

International Centre for Integrated Mountain Development
Updated Risk Management Strategy for Medium Term Action Plan IV
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Abbreviations

ARB	Adaptation and Resilience Building
CBD	Convention on Biological Diversity
CBFEWS	Community based flood early warning system
CCAC	Climate and Clean Air Coalition
CIRC	community information resources center
CRA	Climate Resilient Agricultural
CSRD	Climate Services for Resilient Development
CSV	Climate Smart Villages
DOI	Digital Object Identifier
DRR	Disaster Risk Reduction
FABKA	Federation of South Asian Brick Kiln Association
FNBI	Federation of Nepal Brick Industries
GAP	Gender Action Plan
GCF	Green Climate Fund
GEE	Global Earth Engine
GEO	Group on Earth Observation
GESI	Gender and Social Inclusion
GIS	Geographic Information System
GIT	Geospatial Information System
HDI	Human Development Index
HKH	Hindu Kush Himalaya
HKPL	Hindu Kush Karakoram Pamir Landscape
HSRC	Himalayan State Regional Council
HUC	Himalayan University Consortium
HI-LIFE	Landscape Initiative for Far Eastern Himalayas
IBI	Indus Basin Initiative
IDRC	International Development Research Centre
IFC	International Finance Corporation
IIED	International Institute for Environment and Development
IOM	International Organization for Migration
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IRBM	Integrated River Basin Management
IUCN	International Union for Conservation of Nature
IUFRO	International Union of Forest Research Organisations
KIU	Karakoram International University
KL	Kailash Landscape
KMC	Knowledge Management and Communication
KSL	Kailash Sacred Landscape

MENRIS	Mountain Environmental Regional Information System
MEL	Monitoring, Evaluation and Learning
MEW	Ministry of Energy and Water
MKAN	Mountain Knowledge and Action Networks
MSDP	Myanmar Sustainable Development Plan
NAPCC	National Action Plan on Climate Change
POUT	Publication and Outreach Committee
RDS	Regional Database System
REDD+	Reducing Emissions from Deforestation and Forest Degradation
REECH	Renewable Energy and Energy Efficiency Centre
RCF	Regional Cooperation Framework
RMC	Regional Member Country
RMS	Resilient Mountain Solutions
SANDEE	South Asian Network of development and Environmental Economics
SCU	Strategic Cooperation Unit
SDG	Sustainable Development Goals
SPM&E	Strategic Planning, Monitoring and Evaluation
SR	Strategic Results
SWaRMA	Strengthening Water Resources Management in Afghanistan
TWG	Thematic Work Group
UNCCD	United Nations Convention to Combat Desertification
UNIDO	United Nations Industrial Development Organization
UNFCCC	United Nations Framework Convention on Climate Change

Introduction

The fourth ICIMOD Medium-Term Action Plan (MTAP IV), for the period 2018–2022, has been prepared based on the overall direction provided in the revised Strategy and Results Framework 2017. ICIMOD’s overall situation, internally and externally, has changed over the past five years. Regional institutions such as ICIMOD are receiving more attention in the context of meeting the challenges of climate change and sustainable mountain development. Mountain regions are being acknowledged as hotspots of climate change and recognized for the ecosystem services that they provide. However, poverty, conflict, and disaster persist in mountainous areas and the rate of outmigration continues to increase, leaving behind women, children, and the elderly.

The Centre aims to contribute to development impact through the achievement of concrete outcomes that go beyond the direct influence of its programmes, often entering into its partners’ areas of influence. However, in a context where many actors and factors play important roles, ensuring programme activities contribute to positive impacts becomes more challenging, and attribution of these impacts can be difficult.

As ICIMOD’s visibility and competitiveness increase, so do the risks related to achieving quality results and cutting-edge, innovative science. Moreover, regional member countries, donors, and other stakeholders have called for increased accountability in terms of the delivery of results and the systematic management of risks to minimize chances of failure.

It is in this context, ICIMOD needs a Risk Management Strategy to define minimum requirements and an approach to address risks at various levels. This will help to minimize reputational risks and will also increase the efficiency of operations.

ICIMOD commits to implementing this strategy and ensuring its integration with other existing institutional policies, strategies, procedures, including: MEL Framework, Gender & Equity Policy, Partnership Strategy, Social and Environmental Policy and Human Resources Policy.

Risk management strategy objectives

Risk management is defined as a systematic plan for the identification, assessment, implementation, and communication of risks. The objectives of the ICIMOD Risk Management Strategy are as follows:

- To help the management of ICIMOD’s plans and allocate resources strategically, and be vigilant of major threats to the organization and its mission.

- To identify, assess, and plan for major risks at the institutional, programme, and initiative levels with clear responsibilities.
- To improve understanding, monitoring, and reporting of risks at different levels.

Definition of risk

The Oxford English Dictionary defines risk as “a situation involving exposure to danger” or “the possibility that something unpleasant or unwelcome will happen”. For ICIMOD, risks are those situations that have the potential to negatively influence the achievement of activities, processes, and results.

Types of risks

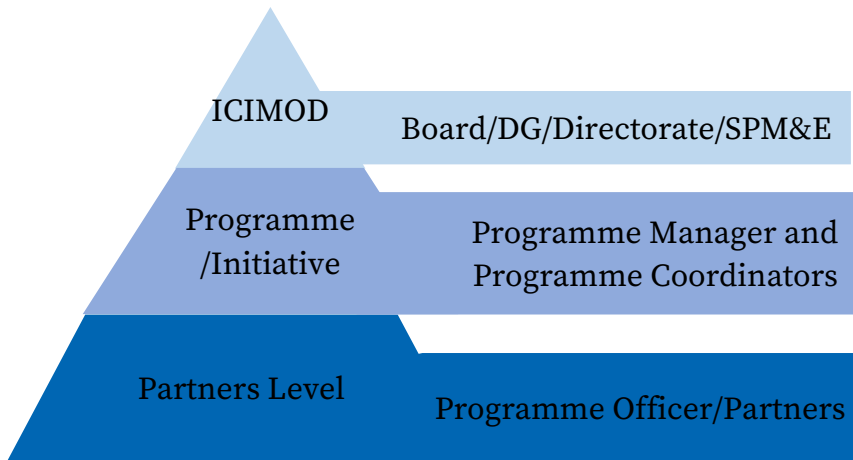
Risks are categorized into two major types – internal risks and external risks. Internal risks are factors and conditions largely within the influence of the organization, programmes, and initiatives that may hinder success, such as corruption, human and financial resource capacity, management capabilities, incentive structures, accountability and transparency, ownership, and motivation of staff.

External risks are conditions outside the influence of the institution, programmes, and initiatives that could have a negative influence on the achievement of results and beyond. External risks could be related to political, institutional, economic, environmental, social, or technological conditions.

Levels of risk management at ICIMOD

ICIMOD’s Risk Management Strategy will address risks at the institutional, programmatic, and initiative levels. The major responsibility of risk management at the institutional level lies with the Director General and his team. Regional Programme Managers are responsible for programme-level risks, and programme coordinators have the responsibility of handling initiative-level risk management. Partner’s level risks are responsibility of partners and programme officers.

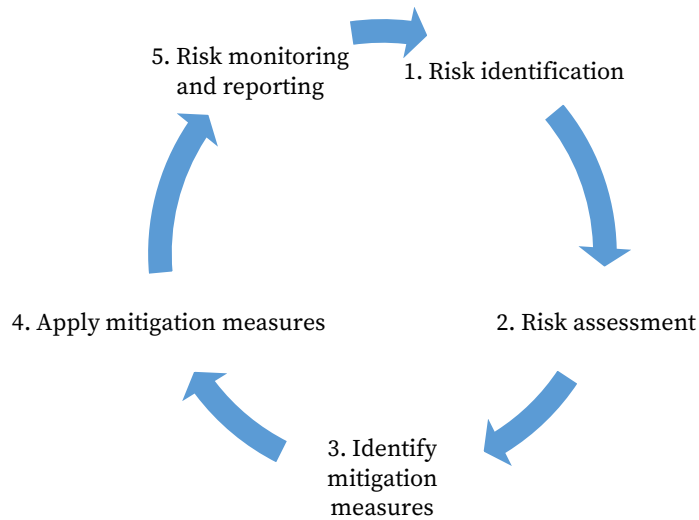
Figure 1. Risk management levels



Risk management cycle

The risk management cycle must be built around the project management cycle. During the project design stage, risks are identified and assessed. Risk mitigation measures should be part of implementation strategies so that these measures are implemented during the execution of the programme. Hence, monitoring and evaluation will take care of various risk implementation strategies.

