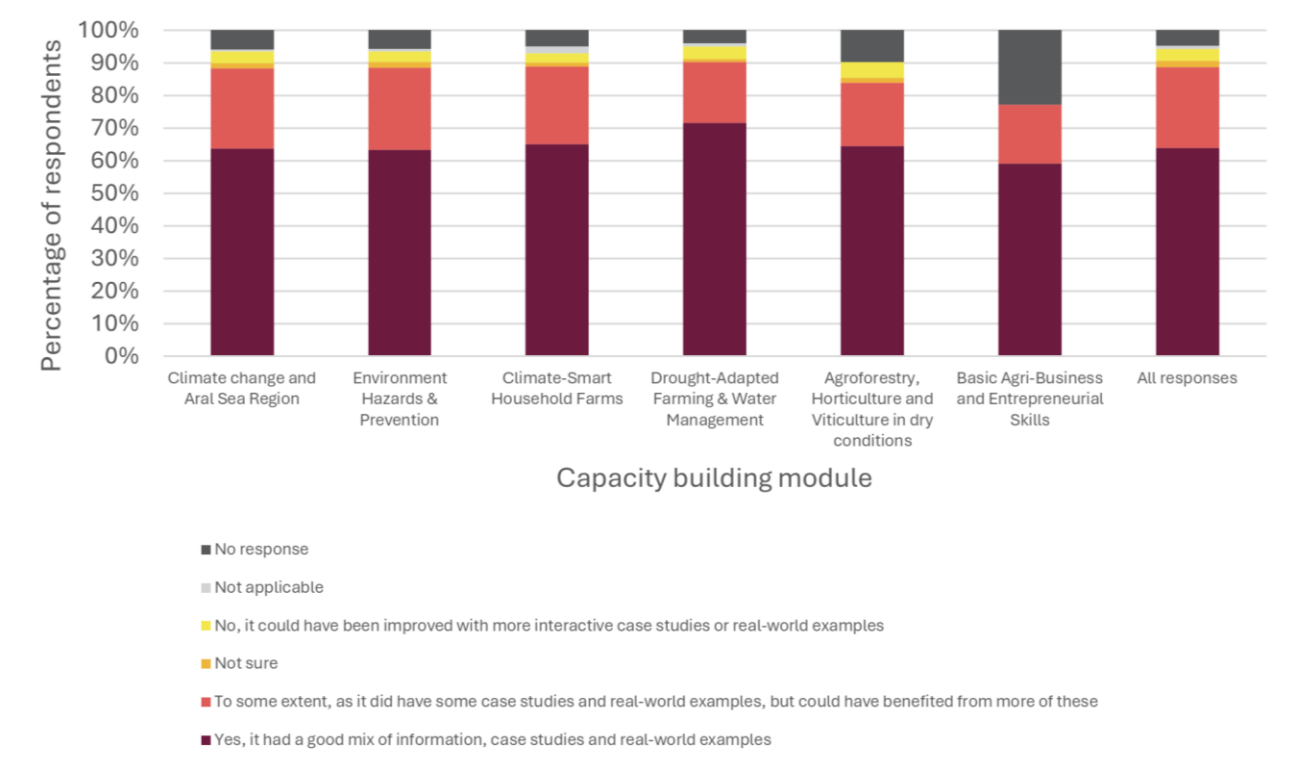


Most respondents were satisfied with the length of the training program in which they participated (see **Figure A3.11**), with an overall 69% (n=133) saying it was sufficient for building their awareness of the topic and to allow them to apply the knowledge they gained in practice. A further 24% (n=47) reported that the time was sufficient, but they would have appreciated additional time. Some 3% (n=6) said the training time was insufficient, while one respondent (1%) said the training length was too long and could have been shortened. Respondents who completed the "Basic Agri-Business and Entrepreneurial Skills" module were again less satisfied with the training program length than respondents who participated in other modules, with a lower than average 41% (n=9) reporting it was sufficient, and a higher than average additional 41% (n=9) reporting it was sufficient, but they would have appreciated additional time.

Figure A3.11: Rating of training program length by capacity building module

More than half of the respondents (65%, n=124) indicated that the training approach was sufficiently interactive to enable them to learn from case studies and real-world examples, as shown in **Figure A3.12**. In this case, the average response was relatively similar across all capability building modules, with the highest satisfaction associated with respondents who completed the "Drought-Adapted Farming & Water Management" module (72%, n=73) and the lowest from respondents who completed the "Basic Agri-Business and Entrepreneurial Skills" module (59%, n=13).

