EXTERNAL REAL-TIME EVALUATION OF THE PROJECT “STRENGTHENING THE CLIMATE ADAPTATION CAPACITIES IN THE SOUTH CAUCASUS”, OUTCOME 3 OF PHASE 1, DECEMBER 2018 – NOVEMBER 2023

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Acronyms and abbreviations

A&A	Adaptation at Altitude Programme
CMF	Caucasus Mountain Forum
CSS	Caucasus Summer School
DLM	Distance Learning Module
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
GCF	Green Climate Fund
GEO	Group on Earth Observation
GeoNode	Open-Source Geospatial Content Management System
GRID-Geneva	Centre of the Global Resource Information Database of UN Environmental Programme, Science Division in Geneva, Switzerland
NIG	National Initiative Group of Armenia
MoU	Memorandum of Understanding
RIG	Regional Initiative Group
RRA	Regional Research Agenda
SCAC	Strengthening Climate Adaptation Capacities in the South Caucasus
SC	South Caucasus
SCO	Swiss Cooperation Office for the South Caucasus
SDC	Swiss Agency for Development and Cooperation
SDI	Spatial Data Infrastructure
SMD	Sustainable Mountain Development
SNC-mt	Scientific Network for Caucasus Mountain Regions
Sustainable Caucasus	Caucasus Network for Sustainable Development of Mountain Regions
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

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Executive summary

The Caucasus is one of the most biologically rich regions on Earth and its socio-ecological systems and diversity are under growing threats from climate change, challenging the sustainability and resilience of livelihoods and ecosystems. Climate amplified natural hazards such as floods, landslides, mudflows, debris flows, avalanches and erosion are causing loss of life, income and infrastructure in both mountain communities and lowland populations across the region.

This is why the Swiss Agency for Development and Coordination (SDC) project "Strengthening Adaptive Capacity in the Caucasus" was initiated in 2018 with the overarching goal of reducing the vulnerability of the region's population to climate change events and long-term impacts and to foster regional cooperation on climate change adaptation challenges in the Caucasus.

The project consists of three outcomes. The first two, implemented by the UN Development Programme, are focused on:

⇒ Building the capacity of Georgian authorities to establish a nationwide multi-hazard hydro meteorological risk monitoring system; and
⇒ Increasing the resilience of vulnerable communities and their livelihoods to climate and natural induced threats.

Outcome 3, implemented by Sustainable Caucasus, seeks to build the capacity of scientists and civil society to support evidence-based policy and advocacy on climate adaptation and sustainable mountain development.

Outcome 3's declared outputs are:

⇒ Improved learning and teaching practice to enhance the human resource capacities of the higher education and research institutions in disaster risk reduction (DRR) and Disaster Risk Management (DRM) in the South Caucasus
⇒ Improved regional and national knowledge exchanges and multi-stakeholder dialogues on climate adaptation and sustainable mountain development; and
⇒ Enhanced processes and tools for Caucasus data, information, and knowledge collection, analysis, and dissemination to facilitate the science-policy interface and evidence-based regional research.

The goal of this evaluation is to examine to what extent Outcome 3 has attained its objectives and indicators as per the project's Logical Framework. The evaluation results aim to provide guidance and recommendations to inform Sustainable Caucasus and its partners in the Region and in Switzerland on the necessary adjustments needed for the successful implementation of a prospective Phase 2.

Below is a summary of the findings, implementation challenges and recommendations.

OVERALL:

- ⇒ Impressive Distance Learning Module on Disaster Risk Management and hazard mapping
- ⇒ Production of Policy Briefs with a Regional Scope
- ⇒ Caucasus Regional Research Agenda (RRA) and Caucasus Environment Outlook 3 (publication pending)
- ⇒ Strengthened regional cooperation through the Regional Initiative Group
- ⇒ Strong National Initiative Group in Georgia
- ⇒ Caucasus Mountain Forum (CMF) and Caucasus Summer School (CSS)
- ⇒ Ability of project to include participants from entire Caucasus region wherein other "Caucasus" regional initiatives have failed to do so

RELEVANCE	COHERENCE	EFFECTIVENESS	EFFICIENCY	IMPACT	SUSTAINABILITY
High level of relevance for researchers, scientists, decision-makers in region.	The project has synergies with the Adaptation @ Altitude project as both strive to support regional collaboration among South Caucasus countries for climate adaptation planning and action.	Elements of the project have lagged in effectiveness due to SC governance issues and institutional challenges in Armenia and Azerbaijan.	Efficiency has suffered in Azerbaijan and Armenia, especially because of SC governance issues, and so has communication about the project	The impact on the community of scientists and practitioners in the region is visible.	Further funding support is needed to secure sustainability of results to institutionalize educational programs

IMPLEMENTATION CHALLENGES

Governance issues within Sustainable Caucasus	Communication of project outcomes	Absence of student feedback and "alumni" outreach mechanisms on DLM in Armenia and Azerbaijan	Weak NIGs in Armenia and Azerbaijan	Inconsistent way in which collaboration with universities is implemented	Lack of effective liaison with other regional initiatives

RECOMMENDATIONS FOR POTENTIAL PHASE 2 OF THE PROJECT

RECOMMENDATIONS FOR SPECIFIC ACTIONS UNDER EACH OF THE OUTPUTS THAT COULD INCREASE THE IMPACT AND THE SUSTAINABILITY OF THE PROJECT AT THE END OF PHASE 2

On Improved learning and teaching practice to enhance the human resource capacities of the higher education and research institutions in DRR and DRM in the South Caucasus

- ⇒ Build on the existing DLM, including by adding courses on digital modelling of risks; DRM of economic aspects; forest fire risk assessment and management; and impact of environmental degradation on natural hazards;
- ⇒ organize visits of researchers and faculty participating in the project from other countries/universities (University of Geneva; BOKU, Vienna); and
- ⇒ build on the Ilia State University- NEA example to facilitate internships (in-service training) and job opportunities in government agencies where DRM and hazard risk mapping is relevant and a much-needed skill.

On Improved regional and national knowledge exchanges and multi-stakeholder dialogues on climate adaptation and sustainable mountain development

- ⇒ Further strengthen and support RIG and its potential role in supporting the A@A programme and the Regional Scientific Panel on Climate Change Adaptation;
- ⇒ Support future CMFs and CSSs to continue building the exchange within the region;
- ⇒ Focus on publication of policy briefs that have a regional scope (versus single country briefs);
- ⇒ Support a small grant program for research with regional scope and authors from more than one country from the region; and
- ⇒ Initiate a Caucasus Regional Organizations lunch 2x/year bringing together all organizations based in Tbilisi that have a regional scope to share work and challenges and opportunities for collaboration.

On Enhanced processes and tools for Caucasus data, information, and knowledge collection, analysis, and dissemination to facilitate the science-policy interface and evidence-based regional research.

Consolidate the existing Caucasus geoportal.

On strengthening the internal coordination and management of the project

The evaluators recommend to Sustainable Caucasus:

- ⇒ considering the WWF/CNF model of having registered offices in Armenia and Azerbaijan (the latter only in the case of WWF)
- ⇒ Hiring a dedicated project manager and communications assistant;
- ⇒ Allocating more resources in Phase 2 for project implementation in Armenia and Azerbaijan;
- ⇒ Maintain closer communication with UNDP in Georgia and with other Caucasus regional initiatives; and
- ⇒ Undertake bi-weekly check in calls with SDC offices in all 3 countries and quarterly in-person meetings with SDC offices from the 3 countries.

Introduction

The Caucasus is one of the most biologically rich regions on Earth. Home to an unusually high number of endemic plant and animal species, it ranks as one of the world's biodiversity "hotspots" according to both Conservation International and WWF.

Formed by the isthmus between the Black and Caspian Seas, the Caucasus ecoregion is a biological crossroads, where plant and animal species from Europe, Central Asia, the Middle East, and North Africa meet endemic species found nowhere else on earth. The hotspot spans approximately 500,000 square kilometres including Armenia, Azerbaijan, and Georgia, as well as small portions of Russia, Iran, and Turkey. This restricted area holds a high diversity of landscape types from semi-desert to high altitude tundra, from alpine meadow to deep forest.

This region's socio-ecological systems and diversity are under growing threats from climate change, challenging the sustainability and resilience of livelihoods and ecosystems. Climate amplified natural hazards such as floods, landslides, mudflows, debris flows, avalanches and erosion are causing loss of life, income and infrastructure in both mountain communities and lowland populations across the region. Under these conditions, this project aimed at supporting a coordinated regional response to the needs and threats is highly relevant. However, because of the geo-political character of the region, especially the tense relations between Azerbaijan and Armenia, any project in the Caucasus with a regional scope faces challenges at the levels of communication and implementation. The Strengthening Adaptive Capacity in the Caucasus project (SCAC) is no exception.

Description of the project/Outcome 3

The Swiss Agency for Development and Coordination (SDC) project "Strengthening Adaptive Capacity in the Caucasus" was initiated in 2018 with the overarching goal of reducing the vulnerability of the region's population to climate change events and long-term impacts and to foster regional cooperation on climate change adaptation challenges in the Caucasus.

The project consists of three outcomes. The first two, implemented by the UN Development Programme, are focused on:

⇒ Building the capacity of Georgian authorities to establish a nationwide multi-hazard hydro meteorological risk monitoring system; and

⇒ Increasing the resilience of vulnerable communities and their livelihoods to climate and natural induced threats.

Outcome 3, implemented by Sustainable Caucasus, seeks to build the capacity of scientists and civil society to support evidence-based policy and advocacy on climate adaptation and sustainable mountain development.

Outcome 3's declared outputs are:

⇒ Improved learning and teaching practice to enhance the human resource capacities of the higher education and research institutions in disaster risk reduction (DRR) and Disaster Risk Management (DRM) in the South Caucasus

⇒ Improved regional and national knowledge exchanges and multi-stakeholder dialogues on climate adaptation and sustainable mountain development; and

⇒ Enhanced processes and tools for Caucasus data, information, and knowledge collection, analysis, and dissemination to facilitate the science-policy interface and evidence-based regional research.

The outputs build on the activities carried out under the umbrella of the Scientific Network for the Caucasus Mountain Region (SNC-mt), bringing together scientific institutions from all six Caucasus countries. Such activities supported by the SDC and the Swiss National Science Foundation, include the first Caucasus Mountain Forum (CMF), the regional research agenda, the regional spatial data infrastructure, and the first regional Caucasus Summer School (CSS).

International partners in Outcome 3 are the University of Geneva, the UN Environment Programme and GRID-Geneva.

Overview of the evaluation approach

Detailed description of the review process, including data sources and possible methodological limitations

As described in the Terms of Reference, the project evaluation was guided by the **OECD/DAC Criteria:** relevance, coherence, effectiveness, efficiency, impact, and sustainability.

With those criteria in mind, the evaluation team reviewed the project's objectives and implementation progress; sought to provide evidence of the project's overall impact, effectiveness and added value; reviewed the implementation challenges and how the implementing organization sough to resolve them; with the overall goal of providing SDC with guidance and recommendations for a potential Phase 2 of the project.

Recommendations specifically stem from observed:

- ◊ collaboration and synergies under Outcome 3 between the consortium, its members and partners in Armenia, Azerbaijan, Georgia, Russia, Turkey, and Iran;
- ◊ contributions from Outcome 3 to enhanced regional cooperation and dialogue among the partners;
- ◊ the Outcome's added value from the regional and national perspectives;
- ◊ cooperation and cross-fertilization between Outcome 3 and the A@A programme which is implemented by Sustainable Caucasus in the region;
- ◊ Sustainable Caucasus's modified organizational structure and organizational development efforts to better implement the project;
- ◊ Sustainable Caucasus's achievements at different levels (impact, outcomes, outputs) against the agreed logframe;
- ◊ Main take-aways from the current intervention, their potential expansion and integration into the possible Phase 2 from the national and regional perspectives; and
- ◊ Identification of future potential areas of cooperation with Sustainable Caucasus based on the status and achievements of the intervention, with a national and regional focus in mind.