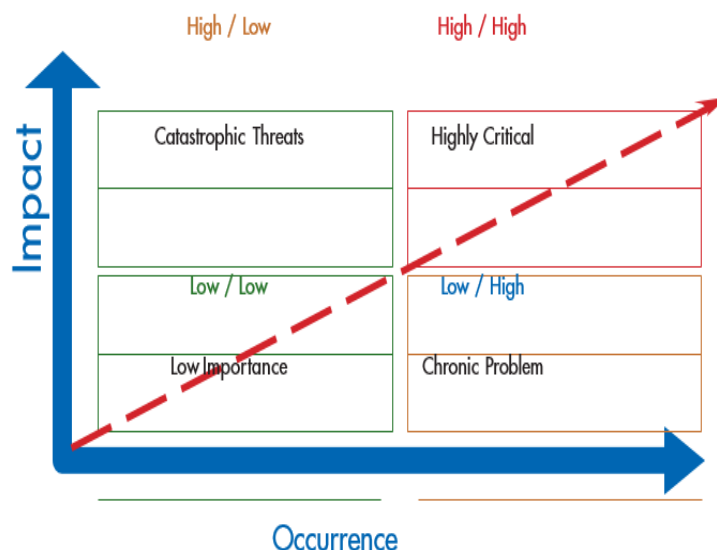
Figure 2. Risk management cycle



Risk assessment matrix

Risks are analysed in two ways, first in terms of impact and second in terms of occurrence. The following matrix provides a brief description of risk assessment. It shows that risks with high probability of occurrence and high impact on results need greater attention in terms of robust planning and a strong mitigation strategy.

Figure 3. Risk assessment matrix (adapted from UNESCO Training Manual)



Monitoring and reporting of risks

Institutional-level risks will be reviewed biannually and will be reported to the ICIMOD Board of Governors on yearly basis. Risks at the programme and initiative levels will also be reviewed on a biannual basis as part of the organization's regular review process.

Risk management strategy operationalisation

ICIMOD will operationalise its risk management strategy in the following manner:

1. Risks will be identified and assessed during the project development stage. Project feasibility and appraisal document will clearly identify pertinent risks which will help in making decisions related to project potential and feasibility. A template will be developed and will be available in MEL guideline document to support project appraisal.
2. Risks will also be identified and assessed along the results chain from activity to impacts. The theory of change and impact pathways development workshop will

identify and assess risks for each of the activities and results. The template is already available and will be made part of the updated MEL guideline.

3. Risks will be also identified and assessed as part of the initiative implementation plan (Given in Annex 2). Both internal and external risks will be assessed and mitigation measures will also be identified. The templates will be given as part of MEL guideline.
4. At ICIMOD level, risks are identified and assessed as part of its medium term action planning processes. These risks include both institutional and programmatic. (Given in annex 1).
5. Risks assessment and reporting has been made mandatory for ICIMOD's Partners as part of their letter of agreement. The templates will be given as part of MEL guideline.
6. Risks are assessed and reported bi-annual basis through ICIMOD's online system and has been explained in the MEL Guideline.

Responsibilities and decision-making processes in mitigating risks

The primary responsibility for identifying risks and managing those lies with management at all levels.

- The Director-General (DG): DG approves the recommendation of the SMC related to deal with strategic nature of risks pertaining to ICIMOD's reputation and strategic functions. The DG is accountable to the ICIMOD Board of Governors for the development and achievement of ICIMOD's strategy and results, including the overall management of risks to these strategic results. The Board approves the risks management strategy.
- The Senior Management Committee (SMC): SMC makes decisions related to new emerging institutional level risks and address the major risks brought to its attention, including by proposing or supporting the implementation of the mitigation plans proposed. The SMC should include risk management in its agenda as and when required.
- Strategic Planning and M&E: The SPM&E provide assurance on the risk management framework and provides advisory services to support management's decision making. It specifically provides assurance that controls are well designed and applied to mitigate risks or take opportunities. SPM&E also provides updates to SMC on the progress related various programme and unit level of risks. In addition, it provides tools and techniques to analyze and control risks. SPM&E closely works with programme finance and strategic cooperation units in managing risks and linking to internal audit work.

- Programme Manager, Initiative Coordinator and Programme Officer: responsible to assess potential risks and formalize them during the project design and implementation stage. Risks identified during the inception workshop and, documented in the project design specifically in the results framework will serve as a basis for discussion with respective funding agencies.
- Unit Heads, Theme Leaders and Country Focal Points: Responsible for managing risks which pose the greatest challenge to the achievement of the outcomes in their respective functions.

Annex 1. Institutional level risks and mitigation measures

Major risks	Assessment ¹	Mitigation measures
External risks		
Reputational risks: Sensational, speculative, and baseless statements based on misunderstandings about ICIMOD by individuals, media, and competitors.	I (H), O (L)	ICIMOD is aware of such situations and is taking precautionary steps like developing relations with mainstream media and engaging with well-reputed media persons from the region to reduce them. ICIMOD makes clear and careful statements on its website about engagements with individuals and organisations.
Partners' capacities and management systems: Partners are unable to deliver according to expectations, leading to unsatisfactory results.	I (H), O (M)	ICIMOD's partnership management system, including the selection process, is being improved, and staff are being trained on partnership-building techniques. ICIMOD will provide trainings in financial management and monitoring and evaluation to its key implementing partners.
Major policy shifts in member countries towards ICIMOD and mountain issues: Such shifts may create big challenges, such as reduced ownership of ICIMOD.	I (H), O (L)	ICIMOD is strengthening its RMC engagement strategy and has been engaging with relevant strategic and policy institutions with the goal of mainstreaming mountain issues in national development policies, such as national planning commissions and policy think tanks.
Major core and programme donors shift their priorities from the HKH to other regions or other topics (regional issues and climate change).	I (H), O (H)	ICIMOD has to demonstrate that its work makes an impact beyond regional boundaries. It should utilize its robust institutional mechanisms for quality assurance and monitoring mechanisms to deliver results and impacts. The ICIMOD Support Group (ISG) is helping ICIMOD to secure long-term strategic funding. Meanwhile, ICIMOD is continuously diversifying its core and programme funding sources to minimize such risks.

¹ I = impact, O = occurrence; (Low, Medium, High)

Major risks	Assessment ¹	Mitigation measures
Political uncertainty, disasters, and security issues in regional member countries pose risks to effective programme implementation.	I (H), O (H)	ICIMOD's strategic planning process is being strengthened to cope with uncertain situations. Country focal points are being trained to stay alert and well informed about developments in their respective countries, and to coordinate effectively with respective line agencies and partners. ICIMOD requires some flexibility to take rapid action and refocus programmes when faced with unforeseen situations. To avoid such situations, regular security advisories are issued to staff.
Major currency fluctuations negatively impact planned activities and deliverables.	I (H), O (H)	ICIMOD will pay non regional partners in their own currency where possible; contracts to partners will be linked to the original currency; and diversify currencies held in banks will be diversified.
Internal risks		
Low-quality output could tarnish ICIMOD's reputation.	I (H), O (L)	ICIMOD is further strengthening monitoring and quality assurance processes at the partner level. Knowledge products and processes are being enhanced to capture success stories and effectively disseminate them. These efforts are aimed at ensuring high-quality outputs.
Reduced relevance and poor linkages of ICIMOD's work to national policies and priorities	I (H), O (L)	ICIMOD programmes are developed in consultation with partners, taking into account their needs. Programmes are also linked to country priorities. ICIMOD ensures that policy makers are involved in the programmes right from the start. It is making conscious efforts to engage with national planning commissions and other equivalent bodies in its member countries.
Not being able to hire competent and appropriate staff for the different initiatives poses risks to timely delivery of the programme outcomes.	I (M), O (L)	ICIMOD has started a strategic staffing process whereby core competency and project staff requirements are identified on short- and long- term bases. Current staff are receiving training to build and strengthen capacity. Short-term consultancy requirements are being addressed through the development and regular update of a consultants' roster, where all potential consultants are registered.
Gender, environment and human rights are not given enough attention by programmes and partnerships.	I (H), O (L)	Policies and procedures are in place for all three dimensions whereby all partnership agreements and internal processes are being monitored on regular basis.

