Evaluation of the Himalayan University Consortium (HUC)

VERSION NOTE

This document is the third and final Version of the HUC Evaluation Report. It incorporates feedback received from ICIMOD and HUC on 16 January 2024 and subsequent feedback from ICIMOD received on 23 February 2024.

Prepared for // ICIMOD.

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IOD PARC also extends its gratitude to ICIMOD and HUC senior management including the members of the Steering Committee, Thematic Working Groups as well as HUC fellows, grantees and beneficiaries for their participation and contribution to the online survey and key informant interviews. Their willingness to engage in candid discussions, provide valuable data and information, and offer constructive feedback has been instrumental in ensuring the rigor and integrity of our evaluation.

IOD PARC hopes that the evaluation findings and recommendations will provide ICIMOD and HUC with useful insights on the governance, management, and future sustainability of the network.

The evaluation of the HUC was led by Mandakini D. Surie, Consulting Partner with IOD PARC with Team Lead of Dr. Ram Bastakoti, research support from Pragya Pokharel and quality assurance from Dr. Roeland Hemsteede.

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Acronyms and Abbreviations

AAERE	Asian Association of Environmental and Resource Economics
EQ	Evaluation Question
HEI	Higher Education Institutions
HIMAP	Hindu Kush Himalayan Monitoring and Assessment Programme
HKH	Hindu Kush Himalaya
HUC	Himalayan University Consortium
ICIMOD	International Centre for Integrated Mountain Development
KII	Key Informant Interview
MKAN	Mountain Knowledge and Action Networks
MTAP	Medium-Term Action Plan
NAO	Network Administrative Organisation
QQR	Quinquennial Review
RMC	Regional Member Countries
SAARC	South Asian Association for Regional Cooperation
SANDEE	South Asian Network for Development and Environmental Economics
SDC	Swiss Agency for Development and Cooperation
SMD	Sustainable Mountain Development
SPMEL	Strategic Planning, Monitoring, Evaluation and Learning
ToC	Theory of Change
ToR	Terms of Reference
TWG	Thematic Working Group
UoA	University of Arctic
VfM	Value for Money

Executive Summary

Evaluation Purpose

In September 2023, following a competitive bidding process, ICIMOD commissioned IOD PARC to conduct an independent evaluation of the Himalayan University Consortium (HUC). IOD PARC's evaluation was guided by the Terms of Reference (ToR) developed by ICIMOD and covered the period between Medium Term Action Plans (MTAP) III and IV (2013 – 2022). The evaluation of the HUC was designed in line with the ToR and assessed the relevance, relevance, effectiveness, efficiency, coherence, impact, sustainability of the network, and lessons learned from other networks. The purpose and main objective of the evaluation is to provide insights to ICIMOD on how it can better manage the HUC and optimize its contributions to ICIMOD's Strategy 2030 and MTAP V (2023-2026). Its specific objectives are to:

- Assess the tangible contributions of SANDEE and HUC as envisaged in their charters to ICIMOD's mission and objectives as the organization that finances both the networks.
- Take a comprehensive stock of tangible learnings from SANDEE and HUC in the period in which they have been supported by ICIMOD.
- Evaluate the present structure of both networks in terms of their delivery mechanisms and assess the value for money in terms of managing and delivering results within their given mandates. And provide viable recommendations on how SANDEE and HUC can be better managed and organized to support their contributions to Hindu Kush Himalaya (HKH) region and ICIMOD mandate and result targets.
- Review the recommendations of previous evaluations and see to what degree they have been implemented and/or remain relevant.

Intended Audience

This report has been written for the consideration of and review by ICIMOD Senior Management, ICIMOD Board, ICIMOD Support Group and the HUC Steering Committee.

Methodology

The HUC evaluation was conducted between September – December 2023. Data was gathered utilizing a mix of qualitative and quantitative research methods including a document and literature review, online surveys with HUC management and alumni, key informant interviews and case studies. All interviews were conducted remotely using virtual tools.

Management of the evaluation

The evaluation of the HUC was led by Mandakini Surie under the team leadership of Dr. Ram Bastakoti and with the research support of Pragya Pokharel and quality assurance of Dr. Roeland Hemsteede. As team members were based in Nepal, India and the Netherlands, weekly meetings were conducted to ensure regular communication and tracking of progress. Regular check in meetings with ICIMOD SPMEL team ensured smooth communication between the team and ICIMOD particularly in terms of progress of the evaluation.

Key Findings

As a regional intergovernmental learning and knowledge centre serving the eight countries of the Hindu Kush Himalaya (HKH) region, ICIMOD's objective in supporting and funding network initiatives such as the HUC and SANDEE stems from a commitment to fostering regional institutional collaboration, knowledge transfer, capacity building on mountain-specific issues, and to build greater awareness about the unique challenges that the HKH region faces. Through its support to HUC, ICIMOD specifically aims to build the capacities of universities and academic institutions in the HKH to focus on mountain-specific issues through the development of new curricula, research tools, human resources, and to equip institutions and individuals with the skills and knowledge to address critical challenges and issues facing the HKH region.

Overall, the evaluation finds that there is evidence to support contributions by HUC to ICIMOD's strategic results under MTAP III and MTAP IV. These contributions specifically relate to (i) the creation of a network of 100 universities in the HKH region and beyond on mountain-related issues; (ii) the capacity building of young scholars and academic professionals on mountain-specific issues and challenges; and (iii) fostering joint research and collaboration between individuals and academic institutions in the HKH region and beyond on thematic issues that are directly relevant to ICIMOD's strategic areas of focus. However, while HUC has made contributions to ICIMOD's high-level strategic goals and to the results frameworks under MTAP III and IV, it has not been able to achieve all its results targets.

The evaluation furthermore finds that there is substantive room for improving the reporting of HUC activities and results both in terms of quality and completeness. Going forward, to better assess HUC's contributions at both the initiative and strategic levels, it is recommended that ICIMOD and HUC enhance monitoring and reporting of results. Moreover, at a corporate level, there is an urgent need to clarify the institutional relationship between ICIMOD and HUC, including a delineation of roles and responsibilities, and establishment of clear accountability mechanisms for organizational and financial management, communication, and monitoring and reporting of activities. Finally, to improve the effectiveness and ensure the sustainability of HUC, the consortium as a priority must address and resolve institutional issues related to its registration/legal status, its governance and membership structure, and financial sustainability. More specifically, below we set out the key findings according to each evaluation criteria.

Relevance: There is strong alignment between the HUC, its charter and activities with ICIMOD's mandate, Strategy 2030 and MTAP V (2023-2026). This alignment is most evident in HUC's support to (i) facilitating regional collaboration between universities and academics, (ii) knowledge exchange and joint research amongst academics and experts on issues related to sustainable mountain development and (iii) capacity building and training of the next generation of researchers and practitioners. Across the two MTAP periods, the evaluation finds that HUC has made relevant contributions towards ICIMOD's broader strategic goals and has achieved some of its planned targets. However, the full extent of these contributions has not been captured due to a lack of sufficiently detailed or accurate reporting against indicators across the two MTAP periods. This makes it challenging to comprehensively assess the extent of HUC's contributions to ICIMOD, particularly at the outcome level. HUC clearly offers ICIMOD a platform for amplifying its research and knowledge outputs but to fully realize this potential, ICIMOD and HUC need to work together to more effectively report on results. Further, ICIMOD must consider developing a more a more explicit strategy for leveraging HUC's network more effectively under MTAP V.

Effectiveness: The HUC's core activities including training and capacity building, networking, and research collaboration, align well with HUC's and ICIMOD's core mandates. Since it was established in 2007, the HUC has been effective in growing a large regional and transboundary network of nearly 100 universities in the HKH region and beyond, that is specifically focused on sustainable mountain development issues and has developed a network of over 200 fellows that it has imparted with skills on issues related to sustainable mountain development. At the same time, HUC's effectiveness has been affected by factors related to its governance, membership, and funding. To enhance its effectiveness, HUC needs to develop a clear and structured plan of what outcomes and results it will achieve during MTAP V and set in place a mechanism by which these outcomes can be captured from member activities. To improve communication with its members, ICIMOD, and a broader community of stakeholders, HUC should revive its newsletter to its membership.

Efficiency: ICIMOD's core funding has been instrumental in supporting the HUC both in terms of its activities but also in meeting the operational costs of the Secretariat. Between 2014 and 2022, ICIMOD has cumulatively contributed from its core and programmatic funding an estimated USD 3,612,166 to HUC. While HUC has been able to raise approximately $ 2.5 million USD in additional resources (including donor funding and cash/in-kind contributions from its members), it remains reliant on ICIMOD for its core resources. In the last few years, the HUC has seen a decline in its overall operating budget (nearly 65 per cent reduction in core budget between 2019-2020 and current funding levels are still well below the 2017-2019 average). However, the lack of sufficient financial documentation and clarity around how core ICIMOD resources have been utilized make it difficult to quantify how efficient HUC has been in delivering Value for Money. To improve efficiency and VfM, (i) stronger linkages are needed between ICIMOD and HUC so that ICIMOD can draw on the expertise of HUC's membership to support its work; (ii) HUC needs to put in place a system that captures the in-kind and cash contributions made by members to the consortium and its activities, and (iii) it is critical that HUC review how the different governance bodies within the consortium i.e. the General Assembly, Steering Committee and Secretariat to ensure they are delivering against their respective mandates; and devise a sustainability and resource mobilization strategy endorsed by its members.

Coherence: There is clear synergy and alignment between the vision, mission, and objectives of HUC and ICIMOD, but at an operational level there are clear issues around organisational and performance management between HUC and ICIMOD including a lack of clarity around roles, responsibilities, communication, reporting, and accountability. HUC is a member driven network and its Charter requires it to operate in service of its membership. This is an essential aspect of HUC as an independent network but creates accountability problems for ICIMOD. As a member of the HUC and the institutional host of the Secretariat, ICIMOD has valid expectations around the reporting of activities and utilization of its resources. At a corporate level, there is an urgent need to clarify key aspects of the network relationship between ICIMOD as the host of the Secretariat of the HUC in terms of day-to-day organisational and financial management, communication, and monitoring and reporting of activities. This recommendation is of the highest priority for ICIMOD and HUC and all other recommendations flow from this.

Impact: The HUC is widely acknowledged by its members and program alumni for its strengths in establishing a robust network of universities within the region; focusing attention

on sustainable mountain development issues, facilitating people-to-people connections among individuals, and significantly contributing to the training and capacity building of young academics and researchers on issues related to sustainable mountain development. In that sense, HUC has had a positive impact within the HKH region in line with both HUC's and ICIMOD's mandate. At a global level, HUC's impact is less clear. However, the extent of HUC's impact is not presently being captured and reported on sufficiently. It is imperative for the HUC to enhance its efforts in effectively capturing the impact of its initiatives, events, and programs. This will reinforce the value proposition to its members, ICIMOD, and other stakeholders.

Sustainability: The sustainability of the HUC has been a concern for both ICIMOD and the consortium since the HUC became formally hosted at ICIMOD. Despite growing its membership and contributions (in-kind/cash), HUC relies on ICIMOD for funding its activities. The sole reliance of HUC on ICIMOD funding makes it financially vulnerable. In June 2023, HUC formed a Task Force on Sustainability task force to explore strategies, membership fees, resource mobilization, and potential hosting alternatives for the Secretariat between 2025-2030, but this task force has not yet delivered its findings. It is important for ICIMOD to consider that any sudden withdrawal of funding from HUC would have a very adverse impact on the HUC network and carries reputational risks for ICIMOD. At a corporate level, ICIMOD's senior management should evaluate the feasibility of continuing core financial support (at a minimum) for two years so that it covers the MTAP V period. The evaluation recommends that HUC meanwhile expedites the work under its financial sustainability task force. The task force represents a crucial opportunity for ICIMOD, the HUC Steering Committee, and the Secretariat to discuss the future trajectory of the HUC.

Lessons Learnt: Key lessons from the literature review on the functioning of consortia as well as other networks reviewed underscore the critical importance for consortia such as the HUC to have clearly defined (i) legal and institutional status, (ii) governance and accountability structures, and (iii) membership structure. KIIs and survey responses further illustrate the need for (i) an adequately resourced Secretariat; (ii) a well-defined governance and organisational structure within the consortium including clarity around expected roles, responsibilities and contributions to the network; (iii) clear lines of communication, reporting, and accountability within the consortium as well as with its host institution; (iv) a clear implementation plan with annual goals, milestones and targets that is reviewed by consortium members on annual basis; (vi) regular performance reviews and evaluations that assess the progress of the consortium in meeting its overall goal and mission; and (iv) most importantly an organisational and membership model that enables the consortium to be sustainable. The evaluation recommends that HUC as a priority addresses issues related to HUC's legal/registration status, governance and membership structure, and financial sustainability. Additionally, to improve organizational management, the HUC should work towards developing an annual work plan with clearly defined targets and milestones; improve communication and reporting channels with consortium members and with ICIMOD. By addressing these issues amongst consortium members as a part of its Sustainability Task Force, HUC can enhance its governance structures, resource allocation, and operational effectiveness, ultimately contributing to its sustainability and ability to fulfill its mission in the HKH region.

Recommendations

Recommendations are directed at ICIMOD as the commissioners of this evaluation and where appropriate to the HUC. The recommendations are structured and prioritised in line with the evaluation criteria. However, **Recommendation 6 (Coherence)** on clarifying the relations and expectations between ICIMOD and HUC has the highest priority as none of the other

recommendations, e.g., around clarifying results, can be implemented until these relations and expectations are formalised and clarified.

EQ Criteria	Finding	Recommendation	Priority	Addressed to
Relevance	While HUC's activities clearly make a relevant contribution to ICIMOD, its results are not adequately captured and reported, particularly at outcome level.	**1.** ICIMOD and HUC collaboratively formulate a results framework specifically for HUC under MTAP V, ensuring that outcomes, outputs, and output targets are clearly defined, including clear milestones to track and record expected contributions.	High	ICIMOD and HUC
Effectiveness	HUC has not had a General Assembly since 2018 and it is unclear to what extent its governing bodies carry out their mandated tasks successfully. Moreover, a substantial part of its network does not appear to actively engage	**2.** The HUC Secretariat and Steering Committee as a priority review how the different governance bodies within the HUC i.e., the General Assembly, Standing Committee and Secretariat are delivering against their respective mandates and develop a network strategy to revitalize the membership including the HUC General Assembly.	High	HUC
	HUC's communication with its members is sub-optimal and it is not being used to create linkages between ICIMOD and HUC's network and alumni, which is a	**3.** To improve communication with its members, ICIMOD, and a broader community of stakeholders, HUC should revive its newsletter to its membership. This can be a mechanism through which ICIMOD	Medium	HUC

	missed opportunity.	can disseminate its research, publications, showcase projects and put in calls for expertise from the network.		
Efficiency	ICIMOD is not fully utilising HUC to either draw in expertise for its own work, or to disseminate its knowledge, which means it is not efficiently using the resource HUC offers.	**4.** ICIMOD devise an internal strategy on how to more actively draw on HUC member expertise and utilize the network to disseminate ICIMOD knowledge, research, and policy outputs.	High	ICIMOD
	There is currently insufficient sight on what members contribute to HUC, nor is there a clear strategy for resource mobilisation that could help HUC become less dependent on ICIMOD.	**5.** HUC should develop a mechanism through which members can report on the value of contributions cash or in-kind to consortium activities and devise a sustainability and resource mobilization strategy endorsed by members.	High	HUC

Coherence	While HUC is an autonomous network, ICIMOD rightly expects certain results and information given that it provides significant funding to HUC. However, at present, this relationship and the associated expectations are unclear.	**6.** ICIMOD and HUC should urgently clarify roles, responsibilities, and expectations vis-a-vis communication, reporting, and other organisational and management aspects (including financing) in line with their respective mandates. This is the highest priority recommendation and all other recommendations, e.g., around clarifying results and developing a work plan etc, cannot be implemented unless roles and expectations are formalised and clarified.	Highest Priority	ICIMOD and HUC
	HUC and SANDEE have complementarity, but currently do not closely work together, which is something ICIMOD could facilitate to improve coherence between these networks	**7.** ICIMOD should work with HUC and SANDEE to identify where their workplans overlap with each other and MTAP V and ICIMOD's Strategy 2030 in order to explore joint activities.	Medium	ICIMOD, HUC, SANDEE
Impact	HUC has an impact, especially at the regional level in terms of facilitating knowledge creation and exchange and building a university network, but its impact at a	**8.** HUC undertake a detailed and comprehensive impact study that assesses the contributions of its activities towards achieving its core goals and objectives, particularly at outcome level.	Medium	HUC
		9. HUC develop a results and impact monitoring strategy alongside a	High	HUC

	global level less clear	communication plan to more effectively capture the impact it generates.		
	At present the HUC's engagement with its alumni is not very systematic and is largely based on emails going out from the Secretariat about upcoming events, workshops, etc. A strong alumni network could enhance collaboration and impact.	**10.** HUC create a more formal alumni network to better connect, strengthen, and leverage its network of nearly 200 alumni in the HKH region.	High	HUC
Sustainability	The governance arrangements between ICIMOD and HUC whereby ICIMOD is only a member of the HUC Steering Committee but cannot direct its activities strongly creates tension between ICIMOD and HUC.	**11.** ICIMOD and HUC review and revise the governance structure for HUC in line with EQ 10/recommendation 6 under coherence.	High	ICIMOD/HUC
	HUC is at present too dependent on ICIMOD to provide core funding, which is a serious sustainability risk.	**12.** HUC expedite the work under its financial sustainability task force.	High	HUC
Lessons Learnt	Insights from other reviewed networks point to the importance of a clearly defined legal status, alongside other aspects including the ability to raise resources from the network's membership.	**13.** HUC's Sustainability Task Force consider and address issues within the consortium related to its registration and legal status, governance, organisational and membership structure of the network.	High	HUC

1. Background

1.1 Purpose and overview of the Evaluation

The International Centre for Integrated Mountain Development (ICIMOD) is a regional intergovernmental learning and knowledge centre serving the eight countries of the Hindu Kush Himalaya (HKH) region – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. In addition to generating new mountain focused research and knowledge from within the HKH region and identifying pathways for policy influence, a key focus for ICIMOD is supporting skills and capability development across the region, with a particular focus on facilitating knowledge transfer, promoting mutual learning, and facilitating interactions between scientists, researchers, experts, and practitioners between Regional Member Countries (RMCs) and with countries outside the region. Beyond skills, training, and capacity development, ICIMOD has also focused its efforts on integrating mountain development and environmental issues into university curricula.

To achieve these objectives, ICIMOD for several years has supported two regional networks: the South Asian Network for Development and Environmental Economics (SANDEE) and the Himalayan University Consortium (HUC). While these networks are driven by different mandates, they broadly support knowledge generation, capacity and skills development, evidence-based policy support, and exchange of expertise on key environmental and socio-economic development issues in the HKH region.

In September 2023, following a competitive bidding process, ICIMOD commissioned IOD PARC to conduct an independent evaluation of both SANDEE and HUC. The evaluation was guided by the Terms of Reference (ToR) developed by ICIMOD and focused on assessing the relevance, relevance, effectiveness, efficiency, coherence, impact, sustainability of SANDEE and HUC and lessons learned from networks similar to them. The evaluation seeks to help ICIMOD better manage both networks and optimize their contribution to ICIMOD's Strategy 2030 and Medium-Term Action Plan V (MTAP V) (2023-2026).

More specifically, the objectives of the evaluation were to:

1. Assess the tangible contributions of SANDEE and HUC as envisaged in their charters to ICIMOD's mission and objectives as the organization that finances both the networks.

2. Take a comprehensive stock of tangible learnings from SANDEE and HUC in the period in which they have been supported by ICIMOD.

3. Evaluate the present structure of both networks in terms of their delivery mechanisms and assess the value for money in terms of managing and delivering results within their given mandates. And provide viable recommendations on how SANDEE and HUC can be better managed and organized to support their contributions to HKH region and ICIMOD mandate and result targets.

4. Review the recommendations of previous evaluations (for example, SANDEE Evaluation 2010, ICIMOD Quinquennial Review (QQR) 2021, and Gender Audits) and see to what degree they have been implemented and/or remain relevant.

At the request of ICIMOD and in line with the ToR, IOD PARC has prepared two separate evaluation reports for SANDEE and HUC. **This report presents the findings and recommendations for the evaluation of HUC. It has been written for the consideration and review by ICIMOD Senior Management, ICIMOD Board, ICIMOD Support Group and the HUC Steering Committee.**

IOD PARC hopes that the evaluation findings and recommendations will provide ICIMOD and HUC with useful insights on the governance, management, and future sustainability of the network as ICIMOD embarks on its Strategy 2030 and implementation of MTAP V (2023-2026).

1.2 Scope of the Evaluation

The evaluation covered the period between MTAP III and MTAP IV (2013 – 2022) and was conducted virtually. The evaluation of the HUC was led by Mandakini D. Surie, Consulting Partner with IOD PARC under the team leadership of Dr. Ram Bastakoti with research support from Pragya Pokharel and quality assurance from Dr. Roeland Hemsteede. The evaluation commenced in mid-September 2023 and the draft evaluation report is submitted to ICIMOD on 21 December 2023. Based on feedback received from ICIMOD, a second revised report was submitted to ICIMOD on 31 January 2024. IOD PARC subsequently received additional feedback from ICIMOD on the report via email on 23 February 2024. This third and final version of the report incorporates the additional received feedback from ICIMOD.

1.3 Limitations

Virtual evaluation: As defined in the ToR, the HUC evaluation was conducted entirely virtually. During the inception phase, ICIMOD and IOD PARC had agreed that where possible the evaluation team would conduct in-person interviews in Kathmandu and New Delhi. While some interviews were conducted in Kathmandu with ICIMOD senior management by team members based there, the bulk of interviews with HUC Secretariat, Steering Committee as well as HUC beneficiaries were conducted virtually due to time constraints and the fact that KII respondents were geographically dispersed across the HKH region with very few based in Delhi or Kathmandu.

Availability and access to documents: The evaluation team was in regular contact with ICMOD SPMEL and the HUC Secretariat to get access to key documents pertaining to both ICIMOD and the HUC. While the evaluation team was able to get access to annual reports and progress reports from ICIMOD, there was very little documentation or reporting available for review on the activities and financial expenditure of the HUC over the two MTAP periods. The list of documents provided and reviewed by the evaluation for the HUC evaluation are listed in Annex 1.

Timely access to key informants: The willingness and ability of key informants to participate is crucial for any evaluation. The evaluation team mitgated this risk by working with ICIMOD

and HUC to ensure that informants were aware that the evaluation was being conducted upon request from ICIMOD and by setting out in advance their required time/effort. The team acknowledges the efforts of ICIMOD and the HUC to inform relevant stakeholders about the evaluation and their efforts to encourage their participation in the evaluation. However, despite these efforts getting interviews with key informants both from those engaged in HUC management and HUC alumni took longer than anticipated. The evaluation period coincided with a series of major festivals including Dusshera/Dashain and Diwali/Tihar. The team was maximally flexible when it came to scheduling KIIs.

Low response rates to the HUC management and HUC alumni surveys: As a part of the evaluation, the team conducted two surveys – with HUC management and HUC alumni. During the inception phase, ICIMOD and IOD PARC had discussed the possibility of a limited response to the HUC alumni and HUC management surveys. To mitigate this risk, the evaluation team gave respondents two weeks to complete the survey and sent two reminders for their completion.[1] Despite these reminders and extending the deadline for submission of inputs, the team received a total of 44 responses to the HUC management survey (the survey was sent to 146 respondents – 30%) and 115 responses to the HUC alumni survey (the survey was sent to over 356 respondents – 32%). Due to the response rate of the survey, the evaluation team internally agreed to include all responses within the analysis as opposed to a select sample as originally proposed during the inception phase.