The evaluation consisted of two parts: review of materials, including online resources, and interviews with relevant stakeholders.

Document review. We reviewed:

Documents, articles, and reports

- ⇒ the overall project document "Strengthening the Climate Adaptation Capacities in the South Caucasus" of which Outcome 3 is a component, including its budget;
- ⇒ Sustainable Caucasus Narrative Technical Report (1st of July 2021 — 31st of December 2021);
- ⇒ Sustainable Caucasus Narrative Technical Report (1st of January 2022 — 30th of June 2022);
- ⇒ Sustainable Caucasus Narrative Technical Report (1st of January 2023— 31st of August 2023)
- ⇒ Sustainable Caucasus project proposal extension for 2023 "Strengthening Adaptive Capacity in the Caucasus: Enhancing Regional Cooperative Action for the Benefit of the Caucasus Mountain Region" and

⇒ Sustainable Caucasus draft proposal for Phase 2
⇒ Article in peer review book chapter entitled "Scientific collaboration to address socio-ecological challenges of the Caucasus Mountain Region" co-authored by Nina Shatberashvili, Joseph Salukvadze, and others.
⇒ Caucasus Environmental Outlook (in press)
⇒ Caucasus Regional Research Agenda https://drive.google.com/file/d/1Jazc5DKPYTj5hbdJkfqGQ0iKZFMHC32p/view; and
⇒ Evaluation of Adaptation @ Altitude Programme Phase 1
⇒ Scolobig Anna et al, 2020. In-Depth Assessment of National Higher Education Offer in DRM and Hazard Mapping in South Caucasus Countries
⇒ Climate Change and Security – South Caucasus https://www.osce.org/files/f/documents/4/9/331921.pdf
⇒ Environment & Security in the South Caucasus Assessing Possibilities of Regional Collaboration Platform for Action Non-Paper. August 29, 2023
⇒ MEMO on Regional representation in the structure and governance of Sustainable Caucasus Janet Dalziell Consulting. 2022.

Websites

⇒ DRM Education platform (https://drm-hehub.iliauni.edu.ge)
⇒ Students' websites (https://ecogeghanist.weebly.com, https://www.facebook.com/ecogeghanist)
⇒ Sustainable Caucasus website and resources (https://sd-caucasus.com/en/pages/index/18)
⇒ Scientific Network for the Caucasus Mountain Region (https://www.caucasus-mt.net)
⇒ Caucasus Spatial Data Infrastructure (SDI)/Geonode Platform (https://sustainable-caucasus.unepgrid.ch/#/)
⇒ SCAC Small Research Top-up Grant 2021 program (https://www.caucasus-mt.net/Other-initiatives)
⇒ CSS (https://www.caucasus-mt.net/Caucasus-Summer-School)
⇒ CMF (https://www.caucasus-mt.net/Caucasus-Mountain-Forum)

Interviews. Annex 4 includes the list of all stakeholders interviewed. Interviewees include:

⇒ SDC officials;
⇒ project implementing partners;
⇒ students and professors as project beneficiaries;
⇒ national governments;
⇒ other stakeholders identified by the project implementing partners; and
⇒ Other regional initiatives/organizations in the Caucasus.

Questions asked to project stakeholders and beneficiaries include those in the Terms of Reference, as well as those contained in Annex 5. The report also draws on feedback from findings presented to SDC officials on Monday, 27 November 2023, and a meeting with SDC officials in Armenia held on Wednesday, 29 November 2023.

Observations about the project: Achievements of Phase 1 and implementation challenges to be addressed in Phase 2

Overarching achievements of Phase 1

Impressive Distance Learning Module (DLM) on DRM and hazard mapping- recognized as of extraordinary value and relevance in the region by students and faculty	Production of Policy Briefs with a Regional Scope: Caucasus Regional Research Agenda (RRA) and Caucasus Environment Outlook 3 (publication pending)	118 maps generated, compared to 13 at the beginning of project.	Strengthened regional cooperation through the Regional Initiative Group	Strong National Initiative Group in Georgia with extensive participation and key forum for discussing policy priorities	CMF (the third one brought together 176 participants from 23 countries) and CSS (the last with 21 Master and PhD students from 7 countries) - high level of satisfaction by participants	Ability of project to include participants from entire Caucasus region (including Turkey, Russia, and Iran) whereas other "Caucasus" regional initiatives have failed to do so

DLM on DRM and hazard mapping. The project has developed a Module with 10 courses. The DLM has been hailed by faculty (Georgia, Azerbaijan, and Armenia) and students (Georgia, Azerbaijan, and Armenia) interviewed as of excellent quality and relevance. Some of the materials in the Module were developed with advice from the National Environmental Agency in Georgia, based on research and policy priorities.

"The course on Disaster Risk Mitigation and Hazard Mapping is exceptionally informative. It provides a thorough understanding of strategies for mitigating risks associated with disasters. The hazard mapping module is particularly enlightening, offering practical insights into identifying vulnerable areas. More hands-on exercises would enhance the application of theoretical knowledge. Overall, the course significantly contributes to a comprehensive understanding of disaster risk management." Gullu Ahmedova, Bachelor in Ecology and environmental sciences, Western Caspian University, Azerbaijan

"The module and the participation in the Caucasus Summer School have been of key importance to my education and continue to inspire my work. In 2020 and 2022, I was recognized as the best teacher of the year by the Ministry of Education, Science, Culture and Sports of Armenia. In 2022, I was awarded that title again for creating the eco-educational association "EcoFamily", Our goal is to unite ecological teams of schools in the region and implement eco-education together, explore the possibilities of community development using natural resources." Tigran Yengybarian, former student at ASPU, now teacher in Geghanist Secondary School, Ararat, Armenia

At the end of 2020, based on the results of the in-depth assessment (Scolobig et al, 2020) wherein students and faculty from all regions indicated what topics should be prioritized, new courses were proposed on:

- ⇒ Digital modelling of risks;
- ⇒ Advanced geographical information system (GIS) hazard mapping;
- ⇒ Use of unmanned aerial vehicles (UAV) in DRM, including use of satellite images;
- ⇒ Multi hazard and risk assessment;

⇒ DRM social aspects;
⇒ DRM economic aspects;
⇒ Forest fire risk assessment and management;
⇒ Community based DRM training;
⇒ Impact of environmental degradation on natural hazards; and
⇒ Case studies in DRM.

The DLM is a "living" module with elements and materials being updated to respond to the evolving circumstances on the topic. The DLM has been translated into Georgian, Azerbaijani and Armenian languages, however there are evolving elements and resources online that are available only in English. Digital modelling of risks, DRM economic aspects, Forest fire risk and Impact of environmental degradation have yet to be developed due to lack of human or economic resources.

Production of Policy Briefs with a Regional Scope, Caucasus Regional Research Agenda (RRA) and Caucasus Environment Outlook 3 (CEO3) (publication pending). While the project has been prolific in publishing national briefs, it is those of a regional scope that are more significant. They include the briefs on:

⇒ "Regional cooperation enhancement for climate change adaptation policy and action harmonization and coordination among South Caucasus countries"; and
⇒ "Encouraging regional cooperation to enhance South Caucasus countries' climate change adaptation research initiatives".

The RRA provides an overarching document guiding research priorities for the Caucasus, and stems from the dialogue among scientists from Armenia, Azerbaijan, Georgia, Iran, Russian Federation and Turkey, and is one of the most visible outputs of the dynamic and thriving exchange among researchers and scientists across the region that the project has helped foster.

CEO3 is pending publication but the draft has been ready for several months. It represents an excellent body of research and policy priorities highlighting the status of the environment in the Caucasus, pressing threats and needs. It is another excellent example of regional cooperation at work like the WWF Ecoregional Conservation Plan (ECP) for the Caucasus. Just like the ECP, it was developed through exchanges and a series of workshops, the CMFs, and CSSs that have played a key role in fostering collaboration as the basis for CEO3.

Enhanced processes and tools for Caucasus data. In addition to the CEO, 118 maps have been created in the frame of the GeoNode platform when at beginning of the project there were only 13. This platform aims at fostering a better geospatial data discovery, visualization, and access to model disaster risk in the Caucasus region. GRID has been supporting the use of the GeoNode through capacity building workshops held in all 3 countries. Two more workshops, in Armenia and Azerbaijan, were expected but have not been carried out by GRID yet.

Regional Initiative Group. The RIG has been the engine of the regional exchange, bringing together scientists and practitioners from the entire region, and in the case of Georgia a government representative from the National Environmental Agency (NEA). Eleven meetings have been held throughout the life of the project, with frequent informal communication and exchanges outside of formal meetings. The RIG has also been a means to create synergies with other existing regional projects, notably the Adaptation @ Altitude (A@A) Programme

SDC offices in Armenia and Azerbaijan report that they have never been proactively invited to the RIG and learned from third party sources of some of the meetings, which is a considerable omission, given the role they can play in engaging with decision-makers. Indeed, Sustainable Caucasus together with the RIG, NIGs and partners, specifically the A@A programme, are discussing how to make the RIG more policy relevant and engage better with decision-makers. They are therefore proposing to transform the RIG into an institutionalized *Regional Scientific Panel on Climate Change Adaptation*. The Panel would elaborate an action plan on how to strengthen regional climate change adaptation knowledge and capacity to support scientifically sound regional decision-making, scenarios, and adaptation pathways to support the Panel's work. Whether institutionalized into a Regional Scientific Panel or not, the RIG would be further strengthened if it included greater participation from decision-makers, especially from Azerbaijan and Armenia.

National Initiative Group in Georgia. The Georgia NIG stands out as the largest, most inclusive group of all three countries. While this could be reflective of a bias towards Georgia by the project, and greater energies expended to invest in such a group in this country, it has resulted in greater science-policy exchange and influence amongst decision-makers. It also appears that individual NIG members have more authority and influence with government partners. One such example is regarding the policy brief on sustainable pasture management in Georgia. For this the Ministry of Environment Protection and Agriculture fully shared the recommendations and opinions outlined in the brief sent by NIG Georgia, and suggested NIG members have their representatives in the working group for developing National Policy for Sustainable Pasture Management. The NIG has also been active in DRM advocacy by preparing a statement on Deficiencies related to the Namakhvani hydro-power plant (HPP) project's development in 2021.

CMF and CSSs. The CMF and the CSS have been pillars for the regional exchange and networking, and a powerful means for keeping the community connected despite COVID-19, the Karabakh conflict, the war in Ukraine and related sanctions impacting the participation of stakeholders from the Russian Federation and Iran.

Based on the survey of the last Forum, participants representing governmental (18.5%) and non-governmental sectors (15.4%), as well as representatives of international organisations (10.8%) and the private sector (9.2%), hailed the networking and new connection opportunities (81.5%), learning about the most recent research done in the Caucasus ecoregion (72.3%) and exhibited general interest in the ecoregion (60%). CMFs have also been laboratories for generating new collaborations for research, the development of CEO2 and furthering the goal of producing peer-reviewed research – in-effect validating science to inform its application. For example, there is an agreement that the Mountain Research and Development journal (MRD, Bern University) will publish 8-10 articles in a special issue on "Challenges and Opportunities for Sustainable Development in the Caucasus Mountains in a Context of ongoing geopolitical shifts" in 2024.

Similarly, CSSs have been well received, described as informative and an opportunity to combine learning about theory and the environment and conditions on the ground from field trips. They have inspired some participants to pursue careers in the NEA, and in the case of Armenia they have built on the DLM and motivated a student to establish two now well-known small NGO. His environmental activism earned him the title as "the best teacher of the year" by the Ministry of Education, Science, Culture and Sports of Armenia.