Figure A3.12: Rating of training interactivity by capacity building module



When asked to indicate topics on which they would like additional capacity building training, 62% of respondents (n=120) selected "Climate change resilience and health". This was the only topic that was chosen by more than half of the survey respondents, followed by "Climate-smart households" (38%; n=74), "Climate change science and ecology of the Aral Sea region" (36%; n=69), and "Climate smart agricultural practices" (29%; n=56), as shown in **Table A3.6**.

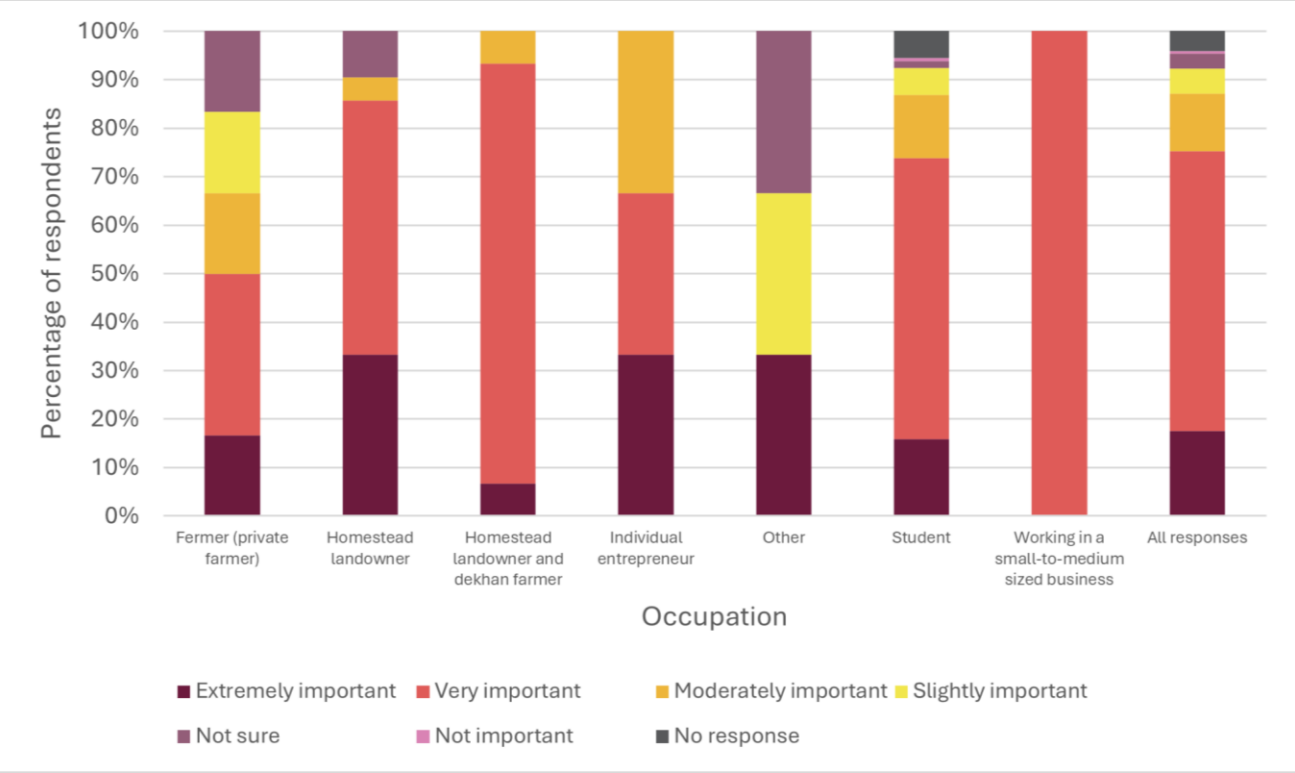
Table A3.6: Climate change resilience topics on which respondents would like additional training