Value for Money (VfM) Analysis: While discussing the draft inception report with ICIMOD's SPMEL Team it was agreed that the VfM analysis will focus on the resource efficiency perspective of each network. The VfM analysis in the evaluation draws on the financial information shared by ICIMOD and gleaned from annual reports and progress reports. While the team understands that in-kind and cash contributions were made by universities to the HUC consortium in the past, the team was not provided with any documentation to support this by either ICIMOD or HUC. Limited financial and outcome level data have reduced the ability to conduct VfM analysis.

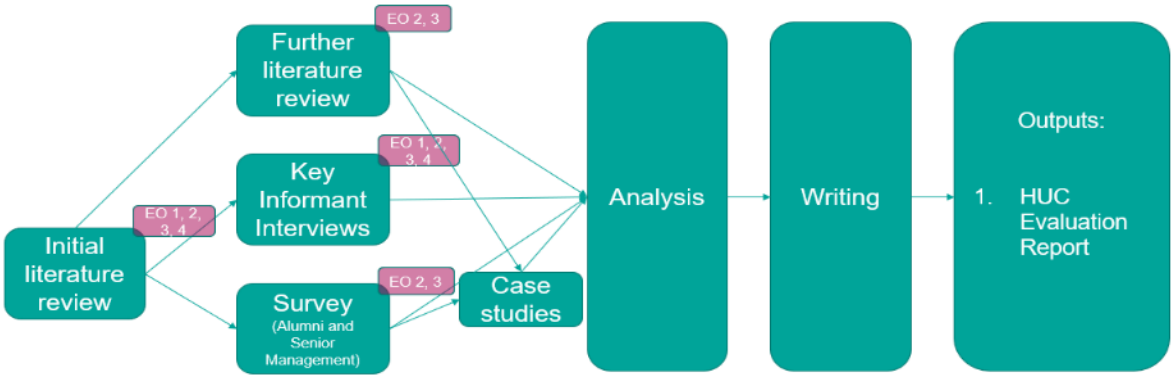
2. Evaluation approach

The methodological approach for the evaluation was utilisation-focused, and therefore continuous engagement with ICIMOD took place which led to revisions of the proposed data collection methods, taking on board suggestions for stakeholders to engage with, and presenting preliminary findings in order to make adjustments based on further data collection and analysis. Case studies were used to add further detail on the findings.

The evaluation was designed around the evaluation criteria and evaluation objectives. It draws on qualitative and quantitative data collected through 1) key informant interviews, 2) an online survey, and 3) case studies, supplemented by a literature and document review. Figure 1 summarizes the overall evaluation approach. It should be noted here that since the evaluation focuses on two networks SANDEE and HUC, the evaluation of each network was conducted separately but in parallel. The same methodology described below was used for both evaluations.

[1] The surveys were sent out on 20th November with a deadline of 30th November subsequently extended till 3rd December. Two reminders were sent by IOD PARC on 25th November and 30th November.

Figure 1: Overall evaluation approach



2.1 Data collection

A combination of qualitative and quantitative research methods was used to collect data and information to address the four evaluation objectives as summarised in Table 1.

Table 1. Overview of data collection

Data Collection Method	No. of Respondents	Gender Disaggregated Data
Literature and document review	N/A	N/A
KIIs	18	9 Male/9 Female
Case Study	4	1 Male/3 Female
Survey	44 Senior Management (sent to 146 respondents)	31 Male/13 Female
	115 Alumni (sent to 356 respondents)	76 male/37 female

Literature and document view: The evaluation commenced with a review of both *internal* and *external* documents relevant to the HUC. At the outset, the literature review covered relevant *internal* documentation from ICIMOD and HUC, including their mandates, strategies, annual progress reports and any other relevant documentation (see Annex 1 for list of Documents reviewed). Note that the IOD PARC team relied on ICIMOD and HUC to provide documentation in a timely manner. In addition, to the *internal* document review, the team also conducted an *external* literature review on the mandate and functioning of academic/research networks and university consortia to gain and understanding of governance structures and mechanisms and the role of boards and steering committees in ensuring the effective functioning of such networks. Finally, the literature review also reviewed documentation on two research networks identified during the inception phase as comparators for the HUC – the

University of the Arctic (UArtic) and the Asian Association of Environmental and Resource Economics (AAERE).

Key Informant Interviews: KIIs were conducted to gather information addressing all four evaluation objectives. KIIs were used to triangulate the findings from literature review and provide qualitative answers to the associated research questions. A total of 18 KIIs were conducted including ICIMOD senior management, HUC Steering Committee, Secretariat as well as beneficiaries/alumni of HUC (9 male and 9 female respondents). KII respondents were selected in a way to ensure both gender and geographic diversity (in terms of covering HKH countries as well as the diversity of the membership (associate members and full members) (see Annex 2).

Based on discussions with the ICIMOD SPMEL Unit, the evaluation team divided KIIs into three categories to represent upstream management (ICIMOD senior management and HUC Steering Committee), mid-stream management (HUC Secretariat) and downstream beneficiaries (HUC beneficiaries). Table 2 summarizes the number of KIIs for each of the stakeholder groups. The KII's were conducted remotely over Zoom. Separate interview guides were developed for upstream/midstream management and downstream beneficiaries (see Annex 3).

Table 2. Stakeholders for key informant interviews

Stakeholder groups	Stakeholders	No. of KIIs
Upstream Management	ICIMOD Management Team	6
	HUC Steering Committee	4
Midstream Management	HUC Secretariat	1
Downstream Beneficiaries	HUC beneficiaries/alumni	7
Total		18

Structured surveys: Two separate surveys were developed for the HUC (see Annex 4). The first survey was developed for HUC management and included HUC Steering Committee Members, Members, Associate Members as well as Thematic Working Group leads and co-leads. The second survey was developed for HUC alumni including fellows and grantees of HUC training and capacity building programs. The surveys sought to elicit a wide range of perspectives from respondents on the evaluation questions particularly as they relate to the relevance, effectiveness, and efficiency of the networks as well as capture reflections on areas for improvement, lessons learned and sustainability.

Case studies: In addition to the KIIs, the team also conducted a few in-depth interviews with 4 HUC beneficiaries to determine how the HUC has impacted them in their careers.

2.2 Data Analysis

All qualitative data were analysed using MAXQDA, a software tool to support the analysis of qualitative data. Data was coded against an analysis framework centred around the Evaluation Criteria (Relevance, Effectiveness, Efficiency, Coherence, Impact, Sustainability and Lessons Learnt) and the underlying evaluation questions. By coding qualitative data against this framework, it became possible to bring together different data sources (documents, interview notes, survey qualitative responses etc.) and to ensure findings are robustly grounded in

evidence rather than anecdotal evidence. Quantitative evidence from the surveys was analysed using Excel and inbuilt tools within Survey Monkey.

3. Context

Geopolitically, South Asia remains one of the least integrated regions in the world with people-to-people movement, trade, transit, and economic integration severely constrained due to a long history and legacy of political tensions and fraught relations between neighbouring countries.[2] Despite the existence of regional entities such as the South Asian Association for Regional Cooperation (SAARC) and sub-regional cooperation initiatives such as Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation and the Bangladesh Bhutan India and Nepal initiative, collaboration to address South Asia's many shared challenges remains constrained by several factors. These include amongst others a lack of adequate institutional frameworks and weak legal mechanisms to enable cooperation. The absence of comprehensive agreements and the lack of adherence to existing treaties hinder effective cooperation, especially on transboundary issues such as water sharing, trade, transit, and people-to-people movement. Additionally, asymmetrical power dynamics, historical mistrust, and political rivalries among South Asian nations create obstacles in forging collaborative solutions.

Against this background, research and knowledge networks can play a pivotal role in promoting economic growth, development and fostering regional cooperation in South Asia.[3] Notably one of the common objectives outlined in the SAARC Charter includes a commitment of all member countries "to promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields".[4] In theory, and specifically in this context, the transfer of knowledge, research, and collaborative networks can provide a platform for countries in the region to pool their knowledge, resources, and expertise; promote trust and mutual understanding; contribute and support capacity building by providing opportunities to researchers, academics, policymakers, and local communities to work together; and finally they enable a deeper understanding of the complex issues facing the region, such as climate change, water, and other natural resource management, sustainable mountain development, and disaster risk reduction. Importantly, in a region fraught by geopolitical tensions, research and scientific networks that bridge national boundaries, can focus attention on the science and evidence to facilitate and galvanize political action. However, despite these notable benefits, regional and transboundary collaboration remains far from optimal.

A recent study found that despite a significant increase in the global share of SAARC research publications in the last two decades, collaboration amongst neighbouring countries remains low, even as there is greater collaboration with countries outside the region. Notably between 2001-2019, only 1535 out of 933,681 (0.2 per cent) research papers published involved collaboration amongst SAARC countries.[5] It further found that there is a distinct asymmetry in terms of the geographic contribution to research outputs by some countries, with India being one of the lead contributors. This is not surprising given the country's size, demographics, and

[2] Kaul, Mandakini (2019). What Kind of Regional Integration Does South Asia Aspire To?. *The World Bank*. World Bank, 2015. Benefits and Opportunities of Regional Cooperation in South Asia, http://www.worldbank. org/en/news/video/2015/11/06/regional-integration-the-answer-to-south-asias-development. Also, Rahman et al edit. (2012). Regional Integration and Economic Development in South Asia. *Asian Development Bank and Edward Elgar Publishing*

[3] The Economist Intelligence Unit (2015) A Might Web: How Research Collaborations Can Foster Growth in South Asia and World Bank and Elsevier (2019) South Asia: Challenges and Benefits of Research Collaboration in a Diverse Region.

[4] SAARC Charter

[5] Jyoti Dua, Jyoti, Lathabai, Hiran H, and Kumar Singh, Vivek. 2022. "Measuring and characterizing research collaboration in SAARC countries," Scientometrics, Springer;Akadémiai Kiadó, vol. 128(2), pages 1265-1294, February.

the size of its economy. This speaks to some of the other challenges facing research collaboration and networks in the region, i.e., that different countries have different levels of infrastructure and provisions for investments in higher education which is reflected in research outputs.[6] Furthermore, the ability of countries to invest in research capacity building varies. For example, a recent paper on research capacity strengthening in Asia in the context of mental health noted that many countries have limited training and capacity building institutes while others have an acute concentration (India and Pakistan for example). Similarly, most academic institutions are poorly funded, have inadequate resources and infrastructure to support research. There is also a high degree of competition for funding, lack of skills and capacity amongst researchers to write competitive proposals, and a lack of opportunities for networking and policy engagement.[7]

In the HKH region, where the impacts of climate change and environmental degradation are transboundary, research and knowledge networks can serve as indispensable tools for fostering regional cooperation. They can enable South Asian nations to collectively respond to these challenges, ensuring a more resilient and sustainable future for the region and its people. At a regional and global level, the role of knowledge and research networks has also been recognised as key to achieving the Sustainable Development Goals (SDGs). Under the SDGs, universities, and Higher Education Institutions (HEIs) are seen as playing an important role in helping to achieve the goals. They are uniquely positioned to do generate credible knowledge, information and evidence-based solutions and innovations to underpin and support the SDGs. As institutions that teach and foster a new generation of leaders and decisionmakers, universities are also well positioned to impart knowledge and training to youth and young professionals on the SDGs and how they can contribute. Finally, as well regarded, and neutral stakeholders in the public sphere, universities have the ability to engage with the public and society across disciplines and sectors in advocating the importance of the SDGs.[8]

3.1 ICIMOD and research networks in the HKH

Within ICIMOD's past and current strategy, knowledge generation, sharing and dissemination are key aspects of ICIMOD's institutional Theory of Change (ToC), which sets out pathways to better connect science, policy, and practice in the HKH region to overcome the complex challenges facing the region.[9] Recognizing the key role of research networks and alliances in generating and disseminating new knowledge and as pathways to policy influence and change, over the years, ICIMOD has hosted and served as the institutional anchor for several regional networks and initiatives in the HKH region including SANDEE, HUC and the HKH Monitoring and Assessment Programme (HIMAP), HI-WISE, Upper Indus Basin Network, and the Bam-e-Dunya Network etc.

The SANDEE and HUC networks each promote knowledge creation, multi-disciplinary research, capacity building, regional networks and partnerships, and knowledge dissemination in line with their respective mandates. They both receive financial support from ICIMOD and have been hosted under the umbrella of ICIMOD's Mountain Knowledge and Action Networks (MKAN) programme which seeks to promote "action-oriented networking" that recognizes the

[6] Ibid.
[7] Sharma M, Razzaque B. Research capacity strengthening in South Asia: based on the experience of South Asian Hub for Advocacy, Research and Education on Mental Health (SHARE). Glob Ment Health (Camb). 2017 May 16;4: e9. doi: 10.1017/gmh.2017.5
[8] Bhowmik, Joy, Samiya A Selim and Saleemul Huq. 2018. The role of universities in achieving the Sustainable Development Goals. International Centre for Climate Change and Development. *Policy Brief.* University of Liberal Arts Bangladesh, Centre for Sustainable Development and International Centre for Climate Change and Development. *February 2018.*
[9] MTAP III Medium Term Action Plan 2013 – 2017, MTAP-IV Medium-Term Action Plan 2018-2022, ICIMOD Strategy 2030-Moving Mountains and MTAP-2023-2026.

critical role that academic researchers, scholars and experts from the region's universities and institutions can play in knowledge generation and capacity building.[10]

Drawing on the strategic direction of ICIMOD's Strategy 2030-Moving Mountains, ICIMOD's new MTAP V (2023-2026), places a strong emphasis on leveraging and building on ICIMOD's partnerships and research networks, such as SANDEE and HUC, in the HKH region to deliver on its strategic goals and objectives. Specifically, by nesting HUC and SANDEE under Strategic Group 3 – Enabling Regional and Global Mechanisms for Sustainable Action/ Action Area E: Building Institutions for Regional Cooperation and Collaboration, ICIMOD is looking at how it can leverage and strategically tap into these networks to amplify dissemination of ICIMOD's knowledge, research and policy outputs, while strengthening support to RMCs in their advocacy on mountain issues in regional and international forums and building linkages, partnerships, and alliances at the global level. It is also specifically focused on delivering "evidence-based knowledge and insights, institutional policies and investment mechanisms needed to enable necessary transitions for a more sustainable HKH." [11]

3.2 ICIMOD and the Himalayan University Consortium

Himalayan University Consortium

- Founded in 2007
- Current network membership of 97 universities
- Membership includes 78 Members and 19 Associate Members
- More than 200 fellows
- 600+ registered users on the HUC online portal
- 9 Thematic Working Groups

Source: HUC in a Nutshell. 2023

The Himalayan University Consortium was established in 2007 at a meeting convened by 11 founding members from the 8 HKH countries and several academics from European universities. The HUC was established with the mandate to develop a network of universities, academic, and research institutions in the Hindu Kush Himalaya region working on sustainable mountain development issues. One of the factors that influenced the founding of the HUC was a 2007 IPCC report that acknowledged that the HKH region was a "data deficit region".[12]

Acknowledging the knowledge, capacity, and resource gaps faced by many universities in the region, and the lack of mountain-focused research and curriculums in the region, HUC has since its inception had a significant focus on engaging researchers and academics in the region and building their capacities and skills to undertake high quality mountain-specific research.[13] In 2014, ICIMOD's Board of Governors formally approved the inclusion of HUC as a platform within ICIMOD to enhance collaboration among member institutions and to promote centres of excellence in areas pertaining to mountain issues in the region.

The overall mission of HUC is to establish a network of universities in the HKH, in collaboration with academic, research, and knowledge exchange institutions both within and outside the region, to engage leading professionals who can undertake high-quality research, teaching, and knowledge dissemination. The HUC is a membership-based consortia that at present has 78 full members from within the HKH region and 16 associate members from universities and institutions outside the HKH region. The HUC is guided by a Charter endorsed by the HUC General Assembly in October 2015.

[10] ICIMOD Mountain Knowledge and Action Networks
[11] ICIMOD MTAP V 2023-2026
[12] KII with former HUC Steering Committee member.
[13] 2018. ICIMOD Annual Progress Report_2018.pdf

In terms of its governance, the highest decision-making body of the HUC is the General Assembly, comprising heads of member institutions. Overall, policy direction to HUC is provided by a Steering Committee that is comprised of 11 voting representatives including one member each from the 8 HKH countries as well as two representatives from associate members. The Steering Committee is Chaired by the Director General of ICIMOD. The Steering Committee has overall responsibility for the implementation of the HUC Strategy 2018-2025.The membership is comprised of two categories of members: (i) Full Members and (ii) Associate Members. Both categories of members can participate in and/or lead the development of consortium activities and all members can participate in the HUC's activities.

The HUC has thematic working groups and cross-cutting working groups that are led by researchers and academics from within the membership and aimed at fostering collaboration in research, training, and dissemination of and for sustainability. They are organised on a leadership sharing and resource pooling basis. The HUC presently has 9 thematic working groups and cross-cutting working groups[14] that have been set up to promote and encourage collaboration amongst members and is steered on a day-to-day basis by a Secretariat hosted by ICIMOD.[15]HUC members co-host and co-lead TWGs. One of the flagship programs of HUC has been the HUC Academy. To date, the HUC has approximately 200 fellows which include individual researchers, scholars, practitioners, and government officials who have taken part in HUC trainings, workshops, or fellow programs. The HUC portal, which is an online portal of information, has approximately 600 ++ registered users.[16]

3.3 Theory of Change

The Himalayan University Consortium's mission is to "establish a network of universities in the HKH, in collaboration with academic, research and knowledge exchange institutions both within and outside the region, to engage top-notch professionals who can undertake high-quality research, teaching and knowledge dissemination."[17] In so doing, the HUC seeks to address three challenges in the HKH region:

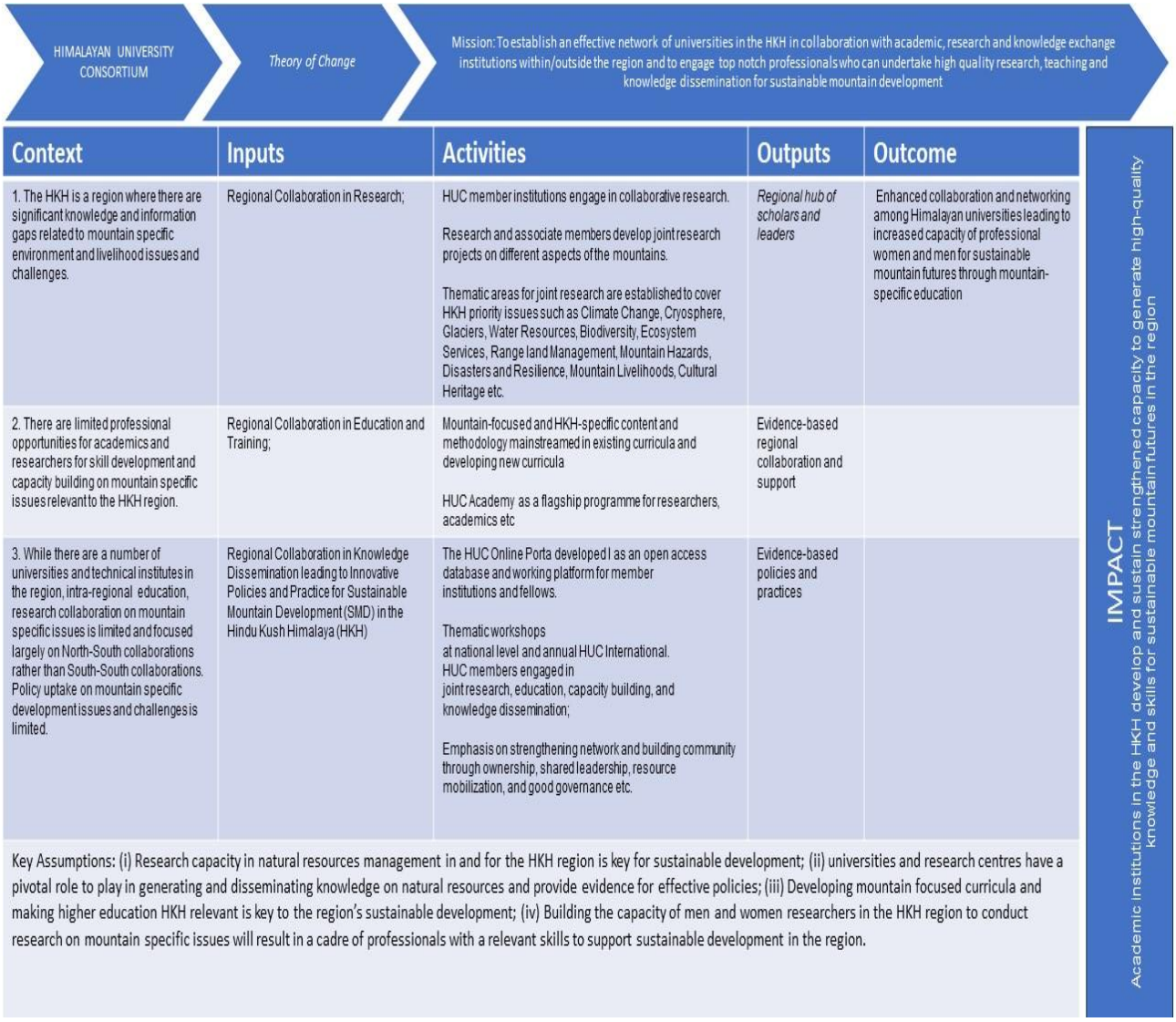
- Knowledge Gaps: Significant knowledge gaps exist in understanding mountain-specific environmental factors and livelihood challenges within the HKH region.

- Limited Professional Opportunities: Scarce avenues for academics and researchers (especially young researchers and amongst them women) to enhance their skills and capacities regarding issues related to sustainable mountain development.

- Lack of Collaboration: Inadequate intra-regional collaboration among universities and technical institutes within the HKH region restricts education and research collaboration, primarily focusing on North-South collaborations rather than South-South collaborations. Moreover, policy uptake on HKH-specific development issues remains limited.

[14] The TWGs include Water, Disasters Risk Reduction and Resilience, Cryosphere and Society, Mountain Agriculture, Mountain Heritage and Tourism, Himalayan Environment Humanities, Education for Sustainable Mountain Futures, Local Indigenous Knowledge, and Locally Led Adaptation and WCRP My Climate Risk Hub for the HKH. https://www.huc-hkh.org/thematic-working-groups
[15] HUC in a Nutshell. September 2023
[16] Ibid
[17] HUC Charter

Figure 2. Theory of Change for the Himalayan University Consortium[18]



To address these challenges, the HUC's strategy revolves around the following key assumptions:

- Research Capacity: Strengthening research capacity in natural resources management within the HKH region is crucial for sustainable development.
- Role of Universities: Universities and research centres have a pivotal role to play in generating and disseminating knowledge on natural resources and generating knowledge and evidence to support effective policy making.
- Relevant mountain-focused curriculum and education: Developing curricula that are mountain-focused and address vital concerns and issues related to the HKH region and that are tailored to the context of the HKH is vital for higher education in the region to contribute to sustainable development in the HKH.

[18] Drafted drawing on the HUC Charter and HUC Strategy 2018-2025

- Capacity Building: Enhancing the capacity of researchers in the HKH region to conduct studies on mountain-specific issues will result in a proficient cadre of professionals equipped with the necessary skills to support sustainable development in the area.

Through its activities - focused on supporting regional collaboration in research, education, and training as well as in knowledge dissemination - HUC aims to bridge knowledge gaps, foster collaboration, enhance professional capacities, and promote policy uptake by utilizing universities and research institutions as vital contributors to sustainable development in the HKH region.

3.4 Literature review

The literature review outlines the theoretical assumptions underpinning transboundary research and academic networks and examines the current state of research and knowledge collaboration in South Asia. It subsequently examines literature on the functioning of academic/research networks and university consortia and the role of different governance mechanisms, such as boards/steering committees etc. This literature review seeks to provide background and context on key factors that have been identified as critical to ensuring the effective functioning of networks and university consortia.