Major risks	Assessment ¹	Mitigation measures
Financial, administrative and monitoring risks		
Internal control risk: Certain internal control processes might be overlooked at the time of actual implementation.	I (H), O (L)	The internal control processes that have been developed for programme operations and administrative functions are very tight and robust. ICIMOD's internal control systems are regularly assessed, and have been approved by donors. To maintain this status, we continuously monitor and upgrade our systems using the automated enterprise resource planning system (STAR) and other internal administrative processes. An internal audit function is in place for regular auditing of accounting, procurement, and control procedures. Internal audit reports are submitted to the SMC.
Partners capacity in financial management, M&E and Gender may pose risk to ICIMOD	I (H), O (L)	ICIMOD undertakes capacity gap assessment of key implementing partners and conducts various capacity building activities through technical trainings including other areas of gender mainstreaming, financial management, monitoring and evaluation and partnership building.
Delays in financial management information for decision making	I (H), O (L)	Financial information is produced for management on a monthly basis as a part of monthly management report. All financial transaction are captured and recorded consistently across all the programmes and projects.
Lack of internal audit function	I (H), O (L)	Our internal auditor is an outsourced accounting firm independent of the management. The internal audit unit mainly covers review of internal control, ensures compliance with laws and regulations in all respect, assists management on the detection of fraud and error, and coordinates with external audit function. Internal auditors issue their report to the Director General. The findings of the internal audit is agreed and acted upon.
Fraud and corruption may hamper the institutional performance at any level	I (H), O (L)	ICIMOD has zero tolerance policy on fraud and corruption. The policy is reflected in all accounting procedures and reporting processes both internally and externally

Major risks	Assessment ¹	Mitigation measures
Monitoring and evaluation processes and systems are not effective	I (H), O (L)	ICIMOD has approved M&E framework that describes our monitoring and evaluation policies, procedures and guidelines. We have trimester review process for institutional and programmatic performance. Through this process, we monitor our progress, risks and lessons learned. We do both internal and external reviews of our programmes and initiatives. We do impact assessments using both qualitative and quantitative rigorous methodologies.
Lack of robust IT system (financial, operational and HR)	I (H), O (L)	ICIMOD has a robust IT system with Microsoft Dynamics Navision 2013 R2 is used for Financial, HR systems. The systems are local with the server hosted on premise.
Financial data storage and security risks	I (H), O (L)	Fortigate 200B is used as an antivirus firewall which secures the internal network from outside intrusions. ISCSI storage with 100TB capacity is used for data storage and backup. As a part of the Business Continuity Plan, an offsite backup site at Godavari with another 100 TB data storage device is connected to the main Office via fiber optic cable and is replicated with the backup device in the main office. As part of ISMS implementation, we are coming up with a separate IT policy as part of Admin and Finance Policy.
Less effective procurement systems and processes	I (M), O (L)	The effective procurement systems and processes are in place which provide clear and efficient guidelines in execution of procurement of goods and services for different threshold value of proposed procurement. Any procurement with value from \$ 500 to \$ 10,000 is carried out by obtaining at least three written competitive quotations from capable suppliers while the procurement with value more than \$ 10,000-\$30,000 is executed through sealed bids competition from competent and qualified suppliers in the market. For any proposed procurement exceeding \$ 30,000 is carried forward through establishment of Capital expenditure committee headed by the Director General.
Weak/inadequate measures of responding to poor performance of partners	I (M), O (L)	The PRM system has the ability to generate report on monthly basis or report on demand at the individual partner level to track the performance of the implementing partners i.e. by tracking deliverables with their associated funds. The traffic light system is instituted - green for deliverables on time; yellow - deliverables due more than a month; and deliverables due more than two months;

Major risks	Assessment ¹	Mitigation measures
Lack of robust agreement instruments in dealing with partners	I (M), O (L)	The Letter of Agreement (LoA) provide the basis for the funding agreements with the implementing partners and can be tracked based on their deliverables. The sanction provision are included for non-delivery of agreed performance.
Inadequate transparency commitments for financial information	I (M), O (L)	ICIMOD's annual audited financial statements are published as part of the annual report which is publicly available for distribution and also posted in the center's website.

Annex 2. Programme level risks and mitigation measures

RP1: Adaptation and Resilience Building Programme

Major risks	Assessment ²	Mitigation measures
Programme Level Risks		
External Risks		
Policies related to adaptation and resilience building do not get adequate attention in the national agenda of member countries.	I (H), O (M)	Regular strategic engagement with policy makers to emphasize the need to formulate climate-friendly development action plans and the value of adaptation and resilience building plans for achieving development goals, particularly the Sustainable Development Goals (SDGs).
Policy makers are unable to formulate tangible response strategies for enhancing local adaptation and resilience building measures despite increased awareness and commitment to develop actionable plans and measures to address local response needs.	I (H), O (M)	Proactive strategic engagement with policy makers to co-develop and ensure policy action. Identifying decision makers and build rapport with them are part of such engagement.
Pilot activities and livelihood securities overshadow adaptation concerns, resulting in intervention designs that are maladapted to addressing climate change impacts.	I (M), O (H)	Pilot activities are jointly designed with relevant stakeholders – who have adequate awareness and judgment – at each stage of the formulation process. This ensures that none of the interventions designed are maladapted to addressing climate change impacts.
Conflicts arising from changing policies and access to resources threaten pilot activities and livelihood securities.	I (M), O (M)	Pilot activities are jointly designed with relevant stakeholders and policy makers to mitigate future conflicts that might result from reduced access to resources. Resource sustainability is factored in during planning.
Global economic factors and market developments lead to maladaptation within pilot projects	I (M), O (L)	Strategically address the mid-term outlook for the economy and market while planning pilot activities.

Major risks	Assessment ²	Mitigation measures
National interests and the need for formulating national plans overshadow interests in regional collaboration for adaptation to change.	I (L), O (M)	While encouraging and providing support for the formulation of National Adaptation Plans, engage and advocate pro-actively at different fora promoting the need for regional cooperation by highlighting areas where a regional, transboundary approach is essential and in the long-term interest of individual nations.
Internal Risk		
Staff turnover leads to delays and reorientation.	I (H), O (M)	Two or three staff capable of addressing relevant topics will be retained, and the matrix structure will be used to adjust other relevant staff. Additionally, a roster of short term consultants can also help to fill gaps.
Relationship building and fostering partnership requires timely response and long-term commitment.	I (H), O (M)	Appropriate allocation of resources for partnership building and an efficient fund transfer and feedback mechanism help build trust.

RP2: Transboundary Landscapes Programme

Major risks	Assessment ³	Mitigation measures
Programme Level Risks		
External Risks		
Long gestation period (>5 years) for outputs.	I (M), O (M)	Capture short-term impact stories, and validate and disseminate them; increase at-scale fieldwork intensity and leveraging of local government resources. Facilitate strong ownership of the programme by country partners; identify champion stakeholders with countries to promote the transboundary concept at policy and practice levels. Strengthen existing cross-border institutional mechanisms and work with government partners through legitimate letters of agreement.
Land use change.	I (M), O (L)	Promote mainstreaming of different frameworks such as ecosystem management, long-term environmental and socio-ecological monitoring, innovative livelihoods, knowledge products, etc. in the local/national planning and implementation systems/mechanisms; and through regional donor programmes. Assist national governments in implementing their land use planning and policy.

