

iCARE Innovation Fund

Climate Resilient Infrastructure for Social Transformation and Adaptation (CRISTA 2.0)

Six Monthly Progress Report
Reporting period: Jan– June 2024

Prepared by Asian Institute of Technology

Contents

Contents.....	2
1. Project Information	3
2. Summary of the Achievements	4
3. Summary of Project Beneficiaries.....	6
4. Performance Outcome Mapping.....	9
5. Partnership	12
6. Sustainability	13
7. Communication and Knowledge Management	13
8. Challenges and Risks	15
9. Lesson Learnt	16
Annex 1: Records of Events	17
Annex 2: Event reports/minutes, Learning documents, Knowledge products, Communication products or other documents.....	19

1. Project Information

Project Title:	Climate Resilient Infrastructure for Social Transformation and Adaptation (CRISTA 2.0)
Project Code:	WBCAR
Partner Organisation:	Asian Institute of Technology
Reporting Period:	January – June, 2024
Date of Submission:	25 th July 2024
Contact Name:	Dr. Indrajit Pal
Contact Position:	Associate Professor, DPMM and Project Lead
Contact Email Address:	indrajit-pal@ait.ac.th
Contact Telephone Number:	
Contact Skype:	
Status of project progress in this reporting period	<input type="checkbox"/> Significant delay <input type="checkbox"/> Delay <input checked="" type="checkbox"/> On Track
Report sign Off	<input checked="" type="checkbox"/> I have reviewed all the information provided for each section including number of beneficiaries. The information provided for each section of the report is complete. Name: Dr. Indrajit Pal Designation: Project Lead

2. Summary of the Achievements

During this reporting period, the CRISTA 2.0 project team has extensively worked on the development of the CRISTA system (mobile app and web dashboard) and preparing the foundation for its utilization in the project target municipalities. Major accomplishments achieved during this period across the four project outcomes are described below.

Outcome 1: Local stakeholders are aware and willing to implement CRISTA 2.0 system for climate-induced hazard and damage monitoring to critical infrastructure systems for climate adaptation

The project has implemented several formal and informal consultations, meetings and discussions with the target beneficiaries, boundary partners and stakeholders to prepare the foundation for adoption and utilization of the innovation by the target beneficiaries. Specific achievements under this outcome are as follows.

1. As part of inception and preparation activity, stakeholder meetings and workshops were conducted in each of the three project municipalities in January 2024, where 59 participants including local government officials, community leaders and partners were made aware of the system and provided feedback on the development process.
2. Three letters of endorsement/interest have been received from the municipalities portraying their interest in adopting the CRISTA system after development.
3. Stakeholder capacity and needs assessment was conducted in the project areas to understand current mechanisms, gaps and challenges in terms of responding to infrastructure disruptions caused by natural hazards.

Outcome 2: Effective and robust decision support system is developed for monitoring climate-induced vulnerabilities, risk and damages to critical infrastructure systems

The CRISTA system is being developed as a risk visualization, monitoring, decision-support and communication platform for risk management of critical infrastructure systems (road and power network). The key achievements under this outcome are as follows:

1. Completed the field survey and mapping of climate hazards and critical infrastructure in the project area. The mapping involved collecting geospatial data from numerous secondary sources including municipal reports, Open Street Map, BIPAD portal and government databases. Similarly, a detailed field survey was conducted for **365 km** out of **1,663 km** of roads located within the project municipalities. As a result of these activities, **one knowledge product** (GIS Database) has been generated.

2. Conducted climate risk assessment for critical infrastructure (road) in the project area and generated **three knowledge products** (risk assessment maps).
3. Transformed all spatial and non-spatial data (including road, power and social infrastructure) collected in different formats and from various platforms into geo-spatial data. Generated **one knowledge product** (GIS database).
4. Developed the CRISTA system framework, including data collection, analysis, storage and communication methodology. Pilot versions of CRISTA mobile application and dashboard have been completed and will undergo internal beta testing in July 2024.

Outcome 3: Local governments actively monitor impacts of climate-induced hazards on critical infrastructure in real-time, enhancing their ability to respond promptly and effectively.