Topic	Number of respondents
Climate change resilience and health	120
Climate-smart households	74
Climate change science and ecology of the Aral Sea region	69
Climate smart agricultural practices	56
Climate change resilience and water resources management	45
Climate change resilience and finance	35
Climate smart agriculture and business development	30
Climate smart agribusiness management (including financial management)	29
Climate change resilience and technology	29
Climate change mitigation (e.g., measures to reduce greenhouse gas emissions)	28
Climate smart agribusiness management and legal knowledge	26

Topic	Number of respondents
Opportunities for women and climate change resilience	23
Other	0
No response	8

A high proportion of the overall respondents said they thought that the training was either very important (58%, n=112) or extremely important (18%, n=34) (see **Figure A3.13**). When considered by respondent occupation, homestead landowners and individual entrepreneurs indicated a higher importance than the overall average (which was driven largely by the responses from students, who formed a majority of the survey respondents), with 33% (n=7) of homestead landowners and 33% (n=1) of individual entrepreneurs saying the training was extremely important. The training was considered least important, on average, by fermers, of which 33% said it was only slightly important, or that they were unsure. Only one respondent (a student) said they thought the training was not important at all.

Figure A3.13: Rating of training importance by occupation



Appendix IV. Project Performance against its Logframe

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
Outcome 1								
1. Climate Smart Agriculture related policy adopted *(Revised in July 2024)*		Climate Smart Agriculture related policy adopted *(Revised in July 2024)*	GGGI	Policy recommendation, validation workshop, government endorsement *(Revised in July 2024)*	0 *(Revised in July 2024)*	1 policy recommendation *(Revised in July 2024)*	Whitepaper has been published with policy recommendations, but policy recommendations not yet adopted by the government (by 2024 Q4). While GoU is yet to adopt a "CSA Agriculture Policy" based on GGGI's recommendations, it is anticipated that GGGI's research, analysis, and high-level consultation processes will inform: • A Food Security Strategy by MoA • The Aral Sea Integrated Investment Program of the MIIT • Other policy documents on environmental protection and climate change, of the MEEPCC. Note - the GoU has released a Presidential Resolution "On measures to create a sustainable agro-ecosystem in relation to climate change and to increase the adaptability of agricultural producers to the risks associated with climate change" in June 2024, prior to the Whitepaper publication which also provides a foundation for developing and adopting a CSA Policy. Note: initial extension of the Project to 31 Dec 2024; and a second extension to mid-2025 has recently been agreed.	Partially