Transboundary research and knowledge networks

One of the core objectives of the HUC is to foster regional and transboundary research collaborations between universities and academic institutions as well as researchers in the HKH region and beyond. Transboundary research collaborations have been described as "collaborations regarding research that go beyond conventional boundaries, be they national, social, or cultural, or that cut across domains such as expertise, discipline and experience."[19] Transboundary research collaborations can play an important role in generating action-oriented research and evidence to address global and shared challenges. At its highest level this is encapsulated in SDG Target 17.6: "Knowledge sharing and cooperation for access to science, technology and innovation: Enhance north-south, south-south and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms…."[20]

Research networks and collaborations across borders and disciplines can also play a role in driving economic development, advancing scientific breakthroughs and innovations, raising awareness about development issues while building knowledge, skills, and capacity. There is also an argument made for efficiency in that research networks and collaborations can create cost-saving benefits and efficiencies as countries and research institutes or networks share and pool resources, labour, equipment, etc.[21] Another key assumption underpinning support for research networks is that by supporting collaboration at individual and institutional level, there will be a positive impact on research capacity and related outputs.[22] Literature on research collaboration and networks, also increasingly looks not just at academic outputs – reports, journal articles, papers, and co-authorship as metrics to evaluate impact, but importantly also looks at the social capital and networks as well as the "formal" and "informal networks and connections that researchers, academics, and institutions may have developed in addition to formal institutional associations/collaborations.[23]

[19] Kotze, Shelly and Dymitrow, Mirek (2021) North-South Research Collaborations: An Empirical Evaluation Against Principles of Transboundary Research. *Devpolicy Review.2022*
[20] United Nations, Department of Economic and Social Affairs, Goal 17, https://sdgs.un.org/goals/goal17 accessed on 20 September 2023
[21] The Economist Intelligence Unit (2015) A Might Web: How Research Collaborations Can Foster Growth in South Asia.
[22] Contandriopoulos, D., Larouche, C., & Duhoux, A. (2018). Evaluating academic research networks. *The Canadian Journal of Program Evaluation, 33*(1), 69–89. https://doi.org/10.3138/cjpe.42159
[23] Ibid.

Research networks and collaboration in South Asia

The lack of regional social and economic integration in South Asia has spillover effects in research collaborations that cross borders as well. Notably, a 2019 report by the World Bank and Elsevier notes that, historically, countries in South Asia have tended to pursue scholarly collaborations outside the region rather than with each other. Factors that impede intra-regional research collaborations in the region include issues related to funding, capacity, language barriers, cultural differences, and geopolitical issues that hamper intra-regional research collaborations.[24]

In South Asia, there are a number of regional research networks and associations such as the South Asia Network of Economic Research Institutes, South Asia Network on Economic Modelling, South Asia University, South Asia Research Network for the Social Sciences, South Asian Network for Social and Agricultural Development, South Asian Consortium for Interdisciplinary Water Resources Studies, South Asian Forum for Infrastructure Regulation and the South Asian Public Administration Research Network etc. However, while many amongst these have a focus on environmental and natural resource management issues, few (if any) have a specific focus on engaging universities and academic research institutions on mountain-related issues in the HKH region. In this context, the HUC is quite unique.

Models of network and consortia governance

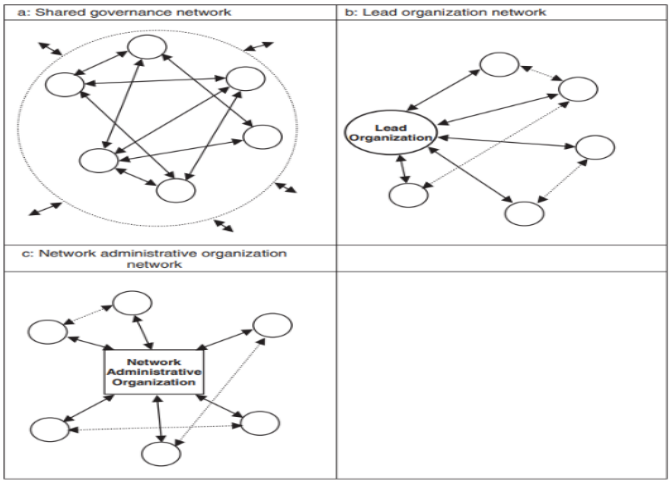
To better understand the factors that influence the effective functioning of networks and consortia such as the HUC, the evaluation looked at literature on networks within the public sector. Existing literature in this field highlights the critical role that governance structures play in shaping the functioning and effectiveness of networks.[25] Specifically, literature outlines different models of network governance, each of which impact how a network functions. For example, a network might be highly centralized with a single organisation functioning as the lead and taking charge of all issues related to network governance. Alternatively, there may be a more decentralized model where network members divide governance responsibilities with no single organisation taking on key governance responsibilities.[26]

There may also be hybrid approaches that are a combination of centralized and decentralized approaches. Notably, Provan and Kenis (2008) outline three specific types of network governance (see Figure 3): (i) Shared or Participant-Governed Networks, where network members themselves are responsible for governance tasks and where this is accomplished through formal processes i.e. regular meetings of designed representatives or more informally through on-going efforts; (ii) Lead Organization Governance, where all major network level activities and decisions are coordinated by a single member who acts as the lead organisation and provides administration for the organisation, underwrites its costs of administration, receives resource contributions etc; and (iii) Network Administrative Organisation (NAO) where a separate administrative entity is established to govern the network and its activities. In such a structure, the NAO is not a member organization, but specifically established for the purpose of network governance. Typically, NAO type networks have board structures with operational decisions left to the NAO. Within the NAO structure, participants within the network interact with one another (as demonstrated via the dotted lines in the diagram) however, activities and decisions are coordinated through the separate administrative entity. In terms of the advantages and disadvantages of a NAO, it is argued that on the one hand such a network

[24] The Economist Intelligence Unit (2015) A Might Web: How Research Collaborations Can Foster Growth in South Asia and World Bank and Elsevier (2019) South Asia: Challenges and Benefits of Research Collaboration in a Diverse Region.
[25] Provan, Keith G. & Kenis, Patrick (2008). Modes of Network Governance: Structure, Management, and Effectiveness. *Journal of Public Administration Research and Theory*, Volume 18, Issue 2, April 2008, Pages 229–252
[26] Ibid.

model lends both legitimacy to the network and ensures its sustainability. However, on the flipside, it may result in an overreliance by network participants on the NAO over time.[27]

Figure 3. Forms of network governance[28]



Proven and Kenis also look at how different network governance models and their impact on network dynamics and argue that there are certain factors that guide and influence the relative effectiveness of forms of network governance. These include four structural and relational factors i.e. (i) trust; (ii) size (number of participants), (iii) goal consensus, and the (iv) nature of the task, including centralized, decentralized, and hybrid approaches (see Table 3). They further argue for example that as networks grow in size (membership) and as the level of trust gets more distributed, and levels of consensus become more dispersed across a larger group, brokered forms of network governance like a lead organisation or a network administrative organisation (NAO) are likely to be more effective than a shared governance network.

In case of the HUC, its structure is most similar to the NAO with the caveat that ICIMOD in this case is both a member of the HUC as well as the administrative host entity for the consortia supporting the core functions of the Secretariat that coordinates consortia activities. It is evident that this network structure supports the HUC to function as a consortium of diverse universities that have different organisational structures, mandates and goals and objectives by bringing them together under the institutional umbrella of ICIMOD as the host. The NAO structure also provides the consortia with stable institutional structure, core financial support as well as credibility and legitimacy.

[27] Kenis, P. N., & Provan, K. G. (2009). Towards an exogenous theory of public network performance. Public Administration, 87(3), 440-456.
[28] Kenis, P. N., & Provan, K. G. (2009). Towards an exogenous theory of public network performance. Public Administration, 87(3), 440-456.

Table 3. Key Predictors of Effectiveness of Network Governance Forms[29]

Governance Forms	Trust	Number of Participants	Goal Consensus	Need for Network-Level Competencies
Shared governance	High density	Few	High	Low
Lead organization	Low density, highly centralized	Moderate number	Moderately low	Moderate
Network administrative organization	Moderate density, NAO monitored by members	Moderate to many	Moderately high	High

In addition to network forms of governance, literature also discusses the governance approaches and modalities regarding consortia including but not limited to university and academic consortia. University consortia have been described as "organizational networks of three or more universities that aim to affiliate, converse and interact with each other for mutual benefit." [30] Importantly, while consortia may take different forms and functions, what makes them unique is the shared desire to achieve common goals that they would not be able to achieve as individual institutions.[31] Consortia can be distinguished based on both their size of membership as well as their activities. The ability of a consortia to function effectively can be attributed to their *complementarity* – the potential for synergy amongst contributors and *compatibility* – the institutional norms and structures that make collaborative projects possible.[32] The higher the complementarity and compatibility between higher education institutions in a consortium, the better its performance.

Literature on research networks and consortia, underscores the importance of clear governance mechanisms, decision-making processes, and accountability frameworks. Furthermore, studies often emphasize the need for governance structures that promote inclusivity, transparency, and equitable participation among network members.[33] Beerkens and der Wende in particular highlight the role of a stable and clear organisational structure, as well as a good communication strategy in building strong relationships within the subunits of the consortium.[34] Similarly, in the context of consortia in higher education, Lang (1975) highlights three main issues that can hinder the effective functioning of consortia: (i) the lack of institutional commitment to cooperation expressed through an unwillingness to relinquish institutional autonomy or provide funds necessary to operate the consortia; (ii) administrative issues including a lack of strong and quick acting leadership and (iii) a lack of communication which is critical if consortia members to expected share resources and facilities.

[29] Keith G. Provan, Patrick Kenis, Modes of Network Governance: Structure, Management, and Effectiveness, *Journal of Public Administration Research and Theory,* Volume 18, Issue 2, April 2008, Pages 229–252, https://doi.org/10.1093/jopart/mum015
[30] Tadaki, Marc and Christopher Tremewan.2013 Reimagining internationalization in higher education: international consortia as a transformative space? . Studies in Higher Education, 38:3, 367-387
[31] Ibid.
[32] Beerkens, E., and M. der Wende. 2007. The paradox in international cooperation: Institutionally embedded universities in a global environment. Higher Education 53: 61–79
[33] Lang, Daniel Wallace, 1975. The Consortia in Higher Education. *The Journal of Educational Administration. Volume XIIII, Number 2.*
[34] Beer kens, E., and M. der Wende. 2007. The paradox in international cooperation: Institutionally embedded universities in a global environment. Higher Education 53: 61–79

Literature also highlights the complexities of evaluating the effectiveness and performance of networks. In the context of assessing the performance of a public network, different stakeholders may have different perspectives on performance, productivity, and goal attainment.[35] Therefore, clarity amongst key stakeholders about which criteria are being used to assess network performance is critical. Their work also points to potential conflict over norms and expectations about network performance. i.e., some stakeholders may consider that the main goal of a network is to be efficient or goal-oriented while others may feel that its objective is to respond to its clients/network members. Networks also have the potential for a conflict in terms of expectations about what the network assessor expects and what the network can realistically achieve. Finally, in assessing the performance of network, there is a need to distinguish between the exogenous and endogenous performance factors that influence a network's performance as these factors can lead to very different conclusions about network performance. For example, if underperformance is attributed to endogenous factors, the responsibility falls on the network itself which might be due to mismanagement. Conversely, if exogenous factors are deemed responsible, the fault lies outside the network and its management.

In the context of the HUC, the literature review illustrates the importance of having a clearly defined governance structure to ensure the effectiveness of a network or consortia. In the context of university consortia, the literature reviewed specifically emphasises the challenges in ensuring shared outcomes without clarity around governance and membership structures and clear communication. As will be discussed in subsequent sections of the report, these factors are particularly relevant in the context of some of the current challenges that HUC is facing in terms of level of engagement by consortium members (particularly in resource mobilization), consortium governance, management, and financial viability. The literature review also illustrates the complexity of evaluating and assessing network performance and the need for clarity around expected results and outcomes and equally about what a network is expected to achieve versus what it can realistically achieve. This is particularly critical in the context of the HUC where the evaluation finds that a lack of clear and consistent reporting of activities and results, as well as poor communication, have impacted the ability of HUC to more effectively demonstrate its contributions to ICIMOD and resulted in missed opportunities for both HUC and ICIMOD to leverage the institutional arrangement. As will be discussed in this report, addressing these issues will require ICIMOD and HUC to work collaboratively to define more clearly the relationship between the two entities, the lines of communication, reporting, and accountability.

4. Evaluation findings

Each evaluation criteria is presented in order and lists the Evaluation Questions (EQs) pertaining to it. Each section starts with a concise answer to the evaluation questions before providing more detailed evidence against the Criteria as a whole. In some places responses to evaluation questions have been combined to address duplication and repetition issues. Each section ends with concrete recommendations.

4.1 Relevance

Summary

[35] Kenis, P.N and K.G. Provan.2009. Towards an exogenous theory of public network performance. *Public Administration*, 8 7(3), 440-456. https://doi.org/10.1111/j.1467-9299.2009.01775.

EQ 1. To what extent has the work of HUC been relevant to addressing critical issues as per its charter and within ICIMOD's given mandate including GESI?

EQ 2. What relevant value addition does HUC bring to deliver ICIMOD's mandate as defined in the ICIMOD Strategy 2030 and the MTAP V (2023-26).

Finding. The evaluation finds that the HUC and its activities are directly relevant to its original charter and ICIMOD's given mandate. This alignment is evident in HUC's role in (i) facilitating regional collaboration among universities and academics in the HKH region and with universities globally, (ii) promoting knowledge exchange and facilitating joint research on sustainable mountain development issues, and (iii) supporting capacity building for the next generation of researchers and practitioners. HUC has made an effort to address GESI issues through its activities by trying to ensure greater representation of women in its consortium membership and capacity building programs, establishing a cross-cutting GESI working group and supporting GESI related issues. Between 2013-2022, across the two MTAP periods the evaluation finds that HUC has made contributions to towards ICIMOD's broader strategic goals and has achieved some of its planned targets. However, the inconsistent tracking and reporting of HUC annual results across MTAP III and IV pose challenges in accurately and comprehensively assessing the extent of these contributions.

HUC's mandate and its mission and objectives speak directly to ICIMOD's mandate and its Strategy 2030 and MTAP V (2023-2026). Under the new *Strategic Group 3 – Enabling Regional and Global Mechanisms for Sustainable Action* and *Action Area E: Building Institutions for Regional Cooperation and Collaboration*, HUC provides ICIMOD with an avenue through which it can amplify the dissemination and uptake of ICIMOD's knowledge, research and policy outputs, while at the same time, leveraging the university and academic network of fellows to influence higher education curricula in the HKH region to more effectively incorporate mountain-focused pedagogy. The HUC through its network is also supporting ICIMOD's broader goal of strengthening transboundary and regional science and knowledge collaboration across borders. HUC serves as a valuable platform for amplifying ICIMOD's research and knowledge outputs. To fully leverage this potential, both organizations must work together to enhance results reporting. Specifically, ICIMOD should establish clear parameters and a standardized format for reporting activities and results – and crucially hold HUC to this - to ensure consistent and accurate reporting on what HUC contributes to ICIMOD's goals and objectives.

Recommendation 1. The evaluation recommends that ICIMOD and HUC collaboratively formulate a results framework specifically for HUC under MTAP V, ensuring that outcomes, outputs, and output targets are clearly defined, including clear milestones to track and record expected contributions.

Discussion

Within the HKH region, there are several research and knowledge networks with a South Asia focus.[36] However, the HUC is, to our knowledge, one of the few, if not the only, network(s) specifically focused on sustainable mountain development issues in the HKH region.

With nearly 100 universities affiliated to the HUC as Members (78) and Associate members (19), it is the largest university network with a mountain focus in the HKH and includes premier universities in the region including the GB Pant National Institute of Himalayan Environment and Sustainable Development and the Indian Institute of Technology Roorkee (India), Kabul University (Afghanistan), Karakorum International University (Pakistan) Kathmandu University and Tribhuvan University (Nepal), Lanzhou University (China), Mandalay Technology University (Myanmar). Its Associate Members include universities in the US, UK, Australia, and Southeast Asia such as the Asian Institute of Technology (Thailand), Western Sydney University (Australia), Walker Institute, University of Reading (United Kingdom) and the India China Institute at the New School (USA) – to name a few (see Annex 5 for a full list of HUC Members and Associate members).

Relevance of HUC to the HKH

There is broad agreement amongst survey and KII respondents that the HUC and its mission and vision remain highly relevant to the HKH region for its role in: (i) creating a platform that connects universities, academic institutions, and research institutions on a common mountain focused agenda; (ii) training and capacity building of young academics and researchers with curricula and content that is tailored to the HKH context; and (iii) enabling collaboration, networking, and joint research between academic institutions and researchers within the HKH region and beyond.

Survey responses from HUC management and alumni on the relevance of the HUC are overwhelmingly positive (see Figure 4 and Figure 5). Notably, 98% of HUC management survey respondents and 94% percent of HUC alumni respondents either strongly agreed or agreed that the HUC supports knowledge exchange, networking, and collaboration between universities, academic research, and knowledge exchange institutions within the HKH region. To a slightly lesser degree, the HUC is also seen as supporting knowledge, research, and network exchange with universities outside the HKH region (86% of HUC management and 79% alumni survey respondents (strongly) agreed). Moreover, 98% of HUC management and 90% of alumni respondents strongly agreed/agreed that the HUC facilitates opportunities for universities, academic institutions, researchers, etc. to engage in collaborative and joint research activities and projects on relevant topics related to sustainable mountain development. 91% of management and 90% alumni respondents also expressed the view that the HUC is supporting ICIMOD in realizing its mission and objectives of a more sustainable and resilient HKH region. 89% of senior management respondents and 76% of alumni respondents also (strongly) agreed that the HUC was supporting universities in the region to develop mountain-specific curricula.

[36] For example: the South Asia Network of Economic Research Institutes, South Asia Network on Economic Modelling, South Asia University, South Asia Research Network for the Social Sciences, South Asian Network for Social and Agricultural Development, South Asian Consortium for Interdisciplinary Water Resources Studies, South Asian Forum for Infrastructure Regulation and the South Asian Public Administration Research Network.

Figure 4. HUC Alumni Responses on the relevance and contribution of HUC

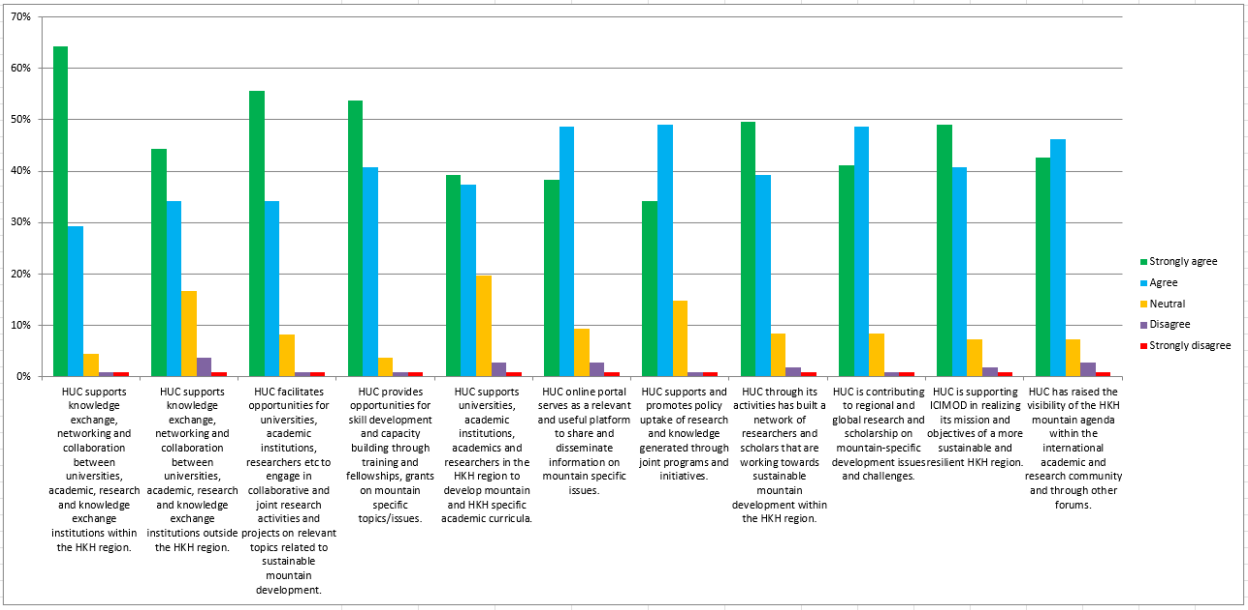
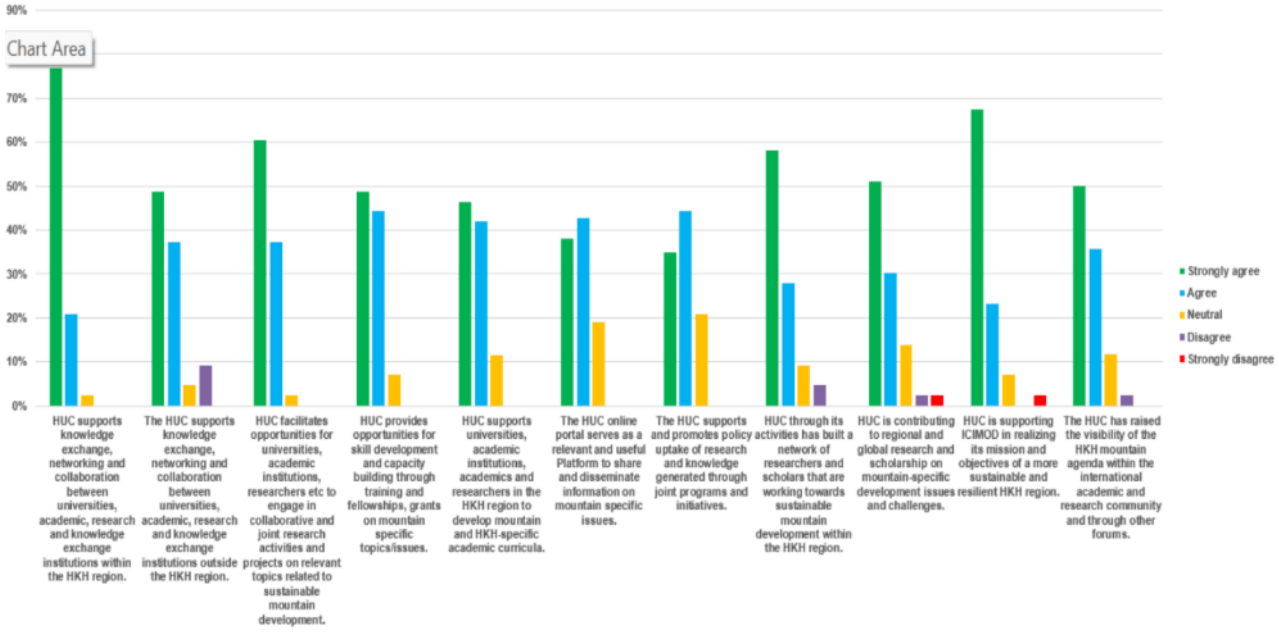


Figure 5. HUC Management Responses on the relevance and contribution of HUC



Given the geopolitics of the region, strict visa regimes, travel and connectivity issues, HUC is highly valued as a space that has allowed academics/researchers (especially young professionals) to collaborate, exchange knowledge, and collaborate across borders. KII's with beneficiaries cited examples where this knowledge exchange had taken place both formally – through connections facilitated by the HUC Secretariat, and informally between alumni themselves who remain connected through social media and their professional networks. By supporting and fostering knowledge exchange amongst scholars and academics in the region, HUC is contributing to furthering regional institutional and academic collaboration in the HKH region. Membership of the HUC, was also cited as beneficial for countries such as Afghanistan

and Bhutan for the opportunities it facilitated in connecting with larger universities in countries such as India and China and with universities in the global north/south.[37]

Relevance of HUC to ICIMOD

The evaluation finds that the HUC and its activities are relevant to its original charter and ICIMOD's given mandate. This alignment is evident in HUC's role in facilitating regional collaboration among universities and academics, promoting knowledge exchange, conducting joint research on sustainable mountain development issues, and supporting capacity building for the next generation of researchers and practitioners. It is evident that across the two MTAP periods that HUC has made contributions to towards ICIMOD's broader strategic goals and has achieved some of its planned targets. However, the inconsistent tracking and reporting of HUC results across the MTAP III and IV periods pose challenges in accurately and comprehensively assessing the extent of these contributions.