Following the development and beta-testing of the CRISTA system, the project will implement a series of activities to deploy the system to the project implementation, including integrating the system within ICT systems of municipal governments, providing administrative access to target beneficiaries, developing user manuals and operating procedures for local governments on the use of the system and conducting trainings and awareness campaigns for uptake of the system. These activities are planned to start implementation in July 2024.

Outcome 4: CRISTA system is promoted as a viable solution for CI climate risk monitoring, management and adaptation in Nepal

A key component of the project involves promoting the CRISTA system as a viable solution for climate and disaster resilience building of critical infrastructure in Nepal. For this, the project is building strategic partnerships and has implemented several activities.

1. Documentation and dissemination of concept, framework and application of CRISTA system through IEC materials to key stakeholders, beneficiaries and boundary partners. In total, **eight (8) knowledge products (IEC materials)** have been developed and disseminated to **272 people** representing various local, national, and international institutions.
2. Conducted **ten (10) events (workshops, meetings, discussions)** solely or in partnership with different organizations to facilitate discourse on climate change risk, current scenario, gaps, challenges and innovative solutions for adaptation in Nepal. In total, CRISTA project has directly engaged with **278 people** across all sectors and levels of governments, private sector, media, non-government organizations, academic institutions and donor agencies in Nepal.

3. Summary of Project Beneficiaries

During this reporting period, the project has reached out to more than 330 beneficiaries across different levels of government in Nepal as well as at regional and global levels. The project has especially prioritized engagement with a wide range of stakeholders, ranging from government agencies and officials, non-government organizations, private sector and media to promote the innovation, seek endorsements and build foundation for sustainability and scale-up.

Direct Beneficiaries

The following table depicts the direct target beneficiaries of the project, the activities performed within the scope of the project with their participation, the achievements of such activities and the target output to be delivered to the beneficiaries.

Table 1: Direct project beneficiaries, services delivered, achievements and targets

SN	Beneficiary	Services Delivered	Achievements	Target
1	Neelkantha Municipality	<ul style="list-style-type: none"> - Inception Workshop and Meeting - Stakeholder Needs and Capacity Assessment 	<ul style="list-style-type: none"> - Letter of endorsement/ interest received for adoption of CRISTA system 	<ul style="list-style-type: none"> - Provide administrative access to CRISTA system - Training for ICT professionals and infrastructure management officials
2	Benighat Rorang Rural Municipality	<ul style="list-style-type: none"> - Inception Workshop and Meeting - Stakeholder Needs and Capacity Assessment 	<ul style="list-style-type: none"> - Letter of endorsement/ interest received for adoption of CRISTA system 	<ul style="list-style-type: none"> - Provide administrative access to CRISTA system - Training for ICT professionals and infrastructure management officials
3	Gajuri Rural Municipality	<ul style="list-style-type: none"> - Inception Workshop and Meeting - Stakeholder Needs and Capacity Assessment 	<ul style="list-style-type: none"> - Letter of endorsement/ interest received for adoption of CRISTA system 	<ul style="list-style-type: none"> - Provide administrative access to CRISTA system - Training for ICT professionals and infrastructure management officials

SN	Beneficiary	Services Delivered	Achievements	Target
4	Nepal Electricity Authority, Dhading District Office	- Stakeholder Needs and Capacity Assessment	- Verbal interest in utilizing system generated information	- Provide administrative access to CRISTA system
5	Infrastructure Development Office, Dhading	- Stakeholder Needs and Capacity Assessment		- Provide administrative access to CRISTA system
6	Community people	- Inception workshop	- Positive attitude and interest in using the CRISTA system	- Provide access to CRISTA mobile application - Training/awareness on climate risk management and use of CRISTA system

Indirect Beneficiaries

In addition to direct beneficiaries mentioned above, the project has also engaged with a number of indirect beneficiaries during this reporting period. Indirect beneficiaries of the project are mainly comprised of sub-national and national government agencies with mandate in disaster risk management, climate adaptation or infrastructure management who have a potential role in sustainability and scale-up of the innovation in the future. Similarly, regional and international actors including researchers and donor agencies were also engaged with to increase outreach and recognition of the system.

