

Kailash Sacred Landscape Conservation and
Development Initiative

Regional Programme
Implementation Plan
2012–2016



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The International Centre for Integrated Mountain Development, ICIMOD, is a regional knowledge development and learning centre serving the eight regional member countries of the Hindu Kush Himalayas – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – and based in Kathmandu, Nepal. Globalization and climate change have an increasing influence on the stability of fragile mountain ecosystems and the livelihoods of mountain people. ICIMOD aims to assist mountain people to understand these changes, adapt to them, and make the most of new opportunities, while addressing upstream-downstream issues. We support regional transboundary programmes through partnership with regional partner institutions, facilitate the exchange of experience, and serve as a regional knowledge hub. We strengthen networking among regional and global centres of excellence. Overall, we are working to develop an economically and environmentally sound mountain ecosystem to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream – now, and for the future.



Partner Institutions, Kailash Sacred Landscape Conservation and Development Initiative

China

Chinese Academy of Sciences – Nodal Agency
Institute of Geographic Sciences and Natural Resources Research – Lead Institution
Institute of Tibetan Plateau Research
Tibet Academy of Agricultural and Animal Sciences
Kunming Institute of Botany

India

Ministry of Environment and Forests (MoEF; Government of India) – Nodal Agency
G.B. Pant Institute of Himalayan Environment and Development – Lead Institution
Wildlife Institute of India; Forest Department, Government of Uttarakhand

Nepal

Ministry of Forestry and Soil Conservation (MoFSC) – Nodal Agency
Ministry of Environment (MoE)
Department of Botany, Tribhuvan University, Kathmandu – Lead Research Institution
Department of Forest/Department of National Park and Wildlife Conservation
Department of Meteorology and Hydrology; Tribhuvan University, Kathmandu

ICIMOD gratefully acknowledges the support of its core and programme donors: the Governments of Afghanistan, Austria, Bangladesh, Bhutan, China, Germany, India, Myanmar, Nepal, Norway, Pakistan, Sweden, and Switzerland, and the International Fund for Agricultural Development (IFAD).

ICIMOD Project Document

Kailash Sacred Landscape Conservation and Development Initiative

Regional Programme Implementation Plan 2012–2016

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Published by

International Centre for Integrated Mountain Development
GPO Box 3226, Kathmandu, Nepal

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Citation: ICIMOD (2012) *Kailash Sacred Landscape Conservation and Development Initiative: A regional programme implementation plan (2012 – 2016)*. ICIMOD Working Paper 2012/5. Kathmandu: ICIMOD

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Acronyms and Abbreviations

ABS	Access and benefit sharing
BMC	Biodiversity Management Committee
CBD	Convention on Biological Diversity
CBO	Community-based organization
CDH	Conservation, development, and harvesting
CEMP	Comprehensive environmental monitoring plan
CS	Conservation strategy
GIS	Geographic information system
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GLORIA	Global Observation Research Initiative in Alpine Environments
HKH	Hindu Kush Himalayan region
HTT	Heritage Tourism Trails
ICIMOD	International Centre for Integrated Mountain Development
KSL	Kailash Sacred Landscape
KSLCDI	Kailash Sacred Landscape Conservation and Development Initiative
LoA	Letter of agreement
LULCC	Land use and land cover change
MEA	Millennium Ecosystem Assessment
MoU	Memorandum of understanding
PAs	Protected areas
PMU	Programme Management Unit
PNRM	Participatory natural resource management
RET	Rare, endemic, and threatened species
UNEP	United Nations Environment Programme

Acknowledgements

This document has been synthesized by the Kailash team within ICIMOD's Environmental Change and Ecosystem Services Programme based on 5-year Programme Implementation Plans submitted by national partners. This synthesis was carried out under the supervision of Dr Eklabya Sharma, Director of Programme Operations, with technical input from Farid Ahmad, Head of Strategic Planning, Monitoring, and Evaluation Unit. Editorial inputs have been provided by Andrea Perlis, Amy Sellmyer, Dharma Maharjan, and Asha Kaji Thaku, with assistance from Pradyumna JB Rana.