MTAP III (2013-2017)

The HUC was integrated into an emerging regional program within ICIMOD under MTAP III (2013-2017). At the outcome level, the defined goal for HUC was to enhance collaboration and networking among universities in the HKH, leading to greater capacity of professional women and men for sustainable mountain development through mountain-specific education. Between 2013-2017, HUC's activities seemed largely focused on building the network and membership, defining the HUC Charter, and establishing a permanently staffed secretariat at ICIMOD.

Analysis of the indicator-level reporting under MTAP III, captured in Table 4,[38] shows that during this period, HUC initiated activities across all key outcome indicator areas.[39] However, it fell short of achieving all its set targets. For instance, under Indicator 1, out of a planned target of 5 HUC members developing and utilizing mountain-specific criteria, by 2017, HUC reportedly only supported 1 - Tribhuvan University, Nepal - in revising its curriculum. Regarding indicators such as 2, 3, and 4, significant inconsistencies in reporting make it unfeasible to accurately determine how many events or workshops HUC organised and how many students it supported to undertake mountain-related studies. For example, under Indicator 2, the number of knowledge-sharing workshops organized remains unclear as reporting mixes planned and completed events. Additionally, under Indicator 4, information about 4 students from Pakistan receiving China National Scholarship's for PhDs is repeated across the 2013, 2014, 2015, and 2016 annual progress reports. Such reporting inconsistencies make it difficult to determine to what extent HUC was able to achieve its targets.

[37] Key informant interviews with HUC beneficiaries

[38] Under MTAP III, HUC reporting was structured around four indicators: (i) increased number of universities using mountain-focused curricula under the aegis of HUC; (ii) increased participation and knowledge sharing among the consortium members as evidenced by workshops, student and faculty exchanges, e-learning and other interactions; (iii) number of joint research projects among consortium members and (iv) increased number of students taking up mountain-specific studies (MSc, PhD, etc.), especially students from disadvantaged mountain communities and women.

[39] In addition to Table 4, see Annex 6, Tab 1 for more details.

Table 4. MTAP III Results Reporting 2013-2017

Outcome for HUC: Enhanced collaboration and networking among universities in the Hindu Kush Himalayas leading to increased capacity of professional women and men for sustainable mountain development through mountain-specific education						
MTAP III (2013-2017)						
Outcome Indicator Target	**2013**	**2014**	**2015**	**2016**	**2017**	**Comments**
Indicator 1. At least five HUC members develop and use mountain-specific curricula	Strategies on how to proceed under discussion. One exchange programme established.	Still discussing on how to proceed. One exchange programme. 13 new members welcomed. HUC charter finalized	HUC charter finalized. High level meeting of vice chancellors held in October 2015.	HUC and ICIMOD assisting g Tribhuvan University in revising their MSc in Environmental Science with mountain-specific focus. The first batch of four Master students in Research in Glaciology Program at Kathmandu University, supported by ICIMOD, has graduated in 2016.	Vice Chancellor of Tribhuvan University presented a proposal for Center for Integrated Mountain Studies at annual meeting in Chengdu.	HUC charter was developed. 1 University supported in revising its curriculum (Tribhuvan University, Kathmandu, Nepal)
Indicator 2. At least five HUC knowledge sharing workshops and one international conference on sustainable mountain development by HUC.	HUC Strategic workshop held in April 2013. In collaboration with COMSATS, Pakistan Second strategic workshop completed in September 2013. Consultation meetings with both member and potential member	Annual meeting of HUC concluded- HUC charter extensively discussed, interim steering committee was formed and HUC programme visioning session on sustainable mountain development took place. HUC presented what it can	HUC mobility programme started. First knowledge sharing workshop took place in Kathmandu in October.	International conference on Mobilizing University Research for Tackling Water, Climate Change and Adaption Challenges in the HKH planned. Two workshops being planned with RP 1 and RP 5	The international conference in October in Chengdu and HUC Academy in Kathmandu were organized. HUC coordinated with Regional Programmes (RPs) of ICIMOD in organizing a training and three meetings.	Exact number of knowledges sharing workshops organised is unclear from the reporting. Reporting mixes planned and completed events making it difficult to establish exactly how many knowledge sharing workshops and conferences HUC organised between 2013-2017

	institutions have taken place in Pakistan, Bangladesh, Bhutan, and India.	offer to universities in the HKH in the first meeting of the International Advisory panel.		10-day field trip for MSc/MA on Water Resource and Disaster Related issues planned		
Indicator 3. At least two joint research projects initiated among HUC members.	Joint research training and faculty & students exchange proposals is being developed for discussion.	Joint research programmes remain most accepted topic for discussion. Appointed a lead person to head this programme and a concept note is being developed for same. Theme leaders from ICIMOD are also involved in its development.	A seed grants programme has been endorsed, and participants from four consortia have been selected.	Four Seed Grants are being implemented, fostering the collaboration between 10 higher education and research institutions in the region, led by four HUC members. In addition, a Mobility/Exchange grant, through which faculty members had opportunities to be exposed to research facilities and expertise in the region, was completed. A Mobility Grant (Institute of Forestry, Tribhuvan University) is completed, and three Seed Grants are scheduled to complete by the first period of	Due to shortened cycle of grants, full-fledged research projects were replaced by partnership building (seed) and proposal writing (seedling) projects.	Joint research projects replaced by seed grants programme. 4 seed grants implemented between 10 higher education and research institutions.

				2017. Three out of seven senior researchers, government officials, and presentative of local agencies who were nominated by HUC attended Temasek Foundation Water Leadership Program at the Institute of Water Policy, Lee Kwan Yew School of Public Policy, National University of Singapore in July 2016, partially funded by HUC Mobility Grants.		
Indicator 4. At least two universities report 50 students taking up mountain-specific curricula.	Four students from Pakistan have received China National Scholarship for PhD studies at Lanzhou University.	Four students from Pakistan have received China National Scholarship for PhD studies at Lanzhou University. HUC will collaborate and work alongside with the Atmosphere initiative of ICIMOD for the proposed degree programme.	Four students from Pakistan have received China National Scholarship for PhD studies at Lanzhou University. HUC will collaborate and work alongside with the Atmosphere initiative of ICIMOD for the proposed degree programme.	Four PhD students (two women) have been recruited from HKH region and are working at ICIMOD Atmosphere Initiative during their one-year fellowship starting 2016. Six PhD students (the women) continue to conduct their research at ICIMOD	40 faculty members came together to discuss the need to bring mountain focus into the existing curricula.	Reporting against this indicator is confusing. Information is repeated across different years i.e. 4 students from Pakistan receiving China National Scholarship for PHD is repeated in 2013, 2014, 2015 and 2016. At an aggregated level, it is difficult to assess exactly how many students were supported to take up mountain-specific curricula.

				and other universities under HI-AWARE. Seventeen master's degree students (eight women) from four RMCs receive support from HI-AWARE, in addition to four MSc students in Master students in Research in Glaciology Program at Kathmandu University. The total of mountain-specific graduate students studying under the support of ICIMOD-HUC have reached 31.		

MTAP IV (2018-2022)

Under MTAP IV (2018-2022), HUC was integrated as an initiative under the umbrella of Regional Programme VI (RP VI) on "Mountain Knowledge and Research Networks" (MKAN) alongside SANDEE and HIMAP. Cumulatively, these three initiatives were to contribute to the MKAN outcome level goal of "enhanced capacity and collaboration among universities, research alliances, policymakers and youth for sustainable development in the HKH and adjoining regions".

Under the results framework for RP VI under MTAP IV, 5 initiative-level output level indicators were defined for HUC (see Annex 6 Tab 2 for more details). According to ICIMOD's own consolidated progress reporting for RP VI, between 2018-2022, HUC made the following overall contribution to RP VI outcome indicators:

Table 5. MTAP IV / RP VI achievements

#	Description	HUC output indicator	Cumulative achievement
1	Increased number of universities employing high-	Support provided to the development/adoption of mountain-	Acting on requests made by HUC

	quality, relevant curricula related to mountains and environmental economics influenced by the programme	and HKH-specific, GESI course syllabi/curricula by HUC members	members, ICIMOD professionals continued to provide technical inputs to Sustainable Mountain Development (SMD) curricula, resulting in five universities taking up mountain-focused, HKH-specific curricula over the past five years.[40]
2	Number of instances that collaborative research and gender-inclusive training programmes are organized by network members with their own resources.	Regional research collaboration promoted through member-led HUC TWGs, HUC International Conference and HUC online portal	A total of eight collaborative research and six gender and social inclusiveness trainings conducted by HUC members.
3	Increased number and quality of peer-reviewed publication by network members	Strengthened research capacity through SMD for HKH field schools, technical trainings, and intensive residence programme	SANDEE and HUC researchers had published over 115 peer-reviewed articles in journals (with an impact factor of two or above) by the end of 2022. This number was not disaggregated for HUC specifically in available reporting. In 2022, Through HUC, we have shared preliminary findings of a regional study on gender and social inclusiveness in sustainability (in higher education curricula). These findings were presented at a workshop hosted by the Kathmandu University, Nepal in December 2022. Peer-reviewed publications based on the findings are being prepared. HUC also trained 25 faculty members from seven HKH countries through ForHimSDGs.
4	Number of HUC fellows both women and men	Strengthened research capacity through SMD for HKH field schools,	16 HUC fellows reported demonstrated

[40] The Alumni survey for this evaluation however finds that 31 alumni reported using knowledge gained through HUC in their curricula.

	demonstrating effective sustainable mountain development work	technical trainings, and intensive residence programme	effective SMD work at their own initiative, ranging from developing joint proposals in previous HUC trainings such as glaciology and springshed management and receiving fellowships in the fields of SMD. A comprehensive HUC fellow tracer study was completed, data from which will substantiate evidence for the impact of HUC capacity-building programmes over the past five years.
5	An effective regional platform that uses science-policy dialogues for regional cooperation leading to poverty reduction, improved ecosystem services, and reduced vulnerabilities	University Grants Commission, Higher Education Commission, National Education Policy Commission and relevant ministries informed of needs	By 2022, HUC had effectively mobilized 17 regional platforms to engage science-policy dialogues fostering regional cooperation. HUC has engaged with Grants commissions in India, Nepal, Pakistan, and Myanmar.

Even though the reporting on contributions to RP VI is inconsistent and sometimes insufficiently disaggregated, it is clear that HUC did contribute to RP VI outcomes for ICIMOD during MTAP IV.

In addition to these higher-level contributions, during MTAP IV, HUC reportedly organized 22 in-person and virtual training and capacity building programs including three HUC Academy's (2017, 2018 and 2019) on topics directly relevant to ICIMOD's areas of focus i.e. disaster risk management, climate science and adaptation in the HKH, livelihoods and economic opportunities in the HKH, etc. Cumulatively, the workshops catered to over 300 participants from within and outside the HKH region (this is discussed in greater detail in the section on Effectiveness (see Table 6)). During this period, fifteen Thematic Working Groups (TWGs) were established based on the partnerships resulting from successfully completed institutional grants from MTAP III. The TWGs carried out collaborative research and conducted joint training. In line with efforts under MTAP IV across ICIMOD to integrate Gender and Social Inclusion issues across initiatives, the HUC's GESI group completed a regional study on integrating gender equality and social inclusion in the curricula of higher education institutions. The HUC reported empowering 130+ young and mid-career female scholars through capacity building programmes and collaborative activities.

In addition to work within the HKH region, HUC raised the visibility of the network and ICIMOD internationally through its participation in conferences and forums such as COP26. For example, HUC organized a workshop, 'Learning Café on Communicating Indigenous and Ancestral Knowledge for Climate Actions in Amazonia, Andes and Hindu Kush Himalaya,' at COP26 on Adaptation and Resilience Day (5 November 2021). In the same year, HUC also

made presentations at three global events including the UNESCO World Conference for Sustainable Mountain Development (May 2021), Sustainability Research and Innovation Congress (June 2021), and the American Geophysical Union meeting, December 2021.[41]

However, as with the reporting under MTAP III, there are significant inconsistencies in the reporting against output-level initiative indicators across the MTAP IV period. In the RP VI results tables provided in each of the annual reports from 2018-2022, there is a lack of consistency in reporting aggregate data on HUC level contributions to the outcome level results. For example, under Output Indicator 4, Output 4. Strengthened Research capacity through SMD for HKH field schools, technical trainings and intensive residence programmes, the 2022, ICIMOD's annual progress report says 43 fellows had demonstrated work on sustainable mountain development through their own initiative including by developing joint proposals in previous HUC training programmes such as glaciology and springshed management and received fellowships in the field of sustainable mountain development.[42] However, the ICIMOD 2018-2022, consolidated progress report states that 16 HUC fellows demonstrated effective sustainable mountain development work during the entire MTAP period. Such reporting makes it difficult for the evaluation team to concretely determine whether 16 or 43 fellows actually demonstrated SMD work during the MTAP period.[43]

The evaluation team has also looked at the data for across the annual progress reports for 2018-2022, and notes the following inconsistencies (i) there is a different set of output targets for HUC in 2018; (ii) the 2019 Bi-Annual Progress report provided by ICIMOD does not have any output level indicator data (iii), for 2020-2022, the team was able to put together a output achievement target table (see Table 6) which illustrates that HUC was partially able to achieve some of its planned targets and fully achieve others. At an aggregate level, based on the information provided by ICIMOD in the annual reports, the evaluation can confidently say that HUC has made contributions through its activities but the extent of these contributions (in terms of quality and quantity) amounted to the realization of RP level outcome results is not adequately or consistently captured by the reporting.

[41] ICIMOD Annual Progress Report 2021
[42] ICIMOD Annual Progress Report 2022
[43] See ICIMOD 2022 Annual Progress report page 38 and ICIMOD 2018-2022 Consolidated Progress Report pages 16 and 26

Table 6. HUC Achievement Against Output Targets for 2020-2022

MTAP IV (2018-2022)
HUC Achievement Against Output Targets for 2020-2022 as reported in Annual Reports

Output indicator for HUC	Output Target 2020	Achievement	Details	Output Target 2021	Achievement	Details	Output Target 2022	Achievement	Details
Output 1. Support provided to the development/adoption of mountain- and HKH-specific, GESI course syllabi/curricula by HUC members	Two RMCs supported on building a knowledge base	Not achieved	Chairperson of the University Grants Commission, Nepal indicates endorsement for the survey to build a knowledge base on MfHs curricula and graduate competence in Nepal Search for key partner in India is ongoing	2 RMCs supported in building a knowledge base on MfHs curricula	Partially achieved	A cross-cutting Education Working Group was formed and initiated a regional study on graduate competent and curriculum with reference for sustainability. Four countries – Bhutan, India, Nepal, and Pakistan – will kick start this survey all at once.	2 RMCs supported in building a knowledge base on mountain-focused HKH-specific curricula	Partially achieved	Regional research is being conducted in Bhutan, India, Nepal, and Pakistan to be completed by Dec 2022
	One HUC member supported in revising SMD curricula	Fully achieved	Masters in Geospatial Engineering, Tribhuvan University, Western Region Campus, Pokhara	3 HUC members supported in revising SMFs curricula	Partially achieved	School of Environmental Science and Management, University of Pokhara received ICIMOD professional inputs for the new MSc Programme in Climate Change	3 HUC members supported revising sustainable mountain futures curricula	Partially achieved	KU is collaborating with AIT and Postdam Institute of Climate Change Impact Research in SDGs curriculum. HUC provides direct input in ForHimSDG Project, led by PIK, KU and AIT, focusing on mainstreaming SDGs for HKH in the curriculum

Output 2. Regional research collaboration promoted through member led HUC TWGs, HUC International Conference and HUC online portal	HUC members and seven TWGs supported in collaborative research, joint publications/ proposals, and member-led trainings	Fully achieved	One collaborative research; one successful proposal; one publication	5 TWGs supported in collaborative research, joint publications or proposals and member- led trainings	Fully achieved	A total of six TWGs are supported in joint research studies and publications, which include DRR and Resilience, Cryosphere and Society, Mountain Agriculture and Mountain Heritage Tourism, GESI Graduate competence, Education, and Himalayan Environmental Humanities. A cross-cutting group on Indigenous Local Knowledge and Locally led Adaption and a new TWG on Energy are about to be jump-started.	HUC members and seven Thematic Working Groups supported in collaborative research, joint publications/ proposals, and member-led trainings	Partially achieved	DRR, Cryosphere & Society, Mt Agriculture & Mt Heritage Tourism, GESI Graduate competence, Education Work Group and Himalayan Environmental Humanities, a total of 4 TWGs and 2 cross cutting groups are supported in joint research studies and publications
	HUC website and online portal expanded with enhanced extensive features	Fully achieved	Redesign of HUC website as per ICIMOD branding is in place. HUC online portal updated with new features	HUC website and online portal expanded with enhanced extensive features	Fully achieved	The HUC website and portal are progressing well with news from TWGs and members. Additionally, NORHED II and APA partnership projects work/ news/dissemination will also be embedded in the HUC portal. There is an increasing demand from members to use the HUC Online Portal as a facility to demonstrate the lasting impact of their work on sustainable mountain development beyond the duration of the projects	HUC website and online portal expanded with enhanced extensive features	Fully achieved	HUC website and portal are progressing well with news from TWGs and members. Additionally, NORHED II and APAN partnership projects work/news/disseminations will also be embedded in our HUC portal. Website vendor contract completed with fine quality; all deliverables achieved.

Output 3. Increased state-of-the-art knowledge base on gender studies and training among HUC members	Gender knowledge gap among HUC members in Nepal and India completed and visualized on HUC website and online porta	Partially achieved	The GESI component of the curriculum study started in November 2020, covering Afghanistan, Bhutan, India, Nepal, and Pakistan	Gender knowledge gap among HUC members in India and Nepal completed and visualized on the HUC website and online porta	Partially achieved	GESI research has been going very well in Bhutan and Nepal and will start in Pakistan.	Mapping of gender knowledge gap among HUC members in most RMCs completed	Fully achieved	Research design for the GESI study in Bangladesh, China and Myanmar completed.
Output 4. Strengthened research capacity through SMD for HKH field schools, technical trainings, and intensive residence programme	Capacity of 10 professionals built in developing research proposals	Fully achieved	Ten professionals received coaching on proposal development skills, including Theory of Change	Capacity of 20 faculty members built in integrated virtual learning/teaching for education for sustainability	Fully achieved	Six members of the Education Workgroup received access to the UNESCO World Conference on Education for Sustainable Development a high-quality resource for ESD	Capacity of 25 faculty members built in integrated virtual learning and teaching on education for sustainability	Fully achieved	25 faculty members from 7 HKH countries completed ForHimSDGs Training
	20 academicians, practitioners, and future researchers trained in mountain- and HKH-specific inter- and trans-disciplinarily research and practice	Fully achieved	Thirty-two academicians, practitioners, and future researchers trained; training provided on water–energy– food nexus for sustainable mountain development	40 academicians, practitioners, and future researchers trained in mountain- and HKH- specific inter- and trans-disciplinarily research and practice	Fully achieved	40 participants from the HKH, Andes and Alps successfully completed the HUC MRI course on Renewable Energy Transitions	50 academicians, practitioners, and future researchers trained in mountain- and HKHspecific inter- and trans-disciplinarily research and practice	Yet to achieve	Nondue to budget constraints

				300 attendees updated with state-of-the-art knowledge of MfHs and ESMFs through the HUC webinar series	Partially Achieved	150+ HUC fellows attended key events of ICIMOD	SDGs-aligned science-policy dialogues facilitated	Partially Achieved	An HUC-focused panel focusing on facilitating science - policy - practice interfaces organized as part of the International Conference in Sudurpaschim University, Far Western Nepal
Output 5. University Grants Commission, Higher Education Commission, National Education Policy Commission, and relevant ministries informed of needs				3 RMC Country Chapters activated	Partially Achieved	Country Chapter in Nepal and Pakistan met in December 2021.			
				Policy briefs published and shared with relevant stakeholders	Partially Achieved	An outreach media kit and a policy brief will be completed as parts of a low-hanging fruit of the previously completed HUC TROSA Water grant.	2 HUC fellows/ members supported in producing policy briefs or innovative communication products distributed to the relevant stakeholders	Partially Achieved	DRR cluster produced media kit as the result of their project. 1 Policy brief on Pancheshwar Dam and Consequences of Delay is completed, 1 Policy brief with AIT in collaboration with TISS is planned to be submitted in Dec 2022.

Relevance of HUC to MTAP V (2023-2026)

HUC's vision and mandate are aligned with ICIMOD's overall goals and objectives under MTAP V and ICIMOD Strategy 2030. Specifically, under the ICIMOD's new Strategy, HUC alongside SANDEE has been nested within *Strategic Group 3 – Enabling Regional and Global Mechanisms for Sustainable Action and Action Area E: Building Institutions for Regional Cooperation and Collaboration*. In this context, HUC as a consortium provides ICIMOD with an avenue and network through which it can amplify the dissemination and uptake of ICIMOD's knowledge, research, and policy outputs. Specifically, under MTAP V and the new Strategy, if leveraged effectively, HUC can provide ICIMOD with (i) access to a regional and global knowledge network of universities, academic institutions, academics, etc, with expertise in areas relevant to ICIMOD's strategic areas; (ii) pathways for the uptake of ICIMOD research, approaches and innovations in higher education institutions through curriculum development, and (iii) access to a network of 200+ HUC fellows, grantees, and researchers who have an affiliation with HUC and ICIMOD and can serve as a resource in terms of knowledge, capacity building, outreach, policy advocacy, etc. However, to fully realize this value addition, ICIMOD will need to more explicitly develop strategies on how it will tap into the potential reach and influence of the network and define more clearly what a 'successful' HUC looks like in the eyes of ICIMOD.

Conclusion

To conclude, the evaluation finds that the HUC and its activities are directly relevant to its original charter and ICIMOD's given mandate. This alignment is evident in HUC's role in facilitating regional collaboration among universities and academics, promoting knowledge exchange, conducting joint research on sustainable mountain development issues, and supporting capacity building for the next generation of researchers and practitioners. It is evident that across the two MTAP periods that HUC has made contributions towards ICIMOD's broader strategic goals and has achieved some of its planned targets. However, the inconsistent tracking and reporting of HUC results across the MTAP III and IV periods pose challenges in accurately and comprehensively assessing the quantity, quality, and outcomes of these contributions. It is essential for ICIMOD and HUC to collaborate more effectively in tracking and reporting results at both output- and outcome-level. HUC can serve as a valuable platform for amplifying ICIMOD's research and knowledge outputs.

4.2 Effectiveness

Summary

EQ 3. To what extent has HUC been able to achieve its mandated objectives and outcomes as defined by its Charter vis-à-vis ICIMOD's mandate?

EQ 4. To what extent is the core work of HUC like capacity building, research and collaboration being translated into concrete outcomes?