Major risks	Assessment ³	Mitigation measures
Conflict between countries.	I (H), O (L)	Focus on a “no regrets approach” i.e., continue mentorship programme implementation and cross exchange at regional knowledge communication fora. Influence national policies and programmes through implementation. Use flagship species like the snow leopard to forge transboundary cooperation.
Inter- and intra-state conflict.	I (M), O (M)	Train programme resource persons and country partners in stakeholder dialogue management, intercultural management, and conflict management through negotiations and mediation techniques; increase integrative concepts and convergence of service delivery. Support policies and practice guidelines of common interests. Use multi-stakeholder processes that are inclusive with free and prior consent of the locals.
Global economic risks and funding for the programme.	I (M), O (L)	Transboundary value chain networking and market places are important. Build on local cooperative systems and domestic markets. Profile regional learning at relevant global forums. There is a need to proactively apply to global calls for funding and to link to the business sector. Get people that understand and have knowledge on global economic streams who can raise funds.
Internal Risks		
Uncertain funding limits long-term planning and operation	I (H), O (H)	For maintaining the momentum, country partners will be supported for accessing national funds well in time by providing inputs to project proposals and in policy forums of significance that acknowledge transboundary cooperation as future vehicle toward regional cooperation. At ICIMOD will initiative discussion with existing and new donors despite changing funding scenarios.
Field sites being far from headquarters leads to difficulty in access and continued engagement	I (M), O (H)	Transboundary sites are usually the remotest and harshest with more poor people. Hence while planning with donors as well as internally this major exigency need to be factored in and we need to set realistic targets when it comes to time-bound outputs and outcomes to be achieved. During the implementation phase at least such areas/sites must be connected to public agencies and schemes as well as other institutions working in the landscape. More investment in terms of time for planning together and face to face discussion need to be invested into for better coordination and target achievement.

RP3: River Basins and Cryosphere Programme

Major risks	Assessment ⁴	Mitigation measures
Programme Level Risks		
External Risks		
Priorities in the RMCs change due to political change or changes in leaderships in partner institutions.	I (M), O (H)	Be aware of changing situations and engage with mid-level officials. Documenting partnerships and having memorandums of understanding and/or letters of understandings is effective, as is having a designated focal person at the concerned partner institutions.
RMC readiness to engage in transboundary cooperation is low.	I (M), O (H)	Continuous engagement and advocacy through participation in various fora and organizing platforms, while working with country focal points. Work through the state/province level and nudge the central government. Seek win-win situations and engagement with cross border communities, local governments and civil society institutions. Engagement with organisations working on transboundary water issues is effective.
Internal Risks		
Continuous funding of the initiative is a big challenge.	I (H), O (M)	ICIMOD senior management makes efforts to get enough funding to continue the planned work. The programme team identifies possible funding opportunities and collaborative research calls, and alerts senior management.
Necessary staff are not available for timely contributions; delays in recruitment; staff turnover without adequate time for handover.	I(H), O (H)	Senior management to take appropriate measures, working closely with the Human Resources Unit. Improve remuneration and facilities for experts and seconding staff from collaborative partners. Improve consideration of SSAs and project-based appointments, and successor planning.

RP4: Atmosphere Programme

Major risks	Assessment ⁵	Mitigation measures
Programme Level Risks		
External Risks		
Major delays are due to long processes within governments for clearances/permissions.	I (M), O (M)	Sufficient time allocation for planning; involvement of partners from governmental agencies from the beginning of the process; facilitation through country focal points.
Delays because of rapid turnover of leadership at national partner organisations.	I (M), O (H)	Frequent briefing visits and invitations to leadership at national partner institutions; close working relations with junior/technical staff; facilitation through country focal points.
Limited professional or technical staff with partners.	I (M), O (H)	Capacity development; involvement of other partners/institutions; incentive to partners and staff.
Our projects might not be high priority for partners.	I (H), O (M)	Involvement of partners from the beginning of the process (design of the programme).
Internal Risks		
Staff numbers inadequate for accomplishing tasks.	I (M), O (M)	Recruiting staff on a priority basis; fund raising to be able to hire more staff.

RP5: Mountain Environment and Natural Resources Information System (MENRIS)

Major risks	Assessment ⁶	Mitigation measures
Programme Level Risks		
External Risks		
Insufficient policies and mechanisms in RMCs for open data and information sharing.	I (M), O (H)	Policy advocacy; encouraging open data sharing; linking up with international initiatives.
Available technology does not match demand/expectations at local levels.	I (M), O (M)	Clarify/communicate limitations.

Major risks	Assessment ⁶	Mitigation measures
Limited information/ communication infrastructure in remote mountain areas may affect collection/ dissemination of information	I (M), O (M)	Strengthen local/ government institutions through capacity building
Institutional structure not favourable or supportive for operationalizing information systems	I (H), O (M)	Policy advocacy and capacity building
Influence of other players on partners may lead to duplications and confusions about partnership activities	I (M), O (M)	Identify other players and try to build synergy
Funding agencies may restrict resource utilization in selected RMCs	I (M), O (H)	Diversify funding mechanism
Security and political environments may not be conducive	I (H), O (M)	Implementation through local partners
Internal Risks		
Selection of appropriate and capable research and implementation partners	I (H), O (M)	Follow partnership strategy and guidelines
Difficulty in finding highly skilled staff	I (M), O (M)	Attractive HR policy and package
Limited synergies with other RPs	I (M), O (M)	Institutional mechanism for cooperation across RPs

RP6: Mountain Knowledge and Action Networks Programme

Major risks	Assessment	Mitigation measures
Programme Risks		
External Risks		
Lack of funding for complex knowledge and action networks, for which it is difficult to show direct impact.	I (H), O (M)	Explore new funding opportunities, including in the region, for capacity building and integrated assessments.

Major risks	Assessment	Mitigation measures
Worsening geopolitical context that thwarts regional cooperation, which is at the heart of knowledge and action networks.	I (H), O (M)	Encourage science diplomacy and focus on environmental issues bringing countries together.
Risk of damage to ICIMOD's brand and image if progress made in strengthening mountain knowledge and action networks is insufficient.	I (H), O (L)	Ensure good programme management and mitigation of internal risks at the institutional level.
Internal Risks		
Lack of progress in developing mountain knowledge and action networks due to complex networks and partnerships.	I (M), O (L)	Strong emphasis on partnership building and developing innovative communication channels among network members.
Internal financial and administrative procedures that are not fit for purpose for managing complex mountain knowledge and action networks.	I (M), O (L)	Institutional support to further streamline procedures and to tailor them to manage complex networks.
Lack of sufficient and appropriate staff to deliver on MKAN's mandate.	I (M), O (L)	Timely strategic human resources planning and good coordination with theme leaders.

Annex 2. Initiative level risks and mitigation measures

RP1: Adaptation and Resilience Building

Risk	Assessment	Mitigation Measures
Resilient Mountain Solutions (RMS)		
External Risks		
Strategic partners unable to influence policy agenda and leverage resources for out/up scaling the initiative	I (H), O (M)	Regular strategic engagement with partners and policy makers to emphasize the value of adaptation and resilience building plans for achieving development goals.
Difficulty in engaging private sectors to develop business modalities in order to help in establishing long term market linkages	I (M), O (M)	Identify potential private companies relevant to initiative and build rapport with them for their engagement from the beginning in developing business modalities
Failure in building resilience due to inadequate knowledge and delay in knowledge dissemination	I (H), O (L)	Design and implement the project jointly with relevant stakeholders using research results and consultative process.
Difficulty in assuring sustainability of the activities as well as resources for resilience building	I (H), O (M)	Regular coordination and engagement with relevant stakeholders, technical experts and policy makers throughout the process of developing actions and resources allocation
National interests and government priorities overshadow interests in regional collaboration for resilience building	I (L), O (M)	Promote and advocate the need for regional cooperation for resilience building as well as collaborate in national priorities focusing the long-term benefits at all level
Internal Risks		
Limited resources - High expectation	I (M), O (M)	Prioritize research and activities based on the Theory of Change and contribution to ICIMOD's impact areas
Inadequate capacities of partners at strategic level as well as implementation leading to poor performance	I (M), O (L)	Follow partnership strategy and due diligence for partner selection assessing the technical and management capacities as well as support in building partner's capacity at multiple stage
Government restructuring/ Lack of state support/ Institutional delay in processing	I (M), O (L)	Follow up and maintain coordination and liaison at all level for any change in structure.