Table 2: Indirect project beneficiaries, services delivered, achievements and targets

SN	Beneficiary	Services Delivered	Achievements	Target
1	Municipal Association of Nepal (MuAN)	- Partnership for organizing national level event on climate change - Dissemination of knowledge products	- Increased awareness of CRISTA innovation at national level	- Collaboration and advocacy for sustainability and replication of innovation
2	Media	- Coverage of pertinent issues of disaster and climate	- Publication of news articles on CRISTA project	- Publication of printed and social media awareness

SN	Beneficiary	Services Delivered	Achievements	Target
		risk management through newspaper articles	activities and open-editorials	and advocacy articles to promote CRISTA system
3	District Disaster Management Committee, Dhading	- Stakeholder Needs and Capacity Assessment	- Positive attitude towards innovation	- Provide public access to CRISTA system
4	Armed Police Force Office, Dhading	- Stakeholder Needs and Capacity Assessment	- Positive attitude towards innovation	- Provide public access to CRISTA system
5	District Forest Office	- Stakeholder Needs and Capacity Assessment	- Positive attitude towards innovation	- Provide public access to CRISTA system
6	Regional Road Division Office	- Planned engagement in September 2024	- Positive attitude towards innovation	- Provide public access to CRISTA system
7	International Agencies/ Networks	- Dissemination of CRISTA innovation concept through posters and research presentation	- Recognition and outreach in international platforms	- Document and share innovation outcomes and project learnings

The table 3 below denotes the total number of individuals (both direct and indirect beneficiaries) engaged within the different project activities during this reporting period.

Table 3: Disaggregation of beneficiaries (no. of people) of project activities until June 2024

SN	Category	Male	Female	Total
1	Government	153	48	201
2	NGOs, CBOs, CSOs	16	8	24
3	Private Sector and Professional Organizations	6	1	7
4	International Organizations	10	5	15
5	Education and Research Institutions	8	10	18
6	Regional Organizations	0	0	0
7	Media	36	3	39
8	Community People	11	8	19
Total		242	97	338

4. Performance Outcome Mapping

The project has been successful in aligning its activities and deliverables in accordance to its work plan. In this reporting period, the project has completed two reporting milestones: Inception Report and First Output Report. The progress of targets as per results framework are on track, and the project expects to successfully achieve the targets within the project duration.

Table 4: Implementation progress as of 30th June 2024

Description	Approved budget (in US\$)	Actual expenditure in US\$	Target	Result/achievement
Outcome 1: Local stakeholders are aware and willing to implement CRISTA 2.0 system for climate induced hazard and damage monitoring to critical infrastructure systems	-	-	30 (31 January 2024)	Complete 59 people participated in supported events (inception meetings and workshops)
Output 1.1: Partnerships are developed and baseline assessment is conducted in the Project areas	-	-	3 (31 May 2024)	Complete Three endorsement letters received from project local governments
<i>Activity 1.1.1: Conduct a Memorandum of Agreement with Project local government and concerned authorities</i>	2,400	2,404	-	Complete. Three Endorsement letters received from project local governments
<i>Activity 1.1.2: Conduct baseline study of project areas and boundary partners</i>	1,800	1,825	-	Complete. Baseline study outcomes included in project inception report.
<i>Activity 1.1.3: Conduct inception workshop to identify needs and capacity</i>	13,200	13,056	-	Complete. Inception report participant details attached in Annex 1.
Outcome 2: Effective and robust decision support system is developed for monitoring climate-induced vulnerabilities, risk and damages to critical infrastructure systems	-	-	10 (31 October 2024)	Ongoing The project has generated four (4) knowledge products: GIS Database and Climate Vulnerability and Risk Assessments for Nilkantha, Benighat Rorang, and Gajuri municipalities. All knowledge products have been reported in the First Output Reports.
Output 2.1: CRISTA system is upgraded to CRISTA 2.0	-	-	-	