Finding. The evaluation finds that by and large HUC has been able to achieve its mandate of establishing a network of universities within and outside the HKH region, capacity building of young professionals and academics and supported efforts to foster academic research and joint collaboration on sustainable mountain development issues. Further it is evident that HUC's activities as reported under MTAP III and MTAP IV are directly relevant to its mandated objectives and outcomes per the HUC Charter, and that of ICIMOD. Between 2013 and 2022, HUC's core activities such as the HUC training academies, capacity building workshops, seed grants programme, and the work of its TWGs have actively contributed to the realization of

HUC's mission, vision, and objectives. Evidence from HUC reporting of its activities in ICIMOD annual progress reports as well as the KIIs and surveys indicate that HUC has been able to achieve some concrete outcomes i.e. developing a network of nearly 100 universities in the HKH region, supporting 5 universities to develop SMD curricula (under MTAP IV) and building a network of nearly 200 HUC alumni who have received training and skills development in different areas related to SMD. However, the evaluation also finds that HUC's effectiveness as a network is currently negatively affected by a lack of active engagement from its membership which has been affected by a set of factors related to the network's governance structure, current state of membership, and funding.

Recommendation 2. The HUC Secretariat and Steering Committee as a priority review how the different governance bodies within the HUC i.e., the General Assembly, Standing Committee and Secretariat are delivering against their respective mandates and develop a network strategy to revitalize the membership including the HUC General Assembly.

EQ 5. To what extent has the HUC contributed to the work of ICIMOD under both MTAPs (2013-2022)?

Finding. As discussed extensively in the section on Relevance, HUC's activities have contributed to the realization of ICIMOD's goals and objectives at the initiative and regional programme level and achieved some of its planned targets. In addition, data from the KIIs and survey illustrate that HUC has had success in some key areas such as capacity building, fostering collaboration within the HKH region and beyond, but these are hard to quantify beyond output level due to an absence of outcome level reporting and inconsistencies in reporting across both MTAP periods. ICIMOD support to the HUC has been instrumental in supporting the Secretariat, its core functions, and in establishing key flagship programs such as the HUC Academy and seed-grants. Interviews with former senior ICIMOD staff illustrate that there was a high degree of engagement between ICIMOD and HUC and contributions of ICIMOD during previous MTAPs. The network is widely viewed as having made a positive contribution to ICIMOD in terms of facilitating connections with universities in the region and beyond by bringing new knowledge in areas such as agriculture and indigenous knowledge as well as increasing the visibility of ICIMOD's work in different forums. However, the evaluation reiterates that the inconsistent tracking and reporting of HUC results across the MTAP III and IV periods pose challenges in effectiveness of HUC. Further, the evaluation has not been able to determine if HUC has a systematic way of internally capturing and reporting on activities, outputs, and results.

EQ 6. As configured, will HUC make significant contributions to the ICIMOD results targets 2026, if so how, and if not why?

EQ 7. What improvements can be made?

Finding. There is alignment on paper between HUC's activities with ICIMOD's Strategic areas under MTAP V. Under the MTAP V results framework for *Action Area E "Building Institutions for Regional Cooperation and Collaboration",* HUC is set to contribute to the outcome level goal of "Increased use of regional knowledge forums and networks for strengthening regional cooperation and collaboration (eg. Science, policy, dialogues) through high quality evidence and skill". The specific outcome targets that HUC is expected to contribute to by 2026 is "All RMCs are active in regional knowledge forums and networks leading to new regional collaboration". Further, the key milestones for specific annual outcome targets till 2026 (i.e. new knowledge being generated through TWGs, collaborative research outputs, HUC

Academy etc.,) are all areas where HUC has made contributions under MTAP III and IV and can continue to do so, provided that it is able to adequately resource these activities and capture its activities and achievements effectively.

ICIMOD's MTAP V results framework puts into place a set of broad outcome and output targets for HUC during 2023-2026. However, in order to ensure that HUC's contributions are captured sufficiently, HUC and ICIMOD should work collaboratively to develop a more detailed set of results and outcomes for HUC along with clear guidelines around the format, frequency and structure of reporting so that activities and results from the consortium are captured with greater accuracy.

In addition, HUC can do more to improve its communication with its members and with ICIMOD. While the HUC is positively regarded amongst its membership, at an operational level, the evaluation finds that the HUC has been less effective in leveraging the strength and resources of its membership and network to generate resources and funding for its activities. Specifically, HUC's effectiveness has been hampered by reliance on a sole source of funding and an over reliance on the dynamism of its small Secretariat (this is discussed in greater detail under the section on Efficiency (EQ 9)).

Recommendation 3. To improve communication with its members, ICIMOD, and a broader community of stakeholders, HUC should revive its newsletter to its membership. This can be a mechanism through which ICIMOD can disseminate its research, publications, showcase projects and put in calls for expertise from the network.

Discussion

HUC was established with the objective of establishing an effective network of universities in the HKH in collaboration with academic, research and knowledge exchange institutions within/outside the region and to engage top notch professionals who can undertake high quality research, teaching, and knowledge dissemination for sustainable mountain development. Under HUC's Strategic Plan 2018-2025, the HUC has three strategic goals i.e. (i) regional collaboration in research, (ii) regional collaboration in education and training; and (iii) regional collaboration in knowledge dissemination leading to innovative policies and practice for sustainable mountain development in the HKH. It seeks to achieve these through a set of three enabling actions related to (i) engaging regional and associate members in joint research, education, capacity building, and knowledge dissemination; (ii) strengthening network and building community through ownership, shared leadership, resource mobilization, and good governance; and (iii) prioritizing problem-based interventions at national and regional levels for SMD in the HKH. The HUC pursues these strategic goals though its core activities i.e. network building, training, and capacity building via the HUC Academy and other capacity building programs, collaboration between universities and academics on key SMD issues via the TMGs, knowledge dissemination through the HUC online Portal as well as the network of alumni.

Reflecting on the strategic goals of the network, the evaluation finds that the HUC has been effective in delivering some core activities that relate directly to its strategic goals and those of ICIMOD especially as they relate to network development, capacity building on SMDs and fostering regional collaboration on SMD in the HKH region. Specifically, it is evident that the HUC has been successful in growing and expanding from a network of only 11 founding members in 2007 to a geographically and institutionally diverse consortia of nearly 100 institutional members from within and outside the HKH region (see Figure 6). Of these 78 Members are from countries in the HKH representing a strong example of regional collaboration fostered by the network (see Figure 7). In countries such as India, Nepal, and

Pakistan, the HUC has established country chapters which seek to build visibility of the network in-country with government and other stakeholders.[44]

Figure 6. Geographic representation of HUC members and associate members

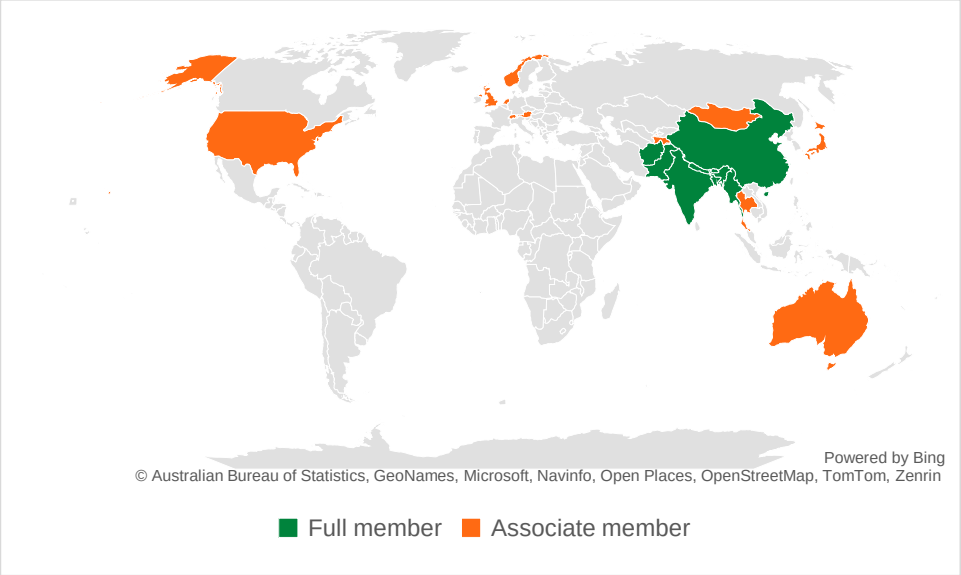
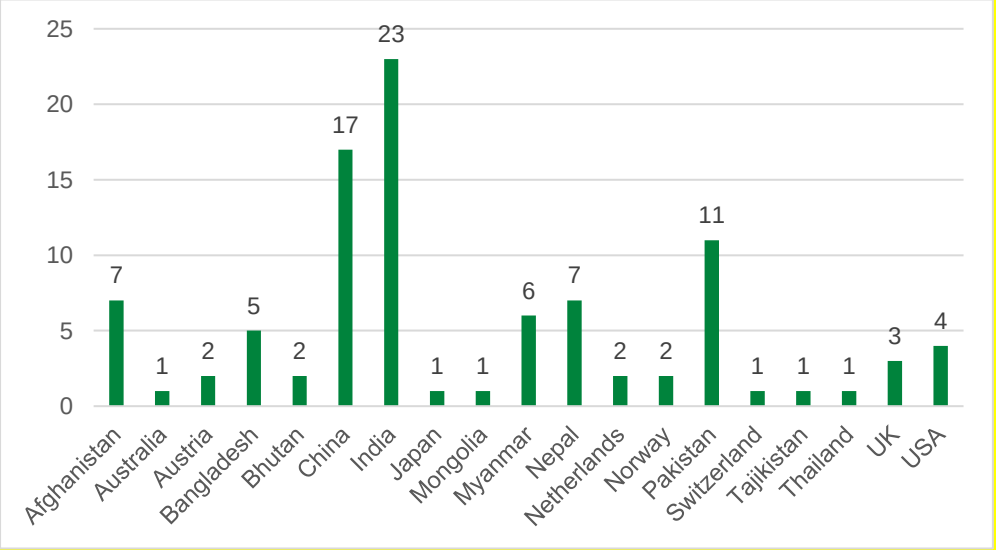


Figure 7. HUC membership by country



The HUC's flagship programme is the HUC Academy – an annual programme that provides opportunities for young researchers to engage in cross-disciplinary scholarship. To date the HUC has organised three HUC Academy programmes in 2017, 2018 and 2019 with cohorts of HUC fellows participating in a two weeklong training, capacity building and leadership programme hosted at ICIMOD. The Academy has in the past focused on different themes related to sustainable mountain development including, for example, disaster risk management (2017), climate science and adaptation in the HKH (2018) and harnessing

[44] The country chapters are responsible for the structure, funding, and implementation mechanism of the HUC country activities.

economic opportunities for transformative change in the HKH (2019). Through the HUC Academy as well as other workshops and trainings, the HUC today has developed a network of over 200 fellows (30 per cent of whom are female). They represent early- and mid-career researchers, academics, government officials, and practitioners working on a range of issues related to sustainable mountain development issues. Between 2017-2023, the HUC has organised several training and capacity building events and workshops for academics and scholars in the HKH region (see Table 7). Notably, these activities while conducted over MTAP III and IV, remain relevant to, and aligned with the broad strategic action areas identified under ICIMOD's MTAP V.

Table 7. List of HUC trainings, workshops, and events 2017-2023[45]

S. No	Date/Year	Training/Event/Workshop	No. of Participants	Total No. of trainings in a particular year	Alignment with ICIMOD Strategy 2030/MTAP V areas of priority
1	May 2017	Glacio-Hydrological Modelling Training	20	2	Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
2	2-12 July 2017	HUC Academy 2017 on Disaster Risk Management	24		Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
3	April 2018	Asia Pacific Water Leadership Programme	17	3	Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
4	Nov-Dec 2018	Glaciology	20		Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
5	1-10 July 2018	HUC Academy 2018 on Climate Science and Adaptation in the HKH	32		Strategic Group 1. Reducing Climate and Environmental Risks.
6	March-April 2019	Springshed Training	22	2	Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks and Action Area

[45] Data reproduced as sourced from HUC documents. Note that no comprehensive database or list of activities and events was available to the team.

					C. Adapting and transforming livelihoods and economies
7	23 Sep - 2Oct 2019	HUC Academy 2019 on Harnessing Economic Opportunities for Transformative change in the HKH	18		Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies
8	19 May-4June 2020	Water-Energy-Food Nexus: Adaptive Response to Regional Hindu Kush-Himalaya Challenge (Online Course)	132	3	Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies
9	June 2020	Food Security Webinar	113		Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies
10	30 Nov-11 Dec 2020	Environmental Humanities Publishing Seminar – Destroying the Sustainable Intelligence of the Earth in the New Himalaya: Symbiotic Indigeneity and Transboundary Commons (Online)	14		Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area D. Restoring and regenerating landscapes
11	29 January 2021	Ethnic fermented foods of Himalayas with reference to Bhutan: Traditional to Metagenomics [Online speech, students in person in Bhutan]	64	5	Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies
12	7-9^{h} April 2021	Renewable energy transitions: a comparative assessment of the Hindu Kush Himalaya, Andes, and Alps (Online)	36		Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies
13	21-23 June 2021	Lahr Flow Modelling Training (Online)	33		Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
14	18-26 August 2021	HUC Summer School (Hybrid Mode) Using Statistics in Climate Science	49		Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
15	October 2021	Storying Climes of the Himalaya, Andes, and Artic: Anthropogenic Water Bodies, Multispecies Vulnerability and Sustainable Living	25		Strategic Group 1. Reducing Climate and Environmental Risks and Strategic Group 3. Enabling Regional and Global Mechanisms for Sustainable Action

16	28-29 March 2022	TWG Cryosphere and Society Meet	42	4	Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
17	3-4 April 2022	Renewable Energy for Climate Actions and Building Resilience Training	100		Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
18	20 April - 12May 2022	NVIVO Training	4		NA
19	Sept-Dec 2022	For Him SDG Training	21		Cross-cutting theme i.e. gender, equality, social inclusion, biodiversity, and climate change
20	10-16 March 2023	Glacier Modelling Training	21	3	Strategic Group 1. Reducing Climate and Environmental Risks. Action Area A. Managing Cryosphere and water Risks
21	26 May 2023	Participatory visual methods for grassroots policy advocacy	10		Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies
22	3 May-16 June 2023	Masterclass on Food Security Assessment	10		Strategic Group 2. Shaping Green and Resilient Mountain Economies. Action Area C. Adapting and transforming livelihoods and economies

In addition to the in-person engagement through the HUC Academy, the HUC online portal has over 600 registered users and serves as a knowledge and information repository for members. The HUC has also built a range of institutional networks and partnerships between research institutions in the HKH region as illustrated by the steady rise in the number of members and associate members over the years.

The HUC's TWGs, with co-leads from members and associate members are collaborating around specific thematic areas of interest such as water, DRR, cryosphere and society, mountain agriculture, mountain heritage and tourism, Himalayan environment humanities, education for sustainable mountain futures, local indigenous knowledge and locally led adaptation and the WCRP My Climate Risk Hub for the HKH. Examples of activities by the TWGs include: (i) the Energy TWG is currently engaged in the NORHED-II funded project "Hydro-Himalaya Project" which aims to strengthen research-based education and produce a better qualified workforce for the HKH (2021-2027); (ii) the Trans-Himalayan Environmental and humanities group implemented a research project on "Interfacing indigenous knowledge, modern science and policymaking: Water and climate change in the Hindu Kush Himalayan region" through an HUC grant, and (iii) the Cryosphere and Society TWG organized a training programme with the University of Bristol on modelling surface flow hazards (2021). Between 2017-2018, the HUC also gave a number of seed grants to support joint activities between premier academic institutions in the HKH regions on issues ranging from climate change,

water resource management, regional cooperation for research, nutritional security in the HKH etc (see Table 8).

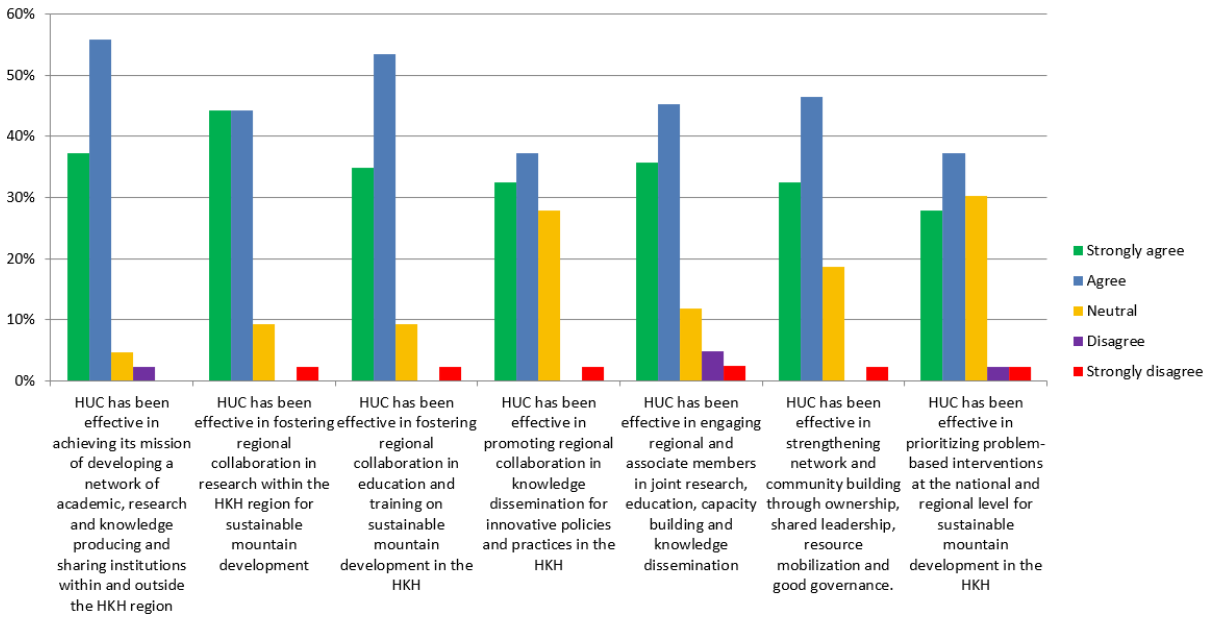
Table 8. HUC Seedling Grants to Institutions between 2017-2018

S.No.	PARTNERING INSTITUTIONS	PROJECT TITLE
1	Himalayan Cryosphere, Climate and Disaster Research Center, Kathmandu University, **Nepal** Department of Atmospheric Sciences, IIT Delhi, **India**; Centre for Climate Change Research, IITM Pune, India; Sherubtse College, RUB, **Bhutan**; Hydrometeorology Department, Kabul University, **Afghanistan**; Institute of Water and Flood Management, BUET, **Bangladesh**	Water in South Asia: Impacts of Climate Change and Variability (WASIACLIVAR)
2	Royal Thimphu College, Royal University of Bhutan, **Bhutan** Sikkim University, **India** UWICER, Bhutan	Developing regional institutional capacity building for educational programme development related to environmental awareness, conservation, and water resource management
3	Samtse College of Education, RUB, **Bhutan**, TERI University, **India;** Kathmandu University, **Nepal**	Identifying water sustainability assessment framework for Himalayan cities
4	Central Department of Biotechnology, Tribhuvan University, **Nepal** Sikkim University, **India;** Manipal College of Medical Sciences, Pokhara, **Nepal**	A collaborative initiative to develop a proposal on study of overall quality of water from Nepalese and Indian Himalayas and its health impact on dependent population
5	Aquatic Ecology Centre, School of Science, Kathmandu University, **Nepal** Institute of Forestry, IoF, TU, Nepal; COMSATS, **Pakistan**	Multiple Use Water System (MUWS) for Water Resource Management in Context of Climate Change in Himalayan Region
6	Centre for Water, Climate and Environmental Policy, Ugyen Wangchuck Institute for Conservation and Environment, **Bhutan,** Institute of Water and Flood Management, BUET, **Bangladesh**; Central Department of Geology, Tribhuvan University, **Nepal**; ACWADAM, **India**	Enhancing capacity and regional cooperation for research within Bangladesh, Bhutan, India and Nepal network
7	Institute of Forestry and Environmental Sciences, Chittagong University, **Bangladesh,** Institute of Geographic Sciences and Natural Resources, Water Resources Research, CAS, **China**; Institute of Forestry, Hetauda, Tribhuvan University, **Nepal**	Hydrological characterization of an ungauged or limited monitoring data basin for flood risk assessment and water resource management – learning and sharing knowledge across the region

8	TERI University, **India** National Agriculture Education College, Kabul, Afghanistan; Samtse College of Education, RUB, Bhutan; **Nepal** Agricultural Research Council, NARC, Nepal; Peshawar Agriculture University, **Pakistan**	Nutritional and livelihood security of subsistence farmer in the hilly and mountain areas of the Hindu Kush Himalayan region
9	College of Natural Resources, RUB, Bhutan Department of Biotechnology, KU, **Nepal**; Sikkim University, **India**; Agricultural and Forestry University, Rampur, **Nepal**	Understanding Organic Farming in Context of Climate Change and Water Management in HKH Region

Survey responses from the HUC management survey (including HUC Steering Committee, Members and Associate members as well as TWG co-leads) show that generally the HUC is seen as having been quite effective, particularly in (i) creating a network of academic and research institutions in the HKH and beyond; (ii) fostering regional collaboration in research on sustainable mountain development; (iii) fostering regional collaboration in education and training; and (iv) regional collaboration in knowledge dissemination for innovative practices and policies in the HKH region (see Figure 8).

Figure 8. Survey Responses of HUC Senior Management on Effectiveness of HUC



In terms of the governance of the HUC, the Secretariat is widely viewed by senior management as having satisfactorily steered the HUC, supporting its activities, and communicating with its members etc (see Figure 9). In interviews with senior HUC management, the Secretariat is seen as delivering its mandate quite effectively given its resourcing. Similarly, survey responses on the performance of the Steering Committee, highlight it is generally viewed as satisfactory in steering the HUC to achieve it mission and guiding the Secretariat (see Figure 10).