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
Output/Activity								
1.1. Two technical analyses (CRGG & GRIA) conducted and validated for the development of the Aral Sea strategic guidance/policy Document framing the Aral Sea Development Program	1.1.1. Undertake a Climate Resilience Green Growth (CRGG) Assessment for the Republic of Karakalpakstan focusing on agriculture and agroforestry sectors	CRGG Assessment Report 3 workshops on baseline setting, stocktaking of CRGG practice and validation of CRGG recommendations	GGGI	Government's written endorsement of CRGG Assessment CRGG baseline, stocktaking and validation workshop reports	No CRGG assessment to systemically understand opportunities for resilience building and green growth No workshops conducted	1 CRGG Assessment Report 3 workshops conducted	1.1.1-a. Agricultural Legal and Policy Review (2022) 1.1.1-b. Climate Resilient Green Growth Assessment (CRGG, 2022) 1.1.1-c. Green Recovery Investment Analysis (202 1.1.1-d. Whitepaper: Policy recommendations on sustainable landscapes, climate-smart agriculture, and forestry development (2024) 1.1.1-e. CRGG Stocktaking Workshop (2022) 1.1.1-f. Technical Advisory Consultations validating CRGG and GRIA, Nukus (Apr. 2022) 1.1.1-g. Technical Advisory Consultations validating CRGG and GRIA, Nukus (Jun. 2022) 1.1.1-h. Technical Advisory Consultations validating CRGG and GRIA, Tashkent (Jun. 2022) 1.1.1-i. Whitepaper Validation Workshop (Jun. 2024) CRGG Assessment final publication approval recorded in *ref. PIU minutes_2022_08*; Final publications (with relevant logos/ Ministry names on front and inside front cover, and Ministries' representatives having reviewed document) indicate Government's written endorsement.	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
	1.1.2. Prioritize a set of green recovery investment projects in agribusiness	A pipeline of green recovery projects in agribusiness 2 workshops on validation of priority investment projects	GGGI	Government's written confirmation on priority projects One consultation and validation workshop report	A list of project ideas is captured under the UN Human security Fund without priority setting Project ideas are not integrated into Karakalpakstan's development planning	Solid green recovery project pipeline with clear project concepts are agreed with the government as priority Priority projects are enacted into Aral Sea Development Program	1.1.2-a. Green Recovery Investment Analysis (GRIA, 2022) 1.1.2-b. Capital Expenditure for Infrastructure Adaptation Measures for Agriculture (2023) 1.1.2-c. Tree nursery capacities and investment mobilization opportunity assessment (2023) 1.1.2-d. Technical Advisory Consultations validating CRGG and GRIA, Nukus (Apr. 2022) 1.1.2-e. Technical Advisory Consultations validating CRGG and GRIA, Nukus (Jun. 2022) 1.1.2-f. Technical Advisory Consultations validating CRGG and GRIA, Tashkent (Jun. 2022) 1.1.2-g. MoA Pipeline_Final_Report_2024-10-29 GRIA final publication updated to Aral Sea GRIP website noted in *ref. PIU minutes_2022_08*, indicating the government's written endorsement of this document. MoU/ TOR on green investment pipeline identification developed and under review by MoA [*ref. Monthly update_2024_3*]; currently (as of 9 Dec 2024) awaiting endorsement.	Partially, and expected to be completed by the end of the Project in mid-2025 (with the project extension)
Output/Activity								
1.2. Inception Action Plan to support Aral Sea Intra-agency Coordinating Mechanisms (Aral Sea ICM) for the Aral Sea Development Program developed	1.2.1. Develop the sustainable bond framework (Revised in July 2024)	Commercial bond framework developed Stakeholder consultations *(Revised in July 2024)*	GGGI	Validated commercial bond framework *(Revised in July 2024)*	0 *(Revised in July 2024)*	1 bond framework 2 consultations *(Revised in July 2024)*	1.2.1-a. Green bond concept 1.2.1-b. Green bond TOR 1.2.1-c. $400m Sustainable bond issuance article (2024) Sovereign Green bond plan Technical Assistance (TA) designed by GGGI but not pursued by GoU within project timeframe → **Alternative**: commercial green bond framework developed by GGGI and validated by SPO [*ref. PSC Minutes Apr 2024*]: MOU with financial institution to provide TA in establishing sustainable bond framework (KOICA notified February 2024). MOU with SQB Bank signed April 2024; GGGI extended the TA in validating SQB bank's sustainable bond framework. Green Bond launched [*ref. article dated 22 Jul 2024*] Stakeholder consultations with SQB and Agrobank with green bond issuance [*ref. PSC minutes_2024_11*]	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