Description	Approved budget (in US\$)	Actual expenditure in US\$	Target	Result/achievement
<i>Activity 2.1.1: Conduct field survey and mapping of climate hazards and critical infrastructure in Project Area.</i>	5,400	5,172	-	Complete. <i>GIS Database generated for the project municipalities. Deliverables submitted in First Output Report</i>
<i>Activity 2.1.2: Conduct climate vulnerability and risk assessment for critical infrastructure systems in the project area.</i>	13,200	9,359	-	Complete. <i>Climate Vulnerability Assessment maps generated for road infrastructure in project municipalities. Deliverables submitted in First Output Report.</i>
<i>Activity 2.1.3: Generate web-based GIS database and integrate baseline information and maps.</i>	18,500	10,413	-	Complete. <i>GIS data has been consolidated for integration into web-based dashboard.</i>
<i>Activity 2.1.4: Upgrade CRISTA dashboard, user interface and mobile application including field testing.</i>	13,900	5,172	-	Ongoing. <i>Planned completion in July 2024.</i>
Outcome 3: Local governments actively monitor impacts of climate-induced hazards on critical infrastructure in real-time, enhancing their ability to respond promptly and effectively.	-	-	300 (December 2024)	<i>Scheduled to start implementation in Q3 2024</i>
Output 3.1: Capacity of local authorities is enhanced in data-driven decision making for climate risk management and adaptation in critical infrastructure systems	-	-	30 (December 2024)	<i>Scheduled to start implementation in Q3 2024</i>
<i>Activity 3.1.1: Establishment of CRISTA-2.0 monitoring system in local governments and integration with existing ICT systems</i>	3,750.00	-	-	<i>Scheduled to start implementation in Q3 2024</i>
<i>Activity 3.1.2: Development of SOP for CRISTA system</i>	7,600.00	-	-	<i>Scheduled to start implementation in Q3 2024</i>
<i>Activity 3.1.3: TOT to technical officers of project area local governments on use of CRISTA system</i>	19,000.00	-	-	<i>Scheduled to start implementation in Q3 2024</i>
Output 3.2 Local communities are aware of and capable to report incidents to CRISTA system	-	-	200 (December 2024)	<i>Scheduled to start implementation in Q3 2024</i>
<i>Activity 3.2.1: Develop and produce IEC materials for public awareness on CRISTA system application</i>	5,000.00	-	-	<i>Scheduled to start implementation in Q3 2024</i>

Description	Approved budget (in US\$)	Actual expenditure in US\$	Target	Result/achievement
<i>Activity 3.2.2: Community level training program for incident reporting by general public</i>	12,000.00	-	-	<i>Scheduled to start implementation in Q3 2024</i>
Outcome 4: CRISTA system is promoted as a viable solution for CI climate risk monitoring and management in Nepal.	-	-	<p>Indicator 1: Number of events supported (23). <i>(28 Feb 2025)</i></p> <p>Indicator 2: Number of people participating in supported events (470). <i>(28 Feb 2025)</i></p>	<p>Indicator 1: 10 Currently, the project team has supported 10 events in relation to this outcome. Included within this are stakeholder meetings, National Dialogue on Climate Change, and workshops.</p> <p>Indicator 2: 278 This includes participants of the National Dialogue, stakeholder meetings, and workshops.</p>
Output 4.1: Communication materials and strategies are developed to inform public and local and national authorities,	-	-	<p>Indicator 1: Number of knowledge products provided (8). <i>31 Dec 2024</i></p> <p>Indicator 2: Number of people / organizations provided with knowledge products (620). <i>31 Dec 2024</i></p>	<p>Indicator 1: 8. This includes posters, videos, and flyers developed for the project. All attachments have been provided through the Monthly Reports.</p> <p>Indicator 2: 272. People who have been provided with knowledge products include participants of the National Dialogue on Climate Change and IWD workshop.</p>
<i>Activity 4.1.1: Prepare CRISTA 2.0 knowledge products and visual documentation.</i>	2,000	-	-	Ongoing. <i>Planned completion in December 2024.</i>
<i>Activity 4.1.2: Conduct a project completion and lesson sharing workshop at regional or national level.</i>	18,100	-	-	<i>Planned in December 2024.</i>
<i>Institutional Administrative Costs</i>	13,650	4,644		
Total	149,500.00	46,874		

5. Partnership

The project intended to formulate key partnerships with several local and international organizations and institutions during the implementation of the project. The partnerships were intended to serve four major purposes,

- i. To streamline the implementation of the project for successful accomplishment of project outputs, outcomes and impact.
- ii. To enhance capacity of local organizations and institutions to innovate and develop solutions for building climate resilience.
- iii. To ensure sustainable utilization of the developed system through continued technical support to the target beneficiaries.
- iv. To disseminate the innovation, project outcomes and learnings to targeted beneficiaries, stakeholders and boundary partners.