Figure 9. Survey Responses from HUC Management on Effectiveness of the HUC Secretariat

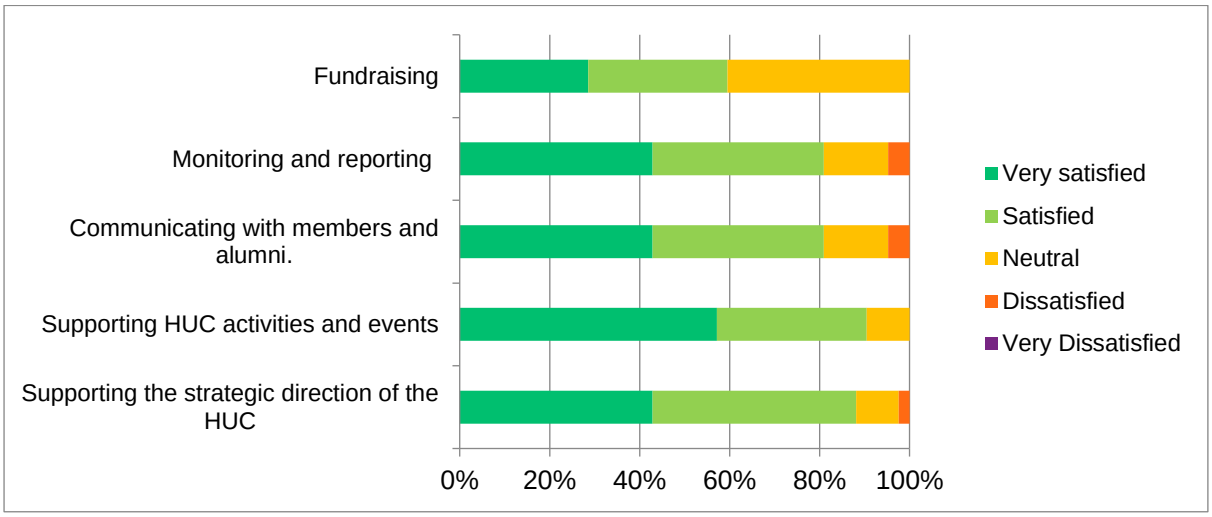
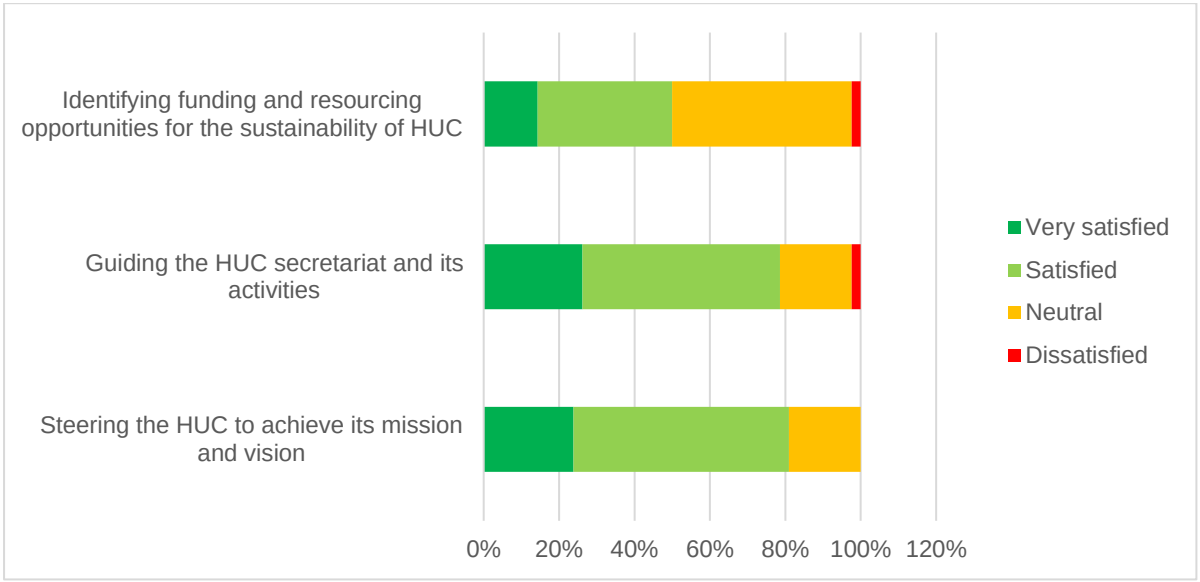


Figure 10. Survey Responses from HUC Management on Effectiveness of HUC Steering Committee



While there is little doubt that the HUC is well regarded amongst its membership, at an operational level, the evaluation finds that the HUC has been less successful in leveraging the strength and resources of its membership and network to generate resources and funding for its activities. Survey responses on effectiveness of the Secretariat and the Steering Committee are more mixed, with some neutral responses. Management responses in KII's illustrated the fact that unlike the intention stated in the HUC Charter the consortium had not been able to mobilize susbantial resourcing for its activities from amongst its members, apart from modest in-kind and cash contributions. Further, while the original intention of the HUC as stated in its Charter was to be hosted in rotation by different universities within the consortia, this has not materialised.

It is important in this context to acknowledge that as a member-led consortium, HUC's ability to achieve its mission, vision, and objectives depends heavily on member engagement. This means that a lot of activity – and what these activities focus on – will and needs to be driven by its members, and that some of this might take place outside the purview of the HUC

Secretariat. It also means there might be differences between what HUC members focus on and ICIMOD's strategic objectives, even if member activities will fall within HUC's overall mandate. It also means that it will be important for the HUC Secretariat to continue to drive member engagement.

In this regard, interviews with HUC senior management illustrate some specific challenges in engaging and sustaining member engagement. The last HUC General Assembly meeting was held in October 2018, and subsequent member engagement has been online both due to the pandemic but also due to resource availability. The membership of some consortia members has expired even as others have signed the Charter online. At present, according to the HUC "only about one-third of members are active, one-third responsive, and the remaining dormant" and their engagement is evident in the TWGs.[46] Interviews with the HUC Steering Committee and senior management, indicate the need to revitalize the membership and chart out a more active role for the Steering Committee at a strategic and corporate level.

The creation of country chapters was also expected by HUC to reduce the financial and administrative burden on the HUC Secretariat and create greater decentralization and ownership. However, it is not clear to what extent the country chapters are active, what specific activities they are engaged it, and what resources have been mobilized for the same at the country level. The HUC website lists details of country chapter meetings in India, Nepal, and Pakistan but these do not provide any information about what was discussed in these meetings or what the outcomes were. Similarly, reporting on the country chapters in ICIMOD's annual progress reports is limited to information about country chapter meetings having taken place. The available information is thus insufficient to make a comprehensive assessment of how active the country chapters are what activities they are engaged in.[47] This makes it hard to establish how the country chapters contribute to ICIMOD's MTAP V and Strategy 2030. Going forward, If HUC wants to demonstrate more clearly how its country chapters are functioning and contributing not just to ICIMOD but to its own work and objectives more broadly, HUC should capture and report on this information.

Conclusion

To conclude, the HUC's activities including training and capacity building, networking, and research collaboration, align well with HUC's and ICIMOD's core mandates. Since it was established in 2007, the HUC has grown into a large network of nearly 100 universities in the HKH region and beyond and has a network of over 200 fellows that it has trained on issues related to SMD. Through both MTAP III and IV periods, HUC's activities have contributed to the realization of its broader mandate as well as contributed to ICIMOD results at initiative and RP level. However, the full extent of these contributions has not been adequately captured due to reporting that is currently largely at output level, and due to inconsistencies in reporting across different years. At the same time, HUC's effectiveness has been affected by factors related to the present state of its governance, membership and funding (funding is discussed in greater detail under Section 4.3).

To improve the network's effectiveness in delivering activities and results for its network and ICIMOD, the evaluation recommends that (i) the HUC Secretariat and Steering Committee as a priority review how the different governance bodies within the HUC i.e. the General Assembly, Standing Committee and Secretariat are delivering against their respective mandates and develop a network strategy to revitalize the membership including the HUC General Assembly, and (ii) HUC should revive its newsletter to improve communication with its members, ICIMOD, and a broader community of stakeholders. This can also be a mechanism through which ICIMOD can disseminate its research, publications, showcase projects and put in calls for expertise from the network.

[46] Interview with HUC Secretariat and reference from HUC Task Force and Sustainability and Resource Mobilization ToR.
[47] Due to time and resource constraints, the Evaluation Team was not able to interview Country Chapter focal points individually.

4. 3 Efficiency

Summary

EQ 8. To what extent does HUC justify the value for money in terms of economy, effectiveness, equity, and efficiency? What improvements could be made to deliver more value for money?

Finding: Since its inception HUC has relied on ICIMOD for core funding. Between 2017-2022, HUC has been able to raise approximately $2.5 million USD in additional resources including donor funding and cash/in-kind contributions from its membership. However, in the absence of (i) sufficient financial documentation and (ii) a clear understanding of the value ICIMOD attaches to HUC's activities, it has been difficult to quantify how efficient HUC has been in delivering VfM. To improve efficiency and VfM, stronger linkages are needed between ICIMOD and HUC so that ICIMOD can draw on the expertise of HUC's membership to support its work. Further, HUC needs to put in place a system that captures the in-kind and cash contributions made by members to the consortia and its activities.

Recommendation 4: ICIMOD should devise an internal strategy on how to more actively draw on HUC member expertise and utilize the network to disseminate ICIMOD knowledge, research, and policy outputs.

Recommendation 5. HUC should develop a mechanism through which members can report on the value of contributions cash or in-kind to consortium activities and devise a sustainability and resource mobilization strategy endorsed by members.

EQ 9. What were the major enabling and potentially constraining factors for HUC to function as an agile and effective network to deliver on its mandate under the pre-2023 structure of ICIMOD? And what improvements can be made in the current structure to make them efficient networks?

Finding: HUC's institutional hosting and core financial support from ICIMOD has clearly been a factor that has enabled HUC to continue to grow and develop as a network. Equally, the HUC Secretariat has played a critical role in sustaining and driving the HUC and its activities. In contrast, there are specific aspects of the governance, day-to-day management and financial status of HUC that is constraining its ability to be more agile and effective. In terms of its governance, it is evident from the evaluation, that significant efforts are needed to revitalize the governance and membership mechanisms of the consortium including the Steering Committee and HUC General Assembly. The agility and effectiveness of the HUC is also impeded by the networks' reliance on a sole source of funding and its limited success in generating additional resources. Finally, the HUC's reliance on its modestly staffed Secretariat to drive consortia activities places legitimate limits on what the network can realistically achieve in terms of outputs, and outcomes.

Discussion

A basic VfM analysis has been conducted, but this was complicated by two factors. The first is the lack of comprehensive financial information that would enable an assessment of whether resources invested have been used efficiently and second, the lack of a clear understanding of the value ICIMOD attaches to HUC's outputs, outcomes, and overall results.

Notably, the ICIMOD 2021 Quinquennial Review specifically states that ICIMOD has a tremendous resource and network that it has sustained at relatively low investment through SANDEE and HUC. Both programs are strong examples of where through small amounts of

sustained funding over a period of time, ICIMOD has been able to achieve high visibility, value and return. The QQR specifically recommends that "ICIMOD could increase its focus on working with and to be able to draw on the resources within HUC (and SANDEE) to contribute to the wider work of ICIMOD and sharing of its research findings more broadly."[48]

ICIMOD's core funding has been instrumental in supporting the HUC both in terms of its activities but also in meeting the operational costs of the Secretariat. Between 2014 and 2022, ICIMOD has cumulatively contributed from its core and programmatic funding an estimated USD 3,612,166 to HUC (see Table 9).[49] As defined in the HUC Strategy 2018-2025, ICIMOD has typically covered the operating costs of the HUC Secretariat, key functions of the Consortium (i.e. HUC online portal, Steering Committee meetings), as well as flagship programs such as the HUC Academy and Mountain Chair. Although the amount of funding has varied annually, in recent years (2020-2022) ICIMOD has contributed between USD 203,902 and 318,993 per year to HUC.

Table 9. Core Support from ICIMOD to HUC

Year	Funding to HUC (USD)	Data Source
2014	80,863	ICIMOD Annual Report 2015
2015	150,325	ICIMOD Annual Progress Report 2015
2016	219,713	ICIMOD Annual Progress Report 2017
2017	944,393	ICIMOD Annual Progress Report 2017
2018	748,842	ICIMOD Finance
2019	652,727	ICIMOD Finance
2020	203,902	ICIMOD Finance
2021	292,408	ICIMOD Finance
2022	318,993	ICIMOD Finance
Total	**3,612,166**	

In addition to core support from ICIMOD, HUC has over the years also received supplements from modest contributions in cash and kind by full and Associate members.[50,51] The HUC Secretariat estimates that between 2018-2022, approximately half a million USD has been contributed by HUC members and associate members in this way, largely from China, India, Pakistan, Australia, and the UK.

In previous years, HUC has also been able to leverage its funding from ICIMOD and has received grant funding from donors including from the World Bank South Asia Water Initiative Phase II (USD1 million (2017-2018) and the Swiss Agency for Development Cooperation (CHF 1 million, 2018-2019).[52] This brings the total estimated additional funds raised by HUC to approximately USD 2.5 million between 2018-2022, which is slightly more than ICIMOD's financial contribution of USD 2,216,872 over the same timeframe. This suggests that ICIMOD's core funding to HUC is catalytic and has enabled HUC to effectively leverage

[48] ICIMOD QQR 2021
[49] Data compiled from ICIMOD Annual Reports for 2014 – 2017. Data for 2018-2022 provided by ICIMOD.
[50] Under HUC's Charter and Strategy 2018-2025, members are encouraged to contribute in-kind and cash to joint activities including for example, hosting or co-organizing HUC events and trainings, leading HUC TWGs, jointly conducting research, curriculum development, etc. Contributions can be made in the form of financial support for travel to events, scholarships, fellowships, exchange programs, staff time, etc.
[51] ICIMOD Annual Progress Report 2020. Pp 4
[52] HUC in a Nutshell

ICIMOD's support. These extra funds can be seen as contributing to ICIMOD's strategic goals, as HUC's activities are relevant to ICIMOD.

In the last few years, the HUC has seen a decline in its overall operating budget (nearly 65 per cent reduction in core budget between 2019-2020 and current funding levels are still well below the 2017-2019 average).[53] This decline in budget has coincided with efforts by the HUC Secretariat to leverage contributions from its members, as seen particularly in the TWGs. In response to a question on financial or in-kind contributions in the senior management survey, several respondents noted that their institutions had made contributions to the HUC, and these were typically in the form of support for meetings, organizing joint workshops, pro bono support to develop proposals and contributing staff time, support for travel, etc. There are also on-going efforts within the TWGs to raise resources for joint research and collaborative activities through contributions of staff time to proposals. The total monetary value of these recent contributions cannot be established as there is no current reporting on this by HUC.

The reduction in core funding raises questions about the extent to which HUC can be expected to fulfil its mandate and creates a need for ICIMOD and HUC to establish realistic expectations with regards to holding HUC accountable for achieving specific results in line with available resources. In order to ensure greater transparency and accountability, ICIMOD and HUC first need to clarify expectations around expected results and outcomes for the resources and funds provided by ICIMOD.

In addition to delivering the activities and contributions to ICIMOD's MTAP's and Strategy, ICIMOD's core funding has provided it with (i) greater visibility within the consortium, enabling ICIMOD to promote its mandate and work within in the HKH region and beyond; (ii) access to a network of nearly 100 member universities and academic institutions in the region as well as associate members globally; (iii) a range of diverse partnerships, networks and relationships in the region including with government agencies; (iv) a network of over 200 fellows across the HKH region that include academics, researchers, and expert practitioners. However, insufficient data was available on the extent to which this exposure was utilised and valued by ICIMOD.

The evaluation also finds that there is unrealized value from the close relationship between ICIMOD and the HUC. Currently, ICIMOD does not fully utilize or leverage the HUC university or alumni network to disseminate the knowledge it has and research it conducts, and HUC does not actively feed its knowledge and network into ICIMOD which could help improve ICIMOD's own programming. There are clear untapped synergies here in terms of how ICIMOD could leverage both the academic and professional network of the HUC in terms of providing professional expertise in areas relevant to ICIMOD's mandate, providing knowledge to ICIMOD's strategic groups, and pathways for the uptake of ICIMOD knowledge and research outputs, particularly in terms of content for higher education curricula and programs. To improve the efficiency of ICIMOD's financial support, ICIMOD thus needs to better leverage the possibilities for exposure and engagement HUC offers and will need to develop an internal strategy to do so.

Finally, it is clear that HUC's institutional hosting and core financial support from ICIMOD has enabled HUC to continue to grow and develop as a network. Equally, the HUC Secretariat has played a critical role in sustaining and driving the HUC and its activities. In contrast, there are specific aspects of the governance, day-to-day management and financial status of HUC that constrain its ability to be more agile and effective. In terms of its governance, it is evident from the evaluation, that significant efforts are needed to revitalize the governance and membership mechanisms of the consortium including the Steering Committee and HUC General Assembly. The agility and effectiveness of the HUC is also impeded by the networks' reliance on a sole source of funding and its limited success in generating additional resources. Finally, the HUC's

[53] ICIMOD Annual Progress Report 2021

reliance on its modestly staffed Secretariat to drive consortia activities places legitimate limits on what the network can realistically achieve in terms of outputs, and outcomes.

Conclusion

At a time when universities globally and in the HKH region are dealing with a decline in government and public sector funding, ICIMOD's core support to HUC has been critical to sustaining the Secretariat and the HUC's core administrative and managerial functions. Core support from ICIMOD has enabled the HUC to raise additional fundings from donors and to leverage resources from its membership by drawing on the legitimacy, credibility and neutrality that being hosted at ICIMOD provides. But HUC's reliance on ICIMOD's core funding alone for its core functions and activities is not sustainable. While HUC has been able to mobilise in-kind and cash contributions, in the long term it needs a more structured and formal mechanism through which it can generate resources to better support its activities. In order to do this, the HUC also needs to more formally address issues related to its governance, membership, and the resourcing of its Secretariat. For ICIMOD, there is also clearly unrealized value in the relationship with HUC.

The evaluation therefore recommends that (i) ICIMOD should devise an internal strategy on how to more actively draw on HUC member expertise and utilize the network to disseminate ICIMOD knowledge, research, and policy outputs, (ii) HUC should develop a mechanism through which it can capture the value of cash or in-kind contributions from its members to consortia activities and (iii) HUC review how the different governance bodies within the HUC i.e. the General Assembly, Standing Committee and Secretariat are delivering against their respective mandates; and devise a sustainability and resource mobilization strategy endorsed by members.

4.4 Coherence

Summary

EQ 10. To what extent are the aims and operating structures of HUC compatible with the aims and structures of ICIMOD?

Finding: As discussed in the sections on Relevance and Effectiveness, there is a strong coherence between HUC's objectives and the aims of ICIMOD. However, in terms of day-to-day operating structures there is some incongruence between the network structure of HUC and ICIMOD. HUC is an autonomous consortia of universities hosted at ICIMOD, of which ICIMOD is one member with a position on the HUC Steering Committee. As such ICIMOD is not able to direct HUC. This is an essential aspect of HUC as an independent network but creates accountability problems for ICIMOD. As described in the literature review, as presently configured, the HUC has a network structure that most closely resembles that of a network administrative organisation (NAO), where ICIMOD serves as the administrative host or NAO of the consortium. The NAO is not a lead organisation and therefore cannot direct the activities of the network, only administer them. If ICIMOD wants a larger say in the day-to-day operations of HUC, it would necessitate a change in the network structure, and this would have to be agreed by the wider consortium. On the other hand, if this not something that ICIMOD or HUC want to consider, then ICIMOD will need to engage with HUC at a senior management-level to determine what alternative reporting structure is feasible and in line with its corporate needs. As illustrated in the literature review, when considering network performance, it is important that stakeholders have clarity on goals and expectations in order to avoid potential conflict over norms and expectations.

Recommendation 6. ICIMOD and HUC should urgently clarify roles, responsibilities, and expectations vis-a-vis communication, reporting, and other organisational and management aspects (including financing) in line with their respective mandates. This is the highest priority recommendation and all other recommendations, e.g., around clarifying results and developing a work plan etc, cannot be implemented unless roles and expectations are formalised and clarified.

EQ 11. To what extent are the two networks (SANDEE and HUC) coherent with and complementary for each other, as well as other regional and international networks – are there any overlaps or untapped synergies?

Finding. The HUC and SANDEE are similar yet distinct networks. While HUC is a consortium of universities that are broadly focused on SMD, SANDEE is more focused on environmental economics and sustainable development. There are clear synergies between HUC and SANDEE particularly in terms of the skills, training, capacity building and curriculum development through workshops and seminars. Greater engagement between the networks would require efforts of both Secretariats to collaborate and for ICIMOD to take a leadership role in bringing together the two networks.

Recommendation 7. ICIMOD should work with HUC and SANDEE to identify where their workplans overlap with each other and MTAP V and ICIMOD's Strategy 2030 in order to explore joint activities.

EQ 12. To what extent does HUC complement ICIMOD's higher level outcomes as envisaged in strategy 2023-2030? What improvements can be made?

Finding. As discussed in previous sections, the evaluation finds that there is a lot of potential for HUC to complement ICIMOD's higher level outcomes as envisaged in its Strategy 2030 especially around regional collaboration and dissemination of knowledge. Realizing this potential will require ICIMOD and HUC to make substantive improvements in terms of developing a results framework and action plan to the extent the governance structures of HUC/ICIMOD allow (see previous recommendations under Relevance, Effectiveness and Efficiency).

Discussion

There is a lot of potential for HUC to complement ICIMOD's higher level outcomes as envisaged in its Strategy 2030 especially around regional collaboration and dissemination of knowledge. But beyond the potential results contributions, interviews with ICIMOD and HUC staff highlight that coherence is limited by a lack of clarity around the day-to-day management of the relationship, particularly in terms of roles, responsibilities, communication, and reporting between ICIMOD as the host institution and the HUC Secretariat.

As a member-led consortium, the HUC's mandate requires it to operate independently guided by its Steering Committee and in service of its membership, yet its institutional hosting by ICIMOD and core funding relationship with ICIMOD have not translated smoothly into operational integration. This has created clear challenges for ICIMOD senior management, particularly as it has transitioned to a new Strategy and MTAP and is looking at how to use its resources and funding more effectively. As already outlined in the section on Relevance, while there have been efforts to integrate the HUC within ICIMOD's framework, notably under the MKAN program in MTAP IV, the lack of a clear results framework and reporting that aligns

HUC outputs with ICIMOD at a strategic outcome level has proved a challenge in accurately reflecting the contributions of HUC to ICIMOD.

The incongruence between HUC and ICIMOD at a management and governance level, raises questions about the viability of the current network structure of HUC. HUC is an autonomous consortia of universities hosted at ICIMOD, of which ICIMOD is one member with a position on the HUC Steering Committee. As such ICIMOD is not able to direct HUC. This is an essential aspect of HUC as an independent network but creates accountability problems for ICIMOD. This raises fundamental questions about the network architecture of HUC. The HUC has a network structure that most closely resembles that of a NAO (see also the literature review). ICIMOD serves as the administrative host or NAO of the consortium. The NAO structure is well suited to networks that have a large number of members and to facilitate consensus building. Within this network structure, the role of the NAO or host is to serve as the administrative entity of the network. The NAO is therefore not a lead organisation and therefore cannot direct the activities of the network, only administer them. The NAO can also not direct the network to align its activities with its own interests. However, ICIMOD as the provider of all core funding, understandably, has greater expectations than other members of network. If ICIMOD wants a larger say in the day-to-day operations of HUC, it would necessitate a change in the network structure, and this would have to be agreed by the wider consortia. On the other hand, if this not something that ICIMOD or HUC will consider, then ICIMOD will need to engage with HUC at a senior management level to determine what alternative reporting structure is feasible and in-line with its corporate needs.

Sandee and HUC

The HUC and SANDEE are similar yet distinct networks. While HUC is a consortium of universities that are broadly focused on SMD, SANDEE has a more structured focus on environmental economics and sustainable development. There are clear synergies between HUC and SANDEE particularly in terms of the skills, training, capacity building and curriculum development through workshops and seminars. Greater engagement between the networks would require efforts of both Secretariats to collaborate and for ICIMOD to take a leadership role in encouraging both networks to identify opportunities for collaboration across themselves, ICIMOD, and their workplans.

Conclusion

As a founding member and significant contributor to the HUC, ICIMOD has distinct expectations for aligned outcomes, especially concerning its strategic objectives under MTAP V and the new strategy. As a university consortium hosted and primarily funded by ICIMOD, HUC needs to strike a balance between retaining its independence and pursuing activities as per its mandate and member-led goals and objectives and meeting the requirements of ICIMOD in terms of transparency, accountability / how resources are utilised, and reporting of activities, outcomes, and results. Therefore, the evaluation as a high priority recommends that ICIMOD and HUC, at a corporate level, clarify key aspects of the network relationship between ICIMOD as the host of the Secretariat of the HUC in terms of day-to-day organisational and financial management, communication and monitoring and reporting of activities. This also directly touches on HUC's funding model, which is further discussed in section 4.7.

4.5 Impact

Summary

EQ 13. To what extent has HUC been able to contribute to its long-term objectives as defined in its charter and ICIMOD strategic results?