Risk	Assessment	Mitigation Measures
Renewable Energy and Energy Efficiency Capability for the Hindu Kush Himalaya (REEECH)		
External Risks		
Conflicting political agendas block institutional development of REEECH initiative	I (H) O (L)	An opportunity-oriented approach towards implementation and strong partner integration in steering with a clear focus on off grid mountain areas rather than promoting high aspirations of regional energy cooperation will mitigate the political risk. Moreover, ICIMOD as an existing intergovernmental organization, its neutral stand, good reputation and its diplomatic know-how and networks, will allow to commence REEECH initiative.
Lacking commitment and responsiveness by focal institutions and partner	I (H) O (M)	The proposed goals align well with national agendas and perceived priorities. Key energy institutions from central or sub-national governments will be invited to participate in programme steering to increase commitment and ensuring partner alignment. Engagement of focal institutions and partners in steering programmatic activities through a consultative decision-making process in annual work plan and building their capacities during the initial set-up phase of REEECH initiative to effectively achieve their targets will support their meaningful engagement.
Lacking ownership or interference by the host organization. Existing governing board and technical committee faces conflicting agendas between energy and environmental aspects	I (M) O (L)	The commitment shown by ICIMOD for REEECH initiative is high and strongly supported by its leadership. Anchoring the Energy Initiative in the MTAP has been a first important step to increase ownership on “energy”. The risk that the existing governing board and technical committee faces conflicting agendas between energy and environmental aspects will be mitigated by anchoring the sustainable mountain development nexus perspectives into the design of REEECH initiative while at the same time defining autonomous steering mechanism for REEECH initiative during its first operational phase
Financial sustainability beyond initial support by development partners	I (H) O (M)	The design of REEECH initiative is built on lean structures to allow to effectively work with core funding which is anticipated for the first four years. Building on the partner-oriented approach and lean structures, additional programmatic funding will quickly allow to scale-up activities and reach out effectively. Business plan of REEECH initiative will include a strategy to increase its impact in defined programmatic areas.

Risk	Assessment	Mitigation Measures
Ineffective benefit sharing (large hydro power)	I (H) O (M)	REEECH will act as a neutral observer and facilitator while also supporting in decision making through evidence-based knowledge product generation where possible. While the risk of instrumentalizing gender and socially equitable approaches to justify an increased implementation of large hydro power without adhering to commitments cannot be excluded, the potential benefits gained for the target-group of REEECH initiative clearly outweigh the risk described. As it concerns large hydro-power some issues like: safety and security risks (e.g. for workers at the hydro-power plants; health risks (due to exposure to water-borne or water-related diseases); community security risks (vulnerability to earthquakes, landslides or extreme climatic/weather conditions); temporary or permanent displacement of the local population / physical relocation; and access to / benefit from cultural heritages shall be considered.
Internal Risks		
Limited technical capacity of REEECH initiative	I (H) O (L)	Technical know-how on energy will be enhanced through dedicated budget for strategic recruitments of champion and senior experts and bringing in specialized consultancy experience for the first year of the operation of thematic areas. ICIMOD has regarded renewable energy as a cross-cutting issue across regional programmes and anchored it as a new initiative under the Regional Programme “Adaption & resilient building” in its MTAP, 2018-2022.
Limited organizational and administrative capacity	I (M) O (L)	The organizational structure and administrative capacities of ICIMOD are found to be appropriate. The use of existing internal procedures (e.g. accounting) as well as its excellent research and communication department right from the beginning of REEECH initiative is a key asset for the performance credibility and the basis to receive direct funding from donor partners.

Risk	Assessment	Mitigation Measures
Reproducing existing unequal gender relations	I (H) O (L)	A gender perspective will be applied in all types of activities and research it undertakes and actively promote the participation of women in its various committees and structures for more balanced decision-making. Moreover, gender mainstreaming will be addressed by ensuring that gender perspectives and gender equality considerations are central to all policy development, research, dialogue, planning, implementation and monitoring activities it conducts or helps facilitate. Existing ICIMOD and UNIDO gender mainstreaming guidelines, such as the ICIMOD Gender Action Plan, will be applied.
Promotion of environmentally hazardous materials	I (M) O (M)	Through the indirect approach, REEECH initiative need to create awareness for the lifecycle management of these devices as well as support collection and recycling activities it may promote. Building on its strong environmental management know-how, ICIMOD can be instrumental for partner to set-up effective Environmental and Social Management Frameworks, which might be a precondition to participate in REEECH initiative, in particular when implementation-oriented activities are launched.

RP2: Transboundary Landscapes Programme

Major risks	Assessment*	Mitigation measures
Kailash Sacred Landscape Conservation and Development Initiative		
External Risks		
The political, social, economic, and natural atmospheres deteriorate.	I (M), O (M)	Create a conducive political, social, economic, and natural environment. Focus on benefits for target groups through scaling up value chains that can create income generating and environmental conservation opportunities. Identify marginal groups and work with them. Recognized country partners and local governments are involved in bottom-up programme planning, implementation, and financing

* I = impact, O = occurrence; (Low, Medium, or High)

Major risks	Assessment*	Mitigation measures
Reform processes are stalled or very slow.	I (M), O (M)	Good lessons and practices are shared with policymakers; mentorship in required fields is continued with key decision makers at all levels of programme and policy (i.e., from local government to national). National and regional stakeholders and authorities are adequately involved in regional knowledge forums; learning is contributed to national and subnational forums for influencing change. With government partners, all project outcomes are mainstreamed.
Ownership of the KSLCDI at country level (e.g., due to low programme funding or sensitive issues).	I (M), O (M)	Members of the regional Programme Steering Committee (PSC) in China, India, and Nepal are sensitized and mentored so that they can promote transboundary cooperation at national public forums. National funds are leveraged right from the start. New partnerships are forged with impact orientation as the main criteria. Interventions continue to follow a demand-driven approach based on consultative and participatory modes of planning and implementation.
National and regional stakeholders and local authorities/institutions do not cooperate in the implementation of the KSLCDI.	I (M), O (M)	Treat global issues such as the SDGs and the Convention on Biological Diversity (CBD), etc. (climate change, globalization processes, and poverty alleviation) as areas for collaboration. Increase joint articulation of relevant issues by providing space in global fora (UNFCCC, CBD, UNCCD). Focus on issues that are of common priority for all stakeholders; build regional partnerships with reference to standard protocols, technologies and instrumentation, etc., and make these available in an adequate and timely manner.
Local communities do not devote their full time to participation in project related activities.	I (M), O (M)	Build on participatory approaches to livelihoods innovation and link with the business sector, ecosystem management, and environment monitoring. Bridge cooperation between stakeholders at the provincial level, integrating local planning and implementation mechanisms; promote innovations among local communities who are willing to share knowledge and introduce incentive-based mechanisms.
Internal Risks		
Low synergy in matrix management.	I (M), O (L)	Strengthen team-building processes by agreeing upon common outputs and future impact. Pre-plan interface with other ICIMOD regional programmes.

Major risks	Assessment*	Mitigation measures
Unequal recognition during HR performance monitoring.	I (M), O (L)	Equitable recognition of good implementation/impact and good science; value-added capacity building opportunities for performing staff.

Major risks	Assessment	Mitigation measures
Hindu Kush Karakoram Pamir Landscape		
External Risks		
Political uncertainty and security concerns in China and Pakistan – Xinjiang province, China and Gilgit-Baltistan province, Pakistan.	I (M), O (M)	Maintain good relationships with concerned governments and all stakeholders for programme implementation. Stay alert to political uncertainties and interface with local governments.
Pilot activities are impacted by security situations	I (M), O (M)	Take government leaders into confidence during the preparatory phase. Demonstrate to them the wins of cross-border livelihood value chains.
Local stakeholders don't have strong ownership of the programme and some compete with HKPL activities	I (H), O (M)	Identify key stakeholders who are competitive and take them into confidence through transparent dialogue and negotiation. Apply a mentorship concept.
The Regional Cooperation Framework (RCF) is not well respected by the local and provincial governments	I (L), O (L)	Involve local authorities in each country in the process of formulating the RCF. Support country partners in profiling the transboundary concept.
Internal Risks		
Strategic partners have great expectations from programme implementation	I (H), O (M)	Identify relevant genuine country partners who are working on development and policy issues. Clarify expectations with all key stakeholders early on.
Huge demand for capacity building activities from local communities and other stakeholders	I (L), O (M)	Use existing tools and capacity building courses (e.g., transboundary landscapes governance training of trainers); build career prospects and opportunities for the local youth in the programme.

