Monitoring & Evaluation (M&E) Plan

Basic Information	
Title of response plan	Using simple mobile technologies to scale up digital collection & processing of climate observations for adaptation actions in Malawi
Technical assistance reference number	AF-20220000072 (CTCN 2022000048)
Country/ countries	Malawi
NDE focal point and organisation	**National Commission for Science and Technology** Private Bag B 303, Lilongwe 3, Malawi www.ncst.mw Contact: Mr. Lyson Kampira Chief Research Services Officer Tel: +265 1 771 550, +265 999 916 036 Email: lkampira@ncst.mw
Sector(s) addressed	Water management. Early Warning and Environmental Assessment. Cross-sectoral.
Technologies supported	• Seasonal to interannual weather forecast. • Flood forecasting systems. • Climate change monitoring. • Water resources assessment. • Hazard mapping solutions. • Hydrological modelling.
Implementation period and total duration	February 01, 2024, to April 30, 2025 (15 months)
Total budget for implementation	USD 193,056
Designer of the response plan	**Malawi University for Science and Technology (MUST)** Centre for Climate Change and Disaster Risk Management (CCC DRM) P.O. Box 5196, Limbe, Malawi www.must.ac.mw/the-center-for-climate-change-and-disaster-risk-management-research/ Contact:
Implementer of response plan	Water in Sight Ltd of Sweden (in partnership with T-Notch Consulting Ltd of Malawi)

Core indicator 3	Anticipated number of direct and indirect beneficiaries as a result of the TA	
	Quantitative value	**Means of verification**
Total beneficiaries	205	The means of verification include tracking participation, manifestation of benefit, and interaction with project communication and events.
Number of adaptation beneficiaries	205	The technical assistance is estimated to reach: **Direct beneficiaries:** - 20 Gauge Readers and Observers who take in-situ water and weather observations. - 5 Working Group members (excluding consultant team). - 30 Government staff who participate in workshops and fieldwork (i.e., DWR, DCCMS, NWRA, DoDMA, DAES, NCST*). - 25 Participants in project training activities (Output 6). **Indirect beneficiaries:** - 80 Family members of the Gauge Readers and Observers (est. 4 individuals per Gauge Reader/Observers). - 5 representatives from international donors/NGOs who are aware and support the innovation. - 40 technical experts/practitioners reached by project/training videos. * DWR – Dept of Water Resources DCCMS – Dept of Climate Change & Meteorological Services NWRA – National Water Resources Authority DoDMA – Dept of Disaster Management Affairs DAES - Dept of Agriculture Extension Services NCST – National Commission for Science and Technology
Number of mitigation beneficiaries		
Number of adaptation- and mitigation beneficiaries		

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
	Select relevant indicators from the Closure Report (at least one core indicator, section B). You may also define additional relevant indicators to be added.	Add the expected quantitative or qualitative target/value of the indicator (e.g. number of studies, policy recommendations, etc.).	Describe the expected method and frequency for data collection (e.g. survey, head count at a training workshop, application of a standard methodology etc.)	Describe any assumptions made or anticipated challenges for collecting quantitative and qualitative data
Whole project	1) Anticipated number of direct and indirect beneficiaries as a result of the TA	The expected 205 anticipated direct beneficiaries of the TA will have greater institutional and technical capacity on how to leverage mobile and cloud computing for hydromet observations and data processing. Strengthening this capacity is critical for the value chain of climate information services – services that are central to adaptation in multiple sectors. The TA is expected to have adaptation benefits to indirect cross-ministerial beneficiaries whose technical capacity is enhanced by DWR and DCCMS being able to provide more and better hydromet data and analysis.	Data on the direct beneficiaries will be collected when associated activities are performed and monitored. Assessment of indirect beneficiaries will be done through unstructured interviews and surveys as part of assessments and trainings.	The anticipated challenges with the direct beneficiaries are: • Ensuring equal opportunity for women and men to be direct beneficiaries • Capturing the details on how women and men's capacity change in their operational roles. • Lack of quantitative and qualitative insight on how DWR and DCCMS will utilise the hydromet data in their applications and with what impact, due to reluctancy to engage if external to the TA, and lack of staff availability to respond to inquiry.
Output 1: Development of detailed Work Plan, Monitoring	Total number of deliverables produced during the assistance	4 i. Deliverable 1.1.a Detailed Work Plan with Budget	Report submission and validation	