Finding. There is evidence that HUC is contributing its long-term objectives and ICIMOD's strategic results, as described in responses to other EQs especially on Relevance and Effectiveness. In the context of MTAP V, these contributions are particularly relevant to realizing the impact pathways that have been identified under ICIMOD's Strategy 2030 in terms of (i) scaling impact pathway – HUC's fostering of joint research and regional institutional collaboration; (ii) regional cooperation pathway - through the creation of a nearly 100+ member regional network of universities and TWGs that engage on science-policy issues and pathways; and (iii) policy impact - through efforts to develop Country Chapters in the HKH region and foster institutional linkages with government institutions such as university grants commissions etc., and finally (iv) capability impact pathway as evidenced through a nearly 200 plus alumni its training and capacity building workshops and HUC academies (see Table 7).

EQ 14. What has been the regional impact and global significance of HUC?

Finding. Assessing the regional and global impact of the HUC is challenging because of two factors (i) the largely output-level focus of annual reporting and (ii) the limited tracing and documentation of results at an outcome level. At a regional level, there is some evidence to support the HUC's theory of change, particularly in fostering networking and collaboration between academics and research institutions in the HKH. However, as illustrated by the interviews and case studies of individual HUC beneficiaries below, there is evidence to support the role that HUC has and can play as a catalyst for individual careers through capacity building, institutional development through support to develop joint proposals and collaborative research on mountain-specific issues, and as a platform that fosters regional and transboundary collaboration in the HKH region. At a global level, the reach, influence, and potential impact of the HUC is harder to gauge. The fact that HUC has been able to attract membership from 19 Associate Members including premier universities in the US, UK, Australia, and Southeast Asia such as the Asian Institute of Technology (Thailand), Western Sydney University (Australia), Walker Institute, University of Reading (United Kingdom) and the India China Institute at the New School (USA) – suggests that the HUC does have some global reach and significance.

EQ15. What improvements can be made?

Finding. Interviews and survey responses from HUC fellows have highlighted how the HUC has contributed to their career development and positively influenced/supported them in delivering impact through their work. However, apart from a few fellow highlights on the HUC website, impacts do not appear to be captured in HUC reporting in a structured way which complicates an assessment of its impact. Greater efforts are needed by HUC to more effectively document its results and impact and to communicate this within the membership and more broadly. Better documentation of HUC activities and tracking of results and outcomes by the Secretariat will go a long way in building a better picture of the impact that the HUC has had at a country, regional and global level.

Recommendation 8. HUC undertake a detailed and comprehensive impact study that assesses the contributions of its activities towards achieving its core goals and objectives particularly at outcome level.

Recommendation 9. HUC develop a results and impact monitoring strategy alongside a communication plan to more effectively capture and report the impact it generates.

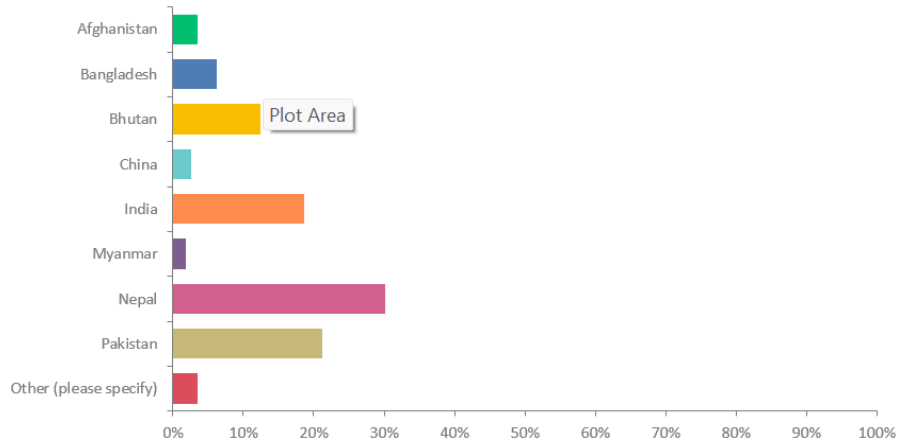
Recommendation 10. HUC create a more formal alumni network to better connect, strengthen and leverage its network of nearly 200 alumni in the HKH region.

Discussion

Since its inception in 2007, the HUC membership has grown significantly to nearly 100 universities as members and associate members and a diverse network of universities, research, and academic institutions from countries in the HKH region but also from the US, UK, Australia, Thailand, and other countries. With nearly 200 fellows of its training and capacity building programmes, the HUC is highly regarded and valued by its alumni for its delivery of high-quality training and capacity development on sustainable mountain development issues and for the people-to-people networks and exposure it has provided especially to young professionals in academia. In 2020, the HUC undertook to document the impact of its training and capacity initiatives and commissioned a Tracer study of 93 past fellows who had completed at least one of five intensive trainings offered by HUC between 2017-2019. The Tracer study found that the majority (96%) reported that they had utilized the knowledge, life skills (94%), and research skills (92%) acquired through HUC into their ongoing research and training endeavours. Additionally, 94% acknowledged the impact of networks and partnerships cultivated through these programs on both their professional and social spheres. Notably, among these, learnings, the acquisition of knowledge and established connections emerged as the most influential factors in shaping their professional careers.[54]

For this evaluation, a survey was sent out to over 300 HUC alumni to seek their views and perspectives on the HUC. A total 115 responses (67% male and 32% female) were received from across the HKH region (see Figure 11) including from HUC fellows, researchers, and grantees.

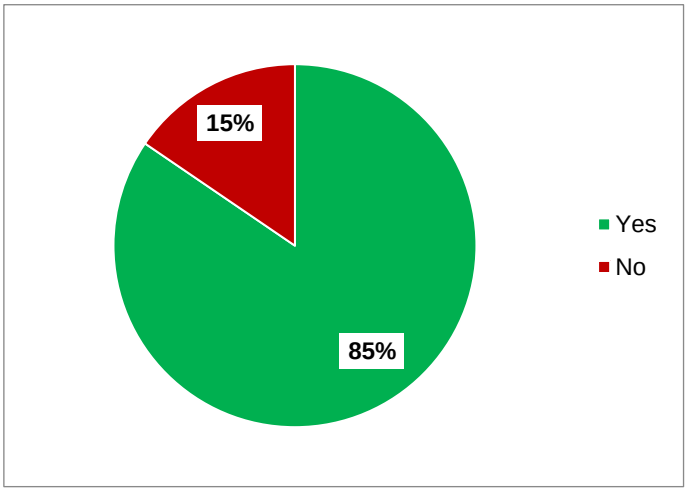
Figure 11. HUC Alumni Survey Respondents by Country[55]



[54] HUC Tracer Fellow Tracer Study 2020
[55] Total number of respondents for this question 113/2 skipped.

Over 80% of the respondents had received support from in the form of a grant, fellowship, training, or capacity building program (see Figure 12). Survey responses from alumni highlight three specific areas where the HUC training has been particularly useful i.e. (i) gaining new skills and knowledge in areas related to SMD, for example on springshed management, disaster risk management, etc; (ii) building professional skills in leadership and communication, and (iii) establishing networks and people-to-people connections with researchers and scholars from other countries in the HKH. Out of a total of 79 respondents, 36 (46%) noted that they had been able to develop a joint research proposal with another researcher or academic institution on SMD. Examples included a collaborative research study on curricula and graduate competency for sustainable mountain futures in Bhutan, India, Nepal, and Pakistan; a joint proposal for researchers of Karakoram University and the Chinese Academy of Sciences (see Figure 13). However, it is evident from the survey responses that it has been more challenging for HUC alumni to go on to develop and integrate mountain curricula in their institutions. Notably, out of 81 respondents, 31 (38%) said they had been able to develop mountain-specific curricula and apply them in their universities (see Figure 14). KIIs with HUC alumni further showed that for many respondents, the HUC Academy was one of the first experiences of meeting other researchers working on mountain-related issues in the HKH region.

Figure 12. Percentage of HUC alumni respondents from the alumni that have received a grant, fellowship, training, or capacity building program from/by HUC.[56]



[56] Total number of respondents for this question 84/31 skipped.

Figure 13. Percentage of HUC alumni who were able to develop a joint research proposal, initiative or program with another researcher or academic institution, university on sustainable mountain development.[57]

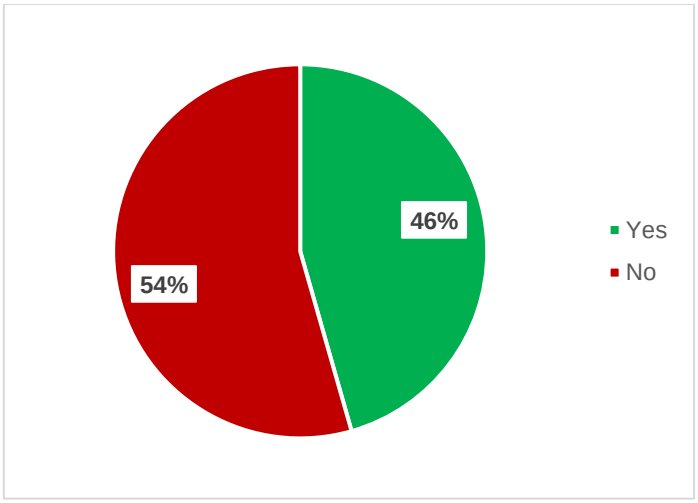
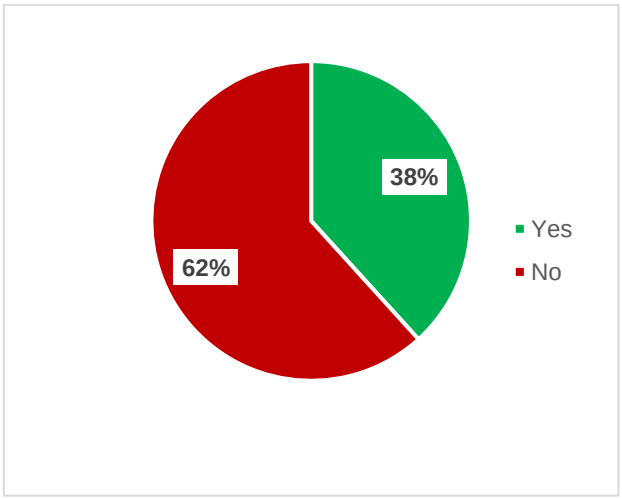


Figure 14. Percentage of HUC alumni that were able develop mountain specific curriculum in their universities[58]



As respondents from Pakistan and China noted, academic collaboration can be quite challenging in the HKH region due to the fraught history of the region, access to data, and national security concerns. By building networks, connections, and synergies, the HUC has enabled researchers to collaborate across borders, reducing the cost of collaboration and fostering people-to-people connections. Nearly all respondents noted the connections they had forged with other alumni, many of whom they continued to be in touch with today through social media. As one respondent noted: "*I value the HUC a lot…it is one of those networks that is very rare in the regional context. We see that lack of communication is one of the problems that is hindering progress of the region. I value HUC and ICIMOD a lot that they are breaking these communication barriers."*[59]

[57] Total number of respondents to this question 79/36 skipped.
[58] Total number of respondents to this question 81/34 skipped.
[59] HUC Beneficiary KII

In addition to building transboundary and regional connections, respondents also highlighted the value of the skills and knowledge gained through their participation in the HUC training and capacity building workshops and events (this is further illustrated in the Case Studies below). KII respondents expressed satisfaction with the peer-to-peer learning environment, content of the programs and the exposure to new concepts and approaches on SMD. There are also examples from the KII's where respondents noted forging research collaborations with other HUC alumni (see Case Studies below). This is not to say that individuals could not develop their careers and networks without the HUC but rather that based on the evaluation data it seems that the HUC has contributed to regional collaboration, and as such acted as a 'springboard' for researchers.

At present the HUC's engagement with its alumni is not very systematic and is largely based on emails going out from the Secretariat about upcoming events, workshops, etc. Going forward, in order to strengthen and leverage the capacity of its nearly 200+ network, the HUC can create a more formal alumni network that will create greater opportunities for fellows to connect and collaborate. However, this is also contingent on the resourcing and capacity of the Secretariat. HUC alumni also suggested that ICIMOD could better leverage the alumni network by engaging researchers and academics from the network within ICIMOD programs and initiatives and drawing on their skills and capacity.

To summarize, it is evident from the evaluation that HUC's activities have contributed to its goals and objectives. Further in the context of MTAP V, these HUC contributions are particularly relevant to realizing the impact pathways that have been identified under ICIMOD's Strategy 2030 in terms of (i) scaling impact pathway – HUC's fostering of joint research and regional institutional collaboration; (ii) regional cooperation impact pathway through the creation of a regional network of universities and thematic working groups that engage on science-policy issues and pathways; (iii) policy impact pathway through efforts to develop Country Chapters in the HKH region and foster institutional linkages with university grants commissions etc. and finally the (iv) capability impact pathway as evidenced through the training and capacity building workshops and HUC Academies (see Table 7).

Assessing the regional and global impact of the HUC is challenging because of two factors (i) the largely output level focus of annual reporting and (ii) the limited tracing and documentation of results at an outcome level. At a regional level, there is some evidence to support the HUC's theory of change, particularly in fostering networking and collaboration between academics and research institutions in the HKH. However, as illustrated by the interviews and case studies of individual HUC beneficiaries below, there is evidence to support the role that HUC has and can play as a catalyst for individual careers through capacity building, institutional development through support to develop joint proposals and collaborative research on mountain-specific issues, and as a platform that fosters regional and transboundary collaboration in the HKH region. At a global level, the reach, influence, and potential impact of the HUC is harder to gauge. The fact that HUC has been able to attract membership from 19 Associate Members including premier universities in the US, UK, Australia, and Southeast Asia such as the Asian Institute of Technology (Thailand), Western Sydney University (Australia), Walker Institute, University of Reading (United Kingdom) and the India China Institute at the New School (USA) – suggests that the HUC does have some global reach and significance.

Case Study 1. Shiba Khan*, HUC Fellow 2017 and 2018

"I was part of the pioneer batch of the HUC. It was my first trans-Himalayan exposure and first-time meeting scholars from other regions in the Himalayas". I learnt about the issues that are facing mountain regions beyond Pakistan.

Shiba Khan* is an Assistant Program Officer at COMSATS University in Pakistan and a Post-Doctoral Fellow at the University of Bonn. She was an HUC Fellow in 2017 and participated in the HUC Academy on disaster risk and water management. She subsequently was a fellow in the HUC 2018 Academy on climate science and adaption in the HKH region. After attending the HUC fellowship program, she went to design her own field research project in Pakistan on disaster management where she was able to apply the skills learnt in the HUC program. She has remained connected with the HUC. During the pandemic, while doing her PhD, through an online training offered by HUC, she connected with researchers from Gilgit, Peshawar and Karachi in Pakistan and designed a small study on dam construction in the Himalayas which was subsequently funded by the HUC. In 2022, she contributed to an edited volume on "Mountain Studies: Understanding and Managing Mountains for People and Nature" published by Karakoram International University, Gilgit Pakistan. She is currently working towards a post-doctoral research project on climate adaptation, loss, and damage in the Pakistan Himalayas.

"Capacity building of young scholars is very important given the global context because a lot of time scholars from the global south are not valued in the research community."

"What makes the HUC unique is the peer-to-peer learning and the combination of theoretical and practical approaches."

Case Study 2. Noor Shazia*, Recipient of an SDC-HUC Focus 2018, HUC fellow in 2018.

Noor Shazia* is Associate Professor at Institute of Water and Flood Management of Bangladesh University of Engineering and Technology. In 2018, she was the recipient of an SDC-HUC Focus grant for $ 25,000 USD to carry out a project with Sikkim University in India on "Diagnosing water security in hard-to-reach mountainous areas with an environmental security framework". The research conducted between August 2018-November 2019, and focused on springs in different areas. She notes her gratitude to the HUC as the project was her first role as a principal investigator and that it subsequently created other project opportunities. In coordination with two other HUC fellows from India and Nepal, Noor also developed a project on "Water Security for Mountainous Cities" in collaboration with Tribhuvan University, Nepal and TERI School of Advance Studies in India which has been funded by the Asia-Pacific Network for Global Change.

"I really appreciate the training from HUC. I found it to be quite useful for the context of Bangladesh. Most of the training we get is from international experts who do not have any exposure to the sub-continent.

**Pseudonym used to maintain respondent confidentiality.*

Case Study 3. Tsering Lama*, HUC Regional Training on Springshed Management 2019

Tsering Lama* is a Dean of Students and lecturer in the College of Natural Resources at the Royal University of Bhutan. He attended the regional training on springshed management organised by HUC at ICIMOD in 2019. At the time, the concept of springshed management was quite new in Bhutan. After attending the training, he developed a module on springshed management that incorporated the key principles and concepts from the training which he continues to teach today to his master's students. He has also gone on to conduct trainings in Bhutan at the community level on springshed management.

"The training was quite different. HUC invested a lot of resources and brought key resource persons working on springsheds. The training was good from both a pedagogical and technical perspective."

**Pseudonym used to maintain respondent confidentiality.*

Conclusion

To conclude, while it is difficult to comprehensively evaluate the regional and global impact of the HUC due to a lack of data particularly at outcome level, there is no doubt that the HUC is acknowledged by its members and alumni of its programs for its strength in creating a network of universities in the region and bringing focused attention to SMD; fostering people-to-people connections in the region; and importantly providing training and capacity building to young academics and researchers in the region. In terms of the contributions to ICIMOD's strategic results, as described in the sections on Relevance and Effectiveness, there is clear evidence at output level that HUC's activities have contributed to ICIMOD results during MTAP III and MTAP IV. However, the extent of these contributions is not presently being captured and reported on sufficiently. Going forward, it is critical for the HUC to more effectively document the impact of its initiatives, events, and programs to strengthen the business case for its added value to its members and the region more broadly. Further as already covered in the sections on Effectiveness and Efficiency, there is unrealised potential that HUC offers to ICIMOD and more could be done to leverage the HUC's network of universities and its alumni.

The evaluation recommends that (i) HUC undertake a detailed and comprehensive impact study that assesses the contributions of its activities towards achieving its core goals and objectives particularly at outcome level; (ii) HUC develop a results and impact monitoring strategy alongside a communication plan to more effectively capture its impact; and (iii) HUC create a more formal alumni network to better connect, strengthen and leverage its network of nearly 200 alumni in the HKH region.

4.6 Sustainability

Summary

EQ 16. To what extent is the governance and operational modality of HUC sustainable in terms of impactful delivery and financial sustainability in the longer term?

EQ 17. What improvements can be made?

Finding. The evaluation highlights significant challenges in the current governance and operational structure between HUC and ICIMOD. There are also clear challenges in terms of the roles and responsibilities and expectations of ICIMOD as the host of the HUC and HUC's ability to meet these expectations. Further, the reliance of HUC on ICIMOD's funding poses a clear risk, given past fluctuations in resource allocation, making it difficult for HUC to plan for the long term.

Recommendation 11. ICIMOD and HUC review and revise the governance structure for HUC in line with the findings on EQ 10/recommendation 6 under coherence.

Recommendation 12. HUC expedite the work under its financial sustainability task force.

Discussion

The sustainability of the HUC has been a concern for both ICIMOD and the consortium since the HUC's formal hosting at ICIMOD in 2014. Annual reports consistently highlight two key issues: (i) the need for greater ownership of the network by its members, and (ii) securing funding for the consortium and its activities. ICIMOD's progress reports consistently emphasize the necessity for HUC to be member-led and the need for a financial sustainability strategy to gradually reduce reliance on ICIMOD support.

Responses to KIIs and the survey clearly indicate that the HUC is valued by its members and alumni for its focus on sustainable mountain development, its transdisciplinary approach, capacity building of young professionals and academics in the region, and the connections it fosters at both personal and institutional levels. However, while there has been a steady increase in membership and acknowledging that some consortium members contribute resources (in-kind/cash) to support HUC activities, there has been a lack of core funding from members to sustain the consortium institutionally. This raises questions about the level of active engagement and ownership of the consortium by its members and associate members.

The 2018-2025 HUC Strategy acknowledges these challenges and outlines strategies to engage the membership and includes a sustainability strategy, including continued ICIMOD support, funding from various educational commissions and institutions, resource mobilization from members, joint research proposals, membership fees, and support from international donors and industries more actively. Unfortunately, there is a lack of documentation or insights about the status and outcomes from these strategies. As discussed previously, between 2018-2022 HUC mobilised approximately USD 2.5 million from members and donors, but these do not constitute long-term core funding.

Beyond funding, addressing the HUC's sustainability necessitates examining its current structure and organization. Presently, HUC lacks formal legal or institutional status, unlike registered networks such as the UArctic or AAERE, and operates as a voluntary member-led network. Further unlike these research networks, the HUC does not levy a membership fee which leaves the HUC largely dependent on the resources of ICIMOD and the dynamism of the Secretariat.

HUC’s senior management in KIIs acknowledged the challenges that the HUC faces in engaging its membership and raising financing. While acknowledging the challenges universities in the region face in terms of (i) collaborating across borders due to the geopolitics of the region; (ii) the need to cater to their own mandates, rules and processes, and (iii) the fact that many universities especially in the HKH region have witnessed a decline in public sector funding; there is a real need to revitalize the membership and specifically for there to be more buy in and engagement by members to support the HUC and its goals and objectives.

The current status quo of the HUC is not sustainable. Interviews and survey responses suggested that there are two potential institutional pathways forward for HUC: (i) to either become fully become integrated or merged as a program/initiative within ICIMOD with governance and financial accountability to ICIMOD, or (ii) to pursue registration as an independent autonomous legal entity that would enable the HUC to have a more clearly defined registration and legal status and create more resource mobilization opportunities. With respect to the latter point, interviews with HUC senior management also highlighted the challenges that HUC potentially faces in trying to become an independent entity or one that is hosted by a university in the region. Specifically, given the geopolitics of the HKH region, ICIMOD is widely viewed in the HKH region and beyond as a neutral, inter-governmental organisation, and therefore the HUC’s hosting at ICIMOD lends HUC a degree of credibility and neutrality which potentially may not exist if the HUC is hosted by another institution in the HKH. In other words, ICIMOD’s hosting of HUC, enables HUC to function as a neutral transboundary/regional network/consortium.

It is evident that the HUC senior management is already aware of many of the sustainability challenges identified above. In June 2023, the HUC convened a task force on Sustainability and Resource Mobilization to explore strategies, membership fees, resource mobilization, and potential hosting alternatives for the Secretariat between 2025-2030. The task force is expected to prepare a first draft in December 2023-January 2024. The Task Force is expected to complete its mandate by 2025 when the current HUC Strategy concludes. When collecting data for this evaluation, however, no insights into the work or findings of the task force were available yet.

Conclusion

It is important for ICIMOD to consider that any sudden withdrawal of funding from HUC would have a very adverse impact on the HUC network but equally have reputational risks for ICIMOD. Key informant interviews highlighted the strong regard for ICIMOD amongst members and alumni and its role in being the key supporter of the consortium. If ICIMOD decides it is no longer able to fund the HUC, it needs to look at pathways for reducing its funding in a responsible manner and to allow HUC time to explore alternative funding sources. Such a transition period with agreed-upon core funding would ensure the continuity of essential HUC functions and activities, as HUC looks at other sustainability and resource mobilization strategies. The HUC Sustainability Task Force presents an opportune moment for ICIMOD, the HUC Steering Committee, and the Secretariat to come together and clearly discuss the future pathways of the HUC and its institutional and funding relationship with ICIMOD. It would be in HUC's interests to proactively engage with and keep ICIMOD informed about the mandate of the Task Force and its progress against its ToR.

At a corporate level, ICIMOD's senior management should evaluate the feasibility of continuing core financial support (at a minimum) for two years so that it covers the MTAP V period. HUC should expedite the work under its Sustainability Task Force and proactively engage ICIMOD in discussions regarding its sustainability, membership structure and legal registration to determine the implications of this on ICIMOD as a host and a member of the HUC.

4.7 Lessons Learnt

Summary

EQ 18. What are the lessons from other networks that can be applied to HUC?

EQ 19. What should be done differently and should have been avoided in such knowledge network programmes in the future?