Major risks	Assessment	Mitigation measures
Kanchenjunga Landscape Conservation and Development Initiative		
External Risks		
Changes in political regime after the 2014 election, specifically in Darjeeling and Sikkim in India.	I (M), O (H)	Strategic planning for inclusiveness and additional effort to bring local authorities on board.
Divergence in opinions and priorities on conservation and development agendas among stakeholders in the countries and states involved.	I (M), O (M)	Inclusive planning and consultative process. Capacity building through mentorship; strengthening existing cross-border institutional mechanisms.
Transitional period leading from programme development to implementation longer than desired.	I (L), O (L)	Shorten the transitional period.
Assured or committed financial resources to implement the programme.	I (M), O (H)	Strategic planning for leveraging financial resources and their efficient use. Explore funding opportunities including at national levels.
Internal Risks		
Resource allocation based on country share may cause problems. There is a larger area involved in India with two states.	I (L), O (H)	Resource allocation is based on priorities and geographical coverage. Maintain transparency and communicate financial allocation (to partners) based on relevant agreed upon criteria.
One-window implementation through only one partner for different components.	I (M), O (H)	Need to engage multiple partners and engage the business sector.
Interventions are not made against the aspirations of local communities and governments.	I (H), O (L)	Adhere to the Conservation and Development Strategy and the implementation plan developed by countries in consultation with local communities.

Major risks	Assessment	Mitigation measures
HI-LIFE		
External Risks		
Political uncertainty/ ethnic conflicts persist in some parts of the Far Eastern Himalaya	I (M), O (H)	Need to identify neutral national partners for programme implementation. Country focal institutes have to be alerted to the situation and should communicate the issue with ICIMOD. Need to leverage national funds and ownership.
Partner capacity to deliver results on time is inadequate. Thus, HI-LIFE activities receive less attention.	I (H), O (M)	Activities and impacts have to be carefully aligned with country priorities. Impact pathways must be clearly communicated with partners. The need for capacity strengthening is addressed early on as major component of HI-LIFE.
Pilot activities are impacted by lack of cooperation from local communities.	I (M), O (M)	Need to take the community leaders into confidence during the preparatory phase. Identify and work with local communities to strengthen existing institutional mechanisms for cross-border cooperation.
Local stakeholders lack ownership of the programme and are not effectively involved in the implementation of activities.	I (M), O (L)	Need to identify key stakeholders who may influence decision making and governance at the local level and take them into confidence through national partners.
Local/provincial governments do not respect the Regional Cooperation Framework (RCF)	I (H), O (L)	Involve local authorities within each country in the RCF formulation process. Influence national policy forums for regional cooperation.
Lack of strategic partnerships for programme implementation.	I (M), O (M)	Work closely with focal institutes to widen the profiles of national partnerships and involve them adequately and effectively for impact.
Internal Risks		
Regional-level HI-LIFE activities do not add value to national-level efforts.	I (H), O (L)	Need careful planning of regional activities to address asymmetry in knowledge and capacity in HI-LIFE member countries. Select a programme package with national stakeholders and strengthen their ownership.
Non-complementary pilots (action research) and capacity building activities.	I (H), O (M)	Build career prospects for youth and opportunities for local institutions in the programme. Prepare and apply customized capacity building plans.

Major risks	Assessment	Mitigation measures
Availability of long-term funding. Landscape initiatives need some time before they can deliver impact given that they involve a gradual, iterative process involving partnership building, capacity strengthening, and finally, actions on the ground).	I (H), O (H)	Proposals need to clearly mention short-term (1–2 yrs.), mid-term (3–5 yrs.) and long-term (beyond 5 yrs.) activities, and their connections to impacts. Explore funding opportunities on a regular basis; explore national funds and schemes for the project area.

Major risks	Assessment	Mitigation measures
REDD+		
External Risks		
REDD+ is not implemented by countries.	I (M), O (H)	Link REDD+ with other forestry activities related to afforestation and reforestation by involving local participation.
REDD+ finance is not accessible to HKH countries.	I (M), O (H)	Develop local-level REDD+ action plans and integrate some of the work package with the forestry sector and development plans.
Internal Risks		
Local communities see no benefit from REDD+ instruments.	I (H), O (L)	Develop and establish co-benefits in REDD+ which help the REDD+ programme become more attractive to the locals.

RP3: River Basin and Cryosphere Programme

Risk	Assessment	Mitigation Measures
Cryosphere Initiative		
External Risks		
Lack of donor financing from the Norwegian MFA consequently leading to reduced or closure of Program	I (H), O (L)	Close dialogue with NMFA and Embassy and focus on result management

Risk	Assessment	Mitigation Measures
Political instability during National election in Nepal in 2022 which may impact implementation of programme activities and cause delays	I (M), O (L)	Reduced activity level in the programme prior to elections
Priorities in the RMCs change due to political change or changes in leaderships in partner institutions which may lead to inefficiency and delays in implementation.	I (H), O (M)	Be aware of changing situations. Engage with mid-level officials. Documenting partnership and having MoUs and/or LoIs. Having focal person at the concerned partner institutions.
RMCs readiness in transboundary cooperation remains low which may lead to lack of relevant information from the upstream areas.	I (M), O (M)	Continuous engagement and advocacy through participation in various fora; organizing platforms; working with country focal points; work through the state/province level and nudge the central government; seek win-win situations; engagement with cross border communities, local governments and civil society institutions ; engagement with organisations working on transboundary water issues
Environmental and weather related challenges in the field may cause delays in carrying out field work and hamper data collection and lead to data gaps.	I (L), O (M)	Promote and advocate the need for regional cooperation for resilience building as well as collaborate in national priorities focusing the long-term benefits at all level
Field equipment installed may be damaged or destroyed due to vandalism, theft, or natural hazards such as earthquakes, landslides and avalanches leading to data gaps or even complete loss of a field monitoring site.	I (H), O (M)	Working closely with the concerned agencies to have O&M, and sustainability plans in place and implemented; Careful planning of the equipment locations to minimize the external risk; Regular field visits to check and maintain the equipment.
Partner institutions facing difficulty in taking over the responsibility of operating the monitoring systems may result in endangering sustainability of the long-term monitoring activities.	I (H), O (M)	Involving the partners in the preparatory and planning process as well as in future planning and budgeting process; Providing targeted capacity building; Phased handover process.

Risk	Assessment	Mitigation Measures
Partners do not have practices for adequate information and data sharing which may lead to low efficiency, overlaps, and data/information gaps	I (H), O (M)	Conscious efforts to encourage and support data and information sharing (e.g. via Cryosphere Knowledge Hub and Regional Database System with regular follow-up; monitoring process and data sharing policies built into partnership agreements and capacity building).
Internal Risks		
Lack of sufficient donor coordination may lead to low efficiency, overlaps, lack of necessary measurements.	I (H), O (M)	Mapping of potential donors in the same field and tight coordination. ICIMOD with an office in Kathmandu will play a central role in donor coordination.
Lack of coordination between multiple partners may lead to low efficiency, overlaps, lack of necessary measurements	I (H), O (M)	Planning with involvement of all the partners from the very beginning and periodic meetings.