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
& Evaluation Plan, and communication documents		ii. Deliverable 1.1.b Monitoring & Evaluation Plan iii. Deliverable 1.1.c CTCN Impact Description (initial formulation and updated version) iv. Deliverable 1.1.d Close and Data Collection Report.	Method: Track deliverables Frequency: M1	
Activity 1.1. Preparing the consultancy work plan, periodical progress reports and final reports	Total number of deliverables produced during the assistance		Method: Track deliverables Frequency: M1, M15	
Output 2: Creation of a steering committee, mapping of stakeholders and inception meeting	Total number of deliverables produced during the assistance	6 i. Deliverable 2.1 Minutes of Kick-off & inception meeting ii. Deliverable 2.2.a Steering Committee/Working Group iii. Deliverable 2.2.b Stakeholder Mapping Report iv. Deliverable 2.3.a Inception meeting Report v. Deliverable 2.3.b Bibliographical document list vi. Deliverable 2.3.c Planning of bilateral meetings with International Expert while in Malawi	Report submission and validation Method: Track deliverables Frequency: M2	
Activity 2.1. Kick off call (online)	Number of participants in events organized by proponents and implementing partners	5	Method: Track participation Frequency: M1	
	Core indicator #3: No. of adaptation beneficiaries	5		
	Total number of events organized by proponents and implementing partners indicator	1		
Activity 2.2. Creation of a steering committee/WG & mapping of stakeholders	Core indicator #3: No. of adaptation beneficiaries	5	Method: Track nomination Frequency: M2	

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
Activity 2.3. Conduct an inception meeting	Number of participants in events organized by proponents and implementing partners	10	Method: Track participation Frequency: M2	
	Core indicator #3: No. of adaptation beneficiaries	10		
	Total number of events organized by proponents and implementing partners	1		
Output 3: Diagnosis and prefeasibility of using simple mobile technologies as a solution to comprehensively collect and digitize weather and climate observations for application in impact modelling and developing climate futures for purposes of adaptation and disaster risk management.	Total number of deliverables produced during the assistance	12 i. Deliverable 3.1.a Diagnosis of hydromet information & systems (MW & Region) ii. Deliverable 3.1.b List: equipment recommendations, barriers & opportunities iii. Deliverable 3.1.c List: previous similar/complementing initiatives in Malawi iv. Deliverable 3.1.d IT characteristics of DCCMS & DWR data management systems v. Deliverable 3.2.a Workshop minutes & materials vi. Deliverable 3.2.b Report: client needs summary (ToR & system architecture) vii. Deliverable 3.2.c Matrix: comparing available versus requested data & system viii. Deliverable 3.3 Report: preliminary analysis on the use of simple mobile phones ix. Deliverable 3.4 Report on challenges, barriers, risks, opportunities & strengths x. Deliverable 3.5.a Draft system architecture with user manual (summary report) xi. Deliverable 3.5.b Matrix: explaining	Report submission and validation Method: Track deliverables Frequency: monthly, M2-5	

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
		needs reached (i.e., 3.2) or not reachable xii. Deliverable 3.6 Minutes: 1-day workshop		
Activity 3.1. Diagnosis of the current systems and equipment available in Malawi to gather climate data				
Activity 3.2. Assessment of needs & requirements of future users & administrators	Number of participants in events organized by proponents and implementing partners	5	Method: Track participation Frequency: M3	
	Core indicator #3: No. of adaptation beneficiaries	5		
	Total number of events organized by proponents and implementing partners indicator	1		
Activity 3.3. Evaluation of mobile phone technologies as a solution				
Activity 3.4. Identify barriers, challenges, opportunities, strength of the systems in place				
Activity 3.5. Design the architecture of the systems				
Activity 3.6. Organize an in-person meeting to validate the prototype technology	Number of participants in events organized by proponents and implementing partners	5	Method: Track participation Frequency: M5	
	Core indicator #3: No. of adaptation beneficiaries	5		
	Total number of events organized by proponents and implementing partners indicator	1		
Output 4: Piloting the use of mobile phone technologies as a solution to comprehensively collect and	Total number of deliverables produced during the assistance	14 i. Deliverable 4.1 Pilot sites: preliminary assessment ii. Deliverable 4.2.a Minutes: 1-day workshop	Report submission and validation Method: Track deliverables Frequency:	