Participation from entire Caucasus region. There is mostly consensus among those interviewed that this project has enabled much needed regional exchange and cooperation, with the CMF, CSS, and the RIG as key enablers as well as the role of the SNC-mt network as a platform for sharing resources and connecting the Caucasus research community.

Georgia: Stakeholders interviewed felt represented, noting that because of the geopolitical challenges, Georgia was also the easiest place to convene meetings and events., They also conceded that project implementation was possibly biased towards Georgia.

Iran: Stakeholders indicated that if it wasn't for the project, they would not have access to maps and tools (GIS) to do research and view it as invaluable.

Azerbaijan: Teachers recognized the importance of the same tools for making DRM teaching more practical and hands on.

Armenia: a stakeholder in charge of the Regional Climate Monitoring Centre in Yerevan, cited the barriers faced in data access and the key role the network plays in making data available, even in the face of the various challenges.

Overarching implementation challenges to be addressed in Phase 2

Governance issues within Sustainable Caucasus	Communication of project outcomes	Absence of student feedback and "alumni" outreach mechanisms on DLM in Armenia and Azerbaijan	Weak NIGs in Armenia and Azerbaijan	Inconsistent way in which collaboration with universities is implemented	Effective liaison with other regional initiatives

Governance issues within Sustainable Caucasus. The organization has been described by some as a "one (wo)man show" given staffing changes and having one person leading both the regional work and the national work in Georgia. There have also been some internal conflicts especially between the Sustainable Caucasus leadership and the Armenia representative leading to changes that could be conducive to more effective work and project implementation in Armenia, but also to more conflict as it appears that members of the current NIG in Armenia and the Armenia representative plan to set up their own NGO and it is unclear how this will impact (positively or negatively) the future of the project.

In 2022, SC during a Strategy meeting, with the help of a facilitator, investigated 3 options for SC:

- ⇒ status quo: registered in Georgia, funding staff and activities in other countries;
- ⇒ independent affiliated entities in Georgia, Azerbaijan, Armenia; and
- ⇒ one organisation with branch offices registered in three countries.

The facilitator, expressing the view that it is extremely difficult to create and operate an organisation that is as representative of the region as it needs to be for optimal legitimacy and effectiveness, at that time, recommended the status quo with a new more representative board. SC has since taken steps to include representatives from each country on the board. However other governance issues have not been addressed yet.

Such issues have also translated into poor and inconsistent communication with SDC, progress reports that are difficult to read (narrative does not follow logframe), and indicators that are not reported on or not substantiated by required means of verification, especially with regards to deliverables specific to Armenia and Azerbaijan.

SC would benefit from having a dedicated program manager as well as a communication manager to address these issues.

Communication. The project has a strong platform on Facebook where information is shared and updated regularly. But that is not the case with the website of Sustainable Caucasus which is the primary on-line face of the project. Project related information should be made available on the website before anywhere else, including reports and lists of participants as a means of verification to emphasize the regional scope of the initiatives.

It has been pointed out that featuring human stories of participants (students, researchers) would highly increase the visibility of the project and demonstrate how the project and its components have impacted lives, careers, research, and the science-policy interface across all three Caucasus countries.

Absence of student feedback and "alumni" mechanisms on DLM in Armenia and Azerbaijan. This is a major shortcoming which has made the evaluation more difficult as we have not been able to reach many students in Azerbaijan and Armenia. While Georgia (Ilia State University) has instituted a mechanism for feedback, that has not been the case for universities in Armenia and Azerbaijan, where the DLM has been used as support material and students have been tested on it. 120 students alone from the Crisis Management Academy in Armenia have participated but the SC Armenia representative has not been able to provide contacts for a single student. After many reminders, the SC Azerbaijan representative provided contacts for 3 students and 3 faculty members. To see that the DLM has been used, and that it has been successful, such feedback mechanisms are critical.

Weak NIGs in Armenia and Azerbaijan. Both networks have had very few meetings compared to Georgia: NIG Armenia lists 17 members as well as government agencies, NGOs, and international organizations as partners. The group met 3 times in connection with the development of policy briefs and the establishment of the SC representative proposed NGO.

In Azerbaijan, the NIG has 18 members and several government, academia, and private business partners. Here the NIG met 5 times in connection with policy briefs and grants.

It is critical to strengthen these two groups by including proactive members, including representatives of relevant government agencies, and establishing regular meetings (and provide funding as necessary) to foster needed collaboration inside the countries and strengthen the science-policy interface. Records from these meeting should be a required means of verification for project implementation purposes.

Collaboration with universities. Collaboration with universities has been approached differently depending on the country. In Georgia there is an MoU with Ilia State University and the DLM is part of institutionalized curriculum in masters and bachelor programs. However, in Armenia and Azerbaijan it is accredited support material, and how and where it is used depends on teachers involved and/or personal/professional relationships with universities.

In Armenia, some originally identified universities, like the American University, have not been engaged on the basis that "this is a privileged university and efforts should be made to reach universities attended by underprivileged students". However, this has not been explained anywhere in the documents. Similarly, several universities are listed as "interested" but with no report on what that means and what opportunities there may be. How the materials have been used and associated challenges are also not described. On the other hand, the State Pedagogical University has been using the materials, quite successfully according to students and teachers interviewed, but that is nowhere reflected in project documentation.

In Azerbaijan, the situation is not very dissimilar, with the National Academy of Science standing out as the most prolific collaborator, likely in part because one of the teachers is a very active NIG and RIG member who is increasingly taking on the role of supporting the SC Azerbaijan representative.

For the visibility of the project and the success of the work it should be a standard rule to have MoUs with all participating universities where it is explicitly stated how the materials are to be used and as needed, what support the SCAC project can provide.

Liaison with other regional initiatives. Communication with other regional initiatives has been somewhat limited, except for exchanges with WWF and CENN. This is not necessarily the fault of Sustainable Caucasus, in fact it is the "fault" of the conservation/environmental community in the Caucasus, where liaising is not encouraged. To the contrary, there is a perceived fear of losing funding by collaborating. All regional initiatives stand to benefit from mutual exchange and collaboration. WWF and CNF often share how little capacity there is in the region, especially in government environmental agencies, underlining that this project could fill that gap by identifying promising candidates (also emphasising the project's contribution to the pipeline for producing professionals for such posts).

Overview of findings related to evaluation review areas

In this section, we present a summary of the key findings related to each of the evaluation review areas. For more detailed analysis on each of these areas, please see the detailed analysis of findings of the evaluation review criteria contained in Annex 2.

RELEVANCE	COHERENCE	EFFECTIVENESS	EFFICIENCY	IMPACT	SUSTAINABILITY
High level of relevance for researchers, scientists, decision-makers.	The project has synergies with the Adaptation @ Altitude project as both strive to support regional collaboration among South Caucasus countries for climate adaptation planning and action.	Elements of the project have lagged in effectiveness due to SC governance issues and institutional challenges in Armenia and Azerbaijan.	Efficiency has suffered in Azerbaijan and Armenia, especially because of SC governance issues, and so has communication about the project,	The impact on the community of scientists and practitioners in the region is visible.	Further funding support is needed to deepen investments and at the very least further institutionalize educational programs.

Relevance. All project partners interviewed underscored the relevance of the activities and outputs. Beneficiaries interviewed were positive. Many underscored the need to incorporate practical experience (e.g., field trips, summer short field courses in the teaching of the DLM.

Partners interviewed underscored the synergies between the UNDP project in Georgia (Outcome 3) and the role of the Swiss National Science Foundation which supported the foundations of the regional scientific network in the Caucasus as well as synergies with the Adaptation @ Altitude programme.

Coherence. The project has positive synergies with the Adaptation @ Altitude programme as both strive to support regional collaboration among South Caucasus countries for climate change adaptation planning and action. It is compatible with the work of other regional initiatives such as that of the Caucasus Nature Fund supported largely by KfW; WWF supported by KfW and Swedish International Development Cooperation Agency; RECC Caucasus, supported by the European Commission, Norway, USAID, and others; and the Transcaucasian Trail supported by CNF, US Forest Service, Austrian Development and Cooperation, among other donors. The topics under this outcome are also considered priorities at the regional scale by UNEP, OSCE, GIZ, and of course SDC.

Effectiveness. The project has only partially achieved its objectives because of internal organizational issues as well as the challenges of operating in both Armenia and Azerbaijan that still need to be overcome. On the other hand, the partners GRID and University of Geneva have been largely effective in preparing and updating the materials, maps and data, and publications, except for the delays with CEO2 and maps waiting to be finalized as well as two additional capacity building workshops expected to be held for Armenia and Azerbaijan (which were the responsibility of Grid)

Efficiency. The budget potentially allowed for hiring of a dedicated program manager that would have likely contributed to more efficient project execution, as well insuring visibility of the project, and better and more timely written reports and communication with SDC representatives in the three countries. Also, with SDC being such an important donor with great visibility, and with UNEP as a partner, SC should have communicated the challenges and drawn on their support and guidance to help resolve them more proactively.

Efficiency has therefore suffered in Azerbaijan and Armenia, especially, because of SC governance issues (e.g., staffing changes, absence of dedicated program manager, management in Armenia and Azerbaijan

[coordination with local SDC officers and other projects), and how communication and other tasks were handled.

The lack of MoUs with all universities involved has also resulted in cases where instead of focusing on strengthening the uptake of the DLM in a smaller group of universities, efforts have been diluted by pursuing a longer list of universities that was not required by the project. Finally, the absence of feedback mechanisms makes it hard to gauge students' impressions and satisfaction with the DLM in Azerbaijan and Armenia.

Impact. Despite the political challenges and COVID-19, the dialogue and cooperation persisted, with the CSS and Forum playing a pivotal role in bringing together students, scientist, and stakeholders from the entire region as well as international experts. The RIG was very active and 2 regional policy advocacy briefs have been produced. The impact on the community of scientists and practitioners in the region is visible. However, the impact on decision-makers is still unclear/in-doubt, especially in Armenia and Azerbaijan.

Sustainability. DRM and hazard mapping are very urgent and highly relevant topics and are areas in which universities have little capacity. Sustainable Caucasus supports an important scientific network that is critical in that it is a unique platform to take on the challenges the region is facing. Sustainability of the program looks promising in Georgia but less so at this stage in Armenia and Azerbaijan. Further funding support is needed to deepen investments and at the very least institutionalize programs.

On the issue of sustainability of Sustainable Caucasus, the answer is more complex. There is not a single regional organization in the Caucasus that is sustainable. All organizations are highly dependent on donor support, some with a better outlook (CNF with a 30 million investment from KfW) than others. Ideally the goal would be for the universities themselves to manage the Caucasus network and fund the CSSs and CMFs and for Sustainable Caucasus to sunset or be financially supported by local institutions and donors but that is highly unlikely soon.

Transversal Themes. The project has maintained a good gender ratio. Not just in the Forum (With 84 female (47.7%) and 92 male (52.3%) attendees) but also in the CSSs.

As discussed, Governance, of Sustainable Caucasus, the network and the groups is one area that needs attention. Changes in practice and progress is critical to the continued success of the interventions and project, and the sustainability of outcomes and impacts.

The project was able to adapt quite well to the challenges of Covid 19 by holding meetings initiative groups (national and regional) online. Also, the innovative approach (with the teaching materials being online) of the project made it very flexible in that sense.

On the issue of Leave No One Behind (LNOB, the project addressed it by including students from low-income background and ensuring their participation in the CSS and CMFs through provision of scholarships.

Recommendations for Potential Phase 2

We present here our overarching recommendations. They are divided into

- ⇒ recommendations for specific actions under each of the outputs that could increase the impact and the sustainability of the Project at the end of Phase 2; and
- ⇒ recommendations to strengthen the internal coordination of the project.