With these objectives in mind, the project has taken on-board multiple local partners in Nepal as well as forged key partnership with several organizations for mutual collaborative actions.

- i. Developed project implementation partnership with three local organizations in Nepal: A local non-government organization in Dhading district to facilitate local project implementation and stakeholder engagement, a national non-government organization in Kathmandu to facilitate national level stakeholder engagement and outreach, and an ICT consultant company for the development of the CRISTA system components. Local partnerships in Nepal have been crucial in streamlining project activity implementation, engagement with endorsing agencies and incorporation of local contexts into system development.
- ii. Implemented national level dialogue on climate change risk and adaptation in partnership with Municipal Association of Nepal (MuAN) and private and public sector organizations. Considering that the MuAN is the umbrella body connecting all municipalities across Nepal, the strategic partnership with MuAN provided the project with vital opportunity to disseminate its concept and demonstrate the CRISTA system. The project will seek to explore long term partnership with MuAN to promote the CRISTA system among a wider range of local governments across the country, enhancing opportunities for upscale and sustainability.
- iii. AIT has leveraged its regional platform and outreach to disseminate the CRISTA concept to a wider range of regional and global stakeholders including the Asian Development Bank, European Geosciences Union (EGU) and government entities in Bhutan, Pakistan and India.

- iv. The project has developed strategic partnerships with several local and national level newspapers to prepare and publish news and op-ed articles regarding the project activities to increase the outreach of the innovation.

6. Sustainability

The project has planned and implemented several efforts to ensure the sustainability of the innovation, both through continued utilization by the current project targeted beneficiaries as well as potential uptake and scale-up in different municipalities across Nepal. Some of the notable efforts implemented until now are as follows,

1. Conducted inception meetings and workshops with the project municipalities outlining the concept of the innovation, its potential application and alignment with the existing governance mechanisms and benefits for the local authorities as well as the communities. Similarly, the meetings were also useful in understanding the challenges faced by the local municipalities in managing risks to critical infrastructure. Hence, these inception-phase activities were crucial to develop a strong foundation for the adoption of the developed system.
2. The project has continued engagement with the local governments at various stages of the implementation, discussing the progress of the activities. One key element was the Status and Capacity Assessment Interviews that the project conducted with relevant stakeholders to collect information on risk governance policies, plans, existing ICT capacity and resources and needs to be fulfilled.
3. The project has also engaged with national-level stakeholders in Nepal including ministers, parliamentarians, media, government officers and professional networks to demonstrate the applicability of the system in enhancing local capacity for critical infrastructure risk management. Similarly, discussions are underway with potential collaborators including MuAN, ADPC and other relevant stakeholders regarding the potential scale-up of the innovation across Nepal. The project is also demonstrating the innovation at regional and global platforms to increase outreach and identify potential avenues and entry-points of replication and scale-up in other countries.

7. Communication and Knowledge Management

Considering that the CRISTA system is a novel approach addressing a critical issue in Nepal, the project has diligently planned and utilized different communication and knowledge management tools with four key objectives,

- i. Instigate and facilitate discourse on climate risks and adaptation in Nepal, with special focus on critical infrastructure.

- ii. To promote the CRISTA system as a viable solution to address the gaps in data and information for decision-making in critical infrastructure risk management.
- iii. To engage with key stakeholders and target beneficiaries, discuss the system and receive feedback.
- iv. To promote CRISTA at regional and global platforms for outreach and potential regional uptake and replication.