	1.2.2. Undertake a green employment assessment of prioritized green investment projects	Green employment assessment report 2 workshops	GGGI	Government's written endorsement of green employment assessment One each consultation and validation workshop report	Karakalpakstan experiences an acute unemployment issue far more severe than the national average	Green employment opportunities clarified and an effective occupation and skill development plan is put in place Two workshops	1.2.2-a. Green employment assessment report (2024) 1.2.2-b. MOEEPCC RK Endorsement letter (2024) 1.2.2-c. MOEPR RK Endorsement letter (2024) 1.2.2-d. Forestry Committee RK Endorsement letter (2024) 1.2.2-e. Endorsement letters translated into Eng (2024) High-level workshop held in Tashkent, 21 Jun 2024 [*ref 1.1.1-i*] Workshop/ seminar held (in Nukus?), 7 May 2024 [*ref. 1.2.2-e*] Note: The green jobs assessment report (endorsed by MIIT RK, MOEEPCC RK, and Forestry RK) doesn't relate to any "priority green investment projects" but writes about the agricultural sector and forestry jobs in Uzbekistan in general. It hasn't clarified "Green employment opportunities" or provided an "effective occupation and skill development plan".	Partially
	1.2.3. Implement high-level policy maker Aral Sea ICM consultations	Inception Action Plan for Aral Sea ICM 1 High-level consultation workshop report	GGGI	Stakeholder consultation reports	No Inception Action Plan for Aral Sea ICM. No workshops conducted	1 Inception Action Plan for Aral Sea ICM 1 key stakeholder workshop conducted	1.2.3-a. GGGI-UNRO Joint action plan article (Jan 2024) 1.2.3-b. Whitepaper Validation Workshop (Jun. 2024) 1.2.3-c. ICM Action plan (c. 2023) The White Paper high-level consultation processes provided the stakeholder consultation for the Aral Sea ICM. GGGI notes the government decision on developing a Presidential Decree on Aral Sea Development Program has been pending since 2022 and is currently not expected to proceed → **Alternative**, proposed: focus on strengthening the existing UNMPTF coordination mechanism. [*Ref. 1.2.3-c ICM Action plan (c. 2023*) details cooperative activities between GGGI's Aral Sea GRIP project and UNMPTF, building on their joint *2022 Letter of Intent*] High-level workshop held in Tashkent, 21 Jun 2024 [ref. 1.1.1-i].	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
Outcome 2								
2. Dehkan and private farmers (fermers) have increased resilience to climate and Aral Sea disaster risks		At least 25% of capacity building program participants from 4 districts use CSA/DRR knowledge At least 25% of capacity building program participants from 4 districts have improved business practices in their small and medium sized businesses	GGGI	Participants confirm increased awareness and acquiring skills in managing disaster-related human security risks	0 0	25% of capacity building program participants in 4 districts 25% of capacity building program participants in 4 districts	Capacity building programs were implemented, but the targets on the number of people trained have not been met. Evaluation survey participants confirmed an increased awareness and skills in managing disaster-related human security risks from the training. Pre- and post-module surveys were delivered, for modules 2 and 3 by GGGI. Positive results were that 74% of module 2 and 62% of module 3 respondents felt that training had reduced their risk to climate change. Some 21% of module 3 respondents recorded an increased knowledge of climate-resilient farming measures. In neither group, though, according to GGGI's survey did the training significantly increase or decrease intent to change health and farming behaviors; the module 2 survey author noted that most participants already had climate change adaptation methods for health and farming in place.	Partially
Output/Activity								