As evaluators we believe in the value of this project, given the essential role it can play in building a foundation for regional cooperation in the Caucasus. We recognize that there have been several significant shortfalls that have compromised the project's effectiveness and desired impact. However, we also believe that if shortfalls can be effectively addressed – which we believe is very possible- the next phase has real prospects to bring about desired changes that would make SDC's investment effective and long-lasting.

A 2nd phase should largely focus on solidifying the outputs, strengthening the Network's governance and impact and deepening relationships with both the universities where the DLM is taught and the relevant decision-makers in the three countries, and more broadly in the region.

Recommendations for specific actions under each of the outputs that could increase the impact and the sustainability of the Project at the end of Phase 2

Improved learning and teaching practice to enhance the human resource capacities of the higher education and research institutions in DRR and DRM in the South Caucasus

General recommendations:

- ⇒ Build on the existing DLM, including by adding courses on digital modelling of risks; DRM of economic aspects; forest fire risk assessment and management; and impact of environmental degradation on natural hazards; and
- ⇒ organize visits of researchers and faculty participating in the project from other countries/universities (University of Geneva; BOKU, Vienna);
- ⇒ build on the Ilia State University- NEA example to facilitate internships (in-service training) and job opportunities in government agencies where DRM and hazard risk mapping is relevant and a much-needed skill.

Country-specific recommendations:
Georgia
⇒ Provide training in universities in modern DRM and remote sensing technology
⇒ Expand DLM training curricula and education to Tbilisi State University, Batumi and Kutaisi universities and formalize further arrangements through MoUs
Armenia
⇒ Provide training in new scientific methodologies of relevance to multiple DRM topics, key studies from various countries and various hazards, including best practices and failures
⇒ Focus on quality over quantity and focus on the universities that have shown the greatest engagement, like Yerevan State Pedagogical University and formalize arrangements through MoUs
⇒ Introduce a system for collecting feedback from students and integrate them into the SNC-mt.
Azerbaijan
⇒ Focus on working with the universities and other education institutions that have shown the greatest engagement, like Azerbaijan National Academy of Science (ANAS)
⇒ Introduce a system for collecting feedback from students and integrate them into the SNC-mt.

Improved regional and national knowledge exchanges and multi-stakeholder dialogues on climate adaptation and sustainable mountain development

General recommendations:

- ⇒ Further strengthen and support RIG and its potential role in supporting the A@A programme and the Regional Scientific Panel on Climate Change Adaptation;
- ⇒ Support future CMFs and CSSs to continue building the exchange within the region;
- ⇒ Focus on publication of policy briefs that have a regional scope (versus single country briefs);
- ⇒ Support a small grant program for research with regional scope and authors from more than one country from the region; and
- ⇒ Initiate a Caucasus Regional Organizations lunch 2x/year bringing together all organizations based in Tbilisi that have a regional scope to share work and challenges and opportunities for collaboration.

Country-specific recommendations:
Armenia and Azerbaijan
⇒ focus on strengthening NIG and its ability to influence national policy by including members of relevant government agencies
⇒ intensify communication within NIG through regular meetings
⇒ further support participation in RIG

Enhanced processes and tools for Caucasus data, information, and knowledge collection, analysis, and dissemination to facilitate the science-policy interface and evidence-based regional research.

General recommendation: Consolidate the existing Caucasus geoportal.

Recommendations to strengthen the internal coordination and management of the project

The evaluators found that there are many concerns related to the governance of Sustainable Caucasus and especially the way the organization has managed the project in Armenia and Azerbaijan which have constrained and limited its impact. Sustainable Caucasus, being aware of some of them at least, has sought to address the regional representation issue by including on the board members from each of the three countries.

The evaluators recommend to **Sustainable Caucasus**:

- ⇒ considering the WWF/CNF model of having registered offices in Armenia and Azerbaijan (the latter only in the case of WWF)
- ⇒ Hiring a dedicated project manager and communications assistant;
- ⇒ Allocating more resources in Phase 2 for project implementation in Armenia and Azerbaijan;
- ⇒ Maintain closer communication with UNDP in Georgia and with other Caucasus regional initiatives;
- ⇒ Consider including on the Board a representative from SDC;
- ⇒ Undertake bi-weekly check in calls with SDC offices in all 3 countries and quarterly in-person meetings with SDC offices from the 3 countries; and
- ⇒ Report accurately and timely against the Logframe including means of verification.

If there is Phase 2, the evaluators recommend to SDC to have a meeting with Sustainable Caucasus and project partners (University of Geneva and UNEP) and share the findings of this report, including the specific comments from the SDC offices in Armenia and Azerbaijan. The evaluators also recommend to SDC to comment timely and accurately on the reports as well communicate concerns in writing; and in case described deliverables are not provided timely without justification, consider withholding associated funding.

Conclusions

Economic and political trends continue to challenge regional cooperation in the Caucasus region. Such challenges make the role of the Scientific Network for the Caucasus Mountain Region (SNC-mt) and its coordinator, Sustainable Caucasus, ever so more significant, with its goal to support sustainable development; develop a comprehensive research strategy; strengthen research capacity; exchange knowledge and share best practices within the Caucasus; and strengthen the nexus between science, practitioners, and decision-makers.

And this is where SDC's decision to support a project aimed at supporting the efforts of scientists and civil society organizations of the South Caucasus, with participation of the academic entities of the wider Caucasus, for evidence-based policymaking and advocacy on issues of climate adaptation and sustainable mountain development is incredibly relevant.

The evaluators believe that some of the many challenges the project has run into are inherent to the regional context and difficulties: in working with universities that are still struggling to adapt to new ways of teaching and learning that are more interactive and adaptive, versus textbook/lecture style; in bringing together students from multiple countries from the region, affected by war, sanctions and tensions. And yet, in spite of those challenges, catalyzing some regional research and dialogue and through the CMF and CSS contributes to the formation and continuation of the Caucasus scientific community, creating of links between the younger generation of scientists- links that were broken since the 90s and which are critical to re-establish.

That said Sustainable Caucasus has run into governance challenges that have compromised the efficiency and effectiveness of the project, in Armenia and Azerbaijan especially. These challenges are not unique to Sustainable Caucasus.

That said they are not unsurmountable, and the evaluators believe that this project has an opportunity to make necessary changes so that Outcome 3 leaves a legacy across the Caucasus which can also become a catalyst for other regional collaboration in the region.

Finally, and this is one of the key points, the communication between SDC as the donor and the Sustainable Caucasus has been very poor especially for such a long-term and regionally significant project and especially in light of the governance difficulties inside Sustainable Caucasus challenging the implementation of the project. Donors such as SDC can play a critical role in facilitating regional cooperation and the science/policy uptake at the national level and Sustainable Caucasus should make use of that.

Annex 1- Terms of Reference

PROJECT EVALUATION

Evaluation title:
External real-time evaluation of the project "Strengthening the Climate Adaptation Capacities in the South Caucasus", Outcome 3 of Phase 1, December 2018 – November 2023

08. 05.2023

Introduction

This document sets out the selection process, criteria and requirements relating to the evaluation of the project "Strengthening the Climate Adaptation Capacities in the South Caucasus", Phase I, namely of its Outcome 3: scientists and civil society organizations (CSOs) in the region support evidence-based policy-making and advocacy on issues of climate adaptation and sustainable mountain development, implemented by a consortium constituted by the University of Geneva (UniGe) and the Caucasus Network for Sustainable Development of Mountain Regions (Sustainable Caucasus), serving as the Coordination Unit of the Caucasus Network for Sustainable Development of Mountain Regions (SNC-mt).
The Terms of Reference (ToR) describe the purpose, context, objectives (including guiding indicative evaluation questions), scope and a proposed methodology of the evaluation. It further describes the evaluation process and the expected deliverables. The ToR will become a component of the contract for this evaluation mandate.

Background information and context of the evaluation

The larger Caucasus region, uniting Armenia, Azerbaijan, Georgia, parts of the Russian Federation, Iran, and Turkey, is a unique ecoregion, rich in diverse landscapes, cultural history, and bio- and agro-diversity; the regional character of the Caucasus is evidenced by a connected system of Caucasus Mountain ranges, the large Kura-Aras transboundary hydrological basin, and numerous cross-border habitats. Today, this natural and cultural heritage is under threat as the combined result of a political agenda dominated by rapid economic growth; rural poverty and natural resource dependence; non-transparent and ineffective environmental and spatial planning coupled with a lack of accountability for negative outcomes; underfunded and inadequately coordinated public agencies; and serious gaps in the development of integrated and evidence-informed policymaking, implementation, and monitoring.
The region's socio-ecological systems are also under growing threat of climate change, already known to be more significant in mountain regions. Climate change poses challenges to all economic sectors, infrastructure, ecosystems, and human life. It triggers and amplifies natural hazards, such as floods, landslides, mudflows, debris flows, avalanches, and coastal erosion. Extreme weather events, like heavy rainfall and atypical hailstorms, and changes in precipitation patterns have also been associated with climate change. In the Caucasus, changing climate patterns are already evident in the form of higher annual temperatures accompanied by heat waves and droughts. Human casualties, damage to infrastructure and economic losses are increasing due to intensifying natural disasters, such as floods, landslides, and mudflows. While the majority of natural disasters occur in mountains or are formed in mountainous areas, they threaten both mountain communities and lowland populations, thus reinforcing the regional character of the Caucasus. For these reasons, the effects of climate change require a coordinated response across national borders, which has thus far failed to materialize due to political tensions across the region.
The project "Strengthening the Climate Adaptation Capacities in the South Caucasus" is designed to address an overall goal of reducing the population's vulnerabilities towards climate-induced hazards and fostering regional cooperation on adaptation challenges in the South Caucasus. While the project is constituted by three outcomes, the evaluation will look only into Outcome 3, implemented by the consortium, led by Sustainable Caucasus. Thus, in all the future references to the evaluation of the project, only Outcome 3 will be implied.
Outcome 3 aims at supporting the efforts of scientists and civil society organizations of the South Caucasus, with participation of the academic entities of the wider Caucasus in some areas, for evidence-based policymaking and advocacy on issues of climate adaptation and sustainable mountain development.
The overall project, including Outcome 3, is strongly aligned with the strategic priorities of Switzerland's International Cooperation Strategy 2021-24. Moreover, it is in line with the Swiss Cooperation Program for the South Caucasus 2022-25 and directly contributes to the Swiss Portfolio Outcome (SPO) 1: protecting and promoting civic engagement and space, as well as cooperation in the region.
The project builds and capitalizes on the SDC's proven track record in sustainable mountain development in the South Caucasus and looks for synergies with the oNGOing Adaptation @ Altitude (A@A) Programme (Phase 1), particularly with its Outcome 2 targeting the South Caucasus, launched by the SDC's Global Programme Climate Change and Environment (CPCCE). The objective of the latter is to increase knowledge on climate change and appropriate adaptation solutions in mountains and to feed it into science-policy platforms for informed decision-making at national, regional, and global policy processes to increase the resilience of mountain communities and ecosystems to climate change.

Objective, scope and focus of the evaluation

Evaluation object

Since 2018, the project has pursued three complementing outcomes:
Outcome 1: The Georgian authorities have the financial, technical, and human capacities to establish a nation-wide multi-hazard hydro-meteorological risk monitoring, modelling, and forecasting (UNDP).
Outcome 2: Vulnerable people, communities and regions in Georgia have increased resilience and face fewer risks from natural and climate change threats to their livelihoods (UNDP).
Outcome 3: Scientists and civil society organizations in the region support evidence-based policymaking and advocacy on issues of climate adaptation and sustainable mountain development (Sustainable Caucasus).
Apart from the SDC, the first two outcomes have been co-funded by the Government of Georgia, Green Climate Fund (GCF) and Swedish International Development Cooperation Agency (SIDA) and implemented by the United Nations Development Programme (UNDP) Georgia.