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
digitize weather and climate observations		iii. Deliverable 4.2.b Pilot sites: final selection iv. Deliverable 4.3 Detailed pilot implementation plan (workplan) v. Deliverable 4.4.a Minutes: online meeting vi. Deliverable 4.4.b Final pilot implementation plan vii. Deliverable 4.5.a Minutes: local workshop viii. Deliverable 4.5.b Official community endorsement (written) ix. Deliverable 4.6 Report: reception and equipment installation x. Deliverable 4.7 Report: demonstrating start of testing xi. Deliverable 4.8 Digital system development & operationalization xii. Deliverable 4.9 Minutes: demonstration workshop xiii. Deliverable 4.10 Report: updated equipment & digital system xiv. Deliverable 4.11 Minutes: technology validation workshop	monthly, M6-8, M12	
Activity 4.1. Select the best sites for the piloting				
Activity 4.2. One Workshop with the stakeholder WG to discuss ranking of sites	Number of participants in events organized by proponents and implementing partners	10	Method: Track participation Frequency: M5	
	Core indicator #3: No. of adaptation beneficiaries	10		
	Total number of events organized by proponents and implementing partners	1		

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
	indicator			
Activity 4.3. Plan the implementation of the pilot project				
Activity 4.4. Organize an online meeting to discuss the logistics and implementation of the pilot	Number of participants in events organized by proponents and implementing partners	5	Method: Track participation Frequency: M5	
	Core indicator #3: No. of adaptation beneficiaries	5		
	Total number of events organized by proponents and implementing partners indicator	1		
Activity 4.5. Onsite WS with community representatives (tbc)	Number of participants in events organized by proponents and implementing partners	10	Method: Track participation Frequency: M6	
	Core indicator #3: No. of adaptation beneficiaries	10		
	Total number of events organized by proponents and implementing partners indicator	1		
Activity 4.6. Purchase / route / install the needed equipment to the selected areas				
Activity 4.7. Implement the small-scale project in the pilot area	Core indicator #3: No. of adaptation beneficiaries	100	Method: Track Gauge Reader, indirect beneficiaries Frequency: twice, M6 and M14	
	Total number of events organized by proponents and implementing partners indicator	1		
	Performance % of Gauge Readers and Observers submitting observation per protocol	80%	Method: data analysis of performance in digital platform Frequency: monthly, M6-14	
Activity 4.8. Development of the digital system integrated with the DCCMS and DWR DMS	Total number of deliverables produced during the assistance: b) Number of tools and technical documents strengthened, revised or developed	2	Method: track implementation of technology, performance, and scalability potential. Frequency:	Implementor will monitor: 1) Mobile tech improved/developed for digitization of in-situ observations. 2) Data integration

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
			monthly, M6-14	into DWR and DCCMS data mgmt systems and applications.
Activity 4.9. Demonstration Workshop (5h) of the prototype to the restricted working group	Number of participants in events organized by proponents and implementing partners	10	Method: Track participation Frequency: M8	
	Core indicator #3: No. of adaptation beneficiaries	10		
	Total number of events organized by proponents and implementing partners indicator	1		
Activity 4.10. Adjustments to the demonstration prototype and pilot demonstration				
Activity 4.11. Validation of the final prototype (Working Group)	Number of participants in events organized by proponents and implementing partners	10	Method: Track participation Frequency: M11	
	Core indicator #3: No. of adaptation beneficiaries	10		
	Total number of events organized by proponents and implementing partners indicator	1		
	Number of climate technology RD&D related events	1	Method: Track event Frequency: M11	
Output 5: Designing a financial mechanism that would make this technology concept sustainable in the context of Malawi	Total number of deliverables produced during the assistance	6 i. Deliverable 5.1 Cost analysis of the new mobile technology system ii. Deliverable 5.2 (1-3) Business Models for 15 years financial sustainability iii. Deliverable 5.3.a Minutes: Business model validation iv. Deliverable 5.3.b Final business model selected v. Deliverable 5.4.a Business model review (up to 3) vi. Deliverable 5.4.b Final business model	Report submission and validation Method: Track deliverables Frequency: monthly, M9-13	
Activity 5.1. Cost				