As such, acknowledging that communication and outreach approaches must be context and target group specific, the project has developed several different communication and knowledge products including flyers, posters, short videos, scientific abstracts and partnerships a

Table 3: Communication and knowledge products activity and progress achieved

Related activity number	Communications Activity. Strategy/Tactic	Related communications or knowledge product	Impact /Change perceived. Big or Small wins. Numbers (If any)
3.2.1	Providing overview of the CRISTA system	Digital flyer for CRISTA 2.0	<p>Flyer was targeted to local stakeholders and general public in Nepal, specifically in Dhading district where the three municipalities are located.</p> <p>The flyer was distributed to participants of the NDCC and CIWE workshop. In total, 271 participants have been provided with the flyer so far.</p>
3.2.1	Providing overview of the CRISTA system	A two-minute video explainer for CRISTA 2.0 in English with Nepali subtitles.	<p>The video was produced for local stakeholders and general public in Nepal and beyond.</p> <p>The video was shown to participants of the NDCC and CIWE workshop. In total, 271 participants have been viewed the video so far. The video will also be uploaded to the official website for CRISTA 2.0 in the future.</p>
3.2.1	Facilitating dialogue on climate adaptation and resilience building, engagement with stakeholders at national-level event.	Proceedings of the National Dialogue on Climate Change (NDCC)	<p>An official account of the Dialogue was integrated in the Proceedings of the NDCC. The Proceedings included presentations and panel discussions from high-level officials in Nepal, specifically surrounding climate adaptation and disaster management.</p> <p>The Proceedings had been circulated among all participants of the Dialogue totalling over 250 participants.</p>

Related activity number	Communications Activity. Strategy/Tactic	Related communications or knowledge product	Impact /Change perceived. Big or Small wins. Numbers (If any)
3.2.1	Facilitating dialogue on climate adaptation and resilience building, engagement with stakeholders at national-level event.	Post-event Report of the Workshop on Climate Innovation and Women Empowerment	The workshop report includes details on presentations, discussions and Q&A. The report was disseminated to all 20 participants of the workshop, which included Ministry officials, members of the national media, and practitioners.
3.2.1	Promoting CRISTA project activities and innovation at regional level	Blog article	Blog article was published in the AIT website. The article discussed the NDCC, climate adaptation in Nepal, and CRISTA as an innovative solution.
3.2.1	Promoting CRISTA project activities and innovation at global scale.	<ul style="list-style-type: none"> • Abstract (1) for CRISTA 2.0 indexed by EGU. • Poster (1) for CRISTA 2.0 presented in EGU General Assembly 2024. 	<p>The abstract generated for the General Assembly has been indexed and is currently available online.</p> <p>The poster was generated and presented in-person to all offline and online participants of the General Assembly. The Assembly took place on 14-19 April 2024 in Vienna, Austria. Over 20 thousand participants attended the Assembly both online and offline.</p>
3.2.1	Promoting CRISTA project and innovation with key development agencies.	Poster for CRISTA 2.0 project and innovation.	The poster was presented to ADB President, Mr. Masatsugu Asakawa and other high-level officials of ADB.

8. Challenges and Risks

SN	Challenge/Risk	Mitigation Action	Residual Risk
1.	The project team faced difficulties in field mapping and survey of critical infrastructure systems due to topographical and geographical difficulties.	<ul style="list-style-type: none"> • Local personnel with ample knowledge of local contexts were used in the survey • Survey only focussed on major strategic roads and power infrastructure components • Adequate safety measures were employed and briefing were done. 	None
2.	There was difficulty in collection of data from secondary sources due to inadequacy, different management mechanisms, duplication etc.	<ul style="list-style-type: none"> • Data were collected from multiple sources (municipal reports, BIPAD portal, OSM, government databases), validated and consolidated for the use in the project. 	None
3.	The project consortium comprises of a local partner and two consultants for implementing various activities. There was	<ul style="list-style-type: none"> • There has been a strong single communication channel between AIT and the three local partners/consultants in Nepal. Weekly meetings are being conducted with all partners to discuss on 	Minor (Needs continuous engagement and monitoring)

SN	Challenge/Risk	Mitigation Action	Residual Risk
	potential risk of siloed approach in implementation or communication gap.	progress and plan for future actions. This approach has been effective in remedying any communication barriers.	
4.	The CRISTA system is a dynamic tool that requires continuous engagement of target beneficiaries as well as the project team to ensure that the system is efficiently operated.	<ul style="list-style-type: none"> • The engagement of a dedicated IT consultant from Nepal remedies this issue, as they will provide continuous monitoring and technical support for the smooth operation of the system. • SOPs, trainings and community engagement activities (along with dedicated user guides and manuals) will ensure that the system is used proactively by the target beneficiaries. 	Moderate (Needs continuous engagement, monitoring and evaluation)

9. Lesson Learnt

The project has gathered some valuable lessons while implementing its activities as well as mitigating the risks.