The evaluation pertains to Outcome 3 only, which is led by Sustainable Caucasus and has three interconnected Outputs:
3. 1 Improved learning and teaching practice to enhance the human resource capacities of the higher education and research institutions in disaster risk reduction (DRR) and Disaster Risk Management (DRM) in the South Caucasus
3.2 Improved regional and national knowledge exchanges and multi-stakeholder dialogues on climate adaptation and sustainable mountain development
3.3 Enhanced processes and tools for Caucasus data, information, and knowledge collection, analysis, and dissemination to facilitate the science-policy interface and evidence-based regional research.
The impact hypothesis of the whole project is as follows: if (i) scientists and civil society provide evidence-based research findings on climate change and sustainable mountain development to the attention of decision-makers; and (ii) if adequate legislative and policy frameworks are in place and implemented to address the challenges of climate change and natural hazards; and (iii) if government and public institutions develop and deliver effective instruments, public services, strategies and plans to prevent and mitigate the effects of natural disasters; then (iv) risks of natural disasters to lives and assets will be effectively identified and managed; and (v) people, particularly in vulnerable groups and communities, will benefit from enhanced livelihood and a safe environment.
Such a holistic approach, employed by the project to link research, policies, legislation and technology with public institutions, academia, and civil society, is expected to encourage and facilitate engagement and actions on the effects of climate change and natural disasters on socio-economic development in the South Caucasus.

Purpose and objectives
The reason for the evaluation is that the project's Phase 1 (Outcome 3 inclusive) has entered its last year of implementation, and the planning for a potential Phase 2 is about to start, if the set outcomes prove achieved, sustainable and relevant.
Moreover, the objective of this evaluation is to assess to what extent the Outcome 3 has attained its objectives and indicators as per the project's Logical Framework. The evaluation results will also inform the project team of Sustainable Caucasus and its partners in the Region and in Switzerland on the necessary adjustments for the successful implementation of prospective Phase 2.
Thus, the evaluation will become an important part of informing the SDC's continued intervention. As such, the purpose of the evaluation of the ongoing project is threefold: learning, decision-making and steering for Phase 2.
The evaluation shall provide an objective assessment of the SDC's engagement within the frame of the given project. The evaluation is expected to provide (1) a critical external view on the ongoing implementation of the project's Outcome 3 and its main achievements to date, and (2) strategic inputs into the formulation and orientation of its potential Phase 2.
The project evaluation shall be guided by the OECD/DAC Criteria[1]: relevance, coherence, effectiveness, efficiency, impact, and sustainability.
The evaluation's objectives are:
To review the objectives and progress of implementation of the Outcome 3;
To provide evidence of the added value of Outcome 3 and identify possible implementation challenges, as well as synergies with the other Swiss-funded projects (e.g., Outcomes 1-2 of the given project; A@A programme by CPCCE; etc.) from the country, as well as from the regional perspective;
To elaborate on the lessons learnt / experiences gained and provide guidance and concrete recommendations with regard to a potential Phase 2 with/for Outcome 3, with particular emphasis on the region.

Scope
The breadth and depth of the evaluation will be informed by the indicative evaluation questions (see chapter below).
The evaluation will be implemented during June 2023, with a total of maximum 25 consultancy days for the evaluation team (an international expert and a national expert). The assignment will include travel to Georgia and online interviews with the partners in Armenia and Azerbaijan.
The evaluation will provide concrete, actionable, and prioritised recommendations, with action points, covering the required scope of work, which will include, but not limited to:
Assessment of collaboration and synergies under the Outcome 3 between the consortium, its members and partners in Armenia, Azerbaijan, Georgia, Russia, Turkey, and Iran;
Assessment of the contribution/Outcome 3 to enhanced regional cooperation and dialogue among the partners;
Assessment of the Outcome's added value from the regional and national perspectives;
Assessment of the cooperation and cross-fertilization between the Outcome 3 and A@A programme, implemented by Sustainable Caucasus;
Assessment of Sustainable Caucasus's modified organizational structure and organizational development efforts to better implement the project;
Review of Sustainable Caucasus's achievements at different levels (impact, outcomes, outputs) against the agreed Logframe;
Review of main take-aways from the current intervention, their possible expansion and integration into the possible Phase 2 from the national and regional perspectives;
Identification of future potential areas of cooperation with Sustainable Caucasus on the basis of the current status and achievements of the intervention, having a national and regional focus in mind; lessons learnt and recommendations for future.

Indicative evaluation questions / key focus areas
The evaluator, in consultation with the Swiss Cooperation Office (SCO) for South Caucasus team in Tbilisi, should further refine and prioritise the questions that are structured according to the OECD DAC-Criteria. The bidder is also expected to address these questions within the technical bid.
The questions below are only indicative and have to be further elaborated by the selected consultant, *particularly considering the timing of the evaluation*[2].

Relevance	To what extent did the activities respond to the needs and priorities of the project partners in Armenia, Azerbaijan, and Georgia at the national and regional level (e.g., academia, local NGOs, CSOs, think-tanks, governmental entities)?

[1] OECD/DAC Network on Development Evaluation: Better Criteria for Better Evaluation. Revised Evaluation Criteria Definitions and Principles for Use (2019).
[2] While the evaluation will not capture the final results of the Outcome 3 at this point of time, it will give a reality check to what extent the activities are on track.

	Are the activities and outputs consistent with the overall goal and the attainment of its objectives? How relevant are the deliverables of the project for the needs and priorities of the students and lecturers/professors in Armenia, Azerbaijan, and Georgia, who are the primary beneficiaries of various knowledge products? What is the relevance of the Outcome 3 in comparison with other similar initiatives in Georgia and/or in the Region, among others funded by Switzerland?
Coherence	To what extent is Sustainable Caucasus aligned with other related initiatives funded by the Swiss Agency for Development and Cooperation (SDC) in Georgia and/or in the South Caucasus in a similar field (consistency, complementarity, and synergy)? Is the Outcome 3 compatible with interventions of other actors (e.g. bilateral and multilateral donors, private sector, UN, NGOs, etc.) active in the same thematic field? Is the Outcome 3 compatible with regional and national frameworks? What should be taken into account when planning for the Phase 2 in order to ensure maximum coherence at various levels?
Effectiveness	Are the Outcome's objectives on track to being achieved (taking into account the fact that the Phase 1 is still ongoing)? What were the major factors influencing potential achievement or non-achievement of the objectives? Is the approach and strategy proposed by the Outcome effective? What is the effectiveness of the different partners in contributing to their respective outputs and the overall outcomes of the same intervention? What should be taken into account when planning for the Phase 2 in order to ensure its effective implementation?
Efficiency	Are the activities cost-efficient? Do the partners work in a cost-efficient manner? Are the objectives on track to being achieved on time? Is the Outcome implemented in the most efficient way compared to alternatives? If not, what were the major impediments (e.g. context in which some of the partners operate, strength of the partners, etc.)? What should be taken into account when planning for the Phase 2 in order to ensure maximum efficiency?
Impact	What sustainable/lasting effects and behavioural changes can be perceived? In particular, did regional cooperation and dialogue increase? What capacities have been developed among the partners and actors in the target countries or in the region as such by Sustainable Caucasus and its consortium members? Has the intervention so far influenced the awareness of / the support to Sustainable Caucasus and its activities by decision-makers in three states of the Region? In what way? What should be taken into account when planning for the Phase 2 in order to ensure maximum impact?
Sustainability	Do the outputs have a longer-term continuing purpose? Can the benefits of the intervention be expected to persist after the current phase has terminated and after donor funding has ceased? What is the (in-kind) contribution of the partners to the intervention? Are there similar/strongly related initiatives supported by other donors or interested stakeholders in the South Caucasus states or in the region as such? Are there important synergies to be used or complementarities to be considered with the other projects financed by the SDC (e.g. A@A) or with other donor-funded interventions? What should be taken into account in order to ensure sustainability of the entire intervention when planning the Phase 2 (ownership, commitment, uptake at national and/or regional levels by various stakeholders, incl. government entities, academia)?
Transversal themes	Gender: Did the project consider existing inequalities between men/women, their causes, and factors of influence? Have strategies been adopted in order to reduce these inequalities? How did the project take into account the specific needs and strategic interests of men and women? LNOB: To what extent did the project take measures to include vulnerable beneficiaries? Governance: how well were the governance principles integrated and mainstreamed in the project? How flexible was the project during COVID-19?

Evaluation process and methods

Evaluation methodology

The review will include desk-review of the project related materials, online interviews with the project partners and stakeholders in Armenia and Azerbaijan, as well as field mission to Georgia. The consultant(s) will be expected to conduct an analysis of the results as per the Logframe and assess the extent to which objectives have been achieved.

Roles and responsibilities of the evaluator

The evaluation will be conducted by a team composed of one international consultant and a national consultant. The overall responsibility will lie with the international consultant, who will be the team leader. The international consultant will have a contract with the Swiss Cooperation Office (SCO) for the South Caucasus, and in the capacity of a team leader, will sub-contract the local consultant. The international consultant will report to the Swiss Cooperation Office for the South Caucasus.

Sustainable Caucasus and its partners in Armenia and Azerbaijan will provide general logistical support for consultants to organize their travel and arrange meetings with relevant stakeholders. Any related costs related to travel will be borne by the consultants.

Evaluation process and tentative timeframe

The following work plan provides suggested dates, responsibilities and resources needed for the various activities of the evaluation process. This work plan will eventually be adapted by the evaluation team, in consultation with the SCO.

Activity	Days/Tentative dates	Responsibilities
Announcement of the evaluation/dissemination of the ToR	8 May, 2023	SCO South Caucasus, Tbilisi
Submission of the technical and financial proposals	22 May, 2023	Consultant
Selection of a consultant and announcement of a decision	25 May, 2023	SCO South Caucasus, Tbilisi
Contracting a consultant	31 May, 2023	SCO South Caucasus, Tbilisi, consultant
Discussion of the technical proposal (with its evaluation questions) and an outline of the evaluation report	0.5 day 1 or 2 June, 2023	SCO South Caucasus, Tbilisi, consultant
Desk review/preparatory work	Until 10 June 3 days	Consultant
Travel to Georgia	From 10 June to 30 June 2023: 1 day	Consultant
Field mission to Georgia, briefing at the SCO SC Tbilisi / meetings with Sustainable Caucasus	4 days	
Travel back from Georgia	1 day	
Online interviews with the SCO teams in Baku and Yerevan and with Sustainable Caucasus's national partners and other stakeholders in the region	3 days	
Debriefing and presentation of the preliminary findings (online)	0.5 day	Consultant
Preparation of the draft evaluation report and submission	10 days	Consultant
Feedback on the draft evaluation report by the SCO South Caucasus, Tbilisi	2 days	SCO South Caucasus, Tbilisi
Finalisation and submission of the final evaluation report	2 days	Consultant

This timeframe is indicative, and it will be discussed with the consultant(s), but the work will be undertaken in June 2023.