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
analysis of the system				
Activity 5.2. Define business model(s) that would ensure the system is financially sustainable				
Activity 5.3. Business model presentation workshop	Number of participants in events organized by proponents and implementing partners	10	Method: Track participation Frequency: M9	
	Core indicator #3: No. of adaptation beneficiaries	10		
	Total number of events organized by proponents and implementing partners indicator	1		
Activity 5.4. Review of the BM based on inputs from WS - reaching final version endorsed by the Working Group	Number of participants in events organized by proponents and implementing partners	5	Method: Track participation Frequency: M13	
	Core indicator #3: No. of adaptation beneficiaries	5		
	Total number of events organized by proponents and implementing partners indicator	1		
Output 6: Train future users, administrators, and beneficiaries of the system	Total number of deliverables produced during the assistance	4 i. Deliverable 6.1 Detailed manual (printed & digital) in up to 3 translations in local language requested ii. Deliverable 6.2.a Minutes: capacity building workshop with future users iii. Deliverable 6.2.b Minutes: capacity building workshop with future administrators iv. Deliverable 6.2.c Minutes: capacity building workshop with civil society	Method: Track deliverables Frequency: M13-14	
Activity 6.1. Redact a detailed manual on the	Total number of deliverables produced during the assistance: b)	1	Method: track deliverable Frequency: M14	Implementor will monitor Technical Training Manual

(A) Outputs and Activities as described in the Response Plan	(B) Indicator	(C) Expected results	(D) Method and frequency for data collection	(F) Comments
use and maintenance of the technology	Number of tools and technical documents strengthened, revised or developed			developed.
Activity 6.2. Organize a training for future users and administrators (3 day)	Number of training organized by proponents and implementing partners (M/W)	25	Method: Track participation Frequency: M14	
	Core indicator #3: No. of adaptation beneficiaries	25		
	Total number of events organized by proponents and implementing partners indicator	3		
	Total number of institutions trained	9	Method: Track participation Frequency: M14	6 government institutions, 1 private sector, 2 NGOs
	a) Government	6		
	b) Private sector	1		
	c) Non-governmental	2		
	Percentage of participants reporting satisfaction with CTCN training (from CTCN training feedback form)	75%	Method: Track change in capacity in surveys Frequency: M14	Satisfied= 4+ on 5-pt scale
	Percentage of participants reporting increased knowledge, capacity and/or understanding as a result of CTCN training (from CTCN training feedback form	75%	Method: Track change in reported satisfaction in surveys Frequency: M14	Increased knowledge, capacity and/or understanding= 4+ on 5-pt scale

Annex 1 Technical assistance data collection

Please add quantitative and qualitative values for the indicators selected in the M&E plan and monitored throughout the technical assistance in the tables below. Indicators which have been monitored in addition to the proposed indicators below may be added at the end of table A. Non-relevant indicators should be left blank.

A. Output and outcome indicators

Indicator Please note indicators below highlighted as **anticipated**	**Quantitative value** Numerals only; disaggregates must sum to the total	**Qualitative description** List the various elements corresponding to the quantitative value as well as timelines and responsible institutions
Total number of events organized by proponents and implementing partners	14	4 Online meetings 7 Workshops 3 Trainings (Output 6) Proponent and Implementor is responsible for organizing events and will tracks no. of events in accordance with Response Plan and matching Work Plan
Number of participants in events organized by proponents and implementing partners	139	Counterpart participants 20 Gauge Readers and Observers involved in piloting (est.) 30 participants in online meetings 79 participants in workshops, field-visits, and trainings 10 estimated participants from local communities in consultations for endorsement of piloting. Implementor tracks no. of participants in accordance with Response Plan.
a) Number of men	104	
b) Number of women	35	Estimated 25% female participation
Number of climate technology RD&D related events	1	1 Validation workshop of final prototype (Activity 4.11)
Number of participants in climate technology RD&D events	10	Participants in accordance with Response Plan
a) Number of men	7	
b) Number of women	3	Estimated 25% female participation
Number of training organized by proponents and implementing partners	3	3 Training events (Output 6, Activity 6.2 - Organize training for future users and administrators and civil society, 3 day) Implementor tracks no. of event in accordance with Work Plan and Response Plan.
Number of participants in trainings organized by proponents and implementing partners	25	
a) Number of men	19	
b) Number of women	6	Estimated 25% female participation
Total number of institutions trained	9	Proponent and Implementor tracks institutions engaged in training in Output 6.
a) Governmental (national or subnational)	6	DWR – Dept of Water Resources DCCMS – Dept of Climate Change &