1. Partnership with local organizations has helped in the smooth implementation of project activities, especially in engagement with project municipalities, stakeholder assessment, public outreach and feedback for aligning the system development to local needs.
2. The use of multiple types of outreach materials (videos, posters, flyers, blogs) etc. has been effective in advocacy and dissemination.
3. Engagement with a wide range of stakeholders beyond the project target beneficiaries can help develop strong foundation for sustainability, replicability and scale-up in the future.

Annex 1: Records of Events

SN	Name of Event	Type of Event	Date	Venue	Purpose	Theme /Topic	No. of participants
1	Project Inception Meeting and Workshop	Meeting and Workshop	12 January 2024	Dhading	<ul style="list-style-type: none"> - To discuss project objectives, goals and implementation mechanism with target beneficiaries, key stakeholders and boundary partners. - To receive feedback on project concept to align objectives and outputs to local needs 	Local DRR governance; Partnerships	59
2	National Dialogue on Climate Change	Symposium	12 March 2024	Everest Hotel, Kathmandu	<ul style="list-style-type: none"> - To enhance understanding and awareness among municipal leaders regarding climate change vulnerabilities and initiatives. - To encourage the integration of risk informed planning processes at municipal level. - To strengthen collaboration within municipal governments and advocate for intergovernmental coordination to address climate change impacts collectively. - To advocate for the integration of climate change considerations into policies and facilitate discussions to translate policies into actionable plans at the municipal level 	Climate adaptation; local governance and collaboration; capacity building for risk-informed planning	251
3	Climate Innovation for Women Empowerment	Workshop	7 March 2024	Kathmandu, Nepal	<ul style="list-style-type: none"> - It aimed to address the pressing need for empowering women in the face of climate change. 	climate action; gender and climate justice; innovative solutions	20
4	EGU General Assembly 2024 (Presented paper on CRISTA system as	Conference	14 - 19 April 2024	Vienna, Austria	<ul style="list-style-type: none"> - Global conference that brings together geoscientists from all over the world to one meeting covering all disciplines of Earth, planetary and space sciences. The EGU aims to provide a forum 	Geosciences; planetary and space sciences	NA

SN	Name of Event	Type of Event	Date	Venue	Purpose	Theme /Topic	No. of participants
	innovation for disaster risk management)				where scientists, especially early career researchers, can present their work and discuss their ideas with experts in all fields of geoscience.		
5	Stakeholder Engagement Meeting and Capacity Assessment Interview	Meeting	April – June 2024	Dhading District, Nepal	- There were seven separate stakeholder engagement meetings conducted in different municipal and district government offices in Dhading District, Nepal. The purpose of the meetings was to assess the needs and capacity of local government offices in addressing road and power disruptions caused by floods and landslides.	Local DRR governance	8
6	AIT Project Demonstration Exhibit for Asian Development Bank	Exhibition	11 June 2024	AIT, Thailand	- The exhibit was conducted with during an event held in AIT where CRISTA project and innovation was showcased to the participants including ADB President Mr. Masatsugu Asakawa.	Innovation in sustainable development in Asia Pacific	1

Annex 2: Event reports/minutes, Learning documents, Knowledge products, Communication products or other documents