Major risks	Assessment	Mitigation measures
Koshi Basin Initiative		
External Risks		
Adequate information/data sharing may not occur as much as needed amongst partners.	I (M), O (M)	Conscious efforts are made to encourage data and information sharing (e.g., regular follow-up; monitoring process built into partnership agreements; knowledge platforms and hubs)
Political instability and frequent natural disasters prevent timely implementation of field and local level activities.	I (H), O (M - H)	Work closely with community and authorities to monitor changes and adapt implementation plans accordingly; build flexibility in planning activities
Partners' capacity and interest to uptake policy, technology transfer, and adopt good practices	I (H), O (M)	Explore network of partners and multiple pathways for policy advocacy, technology transfer, and out-scaling. Adapt these wherever necessary.
Insufficient cooperation of national agencies for transboundary river basin management.	I (H), O (H)	Monitor development of water management related policies in all three countries to identify opportunities; Strategic partnership with key national agencies to be developed to involve policy makers.

Major risks	Assessment	Mitigation measures
Indus Basin Initiative		
External Risks		
The security situation will hinder ICIMOD staff from visiting field sites.	I (H), O (H)	Build partnerships with strong local organisations; build capacity of local partners and strengthen country office.
Delayed or unacknowledged approvals for partnership agreements with mandated government organisations.	I (H), O (M)	Establish partnership with strong and reputed non-governmental organisations and bring government organization on board through them.
Limited coordination among Upper Indus Basin (UIB) partners.	I (M), O (M)	UIB field visits and workshops will strengthen coordination and collaboration among partners.
RMCs sharing the Indus Basin lack close cooperation. The sharing of knowledge, information, and coordination responsibilities to devise strategies/policies around the basin may be a sensitive issue for some RMCs that would need to work together.	I (H), O (H)	The existing UIB Network will be used to facilitate frequent interactions between RMCs, providing relevant professionals from each country the opportunity to discuss common emerging issues and potential for mutual and regional cooperation.

Major risks	Assessment	Mitigation measures
SWaRMA		
External Risks		
Security situation in Kabul	I (H), O (H)	Contingency planning to arrange activities in other neighbouring countries in cost effective manner
Partners fail to share data needed for different training programmes and modelling with ICIMOD on time	I (H), O (M)	Frequent follow up with government officials to remind partners of ICIMOD's data policy; set an example with ICIMOD-owned data
Delay in visa issuance for the participants of training programmes	I (H), O (M)	Prior planning of training programmes - arranging training programmes in countries with flexible visa issuance rules and regulations
Frequent changes in the positions of Afghan government officials	I (H), O (H)	Update the new government officials regularly - frequent meetings and involving them in the processes

Major risks	Assessment	Mitigation measures
Internal Risks		
Delays in nomination of trainees and participants of capacity building programmes	I (H), O (M)	Frequent follow up with government officials to remind partners of ICIMOD's data policy; set an example with ICIMOD-owned data

RP4: Atmosphere Programme

Major risks	Assessment*	Mitigation measures
Atmosphere Watch		
External Risks		
Delays in the ability to hire staff and implement activities due to delays in raising sufficient funds to meet MTAP budget goals.	I (H), O (L)	Explore various channels to secure resources, and reprioritize tasks and activities.
Delays in completion of observatories due to lack of government priority, regulatory hurdles and problems with transport to and from the site.	I (M), O (H)	Frequent follow-up with government offices to clear hurdles; flexible planning to minimize impacts of road closures. Plan for most work to take place during the dry season.
Partners fail to share data with the public, with each other, and with ICIMOD.	I (H), O (M)	Remind partners of ICIMOD's data policy; set an example with ICIMOD-owned data; provide additional incentives to partners who share data.
Credit for key work or key findings goes to competing institutions instead of ICIMOD.	I (M), O (M)	Keep track of what competing institutions are doing, while being careful not to share results before they are published or disseminated with due credit given to ICIMOD.
Policy makers ignore our results and recommendations.	I (M), O (H)	Early engagement with policy makers. Build a knowledge dissemination strategy including direct communication with policy makers, media, and the public. Use innovative and artistic approaches to bring messages to the public.
Internal Risks		
Due to limited resources, we cannot hire required experts on time.	I (M), O (L)	Make use of in-house experts and focus on fewer activities.

* I = impact, O = occurrence; (Low, Medium, or High)

Major risks	Assessment*	Mitigation measures
Failure to capitalize on external interest and funding opportunities related to short-lived climate pollutants in the HKH region [such as the Climate and Clean Air Coalition (CCAC)].	I (M), O (L)	Monitor opportunities; inform senior management about possible opportunities in advance so that quick decisions can be made.
Failure to maintain its position as remain a major player in atmospheric science in the HKH region.	I (M), O (L)	Keep publishing in high impact factor journal papers; attend and host scientific meetings; drive the regional scientific agenda.
Failure to become a major player in mitigation in the HKH region.	I (H), O (M)	Build on CCAC initiatives; hire additional staff specializing in mitigation; work with partners on pilots.
Inability to take advantage of opportunities to have policy impact.	I (H), O (L)	Maintain relationships, scientific credibility, and visibility to stay within the view of policymakers. Be ready to drop tasks and run to policy meetings.
Failure to extend initiative activities beyond Bhutan and Nepal.	I (M), O (M)	Make efforts early in the MTAP IV period to visit partners in other RMCs and develop plans for engagement in other RMCs. Ensure that modelling domains cover a larger region.
Poor or slow performance by partners.	I (M), O (M)	Design letters of agreement to give partners incentive to deliver good quality work in time.

Major risks	Assessment	Mitigation measures
Air Pollution Solutions level risks		
External Risks		
External risk: Local, national and regional level political disturbances may hamper the Project delivery deadlines	I (H), O (M)	<ol style="list-style-type: none"> 1. ICIMOD will keep an eye on country's situation and keep DFID informed: a 'watch-and-wait' brief, as outside ICIMOD/DFID control 2. The project will regularly assess the situation and inform the relevant stakeholders about political disturbances. At the same time the project will also prepare and execute alternative plans.

Major risks	Assessment	Mitigation measures
Fiduciary risk: Exchange rate fluctuation	I (H), O (M)	<ol style="list-style-type: none"> 1. ICIMOD commit the funds to the partners in annual basis hence change in exchange fluctuations is adjusted every following year. 2. ICIMOD analyse the exchange fluctuation at least on 6 month basis to identify the revised funds available to implement the activities for the remaining period 3. Based on exchanged gained and loss scenario ICIMOD first completes the prioritize activities and then also revisit on the flexible planned activities
Reputational risk: Reputational risk to ICIMOD DFID include the following major elements: - Child labour issue not properly addressed - False reporting in media about the project	I (H), O (M)	<ol style="list-style-type: none"> 1. The partner agreement will include clear clauses on reputational risks and frequently monitored 2. Build coalition and alliances with relevant agencies working in the sector 3. Awareness and capacity building of the stakeholders on safeguard related issues 4. Communicate openly and immediately to DFID when reputational related risks arise 5. Capacity building of implementing partners 6. Careful relationship management with media
Inability to take advantage of opportunities to have policy impact in South Asia	I (M), O (M)	Maintain relationships, scientific credibility, and visibility to stay within the view of policymakers. Be ready to drop tasks and run to policy meetings.
Poor or slow performance by partners.	I (M), O (M)	Continuously monitor the partners' progress through meetings, phone calls and reports
Internal		
Safeguard risk: Safeguard issues of labourers and animals are not properly addressed	I (M), O (M)	<ol style="list-style-type: none"> 1. Awareness Projects are conducted 2. SoPs on safeguards are developed and implemented. These will be continuously monitored

Major risks	Assessment	Mitigation measures
Fiduciary risk: ICIMOD relies on its partners for financial management, monitoring and reporting of the project. This may pose a risk in quality of financial and technical reporting	I (M), O (M)	<ol style="list-style-type: none"> 1. ICIMOD will conduct a due diligence in order to select relevant partners for implementation 2. ICIMOD will closely work with partners on financial management and reporting. At the same time we will also provide required training and tools. 3. Adaptive planning processes in place 4. ICIMOD has itself adopted a partnering approach with its partners as a risk management approach.
Delivery: Capacity of implementing partners may pose risk in effectively delivering the results in terms of adoption of modified/new technologies	I (M), O (M)	<ol style="list-style-type: none"> 1. Provide training on financial management, communication, technology, monitoring and reporting of the implementing partners will be done at various levels 2. ICIMOD will establish technology incubation centre under FNBI for demonstrating the new/modified technologies to sensitize the entrepreneurs 3. ICIMOD will provide relevant trainings and exposure opportunities to the entrepreneurs, government agencies and technical professionals and workers 4. ICIMOD will facilitate FNBI in setting up pool of trained supervisors on the ground to help with technology transfer

RP5: Mountain Environment and Natural Resources Information System (MENRIS) Programme

Major risks	Assessment*	Mitigation measures
SERVIR-HKH		
External		
Transfer of skilled professionals in government system; losing the right professionals.	I (M), O (M)	Sustained capacity-building efforts.
Constraints in responding to specific demands of RMCs due to limited scope of the initiative.	I (H), O (M)	Communication with concerned agencies; linkages with relevant initiatives.
Leadership change in partner organisations.	I (M), O (H)	Involve more key people during project inception and implementation.