Deliverables

The following deliverables are expected to be submitted by the evaluator(s):
Technical proposal on evaluation with the elaborated evaluation questions according to DAC criteria
Inception Report, including an outline of the evaluation report (max. 5 pages)
Draft evaluation Report and PPT presentation of its key findings
Final evaluation Report (max. 15 pages)
SDC's Assessment Grid of the DAC Criteria (tool 7) must be completed by the evaluator(s) and attached to the final evaluation report
Analysis of the Logframe (or Theory of Change): extent to which objectives have been achieved
List of interviewed persons; minutes of workshops; field visit pictures
Activity and financial report of the mandate

Reference Documents
After signing the contract, SCO will share the following documents with the evaluator(s):

A selection of documentation to share with the evaluator(s):
Project documents for the Inception and Main Phases; project factsheet; annual workplans; progress reports; SCO feedback letters on Sustainable Caucasus's progress reports and answers received from the partner; project extension request
Entry Proposal and Credit Proposal of the project (to be treated as confidential documents that must not be shared outside of the evaluation team)
Swiss Cooperation Program for the South Caucasus 2022-25

Competency profile of the evaluation team
The evaluation team is expected to bring along the following expertise and experience.
International Consultant:
Experience and expertise in Sustainable Mountain Development, Climate Change Adaptation, and related sectors (science and policy)
In-depth knowledge of the current political context in Armenia, Azerbaijan, and Georgia, as well as up-to-date knowledge of the regional (South Caucasus) prospects, developments, and challenges
Expertise in the science-policy dialogue at various levels (national, regional, global)
Methodological competence in project monitoring, review and evaluation of similar donor funded projects
Strong analytical and editorial skills, ability to synthesise and write intelligibly for different audiences
Knowledge of the Swiss development cooperation system
Ability to steer complex processes involving a multiplicity of stakeholders through participatory methods.
Competency with gender, governance, Conflict Sensitive Project Management (CSPM) and Leave No One Behind (LNOB) issues (application of gender and governance sensitive evaluation methodologies)
Proficiency in working and communicating (speaking, writing, and presenting) in English; knowledge of Russian is desirable.

National Consultant:

Experience and up-to-date knowledge on Sustainable Mountain Development, Climate Change Adaptation, and related sectors (science and policy)
Excellent knowledge of the particular political context in Armenia, Azerbaijan, and Georgia; being exposed to the wider context of the South Caucasus, particularly in the field of science-policy interface pertaining to Sustainable Mountain Development, Climate Change Adaptation, and related fields
Confirmed experience of leading or supporting evaluation projects in Georgia
Competency with gender, governance, CSPM and LNOB issues (application of gender and governance sensitive evaluation methodologies)
Competency and proven experience of organizing interviews, focus groups and analysing corresponding data
Proficiency in working and communicating (speaking, writing, and presenting) in English and Georgian languages; knowledge of Russian is desirable.
Social competences, including intercultural sensitivity and ability to work with a range of stakeholders

Reporting
The evaluator will report to the SCO for the entire duration of the assignment. Operational support will be provided by Sustainable Caucasus.

Draft Evaluation Report	The draft report should include the evaluation findings, conclusions, and recommendations. It is also essential for the SCO to give feedback to the evaluator(s). Project stakeholders should comment on the draft report, focusing on completeness, language, structure, comprehensibility, and any factual inaccuracies. The evaluator(s) should finalise the report in view of these comments.
Final Evaluation Report	The report should be in English, logically structured, contain evidence-based findings, conclusions, lessons and recommendations and their correlations. All information that is not relevant to the overall analysis belongs to an annex. The report should respond in detail to the evaluation questions and key focus areas. It should include a set of specific recommendations formulated for the Outcome 3, and identify the necessary actions required, who should undertake these, and possible timelines (if any). The evaluation report should not exceed 15 pages, including an executive summary (2-3 pages), but excluding the annexes. The report should contain clear references to important information/data available in the annexes. Proposed structure of the evaluation report: Cover page Table of contents Acronyms and abbreviations Acknowledgments Executive summary Introduction Description of the project/Outcome 3 Findings, incl. results Conclusions Recommendations and lessons learnt Annexes (compulsory) Terms of reference Filled out Assessment Grid Complete list of stakeholders and others consulted and interviewed Detailed description of the review process, including data sources and possible methodological limitations Analysis of the intervention logic (or ToC): extent to which objectives have been achieved Other deliverables that were requested in the ToR

Application procedure
Technical and financial proposals have to be submitted to the Swiss Cooperation Office for the South Caucasus by email to tbilisi@eda.admin.ch until May 22, 2023, (23:59 CET), with CC to tamar.tsivtsivadze@eda.admin.ch
The technical proposal should not exceed 5 pages and should outline the service provider's:
Approach to and methodology for the assignment;
Experience with similar assignments (incl. CVs);
Draft evaluation work plan;
Draft report outline;
Financial proposals

The financial proposal should be no more than one page and should clearly outline the daily rates in Swiss Francs (CHF)

Timetable of the invitation procedure

Date / Deadline	Activity
22.05.2023	Deadline for submission of tenders To: tbilisi@eda.admin.ch CC: tamar.tsivtsivadze@eda.admin.ch
25.2023	Evaluation of submitted bids
31.05, 2023	Signing of contract

05.06, 2023	Contract start date

Contracting
The contract will be awarded by the SCO following an analysis of technical and financial proposals received in response to these terms of reference.

Annex

No.	Annex
Annex	
1	Budget forms 4.1 Budget form type A – for employed persons Form Offer (Budget) Mandate Type A.xlsx
2	4.2 Budget form type B – for legal entities, organisations, and self-employed persons B_EN.xlsx

Annex 2- Filled out Assessment Grid

COMPLETED EVALUATION RATING TABLE

Assessment grid (version July 2021)

Select the corresponding number (0-4) representing your rating of the sub-criteria in the column "score":0 = not assessed; 1 = highly satisfactory; 2 = satisfactory; 3 = unsatisfactory; 4 = highly unsatisfactory

Highly satisfactory (HS) – there were no shortcomings in relation to the intervention's relevance, coherence, and efficiency; the objectives at outcome level were fully achieved or exceeded and are likely to have a significant impact, which will be sustained in the future.

Satisfactory (S) – There were moderate shortcomings in relation to the intervention's relevance, coherence, and efficiency. Most intended objectives at outcome level were achieved (or for mid-term is likely to be achieved). The likelihood of achieving intended impact or sustainability of the intervention's benefits is reasonable.

Unsatisfactory (U) – There were important shortcomings in relation to the intervention's relevance, coherence, and efficiency, in the achievement of its objectives (N.B. if outputs are achieved, but do not result in the expected outcomes, consider rating relevance and/or effectiveness as unsatisfactory). The likelihood of achieving intended impact or sustainability of the intervention's benefits is questionable.

Highly unsatisfactory (HU) - There were very severe shortcomings in relation to the operation's relevance, coherence, and efficiency. Intended objectives have not been achieved, achievement of intended impact or sustainability of benefits are highly unlikely.

Not assessed (na) – The criteria statement cannot be assessed. Please explain and provide details in the justifications section.

Type: Phase 1

Evaluator(s): Tanya Rosen, Eka Kakabadze and Andrew Taber

Date of the evaluation: December 3, 2023

Score: Satisfactory

DAC Criteria	Questions:	Score	Justification
Relevance	To what extent did the activities respond to the needs and priorities of the project partners in Armenia, Azerbaijan, and Georgia at the national and regional level (e.g., academia, local NGOs, CSOs, think-tanks, governmental entities)?	HS	All project partners interviewed underscored the relevance of the activities, underscoring the importance of introducing international and local teaching-learning practices and the establishment of DRM & hazard mapping modules in Armenia, Azerbaijan, and Georgia. The CSS and CMF, the coordination of the Scientific Network for the Caucasus Mountain Region (SNC-mt), webinars hosted, national and regional implementation groups meetings hosted have all been praised.
	Are the activities and outputs consistent with the overall goal and the attainment of its objectives?	HS	The activities and outputs are all very relevant and important.
	How relevant are the deliverables of the project for the needs and priorities of the students and	S	**S** here because we were able to reach a relatively small sample of students and lecturers. The feedback is positive, with one student in Armenia indicating

	lecturers/professors in Armenia, Azerbaijan, and Georgia, who are the primary beneficiaries of the various knowledge products?		that the program inspired him to set up an ecological NGO doing climate advocacy as well as to become a teacher in high school and incorporate some of the materials in his own teachings. Many underscored the need to incorporate a practical experience while teaching the modules.
	What is the relevance of the Outcome 3 in comparison with other similar initiatives in Georgia and/or in the region, among others funded by Switzerland?	HS	Partners interviewed underscored the role of the Swiss National Science Foundation which supported the foundations of the regional scientific network in the Caucasus as well as synergies with the Adaptation @ Altitude project. UNDP recognized the synergies between Outcome 2 and 3, citing that SC participated actively in meetings of the UNDP Steering Committee, technical working groups. UNDP also actively supported the MoU between Ilia State University and NEA; and participated in the CMF and RIG. Some students graduating from the program at Ilia State University joined NEA with salaries paid by UNDP. UNDP also advises on DLM improvements.
Coherence	To what extent is Sustainable Caucasus aligned with other related initiatives funded by the Swiss Agency for Development and Cooperation (SDC) in Georgia and/or in the South Caucasus in a similar field (consistency, complementarity, and synergy)?	HS	The project has synergies with the Adaptation @ Altitude project as both strive to support regional collaboration among South Caucasus countries for climate adaptation planning and action.
	Is the Outcome 3 compatible with interventions of other actors (e.g. bilateral and multilateral donors, private sector, UN, NGOs, etc.) active in the same thematic field?	HS	It is compatible with the work of Caucasus Nature Fund supported largely by KfW, WWF supported by KfW and Swedish International Development Cooperation Agency; RECC Caucasus, supported by the European Commission, Norway, USAID and others, and the Transcaucasian Trail supported by CNF, US Forest Service, Austrian Development and Cooperation, among other donors. The topics under this outcome are also considered priorities at the regional scale by UNEP, OSCE and GIZ.
	Is the Outcome 3 compatible with regional and national frameworks?	HS	It is. Both Georgia and Armenia have submitted their revised Nationally Determined Contribution (NDC) to the Paris Climate Agreement in 2021 while Azerbaijan is currently preparing its revised NDC having submitted its first NDC in 2017. Georgia has also developed a "2030 Climate Change Strategy and Action Plan (CSAP)" in 2021, which is planned to be revised in 2023. In Azerbaijan, DRR is reflected in the laws and regulations of the Ministry of Emergency Situations; but still lacks a National Disaster Risk Reduction Strategy in line with the Sendai Framework for Disaster Risk Reduction 2015–2030.
Effectiveness	Are the Outcome's objectives on track to being achieved (taking into account the fact that the Phase 1 is still ongoing)?	U	The project's ability to entirely achieve the objectives is related to some organizational issues as well as, especially in Armenia and Azerbaijan, challenges of operating in those countries, that still need to be overcome.
	Is the approach and strategy proposed by the Outcome effective?	HS	The approach and strategy are ambitious but very straightforward, with the different outputs well interconnected.
	What is the effectiveness of the different partners in contributing to their respective outputs and the overall outcomes of the same intervention?	S	The partners, GRID, University of Geneva have been effective in preparing and updating the materials, maps and data, and publications. There are some delays with the Caucasus Environment Outlook (CEO)