Findings. Drawing on the literature review, KIIs, and survey responses some of the key lessons learned with respect to the HUC are (i) the need for a Secretariat that is appropriately resourced in terms of staff and funding; (ii) clarity of governance and organisational structure within the consortium; (iii) clear expected roles and responsibilities of consortium members, especially in terms of their contributions to the network. In the context of HUC this should include both expected in-kind and financial contributions; (iv) clear lines of communication, reporting and accountability within the consortium as well as with its host institution; (v) the need for the consortium to have a clear implementation plan with annual goals, milestones and targets that is reviewed by consortium members on annual basis; (vi) regular performance reviews and evaluations that assess the progress of the consortium in meeting its overall goal and mission; and (iv) most importantly an organisational and membership model that enables the consortium to be sustainable (see Table 10). These insights highlight the importance of organizational structure, clarity in roles and expectations, sustainable resource allocation, and exploring new avenues for funding and membership to ensure the consortium's longevity and effectiveness.

Recommendation 13. As a priority, HUC as a part of its Sustainability Task Force should consider, and address issues within the consortium related to its registration and legal status, governance, organisational, and membership structure of the network.

Discussion

Literature on consortia in higher educational institutions illustrates the need for clear governance and resourcing structures to support core consortium activities. The literature review compared the operating structure of the HUC, with two other university and research networks (as agreed during the inception phase): the University of the Arctic (UArctic) and the Asian Association of Environmental and Resource Economics (AAERE).

Table 10. Comparison of HUC with other similar research networks

Aspect	UArctic	AAERE	HUC
Registration Status	Not-for-profit association registered under Finnish Law	Incorporated association in Japan	Consortium
Governance	Governed by a Constitution	Governed by Statute	Governed by Charter
Board	UArctic Board	Board of Directors	Steering Committee
Membership Structure	Open to universities, colleges, research institutions, and other organizations concerned with education and research in and about the North	Open to individuals interested in environmental and resource economics and management	Consortium-based membership
Annual Membership Fee	Tiered fee based on member organization/institution's annual operating budget	Annual membership fee	Membership-based
General Assembly/Assembly	UArctic Assembly	General Assembly	General Assembly
Host Institution	University of Lapland	Waseda University	ICIMOD

All three organisations differ in their structures, membership criteria, and operational frameworks (see Table 10). The UArctic operates as a network of institutions and organizations concerned with education and research in the North, whereas the AAERE primarily engages individuals interested in environmental and resource economics and management. In contrast, the HUC functions as a university consortium with ICIMOD as its host institution.

Each entity follows a distinct governance model and membership structure, tailored to their respective focus areas and objectives. Both the UArctic and AAERE have governing structures that are more formalized than the HUC. The UArctic has a Board and the AAERE has a Board of Directors. In contrast, the HUC has a Steering Committee. Registration statuses also differ, with UArctic registered as a not-for-profit association under Finnish law, AAERE as an incorporated association in Japan, and the HUC being a consortium which does not have a formal legal status. Further in terms of its governance and membership structure, the UArtic and AAERE both have membership fee-based structures and are each hosted by universities. To conclude, in contrast to the HUC, the UArtic and AAERE are (i) registered as autonomous entities which gives them an independent and autonomous legal status; (ii) have a membership fee that provides them with a resource generation model; and (iii) are hosted by universities.

The lessons from these and other university networks like the HUC revolve around the importance of (i) registration/legal status of the network; (ii) governance structure and (iii) membership structure. These are critical factors that contribute to the sustainability and

viability of research and university networks (see Table 11). It is evident from this evaluation and insights from KIIs that having ICIMOD as the institutional host for the HUC has been a key factor in enabling the network to function as a regional network within the HKH. The hosting of the network by another university in the region, was highlighted by some respondents as making collaboration more challenging due to the geopolitics between countries in the HKH. ICIMOD provides the HUC with credibility and neutrality and appeals to institutions from all HKH member states.[60]

Table 11. Lessons learned from other consortia and networks.

Strong Secretariat: Effective management and governance of a consortium requires a well-supported and functioning Secretariat to effectively manage operations. **Governance:** Governance mechanisms within a consortium including a clearly defined organogram with defined roles and responsibilities of consortia members, Steering Committee/Boards is essential to ensure accountability and ensure efficient decision-making and functioning. **Resource and Sustainability Strategy:** A consortium relies on the contributions (financial and otherwise of its members). Developing a clear plan for resources and sustainability is vital for long-term success and viability of the consortia. **Clarifying Host Institution's Role:** In the event that a consortium is hosted by a particular member of the consortium, it is essential to clarify the role of the host organisation of the network, including the duration of hosting the Secretariat, expectations linked with core funding, and setting clear targets for outputs, outcomes, and fundraising. **Membership Model:** The membership model and structure of consortia is critical to its sustainability. A growing number of consortia are based on a membership fee-based model to enhance impact, ensure stability and greater member engagement/buy-in.

Conclusion

Based on the analysis of other networks, literature review, KIIs, and survey responses, the following key areas require attention to strengthen the functioning and effectiveness of the HUC going forward:

- **Legal Status:** Consider the pros and cons of formalizing the HUC's legal status, such as registering as a not-for-profit association, to enhance its autonomy and credibility.
- **Membership Structure:** Explore the possibility of introducing a membership fee-based structure to ensure sustainable funding for the HUC's activities and operations.
- **Governance and Organizational Structure:** Clarify and strengthen the governance structure of the HUC, potentially adopting a more formalized board structure similar to

[60] This point was emphasized in the initial feedback from HUC on the draft report.

UArctic and AAERE, while ensuring alignment with the consortium's objectives and regional dynamics.

- **Resource Allocation:** Allocate adequate human and financial resources to the Secretariat to support its functions effectively. Explore alternative funding and resourcing mechanisms including through member contributions to core Secretariat functions.

- **Communication and Accountability:** Establish clear communication channels, reporting mechanisms, and accountability frameworks within the consortium and between HUC and ICIMOD to enhance transparency and effectiveness.

- **Strategic Planning:** Develop a comprehensive annual HUC implementation plan with annual goals, milestones, and targets, reviewed collaboratively by consortium members, to guide the HUC's activities and measure its progress towards its mission.

- **Sustainability:** Focus on developing a sustainable organizational and membership model, exploring diverse funding sources and membership opportunities to ensure the longevity and effectiveness of the HUC.

By addressing these issues amongst consortium members as a part of its Sustainability Task Force, HUC can enhance its governance structures, resource allocation, and operational effectiveness, ultimately contributing to its sustainability and ability to fulfill its mission in the HKH region.

Conclusion

The Himalayan University Consortium is one of the largest, if not the only university consortia in the HKH region that is specifically focused on advancing collaboration, knowledge exchange, skills, and capacity building on sustainable mountain issues. The consortium today is nearly 100 universities strong and has members from the 8 HKH member countries as well as universities and academic institutions from the US, UK, Australia, and Southeast Asia. It is evident from the data reviewed for this evaluation that amongst its members and alumni, the HUC is highly valued as a platform that connects universities and researchers, that provides capacity building, skills, and training on topics relevant to SMD, and creates networks and linkages between researchers and academics within the HKH region and between the global north and south.

Between 2013-2022, the HUC has made significant contributions via its activities to both its own goals and objectives as well as ICIMOD’s. Its activities are well aligned with the outcomes and results ICIMOD pursues. During MTAP III and IV, HUC contributed to facilitating regional collaboration among universities and academics, promoting knowledge exchange, conducting joint research on sustainable mountain development issues, and supporting capacity building for the next generation of researchers and practitioners.

ICIMOD as the institutional host of the HUC since 2014, has been instrumental in sustaining the core functions of the Secretariat as well as flagship programs such as the HUC Academy. As noted in the ICIMOD Quinquennial Review 2021, HUC (along with SANDEE) are examples of initiatives managed by ICIMOD that illustrate the value of small amounts of sustained funding over a longer period. In exchange, ICIMOD through HUC has been able to achieve a high degree of visibility with Higher Education Institutions throughout the HKH region and indeed globally and had access to a network of institutions and experts in the region/beyond

to leverage its work. The HUC's activities have also contributed to ICIMOD's strategic results at initiative and regional programme level and supported (alongside other initiatives) its institutional theory of change and impact pathways.

However, it is equally clear that over the years despite efforts at integrating the HUC within the overarching programmatic and reporting structure of ICIMOD, this integration has been challenging for several reasons. Prime amongst these is the challenge of balancing the reporting and accountability needs of ICIMOD as the host and core funder of the HUC and the autonomy and independence of the HUC. On a day-to-day basis, the lack of clarity around roles, responsibilities, expectations, and clear lines of communication, has made managing the relationship between ICIMOD and HUC challenging. Moreover, the lack of sufficiently detailed reporting of HUC results particularly at outcome level has made it difficult for HUC to articulate its overall value addition and VfM in relation to the realisation of ICIMOD's goals and objectives. This also makes it complicated for HUC to show its contributions to ICIMOD's Strategy 2030 and MTAP V.

These issues are reflections of broader issues that are currently facing the HUC in terms of governance, the engagement with, ownership of the consortium by its members, and the lack of progress on raising financial resources from within the consortium. This is reflected in the fact that ICIMOD has remained as the facilitating host of the network, despite the intention that the Secretariat would be rotated amongst consortia members over time and members would contribute resources to support its core activities. While there are on-going discussions within the HUC about more sustainable models for the consortium these have not yet been made concrete.

It is also evident that for the immediate future, HUC will require ongoing support from ICIMOD to sustain its core functions. However, it is uncertain to what extent ICIMOD can sustain this support without a clear strategy and plan for its investment to support broader realization of ICIMOD's goals and objectives under its new strategy. Balancing the HUC's autonomy while aligning it with ICIMOD's broader vision is vital if HUC is to continue to receive ICIMOD support. At a corporate level, there is an urgent need to clarify governance, reporting and accountability between the HUC and ICIMOD and to ensure that communication about future pathways for both ICIMOD and HUC are clear and transparent.

Recommendations

Recommendations are directed at ICIMOD as the commissioners of this evaluation and where appropriate to the HUC. The recommendations are structured and prioritised in line with the evaluation criteria. However, recommendation 6 (Coherence) on clarifying the relations and expectations between ICIMOD and HUC has the highest priority as none of the other recommendations, e.g., around clarifying results, can be implemented until these relations and expectations are formalised and clarified.

Table 12. Recommendations

EQ Criteria	Finding	Recommendation	Priority	Addressed to
Relevance	While HUC's activities clearly make a relevant contribution to ICIMOD, its results are not	**1.** ICIMOD and HUC collaboratively formulate a results framework specifically for HUC under MTAP V, ensuring that	High	ICIMOD and HUC

	adequately captured and reported, particularly at outcome level.	outcomes, outputs, and output targets are clearly defined, including clear milestones to track and record expected contributions.		
Effectiveness	HUC has not had a General Assembly since 2018 and it is unclear to what extent its governing bodies carry out their mandated tasks successfully. Moreover, a substantial part of its network does not appear to actively engage	**2.** The HUC Secretariat and Steering Committee as a priority review how the different governance bodies within the HUC i.e., the General Assembly, Standing Committee and Secretariat are delivering against their respective mandates and develop a network strategy to revitalize the membership including the HUC General Assembly.	High	HUC
	HUC's communication with its members is sub-optimal and it is not being used to create linkages between ICIMOD and HUC's network and alumni, which is a missed opportunity.	**3.** To improve communication with its members, ICIMOD, and a broader community of stakeholders, HUC should revive its newsletter to its membership. This can be a mechanism through which ICIMOD can disseminate its research, publications, showcase projects and put in calls for expertise from the network.	Medium	HUC

Efficiency	ICIMOD is not fully utilising HUC to either draw in expertise for its own work, or to disseminate its knowledge, which means it is not efficiently using the resource HUC offers.	**4.** ICIMOD devise an internal strategy on how to more actively draw on HUC member expertise and utilize the network to disseminate ICIMOD knowledge, research, and policy outputs.	High	ICIMOD
	There is currently insufficient sight on what members contribute to HUC, nor is there a clear strategy for resource mobilisation that could help HUC become less dependent on ICIMOD.	**5.** HUC should develop a mechanism through which members can report on the value of contributions cash or in-kind to consortium activities and devise a sustainability and resource mobilization strategy endorsed by members.	High	HUC
Coherence	While HUC is an autonomous network, ICIMOD rightly expects certain results and information given that it provides significant funding to HUC. However, at present, this relationship and the associated expectations are unclear.	**6.** ICIMOD and HUC should urgently clarify roles, responsibilities, and expectations vis-a-vis communication, reporting, and other organisational and management aspects (including financing) in line with their respective mandates. This is the highest priority recommendation and all other recommendations, e.g., around clarifying results and developing a work plan etc, cannot be implemented unless roles and expectations are formalised and clarified.	Highest Priority	ICIMOD and HUC
	HUC and SANDEE have	**7.** ICIMOD should work with HUC and	Medium	ICIMOD, HUC, SANDEE

	complementarity, but currently do not closely work together, which is something ICIMOD could facilitate to improve coherence between these networks	SANDEE to identify where their workplans overlap with each other and MTAP V and ICIMOD's Strategy 2030 in order to explore joint activities.		
Impact	HUC has an impact, especially at the regional level in terms of facilitating knowledge creation and exchange and building a university network, but its impact at a global level less clear	**8.** HUC undertake a detailed and comprehensive impact study that assesses the contributions of its activities towards achieving its core goals and objectives, particularly at outcome level.	Medium	HUC
		9. HUC develop a results and impact monitoring strategy alongside a communication plan to more effectively capture the impact it generates.	High	HUC
	At present the HUC's engagement with its alumni is not very systematic and is largely based on emails going out from the Secretariat about upcoming events, workshops, etc. A strong alumni network could enhance collaboration and impact.	**10.** HUC create a more formal alumni network to better connect, strengthen, and leverage its network of nearly 200 alumni in the HKH region.	High	HUC
Sustainability	The governance arrangements between ICIMOD and HUC whereby ICIMOD is only a member of the HUC Steering Committee but	**11.** ICIMOD and HUC review and revise the governance structure for HUC in line with EQ 10/recommendation 6 under coherence.	High	ICIMOD/HUC

	cannot direct its activities strongly creates tension between ICIMOD and HUC.			
	HUC is at present too dependent on ICIMOD to provide core funding, which is a serious sustainability risk.	**12.** HUC expedite the work under its financial sustainability task force.	High	HUC
Lessons Learnt	Insights from other reviewed networks point to the importance of a clearly defined legal status, alongside other aspects including the ability to raise resources from the network's membership.	**13.** HUC's Sustainability Task Force consider and address issues within the consortium related to its registration and legal status, governance, organisational and membership structure of the network.	High	HUC

Annexes

Annex 1. Documents Reviewed

The Himalayan University Consortium in a Nutshell. September 2023

ICIMOD. Annual Progress Report (Jan - Dec). 2013

ICIMOD. Annual Progress Report (Jan – Dec) Part B. 2014

ICIMOD. Detailed Progress Report (Jan – Dec). 2015

ICIMOD. Detailed Annual Progress Report. 2016

ICIMOD. Detailed Annual Progress Report (Draft). 2017

ICIMOD. Annual Progress Report. 2018

ICIMOD. Bi-Annual Review Report. 2019

ICIMOD. Annual Progress Report. Regional Programme VI. Mountain Knowledge and Action Networks. 2020

ICIMOD. Annual Progress Report. Regional Programme VI. Mountain Knowledge and Action Networks. 2021.

ICIMOD. Detailed Progress report 2018-2022. Regional Programme VI: Mountain Knowledge and Action Networks. 2023

HUC Charter

HUC Strategy 2018-2025

HUC in a Nutshell.2023

HUC Sustainability Task Force ToR 2023

Himalayan University Consortium Fellow Tracer Study. 2020

ICIMOD MTAP III

ICIMOD MTAP IV

ICIMOD MTAP V

ICIMOD Fifth Quinquennial Review. 2016

ICIMOD Quinquennial Review. 2021

Annex 2. List of Key Informant Interviews

S. No	Name	Designation	Date
ICIMOD			
1.	Dr. Pema Gyamtso	Director General	31 October 2023
2.	Dr. Izabella Koziell	Deputy Director General	31 October 2013
3.	Dr. Eklabya Sharma	Former Deputy Director General	2 November 2023
4.	Dr. David Molden	Former Director General	2 November 2023
5.	Farid Ahmad	Head, Strategic Planning, Monitoring and Evaluation Unit	6 November 2023
6.	Ghulam Muhammad Shah	Senior Impact, Monitoring and Evaluation Specialist, SPMEL Unit	6 November 2023
HUC Steering Committee			
7.	Mohammad Rezaur Rahman	Professor, Institute of Water and Flood Management, Bangladesh University of Engineering and Technology	8 November 2023
8.	Tahira Yashmin	Registrar, PARC Institute of Advanced Studies in Agriculture, Pakistan	22 November 2023
9.	Dasho Nidup Dorji	Vice Chancellor, The Royal University of Bhutan	24 November 2023
10.	Rosalind Cornforth	Director, Walker Institute, University of Reading	11 December 2023
HUC Secretariat			
11.	Chi Huyen Truong (Shachi)	HUC Secretariat Programme Coordinator	31 October 2023
HUC Beneficiaries (including fellows, grantees, researchers, members of Thematic Working Groups			
12	HUC Fellow from Pakistan (Female)		29 November 2023
13	HUC Training Workshop Participant from Bhutan (Male)		30 November 2023
14	HUC Fellow from Afghanistan (Female)		30 November 2023
15	HUC TWG Member from China		4 December 2023
16	HUC Fellow from Bangladesh		6 December 2023
17	HUC TWG Member (China)		7 December 2023
18	HUC Grant Recipient from India (female)		11 December 2023

Annex 3. Interview Guides

Questionnaire ICIMOD Senior Management.pdf

Questionnaire for HUC Steering Committee Members.pdf

Questionnaire HUC Beneficiaries.pdf

Annex 4. Survey Questionnaires

HUC Online Surveys.pdf

Annex 5. List of HUC Members and Associate Members

S. No	Institution	Country	Member type
1	A P Goyal Shimla University	India	Full member
2	Abdul Wali Khan University	Pakistan	Full member
3	Agriculture and Forestry University (AFU)	Nepal	Full member
4	Ashoka Trust for Research in Ecology & the Environment ATREE	India	Full member
5	Asian Institute of Technology (AIT)	Thailand	Associate member
6	Bangladesh University of Engineer & Technology (BUET)	Bangladesh	Full member
7	C S K Himachal Pradesh Agricultural University	India	Full member
8	Centre for Development and Environment (CDE, University of Bern)	Switzerland	Associate member
9	COMSATS University Islamabad	Pakistan	Full member
10	Department of Geoinformatics, University of Salzburg (Z_GIS)	Austria	Associate member

11	East West University	Bangladesh	Full member
12	Eshraq Institute of Higher Education	Afghanistan	Full member
13	Far Western University	Nepal	Full member
14	Forest Research Institute (FRI)	India	Full member
15	G B Pant National Institute of Himalayan Environment and Sustainable Development	India	Full member
16	G B Pant University of Agriculture and Technology	India	Full member
17	H N B Garhwal University	India	Full member
18	Himalaya Institutes of Alternative	India	Full member
19	India China Institute at The New School	USA	Associate member
20	Indian Institute of Technology, Roorkee (IIT-Roorkee)	India	Full member
21	Institute for Global Environmental Strategies	Japan	Associate member
22	Institute for Mountain Hazards and Environment (IMHE)	China	Full member
23	Institute of Geographic Sciences and Natural Resources Research (IGSNRR)	China	Full member
24	International Centre for Integrated Mountain Development (ICIMOD)	Nepal	Full member
25	International Institute for Geo-Information Science and Earth Observation (ITC)	Netherlands	Associate member
26	International Institute of Asian Studies, Leiden (IIAS)	Netherlands	Associate member
27	Jahangirnagar University	Bangladesh	Full member
28	Jawaharlal Nehru University	India	Full member
29	Kabul Polytechnic University	Afghanistan	Full member
30	Kabul University	Afghanistan	Full member
31	Kandahar University	Afghanistan	Full member
32	Karakorum International University (KIU)	Pakistan	Full member
33	Kashmir University	India	Full member
34	Kathmandu University (KU)	Nepal	Full member
35	Kumaun University	India	Full member
36	Kunming Institute of Botany (KIB)	China	Full member
37	Laghman University	Afghanistan	Full member
38	Lanzhou University (LZU)	China	Full member
39	Leshan Normal University	China	Full member
40	Mandalay Technological University	Myanmar	Full member
41	Martin Luther Christian University	India	Full member
42	Mizoram University	India	Full member
43	Mongolia International University	Mongolia	Associate member
44	Monywa University of Economics	Myanmar	Full member

45	Myitkyina University	Myanmar	Full member
46	Nangarhar University	Afghanistan	Full member
47	National Institute of Hydrology	India	Full member
48	Nepal Open University	Nepal	Full member
49	Northwest University	China	Full member
50	Norwegian University of Life Sciences (UMB)	Norway	Associate member
51	PARC Institute of Advanced Studies in Agriculture (PIASA)	Pakistan	Full member
52	Pir Mehr Ali Shah Arid Agriculture University	Pakistan	Full member
53	Pokhara University	Nepal	Full member
54	Qinghai Normal University	China	Full member
55	Rajshahi University	Bangladesh	Full member
56	Royal University of Bhutan	Bhutan	Full member
57	Shaheed Benazir Bhutto University	Pakistan	Full member
58	Shoolini University of Biotechnology and Management Sciences	India	Full member
59	Shri Guru Ram Rai University	India	Full member
60	Sichuan University (SCU)	China	Full member
61	Sichuan University of Agricultural Science	China	Full member
62	Sikkim University	India	Full member
63	SKUAST Agriculture University	India	Full member
64	South Asian University	India	Full member
65	Southwest Forestry University (SWFU)	China	Full member
66	Southwest Minzu University	China	Full member
67	Syed Jamaluddin Afghani University	Afghanistan	Full member
68	Tata Institute of Social Sciences (TISS)	India	Full member
69	TERI School of Advanced Studies	India	Full member
70	The Norwegian University of Science & Technology (NTNU)	Norway	Associate member
71	Tribhuvan University (TU)	Nepal	Full member
72	Ugyen Wangchuck Institute for Conservation and Environment Research (UWICER)	Bhutan	Full member
73	UNIDO International Solar Energy Centre for Technological Promotion and Transfer	China	Full member
74	University of Agriculture	Pakistan	Full member
75	University of Arizona	USA	Associate member
76	University of Baltistan	Pakistan	Full member
77	University of Bristol	UK	Associate member
78	University of Central Asia (UCA)	Tajikistan	Associate member
79	University of Chitral	Pakistan	Full member

80	University of Chittagong	Bangladesh	Full member
81	University of Colorado, Boulder	USA	Associate member
82	University of Mandalay	Myanmar	Full member
83	University of Natural Resources and Life Sciences, BOKU	Austria	Associate member
84	University of Peshawar	Pakistan	Full member
85	University of Swat	Pakistan	Full member
86	University of the Highlands and Islands (UHI)	UK	Associate member
87	Walker Institute, University of Reading	United Kingdom	Associate member
88	Western Sydney University	Australia	Associate member
89	Wildlife Institute of India (WII)	India	Full member
90	Wuhan University	China	Full member
91	Xinjian Institute of Ecology and Geography	China	Full member
92	Yale Himalayan Initiative	USA	Associate member
93	Yangon University	Myanmar	Full member
94	Yezin Agricultural University (YAU)	Myanmar	Full member
95	Yunnan Agricultural University (YAU)	China	Full member
96	Yunnan Minzu University	China	Full member
97	Yunnan University	China	Full member

Annex 6. MTAP III and MTAP RESULTS REPORTING

Annex 6. HUC Results Reporting MTAP III an