2.1. Climate and disaster risk resilience capacity is strengthened among dehkan farmers and fermers in 4 districts in Karakalpakstan	2.1.1. Develop a risk profile for disaster-related human security risks in Karakalpakstan, with focus on food and livelihood security	A validated Risk profile	GGGI / Human Asia	Stakeholders confirm/validate the risk profile One each consultation and validation workshop report	0	1	2.1.1-a. A risk profile (2022) [sighted: Final draft (under review) June 2022, but *Ref. PSC minutes_2023_04* notes it was published, which, with the affixing of Government logos, indicates its endorsement.] TACs and Validation Workshop as per the documents for Activity 1.1.1	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
	2.1.2. Develop capacity building program with government stakeholders on climate resilience and disaster risk management focusing on food security and livelihoods	At least 6 capacity building modules designed covering topics for climate resilience and disaster risk management	GGGI	Capacity building modules accepted by Government and stakeholders	0	6	2.1.2-a. Capacity building modules 2.1.2-b. Module 1. CC and Aral Sea region 2.1.2-c. Module 2. Health 2.1.2-d. Module 3. Climate-smart farms 2.1.2-e. Module 4. Drought-adapted farming and water 2.1.2-f. Module 5. Agroforestry 2.1.2-g. Module 6. Climate-resilient agribusiness 2.1.2-h. Survey report-Health 2.1.2-i. Survey report-Climate-smart farms 2.1.2-j. Survey report-Sets 2 & 3-Stats-metadata 2.1.2-k. Whitepaper Policy recommendations Sustainable landscapes, CSA, forestry development This activity was evaluated as completed, given the modules were prepared and the concept note for them is published. Whitepaper on sustainable landscape and CSA approved by MEEPCC (& KOICA, UN Uzbekistan and UN MPHSTF) [*ref. Monthly update_2024_7*]. The assumption is made that the modules were accepted by Government and stakeholders: no formal endorsement letter found, but the Ministry of Education (KR) signed an MOU with GGGI and approved the curriculum; the modules have been run. *Ref. PSC minutes_2023_04* noted the modules were being finalized for Government endorsement; *ref. PSC meeting notes_2023_07_11* made no mention of it.	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
	2.1.3. Conduct capacity building and awareness raising activities on climate change and disaster risk resilience, focusing on food security and livelihoods	Capacity building modules and knowledge sharing events conducted in 57 village council of citizens (VCCs) in 4 districts, with at least 50% of activities targeted at women; and 25% of total participants are youth, 14 to 30 years old.	GGGI	Participants confirm increased awareness and acquiring skills in resilience to climate and disaster risks	0	At least 25% of total population working at agricultural sector from 57 village councils of 4 districts participate in the capacity building activities	2.1.3-a. Student training article (2024) 2.1.3-b. Microgreen training article (2024) 3.2.2-d. 2024 BDP session at Microgreen training. 12,000 vocational school students were trained on climate change adaptation, with an initial project goal of about 7077 youth (approx.14-30); includes 1 student testimonial [*ref: 2.1.3-a Student training article*]. 16 women with disabilities were trained in microgreens management; includes several positive testimonials [*ref 2.1.3-b. Microgreen training article* & *3.2.2-d. 2024 BDP session at Microgreen training*]. *Ref. PSC meeting notes_2024_11_6* states 17,000+ youth, women, and farmers had been trained to that date; the assumption is this is an upper bound of persons trained. Numbers of participants found documented for specific training courses across a number of project management references by the Evaluation Team totaled 16,000+; this represents a lower bound of people trained. 25% of the total population working in the agricultural sector of the four target districts in 2021 was **26,375**: this target [revised to 28,307 in *ref. 2.1.1-a*] is not yet met, using either lower or upper bounds of trainees. Percentage of females/ youth trained were available for many but not all of trainings documented. GGGI supplemented its training program with an extensive media awareness raising campaign as noted in Box 4.2. [Note: *Ref 2.1.1-a. Risk profile* notes the aim is to develop capacity of approx. **28,307** people in the agriculture sector, including at least 7,077 youth, 14,154 females, in 57 village council of citizens in the 4 target districts.]	Partially