SN	Name of Knowledge Product	Category	Type of Product	Language	Date of Production	Target Audience	Link
1	Promotional Flyer	IEC KP	Flyer	English	March 2024	Local stakeholders and general public	Link
2	Promotional Video	IEC KP	Video	English	March 2024	Local stakeholders and general public	Link
3	Proceedings of the National Dialogue on Climate Change (NDCC)	IEC KP	Event Report	English	March2024	- Government officials at municipal, provincial, and national levels. - INGO/NGOs - CSOs - Academia	
4	Report of the Workshop on Climate Innovation and Women Empowerment	IEC KP	Event Report	English	March2024	- Women empowerment groups in Nepal. - INGO/NGOs and CSOs working in gender equality, social inclusion, and climate adaptation.	Link
5	Blog on CRISTA published in AIT website	IEC KP	Blog	English	March 2024	International audience of students and academics	Link
6	CRISTA Poster for EGU	IEC KP	Presentation	English	March 2024	Attendees of EGU General Assembly 2024	Link
7	CRISTA Abstract for EGU	IEC KP	Abstract	English	April 2024	Attendees of EGU General Assembly 2024	Link
8	Poster for ADB - AIT Conferment Ceremony	IEC KP	Poster	English	June 2024	High level officials from AIT and ADB, including ADB President.	Link
9	GIS Database	System KP	Database	English	April 2024	Municipal governments	Link
10	Climate vulnerability assessment - Neelkantha	System KP	Report	English	May 2024	Municipal governments	Link
11	Climate vulnerability assessment - Gajuri	System KP	Report	English	May 2024	Municipal governments	
12	Climate vulnerability assessment - Benighat Rorang	System KP	Report	English	May 2024	Municipal governments	

Annex 3 : Result Framework

PDO Indicator Description: Government agencies and Citizens who have access to climate-resilient solutions tested under the project (Number)		
	Current Value	End Target
Government Agencies	0	305
Male Citizen	0	155
Female Citizen	0	150
Date	30 June 2024	31 Dec 2024
Comments	Citizen and government access to innovation will begin in August 2024	
Outcome 1 Indicator Description: Number of people participating in supported events (by participant category, sex, year, theme, country)		
Value	59	30
Date	31 Jan 2024	31 Jan 2024

Comments	Participants of the project inception workshop held in January 2024	Complete
Output 1.1 Indicator Description: Number of endorsement letters received from government agencies for the implementation of project/development of solution.		
Value	3	3
Date	31 May 2024	31 May 2024
Comments	Endorsement/Expression of Interest letters received from the project municipalities	Complete
Outcome 2 Indicator Description: Number of knowledge products provided (by type of product, theme, country)		
Value	4	10
Date	30 June 2024	31 Oct 2024
Comments		In Progress
Outcome 3 Indicator Description: Number of incident reports generated by the system (infrastructure, location, hazard, level of damage)		
Value	0	300

Date	30 June 2024	31 Dec 2024
Comments	Planned to begin in August 2024	Planned to begin in August 2024
Output 3.1 Indicator Description: Number of people trained (in person) (by sex, country, topic, year, participant category)		
Value	0	30
Date	30 June 2024	31 Oct 2024
Comments	Planned to begin in August 2024	Planned to begin in August 2024
Output 3.2 Indicator Description: Number of people trained (in person) (by sex, country, topic, year, participant category)		
Value	0	200
Date	30 June 2024	31 Dec 2024
Comments	Planned to begin in August 2024	Planned to begin in August 2024
Outcome 4 Indicator Description: Number of events supported (by type, year, theme, country)		

Value	10	23
Date	30 June 2024	28 Feb 2025
Comments		In Progress
Outcome 4 Indicator Description: Number of people participating in supported events (by participant category, sex, year, theme, country)		
Value	278	470
Date	30 June 2024	28 Feb 2025
Comments		In Progress
Output 4.1 Indicator Description: Number of knowledge products provided (by type of product, theme, country)		
Value	8	8
Date	30 June 2024	31 Dec 2024
Comments		Complete

Output 4.1 Indicator Description: Number of people / organizations provided with knowledge products (by recipient category, type of knowledge product, country, theme)

Value	272	620
Date	30 June 2024	31 Dec 2024
Comments		In Progress



Asian Disaster Preparedness Center

SM Tower, 24th Floor, 979/66-70 Paholyothin Road,
Phayathai, Bangkok 10400 Thailand

Tel: +66 2 298 0681-92

Fax: +66 2 298 0012

Email: adpc@adpc.net



www.adpc.net



Asian Disaster Preparedness Center - ADPC



@ADPCnet



Asian Disaster Preparedness Center (ADPC)