Executive Summary

The Kailash Sacred Landscape Conservation and Development Initiative (KSLCDI) is a long-term collaborative programme facilitated by ICIMOD around the Kailash Sacred Landscape (KSL) transboundary area in China, India, and Nepal, a region well known for its cultural, geo-hydrological, and biodiversity value. Realizing its conservation significance, the three countries have come together with a vision of a long-term conservation initiative based on regional, transboundary cooperation and ecosystem management approaches. During the 18-month preparatory phase supported by UNEP and GIZ, the KSLCDI moved forward with an innovative and participatory consultative approach to create institutional networks, an inclusive policy and enabling environment, and the knowledge base needed for regional collaboration. The process led to the preparation of three documents: a feasibility assessment report, a conservation strategy, and a comprehensive environmental monitoring plan. Wide consultation and technical exchange among the three countries also led to the development of a regional cooperation framework which has been endorsed by the respective governments.

This Regional Programme Implementation Plan for the KSL is a synthesis of proposed activities based on a wide consultative process and national programme implementation plans submitted by partner institutions in China, India, and Nepal. The plan has been prepared for the five-year period 2012-2016. During this period, the plan has been visualized according to a programmed cycle of phased implementation of a long-term strategy based on participatory approaches and an improved regional knowledge base. The plan describes how the conservation strategy and comprehensive environmental monitoring plan, along with other programme elements, will be implemented and executed on a regional scale.

The overall aim of the regional implementation plan is to contribute to the sustainable development of the KSL by applying ecosystem management approaches and building on the strengths of the region while considering both the risks and opportunities of climate change especially for natural resource dependent groups such as women, indigenous peoples, and ethnic/caste groups. Broad objectives of the plan are to strengthen transboundary regional cooperation by institutionalizing elements of the regional cooperation framework; to mainstream sustainable ecosystem management approaches and practices into national policies and plans at all levels in the context of climate change adaptation in the KSL; to build the capacity of key institutions for long-term environmental monitoring and socioeconomic research for better planning and decision making; and to establish a regional knowledge sharing platform to support evidence-based decision making at regional and national levels.

The implementation plan is separated into five major components: innovative livelihood options; ecosystem management for sustaining services; access and benefit sharing for the development of resilient communities; long-term conservation and environmental monitoring; and regional cooperation to enable policies and knowledge management. Each component is further divided into specific activities. If the plan is effectively implemented, significant achievements are expected in terms of conservation of regional biodiversity, preservation of cultural heritage, improved ecosystem management, sustainable development and adaptation to environmental changes across the landscape and equitable distribution of ecosystem services and benefits. The programme intends to utilize transboundary cooperation to institutionalize the regional cooperation framework, build the capacities of institutions and organizations, and develop the national and regional knowledge base.

The five-year implementation plan has a financial outlay of US\$ 20 million. ICIMOD will provide the overall programme management, regional facilitation, and coordination services, engaging with the governments of China, India, and Nepal on the basis of the regional cooperation framework. Implementation of the regional programme will be advised and guided by the Programme Steering Committee, which will have the responsibility of making decisions and approving annual plans on the implementation of the programme. As for risks for implementation, the project recognizes the sensitivities of international relations between the countries, challenges of intersectoral collaboration, inherent challenges in achieving international standards of outputs, differential

capacities of the partners, and situations of economic downturn. The risk management takes these elements into consideration.

National nodal institutions within each member country will coordinate field-level programme implementation. The lead research institutions in each country will also be the key partners for implementation of conservation strategies and comprehensive environmental monitoring plans, while activities related to sustainable livelihoods and participatory natural resource management planning will be executed in collaboration with government development agencies and their line departments. In Nepal, the Ministry of Forest and Soil Conservation and the Ministry of Environment will implement rural livelihood programmes. In India, the GB Pant Institute of Himalayan Environment and Development, under the Ministry of Environment and Forests, will be the lead institution to implement these programmes alongside the Wildlife Institute of India (WII) and the Uttarakhand Forest Department. In addition, various non-governmental organizations (NGOs) will participate in implementation of specific activities. In China, this role will be taken on by the Institute of Geographic Sciences and Natural Resource Research (IGSNRR) within the Chinese Academy of Sciences in collaboration with the Tibet Academy of Agricultural and Animal Sciences.