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
Outcome 3								
3. Local entrepreneurs of Karakalpakstan are equipped with climate resilient agri-business models		Farmers and MSMEs have incorporated climate resilient agri-business models and participate in the business development platform 20M USD investment commitment mobilized from demonstrated business models	GGGI	Financial statements of beneficiary enterprises Household income surveys of farmers	0 0 USD	At least 4 enterprises have incorporated climate resilient agri-business models, and their supply comes from farmers that have applied CSA practices; 20M USD investment commitment mobilized from demonstrated business models	28M USD mobilized (SQB) for green financing facility [*ref. 2024 Quarterly Report*]; the business models (wheat, fruit orchards etc) have been incorporated into the design of the CSA finance facility, and the banks have adopted the model. 4 farms and enterprises have incorporated climate resilient agri-business models [*ref. 2024 Quarterly Report*] Delays in program implementation are the main factors that influenced the partial achievement of the outcome. The piloting of validated agri-business models with farmers and MSMEs (activity 3.1.3) under this outcome is currently ongoing, with agri-business pilot projects yet to be commissioned (and the Project having been extended to 2025 to accommodate these delays). At the time of this report (December 2024), 2 of the 7 pilot climate-resilient agri-business models' programs were still in the process of installation.	Fully
Output/Activity								
3.1. Climate resilient agri-business models are established for farmers & MSMEs	3.1.1. Conduct functional and economic value chain analysis, and financial, technical, and social analysis of supply chain stages (production & processing) of focal commodities	Value chain analyses and climate resilient agri-business models for focal commodities baseline studies (economic, social, technical, and environmental)	GGGI	Identified interventions at the production and processing level	0	4 value chain analyses on selected commodities	3.1.1-a. Value chain analysis_apple and apricot 3.1.1-b. Value chain analysis_melon and watermelon 3.1.1-c. Value chain analysis_Tomato and cucumber 3.1.1-d. Value chain analysis_sorghum 3.1.1-f. Market system analysis report All items sighted; four value chain analyses delivered.	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
	3.1.2. Engage key stakeholders and target groups to validate the integration and adoption of climate resilient agri-business models	Climate resilient agri-business models consulted and validated	GGGI / Green Asia Network	Four climate resilient agri-business models consulted and validated by key stakeholders	0	4 Climate resilient agri-business models validated	3.1.2-a. CRA business model feasibility study (FS) 3.1.2-b. FS mission report 3.1.2-c. FS mission presentation All items sighted; four CRA business models consulted and validated by CMRK/ MIIT RK [*ref. 2024 Quarterly Report*].	Fully
	3.1.3. Pilot validated climate resilient agri-business models with farmers and MSMEs (Revised in July 2024)	Climate resilient agri-business models demonstrated *(Revised in July 2024)*	GGGI	8 CSA agribusiness models piloted with 8 enterprises/entities *(Revised in July 2024)*	0	8 enterprises and/or entities *(Revised in July 2024)*	3.1.3-a. Jusbazi Implementation Note 3.1.3-b. Juzbazi site report (2024) 3.1.3-c. MCHS Implementation Note 3.1.3-d. MCHS site report (2024) 3.1.3-e. AgroImpex site report (2023) 3.1.3-f. Aktuba Jaylo site report (2024) 3.1.3-g. Asxat Rufat site report (2023) 3.1.3-h. Bozataw site report (2023) 3.1.3-i. Karauzyak site report (2023) 3.1.3-j. Tree windbreak Implementation Note (2023) 3.1.3-k. Karatal Implementation Note (2023) 3.1.3-l. Greenhouse training Implementation Note (2023) 3.1.3-m. Greenhouse training 7 pilots (1x CRA Greenhouse drip irrigation, 2x CSA FE nurseries, 2x CSA wheat irrigation, 2x CSA fruit irrigation) commenced but not completed; 2 of the 7 pilots in the process of installation as of 9 Dec 2024. Note: Activity 3.1.4: Limited processing MSMEs available in RK; prioritized grant-based financing and capacity building → **Alternative**, proposed: Merging activity [3.1.3. CSA model demonstration - production] and [3.1.4. CSA model demonstration – processing] [*ref: PSC Minutes Apr 2024*] MCHS and Asxat Rufat sites awaiting infrastructure delivery and installation - winter weather not conducive to implementation [*ref. PSC minutes_2024_11*] - request for project extension to mid-2025. Under this activity (3.1.3) as at November 2024, two of the target of eight enterprises and/or entities were yet	Partially, and expected to be completed by the end of the Project in mid-2025 (with the project extension)