			maps waiting to be finalized, as well as 2nd CEO publication delayed.
Efficiency	Are the activities cost-efficient?	S	The budget potentially allows for hiring of a dedicated program manager that would likely contribute to efficiency.
	Do the partners work in a cost-efficient manner?	U	In Armenia and Azerbaijan communication and efficiency were weak and required significant strengthening,
	Are the objectives on track to being achieved on time?	S	Most of the activities yes, but there are some areas where they could be achieved better in Armenia and Azerbaijan especially if there were MoUs with all universities that agreed to incorporate the DLMs in their teaching curricula and similarly if there were established mechanisms for students to provide feedback on classes and materials offered as part of the project.
	Is the Outcome implemented in the most efficient way compared to alternatives? If not, what were the major impediments (e.g. context in which some of the partners operate, strength of the partners, etc.)?	U	It would have been better if Sustainable Caucasus hired a dedicated program manager to support the reporting, visibility of the project and the communication with stakeholders, coordination of the Network and the RIG.
Impact	What sustainable/lasting effects and behavioural changes can be perceived? In particular, did regional cooperation and dialogue increase?	S	Despite the political challenges and COVID, the dialogue and cooperation persisted, with the CSSs and Forum playing a pivotal role in bringing together students, scientist, and stakeholders from the entire region as well as international experts. The Regional Implementation Group has been activated through the production of policy advocacy briefs.
	What capacities have been developed among the partners and actors in the target countries or in the region as such by Sustainable Caucasus and its consortium members?	S	Of course, challenges remain but stakeholders interviewed have been adamant in underscoring the importance of the Network as keeping the regional cooperation alive.
	Has the intervention so far influenced the awareness of / the support to Sustainable Caucasus and its activities by decision-makers in three states of the Region? In what way?	U	Our impression is that on this element Sustainable Caucasus falls short as it has not yet had a desired impact with decision-makers especially in Azerbaijan and Armenia. In Georgia, the MoU signed between Ilia State University and the National Environmental Agency (NEA), is a promising platform for collaboration that can feed graduates into NEA. Sustainable Caucasus, Ilia State University and NEA have also submitted a proposal together to the Green Climate Fund which could help deliver desired policy changes. In Azerbaijan and Armenia, that support is not visible.
Sustainability	Do the outputs have a longer-term continuing purpose?	HS	They do. These topics are urgent and relevant, and universities have little capacity. And Sustainable Caucasus supports an important scientific network that is critical in that it is a unique platform to take on the challenges the region is facing.
	Can the benefits of the intervention be expected to persist after the current phase has terminated and after donor funding has ceased?	S	Yes, they have and especially in Georgia where the DLM has been institutionalized in the curriculum of Ilia State University. They also have such potential in universities in Azerbaijan and Armenia but that is far less likely without a second phase to deepen the relationships and investments.

Transversal themes	Gender: Did the project consider existing inequalities between men/women, their causes, and factors of influence?	HS	The project has maintained a good gender ratio. Not just in the Forum (With 84 female (47.7%) and 92 male (52.3%) attendees) but also in the CSSs.
	Governance: how well were the governance principles integrated and mainstreamed in the project?	S	Governance, of Sustainable Caucasus, the network and the groups are one area that needs attention. We are aware that some changes are in progress, critical to the continued success of the interventions and project.
	LNOB: To what extent did the project take measures to include vulnerable beneficiaries?	S	The project sought to include students from low income backgrounds, including by providing scholarships for participation in the CSSs and CMFs.
	How flexible was the project during COVID-19?	HS	While in person attendance is priceless, the project was able to adapt quite well to the challenges of Covid 19 by holding meetings of implementation groups (national and regional) online. Also, the innovative approach (with the teaching materials being online) of the project made it very flexible in that sense.

Annex 3- Analysis of the intervention logic (or ToC): extent to which objectives have been achieved

Output 3.1

Outcome 3 (SC): Scientists and civil society organizations in the region support evidence-based policy-making and advocacy on issues of climate adaptation and sustainable mountain development			
Outputs	**Output Indicators**	**Output:** **Sources and Means of Verification**	

[9] Sex disaggregated data to be given by UNDP.
[10] To be defined by 2020.

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Output 3.1: Improved learning and teaching practice to enhance the human resource capacities of the higher education and research institutions in disaster risk reduction (DRR) and Disaster Risk Management (DRM) in the South Caucasus	**Indicator 3.1.1: #** of distance learning DRM and hazard mapping modules introduced by the higher education institutions in the South Caucasus **Baseline**: 0 course, 0 students (AM; AZ; GE) **Target**: 1 module per country/per university with at least 50 students (F/M[11]) in total for the South Caucasus (AM; AZ; GE) **Indicator 3.1.2:** # of field-based transdisciplinary DRM&SMD courses for # of MS and PhD students established (i.e. Caucasus Summer Schools (CSS)) **Baseline:** 0 field-based transdisciplinary courses/CSSs on DRM with 0 students (AM; AZ; GE); 1 field-based transdisciplinary course/CSS on SMD with 20 students (AM; AZ; GE) **Target:** at least 2 field-based transdisciplinary courses/CSSs on DRM & SMD with 40 students (F/M) (AM; AZ; GE) **Indicator 3.1.3 #** of teachers completing the teachers' coaching programme to teach DRM and hazard mapping module in the partner universities of the South Caucasus **Baseline:** 0 teachers completing coaching programme on DRM and hazard mapping; 0 teachers' coaching programme; 0 regional/national coaching workshops (AM; AZ; GE) **Target:** 1 teachers' coaching programme on DRM and hazard mapping module for 26	- Syllabus for the distance learning module - Teachers' coaching programme - Coaching certificates for teachers - Records on graduate students and teachers - External, internal and peer evaluations of the teachers' coaching programme and of the distance learning module on DRM and hazard mapping - Reports and participants' feedback on the two summer schools	- Higher education institutions are willing and adequately resourced to cooperate

[11] A final share of the women and men among the students of the distance learning modules and transdisciplinary courses to be motivated by SC.

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	teachers (F/M[12]), including 1 regional workshop (AM; AZ; GE) **Indicator 3.1.4 #** of instruments (i.e. tool-box to improve the teaching practices) for regular in-class improvement of the selected DRM and hazard mapping module introduced in the three national languages of the South Caucasus's partner universities **Baseline:** 0 tool-box to improve DRM and hazard mapping module (AM; AZ; GE) **Target:** 1 tool-box to improve DRM and hazard mapping module (AM; AZ; GE)		

At the regional scale, the output was achieved as the CSSs have played a pivotal role in bringing students and researchers together from the entire Caucasus (including Iran, Turkey, and Russia).

Results are also very satisfactory in Georgia. That is not the case for Armenia and Azerbaijan, where better means of verification are also missing especially with regards to students' participation and interest.

3.1.1- The project has succeeded in the introduction of one DLM on DRM and hazard mapping in Georgia as part of masters and bachelor programs at Ilia State University, and in Armenia (Crisis Management Academy and National Academy of Sciences) and Azerbaijan (Azerbaijan State Oil and Industry University, Western Caspian University, Baku State University, Azerbaijan National Academy of Science, National Aviation Academy and Azerbaijan University of Architecture and Construction) as support materials.

However, the DLM has not been consistently implemented. Whereas at Ilia State University it is an institutionalized course, in Georgia and Armenia it is taken up as supporting teaching material. In Azerbaijan, for example mostly GIS components of the DLM were used to teach bachelor and master's students.

In Armenia, the DLM was also used in the State Pedagogical University, which is not reflected in the report. Several other universities are listed as having expressed interest, but ultimately the program was not rolled out. And in others, like the Crisis Management Academy it is somewhat at risk since the Academy is undergoing a merger with another university.

266 students (beyond the 50 total target) are listed as having taken the DLM, but **absent records from Armenia and Azerbaijan it is not possible to verify that number.** The project, in Armenia and Azerbaijan, has not kept track of participating students. 120 students alone are supposedly from the Crisis Management Academy.

3.1.2- 3 CSSs have been held, bringing together bachelor, master, and PhD students from the entire Caucasus. After the Third CSS, which brought together 21 participants, 17 provided an evaluation, underscoring their satisfaction with the program for networking opportunities, meeting new people, and deepening their experience in the field. 88.2% of respondents reported being very satisfied with their experience, while 11.8% reported being satisfied. 100% of respondents indicated their willingness to participate in the fourth CSS and would recommend the CSS to their friends/colleagues.

3.1.3- 20 teachers built their skills in teaching practice thanks to the coaching programme – and this is slightly below the 26 teachers target which is supposed to be met by end of 2023. What is not clear is how many teachers from each country participated.

The programme has been rolled out through 10 webinars curated by the University of Geneva averaging **10 participants (not 20 as indicated in the reports)** covering, among others:

- *Advanced GIS Hazard Mapping* - a learning unit focused on using multi-temporal imagery to monitor changing land cover over time; integrating freely available global datasets to undertake hazard susceptibility analyses over large areas; performing suitability and network analysis to guide the planning of evacuation routes; customizing project output and sharing it online;
- *Cases in Disaster Risk Management and Decision Making* – on real cases of disaster risk management and training them in making difficult risk management decisions;
- *Constructive Alignment under a Series on Pedagogical Issues* – on outlining learning outcomes, assessment methods, and teaching activities such that alignment is optimized; and using the approach to identify the core elements of a new or revised course;
- *Use of UAV's and satellite images in DRM* – on use of UAV and satellite imagery at the four key stages of the DRM cycle, from prevention, to preparation, to response, to recovery;
- *ABC Course Design* – on principles of constructive alignment and cross-course or cross-program themes and institutional policies;
- *Multi-risk Assessment and Governance* – on understanding multi-hazard and multi-risk assessment; and conducting multi-risk governance analysis; and
- *Community Engagement for Disaster Risk Management* on "Building capacities and community resilience" of the SCAC project DLM.

3.1.4- A toolbox based on materials of the Teacher Coaching Programme, with parts translated into Armenian and Azerbaijani languages was uploaded in the Regional Knowledge Hub (https://drm-hehub.iliauni.edu.ge).

Output 3.2

Output 3.2 Improved regional and national knowledge exchanges and multi-stakeholder dialogues on climate adaptation and sustainable mountain development	**Indicator 3.2.1:** The first regional multi-stakeholder platform for exchanges on DRM-related policy, advocacy and actions established **Baseline:** 0 regional platforms; 0 regional meetings (GE); 0 national meetings (AM; AZ; GE); 0 regional policy and/or advocacy plans **Target:** 1 regional platform; 3 regional meetings with 15 participants per meeting (GE); 6 national meetings with 25 participants per meeting (AM; AZ; GE); 1 regional policy and/or advocacy plan developed **Indicator 3.2.2:** # of research topics for applied research identified annually through regional and national knowledge exchanges, and multi-stakeholder dialogues	- Roadmap and records of multi-stakeholder collaboration on DRM and SMD - Periodic reviews of the findings on DRM-related work, relevant output documents - Reports of national and regional meetings/workshops on DRM - Articles on the undertaken applied research in various peer-reviewed journals - Public availability of research and scientific information stored at one place - Platform statistics (update frequency, registered users, user-implemented updates, breadth and quality of available information, Google analytics, etc.) and updates (respective databases of policies,	- Involved stakeholders and partners are appropriately willing and resourced to cooperate and participate - Registered members of the online platform are willing and resourced to cooperate within the platform; partners/members are willing to share relevant information on time

[12] Sex disaggregated data on the university teachers to be given by SC.

	from the available regional research agenda[13] **Baseline:** 0 (AM; AZ; GE) **Target:** 3 (AM; AZ; GE) **Indicator 3.2.3:** # of gender sensitive regional and national collaborative applied research papers produced by the Armenian, Azerbaijani and Georgian scientists/scientific institutions on CCA and natural hazards, and disseminated in peer-reviewed journals **Baseline:** 0 collaborative applied research papers (AM; AZ; GE) **Target:** at least 10 collaborative applied research papers (AM; AZ; GE) **Indicator 3.2.4:** Climate adaptation policy briefs and/or physical measures emanating from joint research or analysis submitted to the respective authorities in Armenia, Azerbaijan and Georgia for further follow-up **Baseline:** 0 (AM; AZ; GE) **Target:** 1 policy brief per country per year by multi-stakeholders (AM; AZ; GE) **Indicator 3.2.5:** On-line platform of the wider Caucasus Scientific Network is optimised and promoted as a key information source to enhance regional research and scientific cooperation	reports, scientific articles, calendar of events) - Advocacy impact documented (reports and news of key stakeholders, meeting reports and minutes, policy briefs, number of scientific articles published in peer-reviewed journals, popular articles and media coverage) - CMFs' statistics (number and status of participants, quality of organization, amount of third-party funding, presentations) and documentation/reports - Proceeding of the CMFs	

[13] Although LNGO Sustainable Caucasus's research agenda is rather wide covering ten thematic areas (e.g. climate change, biodiversity, forest resources, water resources, land us natural hazards, population and culture, tourism and recreation, socio-economic development, mountain cryosphere), the project will specifically focus on climate change adaptatio and natural hazards-related aspects (for more details on the regional research agenda, please visit: http://caucasus-mt.net/projects/res-agenda).