		Meteorological Services NWRA – National Water Resources Authority DoDMA – Dept of Disaster Management Affairs DAES - Dept of Agriculture Extension Services NCST – National Commission for Science and Technology
b) Private sector (bank, corporation, etc.)	1	Illovo Malawi (sugarcane, TBC)
c) Nongovernmental (NGO, University, etc.)	2	Malawi Red Cross World Vision
Percentage of participants reporting satisfaction with CTCN training (from CTCN training feedback form)	75%	Implementor will track satisfaction in surveys (Satisfied= 4+ on 5-pt scale)
Percentage of participants reporting increased knowledge, capacity and/or understanding as a result of CTCN training (from CTCN training feedback form)	75%	Implementor will track change in surveys (Increased knowledge, capacity and/or understanding= 4+ on 5-pt scale)
a) Percentage of men	75%	
b) Percentage of women	75%	
Total number of deliverables produced during the assistance (excluding mission, progress and internal reports)	42	Implementor is responsible for deliverables in accordance with the Response Plan.
a) Number of communication materials, including news releases, newsletters, articles, presentations, social media postings, etc.	4	Posts on LinkedIn, Instagram and X.
b) Number of tools and technical documents strengthened, revised or developed	3	Implementor is responsible for: 1) Mobile technology improved and developed for digitization of in-situ observation data. 2) Data integration into DWR and DCCMS data management systems and application software developed. 3) Technical Training Manual developed.
c) Number of other information materials strengthened, revised, or created (For example training and workshop reports, Power Points, exercise docs etc.)	35	Reports, Minutes, Matrix analysis, and Implementation Plans.
Total number of policies, strategies, plans, laws, agreements or regulations supported by the assistance		
a) Adaptation related		
b) Mitigation related		
c) Both adaptation- and mitigation related		
Anticipated number of policies, strategies, plans, laws, agreements or regulations proposed, adopted or implemented as a result of the TA		
a) Adaptation related		
b) Mitigation related		
c) Both adaptation- and mitigation related		
Anticipated number of technologies transferred or deployed as a result of CTCN support	6	• Seasonal to Interannual weather forecast. • Flood forecasting systems. • Climate change monitoring. • Water resources assessment. • Hazard mapping solutions. • Hydrological modelling.
Anticipated number of collaborations facilitated or enabled as a result of technical assistance		
a) Number of South-South collaborations		
b) Number of RD&D collaborations		
c) Number of private sector collaborations		

Number of countries with strengthened National System of Innovation as a result of CTCN support		
Additional Indicators AF Strategic Results Framework Indicators		
AF & CTCN Core Indicator: No. of beneficiaries	205	Total (80 direct, 125 indirect; 25% female, 10% youth). Implementor records, tracks, and collects disaggregated data on direct and indirect beneficiaries throughout project activities, from recording participant details at events, through to users of the technology explored.
2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	35	Staff at DCCMS, DWR, WRA and DoDMA (25% female). Proponent and Implementor evaluates capacity at key milestones of workshops and training events (e.g., using online surveys).
2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	35	Staff at DCCMS, DWR, WRA and DoDMA (25% female). Proponent and Implementor tracks number of staff throughout project workshops and training events.
2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	4	Institutions (DCCMS, DWR, NWRA, DoDMA). Proponent and Implementor evaluates capacity through Working Group, workshops, and trainings tracked.
3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	1	Training Manual. Proponent and Implementor develops training manual for training events in output 6, tailored for sub-national use.
4.1.1. No. and type of development sector services modified to respond to new conditions resulting from climate variability and change (by sector and scale)		Water management at local scale improves to moderately responsive. Proponent and Implementor evaluates response level of Department of Water Resources at the onset, mid-term, and end of project.
4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale) (**AF Core Indicator** 4.2 Assets produced, developed, improved or strengthened)	10	Local in-situ observation stations (assets) are moderately improved. Implementer, with DWR and DCCMS, assesses condition of assets at onset, mid-term, and end of project.
8. Innovative adaptation practices are rolled out, scaled up, encouraged and/or accelerated at regional, national and/or subnational level.		The innovation has been accelerated at sub-national level within water management at project end. Proponent, Implementor, and DWR tracks acceleration potential of innovation (at mid-point and project end)
8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	2	Innovative practices - 1) digitization of observations using phones and 2) integration of observation data online for application in

		modelling - have been implemented with effective status within water management. Proponent, Implementor, and DWR tracks effectiveness in project piloting implementation (Output 4), and reports at mid-point and project end.
8.2. No. of key findings on effective, efficient adaptation practices, products and technologies generated	3	Key findings are generated on the innovation's 1) technical, 2) financial, and 3) operational viability. Proponent, Implementer, DWR, and DCCMS investigates findings on the innovation that is partially effective at onset (baseline), and effective at project end.
Additional Indicator		
Performance % of Gauge Readers and Observers submitting water and weather observation per government protocol	80%	WMO standard level on daily in-situ record of manual observations. Implementor tracks observation performance though online data platform.