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
							to have their agri-business infrastructure installed and commissioned and evidence of completed delivery/installation was found for only five pilots out of seven. The requested extension to the Project to mid-2025 has been granted to facilitate completion of this activity.	
Output/Activity								
3.2. Business Development Platform (BDP) established for farmers, MSMEs, and institutional enablers	3.2.1. Create the business development platform structure and curriculum for farmers and MSMEs	Business development platform structure equipped with curriculum programs	GGGI / Consort Group	One BDP established and curriculum capacity building programs uploaded	0	1 BDP created and curriculum programs developed	3.2.1-a. BDP Establishment and Operational Plan 3.2.1-b. 2024 BDP report 3.2.1-c. BDP info brief 3.2.1-d. Assessment of existing BDP services and surrounding circumstances_GGGI_Civitta BDP was launched in 2022 as scheduled.	Fully
	3.2.2. Organize events and sessions for participating farmers and MSMEs, together with enabling institutions	Events and sessions organized	GGGI	event/ session organized and documented	0	At least 4 events and sessions	3.2.2-a. 2022 BDP launch 3.2.2-b. 2022 Technical Advisory Consultation 3.2.2-c. 2023 Agri-consultancy Expo_2023 report 3.2.2-d. 2024 BDP session at Microgreen training 3.2.2-e. 2024 Technical Advisory Consultation GGGI's Technical Advisory Working Group Consultations 3.2.2-f. BDP Manual_Instructions for Registration (2022) All items sighted; 3 farmer expos, 1 BDP consultant event, and 1 farmer study tour organized [*ref: 2024 Quarterly Report*].	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
	3.2.3. Develop the strategy for future funding to keep the business development platform operational	Business Development Platform Funding Strategy	GGGI	Government endorsement letter	0	1	3.2.3-a. BDP Piloting result (2022) [Note: covers potential issues and lessons learned, but no information on strategy] 3.2.3-b. GreenAral consultant opinion (2022) The BDP struggled to secure consistent private sector engagement and was perceived as lacking sufficient site management from its contract manager. At the writing of this report, the BDP had not yet generated significant interest, with only 1600 registered users. GGGI has developed a BDP Sustainability Strategy (including financing options) and plans to present it to the GoU for endorsement. GGGI reported that once there is a decision on the ownership of the BDP, a strategy will be developed, and government endorsement will then be sought.	Partially, and expected to be completed by the end of the Project in mid-2025 (with the project extension)
Outcome 4								
4. Successful climate resilient agri-MSMEs and farmers across Karakalpakstan have improved access to finance from commercial banks and government green financing.		10M USD Investment commitment mobilized from the government and DFIs	GGGI	MoU document	0 0 USD	1 signed MoU 10M USD	$1 Billion mobilized for sustainable & green investment with SQB and Agrobank [*ref: PSC Minutes Nov 2024*]; MOU signed with SQB Bank for green financing facility and green bond framework (16 Apr) & Mandate letter received from Agrobank for sustainable bond framework development (30 Apr) [*ref. Monthly update_2024_3*] MOU signed with SQB and MoA for green investment mobilization [*ref. Monthly update_2024_4*]. Required to report on the indicators for Outcome 4: documented cases of the credit facility being utilized [note: *ref. PSC Minutes Nov 2024* stated 14 "use of proceeds" wrt SQB and 3 wrt Agrobank]; other documents or interviews required to confirm training effectiveness.	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
Output/Activity								
4.1. Risk mitigating financial solutions are developed to facilitate increased commercial lending for MSMEs utilizing climate resilient agri-business models identified in Output 3.1	4.1.1. A green financing facility is designed to facilitate commercial lending for successful agri-MSME models identified in Output 3.1 (Revised in July 2024)	Green financing facility *(Revised in July 2024)*	GGGI	Green financing facility design *(Revised in July 2024)*	0	1 facility design *(Revised in July 2024)*	4.1.1-a. Article on MOU signing with SQB 4.1.1-b. Agrobank_Green Finance Framework (2024) 4.1.1-c. CSA facility design document from PwC 4.1.1-d. CSA_Credit Financing Facility_Final report_Component 2_EN 4.1.1-e. CSA_Information_memorandum Note: Activity 4.1.1: GCF proposal not feasible within project timeframe due to nominated AE delay → **Alternative**, proposed: A design of a green commercial financing facility [*ref: PSC Minutes Apr 2024*] Indicator achieved with regard to Agrobank (not yet with SQB: MoU signed 16 Apr 2024, and a $50M CSA Financing Facility development in progress with SQB [*ref: PSC Minutes Nov 2024*]) - the 2024 target for 4.4.1 has been achieved. PWC reports on the design of the facility have been sighted.	Fully
	4.1.2. Technical due diligence and financial scenario for grant and investment project pipeline (Revised in July 2024)	Grant and investment project pipeline *(Revised in July 2024)*	GGGI	Grant and investment pipeline, letter of intent to seek funding for grant scheme from the govt *(Revised in July 2024)*	0	1 pipeline *(Revised in July 2024)*	4.1.2-a. Article on MOU with MoA Note: Activity 4.1.2: GCF proposal not feasible within project timeframe due to nominated AE delay → **Alternative**, proposed: Support grant & investment project pipeline identification and review [*ref: PSC Minutes Apr 2024*] *Ref: PSC Minutes Nov 2024* stated that 57 green grant investment pipeline projects worth $974M were in progress with MoA and MIIT; currently awaiting MoA endorsement.	Fully

Category		Indicator	Responsible Party	Means of Verification	Baseline 2021	Target 2024	Documents Sighted Relevant to Deliverables; Comments	Target Achieved?
Output/Activity								
4.2. A capacity building program on climate finance for the NDA and financial institutions is established	4.2.1. Develop and implement capacity building program for the NDA and financial institutions in the region	Number of NDAs and financial institution stakeholders which have completed the program	GGGI	Letter of appreciation from the participating NDA and local financial institutions	0	3	4.2.1-a. Green finance training article (2023) [Note: Green finance training report (2024) (4.2.1-b) not sighted] Four green and climate business lending templates developed and consulted with banks [*ref: Biannual Report_2023*] Ref. 2024 Quarterly Report stated that 15 banks joined training on green lending and ESG framework.	Fully

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The Global Green Growth Institute was founded to support and promote a model of economic growth known as “green growth”, which targets key aspects of economic performance such as poverty reduction, job creation, social inclusion, and environmental sustainability.

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The Global Green Growth Institute

19F Jeongdong Building, 21-15, Jeongdong-gil,
Jung-gu, Seoul, Korea 04518

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