	Baseline: 300 registered and 100 self-registered users **Target:** 500 registered and 150 self-registered users		

This outcome has been achieved at the regional scale and national scale in Georgia but not in Armenia and in Azerbaijan results are mixed.

3.2.1 – This relates to the CMF, as the regional multistakeholder platform as well as the Regional and National Initiative Groups.

During the life of the project, two CMFs have been held (target is 3), bringing together researchers from the entire Caucasus. In their evaluation, participants stated networking and learning about the most recent research done in the Caucasus ecoregion and general interest in the ecoregion as primary reasons for participation. 96.9% of respondents rated their overall experience at the last forum positively. One of the outcomes of CMF3 is the agreement that the peer-reviewed Mountain Research and Development journal (MRD, Bern University) would publish 8-10 articles in its special issue 'Challenges and Opportunities for Sustainable Development in the Caucasus Mountains in a Context of Ongoing Geopolitical Shifts' in 2024.

Throughout the life of the project 3 meetings of the Regional Initiative Group (RIG) have been held. The target has been met, but it would be beneficial if those meetings were more frequent given the regional focus of the project. During the last one, held in consultation with the Adaptation @ Altitude team opportunities were discussed of institutionalizing the cooperation on climate change adaptation in the South Caucasus.

The National Initiative Group (NIG) Georgia met 11 times. The NIG Georgia is quite large and well represented and meetings are used to discuss policy briefs. In contrast the NIG Armenia, a smaller not so active group, met only 3 times in connection with policy briefs as well as the establishment of a new non-governmental organisation to address sustainable development of mountain regions of Armenia. The NIG Azerbaijan met 5 times to discuss policy briefs on energy and climate change.

3.2.2 – This indicator is specific to the Caucasus Regional Research Agenda adopted in 2019 at CMF2. One of the priorities identified by it are joint research initiatives, especially in natural hazards and climate change.

3.2.3 – In the face of difficulties in coming up with gender-sensitive peer review quality research, this indicator was converted into the decision by the 3 countries to use the available amount to support research by different approaches: Georgia and Azerbaijan agreed to use a grant scheme, while Armenia decided to organise pilot studies and work with the community. Mariam Tsitsagi of Tbilisi State University and Emil Jabrayilov of the Azerbaijan Academy of Sciences were awarded a SCAC Small Research Top-up Grant 2021. In Armenia, a case study on natural hazards impact on ecosystems services in Hovk was conducted. Both researchers produce peer-reviewed articles on DRM and climate. Results of the research in Hovk are not available.

3.2.4 – Underpinning this indicator is the idea of producing briefs through collaboration and research. The target was achieved, with several country briefs produced and the most significant being the two regional briefs on "Regional cooperation enhancement for climate change adaptation policy and action harmonization and coordination among South Caucasus countries"; and "Encouraging regional cooperation to enhance South Caucasus countries' climate change adaptation research initiatives".

3.2.5- This indicator is about the role of Ilia State University in maintaining the SNC-mt Online Platform. The Platform is rich in resources and the target is met.

Output 3.3

Output 3.3 Enhanced processes and tools for Caucasus data, information, and knowledge collection, analysis and dissemination to facilitate the science-policy interface and evidence-based regional research	**Indicator 3.3.1:** The Caucasus Spatial Data Infrastructure (SDI) is continuously updated **Baseline:** 1 GeoNode with 98 layers and 13 maps **Target:** 1 GeoNode with at least 30% increase in number of maps **Indicator 3.3.2:** Capacities of the South Caucasus countries are regularly enhanced for national and regional Spatial Data Infrastructure development **Baseline:** 2 regional capacity building events on SDI development and coordination (GE) **Target:** 6 regional capacity building events on SDI development and coordination (GE); 4 national capacity building events on SDI development (AZ; AM) **Indicator 3.3.3:** The Second Caucasus Environment Outlook (CEO), a key tool with the most up-to-date knowledge and information about the region, gets updated and published **Baseline:** 1 CEO published in 2002 **Target:** 2 CEOs	- Data sets available under the Caucasus Spatial Data Infrastructure - Caucasus GeoNode - Reports from the regional and national capacity building and promotional events - CEO's hard copies and electronic versions - Media coverage	- Partners are willing and resourced to cooperate and share information within and after the project ends

This output is on track to be met. There are some delays in the production of the Second Caucasus Environment Outlook as well as outstanding maps.

3.3.1- Currently, there are 118 maps, compared to 13 at the beginning of project.

3.3.2 – This was coordinated by GRID-Geneva, with 2 capacity building workshops in Armenia and Azerbaijan, respectively, and a joint workshop held with GEO- Mountains during CMF3, addressing the in-situ data for mountain regions topic. During this session, the work done for SDI during the SCAC project was explained and promoted. This falls short of the target and the reasons are not explained.

3.3.3 – The publication is delayed to early 2024.

Annex 4- Complete list of stakeholders and others consulted and interviewed

Swiss Cooperation Office South Caucasus	
Tamar Tsivtsivadze, Head of Program in Georgia	tsivtsivadze@eda.admin.ch
Tamar Khurtsilava, National Program Officer, Tbilisi, Georgia	tamar.khurtsilava@eda.admin.ch
Zahir Ahmadov, National Program Officer, Baku, Azerbaijan	zahir.ahmadov@eda.admin.ch
Werner Thut, Head of Program in Armenia	werner.thut@eda.admin.ch
Danielyan Hamazasp, National Program Officer, Yerevan, Armenia	hamazasp.danielyan@eda.admin.ch
Marco Hunziker, intern, Yerevan, Armenia	marco.hunziker@eda.admin.ch
University of Geneva	
Joerg Balsiger, Associate Professor at the Department of Geography and Environment	joerg.balsiger@unige.ch
Anna Scolobig, Senior research associate	Anna.Scolobig@unige.ch
UN Environment Programme	
Matthias Jurek, Programme Management Officer	Matthias.jurek@un.org
Ansgar Fellendorf, Climate Change and Mountain Specialist	Ansgar.fellendorf@un.org
Tamara Mitrofanenko, consultant	tamara.mitrofanenko@boku.ac.at
UNDP	
Salome Lomadze, Project Manager. Strengthening the Climate Adaptation Capacities in Georgia	
Tornike Phulariani, GCF (component of education and capacity)	
Ketevan Skhireli, Project Manager	
Caucasus Network for Sustainable Development of Mountain Region (Sustainable Caucasus)	
Nina Shatberashvili, Executive Director	nshatberashvili@sd-caucasus.com
Armen Gevorgyan, Country Representative, Armenia	armen_gevorgyan@mail.ru
Fuad Bagirov, Country Representative, Azerbaijan	fuad.bagir@gmail.com
Georgia	
Zurab Javakhishvili, Professor, Institute of Earth Sciences, Ilia State University	zurab_javakhishvili@iliauni.edu.ge
Salome Gogoladze, PhD student	
Giorgi Merebashvili, PhD student	
Zurab Baratashvili, master's student	
Ia Iakobashvili, master's student	
Linda Nakashidze, bachelor, and CSS student	
Tekla Gurgenidze, bachelor, and CSS student	
Ioseb Qinqladze, NEA	
Armenia	
Marine Matosyan, lecturer, Armenian State Pedagogical University (ASPU) (also new SC candidate rep. in Armenia)	marinematosyan@mail.ru
Ashot Sargsyan, DRM National Expert, and member of NIG	ssashot@gmail.com
Gor Aleksanyan, Associate Professor Office Head/Vice-Dean of Faculty of Geography and Geology of YSU	goraleksanyan@ysu.am
Tigran Yengibaryan, former master's student at ASPU	tigran.yengibaryan@gmail.com
Gorik Avetisyan, former CSS student	avetisyaNGOrik@gmail.com
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Azerbaijan	

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Tamar Pataridze, Regional Conservation Director	tpataridze@caucasus-naturefund.org
WWF	
Maka Bitsadze, Conservation Director	mbitsadze@wwf.int
Transcaucasian Trail	
Meagan Neil, Director	
CENN	
Vakho Chitiasvhili	
Rso Getiashvili	
REC	
Sophiko Akhobadze	

Annex 5- Additional Questions asked to some interviewees

Questions to National Coordinators on Coaching Programme and DRM and hazard mapping Module:

Teacher Coaching Programme for Teachers (inc. PhD Students)
Workshops on Coaching Programme:
Except one Regional workshop for Teacher Coaching Programme held on 31st August 2021 (https://drm-hehub.iliauni.edu.ge/products/teacher-coaching-programme/), were there other Regional or National workshops held? (if yes, please provide information on the number of regional and national workshops and dates)
How many coaches were involved in the workshop(s)?
Which universities participated in the workshop(s) from each country?
How many teachers participated in the workshop(s) from each country?

Coaching Programme (besides the Regional and National Workshops):
Do the participants get certificated after completion of Coaching Programme?
Is the Teacher Coaching Programme mandatory for Teachers (inc. PhD students) to teach the course on DRM and Hazard Mapping?
How many teachers completed the Coaching Programme?

CSSs:
Summer school in 2021 - "Natural Hazards in the Mountains: Mapping and Risk Assessment" (Some Info here: https://drm-hehub.iliauni.edu.ge/products/caucasus-summer-school-2021/):
Where was it organized?- **Online**
How many lecturers participated in the summer school? – **11?**
From which countries?- **?**
How many students participated in the summer school? (how many Master and PhD students from each country). – **15???**
From which courtiers?- **??**
Was the certificate awarded to the participant students? – **Yes?**
Feedback/evaluation of the course by students (general a) positive and b) negative pints)-

Other Summer schools:
Where organized?
How many lecturers participated in the summer school?
From which countries?
How many students participated in the summer school?
From which courtiers?
Was the certificate awarded to the participant students?
Feedback/evaluation of the course by students (general a) positive and b) negative pints)

Questions for Universities/lecturers:

Is the DRM and hazard mapping Module taught at your university?
Is it a separate module or integrated in another module?
Is it a mandatory or compulsory course?
For which students (bachelors, masters, PhD) is this course?
How many courses of this module were thought? (separately for bachelors, masters, PhD; since when?)

How many students were involved in this course (in-class teaching)? (separately for bachelors, masters, PhD)
Are instruments (e.g., toolbox to improve the teaching practices) for regular in-class improvement available on National language?
Please provide the syllabus of the course.
Is there any evaluation for the a) teachers coaching programme and b) DRM and hazard mapping programme?
Feedback/evaluation of the course by students (general a) positive and b) negative pints)
Was this course taken by other students except your university? (As it is a distance-learning module).
Will the course continue to be thought? Any plans to introduce it to the Bachelors?

Questions for Students (both Uni and Summer school):
Are you as Master or PhD student? or summer school student?
When did you take the DRM and hazard mapping Module?
Where?
How/from whom did you hear about this course?
Was the course as a separate subject or part of one of the subjects?
Did you take the in-calls course or as a distance learning course?
How many students were in this course?
Was the course in English or your national language?
Were the course materials available in your national language?
Did you use distance-learning course available at https://drm-hehub.iliauni.edu.ge/products/distance-learning-modules/ ?
Was survey/feedback conducted after completion of the course?
How would you assess the course? Your feedback?