* I = impact, O = occurrence; (Low, Medium, or High)

Major risks	Assessment*	Mitigation measures
Low receptiveness of certain partner agencies in operationalizing information services.	I (M), O (M)	Increased user engagement and capacity building.
Internal		
Ambitious plans for the given time and human resources.	I (M), O (M)	Careful planning of activities and human resources.
Delays in placement of staff and procurement of equipment.	I (H), O (H)	Careful planning of recruitment and procurement processes.
Other initiatives are not keen on adopting SERVIR methods/tools.	I (M), O (M)	Involvement of other programmes/initiatives during the development of applications
Duplication of efforts and inadequate synergy between initiatives.	I (L), O (M)	Better communication mechanism in place for planning and implementation.

Major risks	Assessment	Mitigation measures
Regional Database Initiative		
External		
National policies are not conducive to open data sharing	I (M), O (H)	Link up with international open data initiatives
Conflict of interest among researchers for data release	I (M), O (H)	Follow ICIMOD data policy and operational guidelines
Intellectual property rights prevent open data sharing	I (H), O (H)	Agreements with data providers for sharing arrangements
Internal		
Data handover by staff not institutionalized	I (H), O (M)	Make operational guidelines for data mandatory
Scope of initiative limited to ICIMOD's data management and sharing	I (M), O (H)	Expand the scope to integrate partners' data. Develop information systems and diversify resources
Hardware/software infrastructure not regularly updated.	I (M), O (M)	Cost sharing mechanisms between programmes for regular updating of infrastructure

Major risks	Assessment	Mitigation measures
Climate Services Initiative		
External		
Transfer of skilled professionals in government system; losing the right professionals.	I (M), O (M)	Sustained capacity-building efforts.
Adequate information/data sharing may not occur as much as needed amongst and between partners	I (M), O (M)	Efforts are made to encourage data and information sharing and co-development of products (e.g., regular follow-up and communication with partners)
Partners (National hydromet agencies) staff may be overburdened and have limited time and incentive to participate in the programme execution due to other commitments.	I (H), O (M)	The initiative maintains continuous engagement with partners. Consider synergies between ongoing projects of partners from the beginning; creating incentives to seek participation
Inadequate participation of relevant stakeholders from all levels	I (M), O (L)	The engagement and communication strategy will ensure that the partners and stakeholders will remain interested in the ongoing work.
Partners' (national and local levels) capacities inadequate to deliver results on time	I (M), O (M)	Capacity building of partners is a focus in the implementation of the initiative
Political instability and insecurity whereby the situation becomes difficult for the implementation of activities in the region and at local levels	I (M), O (M)	Maintain close relations with partners and gain support from government institutions; adapt work plans and be flexible if needed
Internal		
Ambitious plans for the given time and human resources.	I (M), O (M)	Proper planning to be conducted in close consultation with the monitoring and planning unit
Adequate funding of the initiative is a challenge	I (H), O (M)	ICIMOD senior management makes efforts to get funding for planned work; programme team identifies possible funding opportunities and collaborative research calls and alerts the senior management
Other initiatives are not keen on collaborating and co-developing activities	I (M), O (L)	Involvement of other programmes/ initiatives during the planning and development of activities

RP6: Mountain Knowledge and Action Networks Programme

Major risks	Assessment*	Mitigation measures
Himalayan University Consortium		
External Risks		
Policy makers take no action despite interest in mountain-specific higher education for sustainable mountain development.	I (H), O (M)	Proactive strategic engagement with policy makers to ensure policy action.
Increased expectations: Consortium members continue to place high expectations on ICIMOD and the Secretariat to fund and lead consortium's activities.	I (H), O (M)	Strengthen ownership among consortium members through member-led activities; actively promote shared leadership among partners; consolidate Steering Group and HUC country chapters where appropriate.
Partner capacities and management systems: Consortium members are unable to deliver according to expectations, leading to unsatisfactory results.	I (H), O (M)	Partnership approach is built into every project; due diligence is provided to key implementing partners.
Internal Risks		
Low synergy in the institutional matrix: A majority of ICIMOD-led or ICIMOD-supported HUC activities depend largely on the coordination between programmes and themes; lack of ownership among and adequate incentives for theme and RP staff members to contribute to HUC.	I (H), O (M)	The initiative strengthens its coordination with RPs, themes, the Strategic Cooperation Unit (SCU), and the Knowledge Management and Communication (KMC) team, allocating resources and incentives for theme and RP staff to secure their engagement, and to sustain medium- to long- term engagement to build intra-institutional ownership.
Insufficient funding: Failure to secure core funding for key activities of the consortium.	I (H), O (H)	ICIMOD senior management is making efforts to obtain funding for core activities and signature programmes of the consortium. RPs integrate their capacity building components with HUC activities where appropriate (concerning higher education and curriculum uptake).

* I = impact, O = occurrence; (Low, Medium, or High)

Major risks	Assessment*	Mitigation measures
Insufficient or inappropriate staff: Not being able to hire competent and appropriate staff to meet the challenge of the rapid growth of the consortium.	I (H), O (M)	The initiative continues to train its existing staff with partnership building and project/programme management skills. Short-term consultancies are utilized and strategic staffing is being discussed in conjunction with RP6 staff requirements.

Major risks	Assessment	Mitigation measures
South Asian Network of Development and Environmental Economists		
External Risks		
SANDEE provides grants to researchers who are employed fulltime somewhere else. Completion of research projects may be delayed and some research projects may fail, resulting in difficulties recovering unspent grant money.	I (M), O (L)	SANDEE has a rigorous screening process for awarding research grants, and a strong mentoring and technical support system. The SANDEE Secretariat makes constant efforts to avoid such issues. In some cases, SANDEE allows extensions for specific research projects if circumstances are beyond the control of the researchers.
Low participation of female researchers and trainees due to the prevailing gender gap in the region.	I (M), O (H)	SANDEE puts considerable effort into increasing female researcher and trainee numbers. It uses its network to identify potential candidates and provides additional support and mentoring to encourage women's involvement in research.
Use of research in academia and policy may be low due to lack of interest at the policy level in environmental economics.	I (M), O (M)	SANDEE works with university faculty and researchers who have less of a focus on Research into Use (RiU). With the integration of SANDEE into ICIMOD, it has greater exposure – among a wider network of policy makers and RiU experts. Research uptake to policy may increase as a result.

Major risks	Assessment*	Mitigation measures
Hindu Kush Himalaya Monitoring and Assessment Programme		
External Risks		
HIMAP may not get countries' required ownership and recognition to become a recognized platform	I (H), O (L)	Develop a strategy of engagement with thought leaders and key government officials to lay the groundwork for developing an institutional mechanism that the countries agree to, based on international experiences.
HIMAP may not be able to get required funding for continuous assessments.	I (H), O (H)	Explore non-traditional funding sources and make a case for it to the ICIMOD Support Group (ISG) for sustained funding for assessments.
Findings of the HIMAP are challenged and may create big problem for the institution.	I (H), O (L)	Strong emphasis on ensuring that all findings and statements in assessments are verifiable and traceable, and based on multiple sources of evidence.
Internal Risks		
Internal core allocations may not be sufficient to cover growing activities of HIMAP	I (H), O (M)	Increase HIMAP funding at all levels from diversified sources.

* I = impact, O = occurrence; (Low, Medium, or High)