B. Core impact indicators

Please fill in the tables for anticipated impacts of the CTCN assistance. Every technical assistance should contribute to at least one of the indicators below. For guidance on how to report on core indicators see the 'M&E Guidance Document for TA Implementers'.

Core indicator 1	**Anticipated metric tons of CO_2 equivalent (CO_2e) emissions reduced or avoided as a result of CTCN TA** Please add your calculations in word or excel format as an Annex to this Closure Report, where applicable.	
	Anticipated metric tons of CO_2e reduced or avoided as a result of the TA **on annual basis**	Anticipated metric tons of CO_2e reduced or avoided as a result of the TA **in total**
Quantitative value (emissions reductions)	Total number (numerals only, no rounding or abbreviations)	Total number (numerals only, no rounding or abbreviations)
Unit	tCO_2e	tCO_2e
GHG assessment boundary (project emissions) Identify expected post-TA activities, associated effects and assess boundary for quantification of GHG emission reductions		
Baseline emissions Describe baseline scenario, baseline candidates, emission factors and emissions calculated		
Methodology Explain the method or process of verifying the indicator and how data was gathered		
Assumptions Describe assumptions made during calculation and quantification of GHG reductions		

Core indicator 2	**Anticipated increased economic, health, well-being, infrastructure and built environment, and ecosystems resilience to climate change impacts as a result of technical assistance** Please provide a **qualitative** description of the anticipated impacts on the categories below
Infrastructure and built environment Anticipated increased infrastructure resilience (avoided/mitigated climate induced damages and strengthened physical assets)	
Ecosystems and biodiversity Anticipated increased ecosystem resilience (areas with increased resistance to climate-induced disturbances and with improved recovery rates)	
Economic Anticipated increased economic resilience (e.g. less reliance on vulnerable economic sectors or diversification of livelihood)	
Health and wellbeing Anticipated increased health and wellbeing of target group (e.g. improved basic health, water and food security)	

Core indicator 3	**Anticipated number of direct and indirect beneficiaries as a result of the TA**	
	Quantitative value	**Means of verification**

Total beneficiaries	Total number	
Number of adaptation beneficiaries	205	The technical assistance is estimated to reach: **Direct beneficiaries:** - 20 Gauge Readers and Observers who take in-situ water and weather observations. - 5 Working Group members (excluding consultant team). - 30 Government staff who participate in workshops and fieldwork (especially DWR, DCCMS, NWRA, DoDMA, DAES, NCST*). - 25 Participants in project training activities (Output 6). **Indirect beneficiaries:** - 80 Family members of the Gauge Readers and Observers (est. 4 individuals per Gauge Reader/Observers). - 5 representatives from international donor/NGOs who are aware and support the innovation. - 40 technical experts/practitioners reached by project/training videos. The means of verification include tracking participation, manifestation of benefit, and interaction with project communication and events. * DWR – Dept of Water Resources DCCMS – Dept of Climate Change & Meteorological Services NWRA – National Water Resources Authority DoDMA – Dept of Disaster Management Affairs DAES - Dept of Agriculture Extension Services NCST – National Commission for Science and Technology
Number of mitigation beneficiaries		Describe calculation methods and assumptions made
Number of adaptation-and mitigation beneficiaries		Describe calculation methods and assumptions made

Core indicator 4	**Anticipated amount of funding/investment leveraged (USD) as a result of TA (disaggregated by public, private, national, and international sources, as well as between anticipated/confirmed funding)**			
	Quantitative value confirmed in USD	**Quantitative value anticipated** in USD	**Qualitative description** List the institutions, timelines, and description or title of the investment	**Methods** Describe methods used for quantification of funds leveraged
Total funding	Total number in USD (numerals only, no rounding or abbreviations)	Total number in USD (numerals only, no rounding or abbreviations)		
Anticipated amount of public funding mobilised from national/domestic sources				
Anticipated amount of public funding mobilised from international/ regional sources				
Anticipated amount of private funding mobilised from national/domestic sources				
Anticipated amount of private funds mobilised from international/regional sources				