Introduction

Background

The Kailash Sacred Landscape Conservation and Development Initiative (KSLCDI) is a transboundary collaborative programme between China, India, and Nepal that has evolved through a participatory, iterative process among various local and national research and development institutions within these countries. The programme aims to achieve long-term conservation of ecosystems, habitats, and biodiversity while encouraging sustainable development, enhancing the resilience of communities in the landscape, and safeguarding the cultural linkages between local populations. Located within the remote southwestern portion of the Tibet Autonomous Region of China, adjacent districts in the Far-Western region of Nepal, and the northeastern flank of Uttarakhand State in northern India, the Kailash Sacred Landscape (KSL) is spread over an area of about 31,000 sq.km and represents a diverse, multi-cultural, and fragile landscape. The biophysical features and historical and cultural significance of this landscape have been well documented (see www.icimod.org/ksl). The landscape is characterized by numerous sacred sites, including high-altitude lakes, snow peaks, and a fine network of religious places across the three countries. Most important among such sites, Holy Mount Kailash and the adjacent Lake Mansarovar (both within the Tibet Autonomous Region) have represented the ultimate pilgrimage destination for as many as five religions – Hinduism, Buddhism, Jainism, Sikhism, and Bon – for several millennia. Besides its sacred nature, the Kailash-Manasarovar area forms the upper catchment of four of Asia's major rivers: Indus, Sutlej, Brahmaputra, and Karnali. As local communities from the three countries have maintained cultural and socioeconomic linkages with one another, the landscape is facing accelerated environmental changes not only due to climatic drivers but other drivers such as population increase, globalization, and outmigration as well. Livelihood options are limited for local communities, adding to the harmful nexus of resource degradation, poverty, and inequity. The transboundary nature of both ecosystem services and environmental changes in the region means that risks, challenges, and opportunities are shared, which is why scientific cooperation and conservation strategies and action plans should be coordinated among member countries.

Recognizing the global and regional significance of the KSL, ICIMOD has been working closely with partner institutions in the three member countries to facilitate the development of a regional cooperation framework and prepare feasibility assessment reports, conservation strategies (CS) and comprehensive environmental monitoring plans (CEMPs) (see at www.icimod.org/ksl). All three member countries have endorsed the regional cooperation framework, which is a guiding instrument for developing and implementing the regional programme for the KSL and bringing partner institutions together to share the common vision of a long-term conservation initiative based on regional transboundary cooperation and ecosystem management approaches. This process was initially supported by UNEP and GIZ.

During 2011, lead institutions in member countries prepared country-specific programme implementation plans involving key stakeholders, partner institutions, and local communities (GBPIHED 2011; IGSNRR 2011; TU 2011). These plans have now been reviewed and consolidated for integration and harmonization to ensure standard approaches and methods at the regional level. The consolidated plan outlines programme components, outcomes, outputs, and work elements for achieving the medium-term goals during the next five years (2012–2016).

Aims and Objectives

The overall aim of the regional implementation plan is to contribute to the sustainable development of the KSL by applying ecosystem management approaches and building on the strengths of the region while considering both the risks and opportunities of the changing climate. Broad objectives of the plan are:

- to strengthen regional, transboundary cooperation by institutionalizing the elements of the regional cooperation framework;
- to mainstream sustainable ecosystem management approaches and practices in the context of climate change adaptation in the KSL and in national policies and plans at all levels;
- to build the capacity of key institutions for long-term environmental monitoring and socioeconomic research for better planning and decision making; and
- to establish a regional knowledge sharing platform to support evidence-based decision making at regional and national levels.

It is hoped that effective implementation of the plan will result in significant achievements in terms of conservation of regional biodiversity, preservation of cultural heritage, improved ecosystem management, and sustainable development, and adaptation to environmental changes across the landscape with greater emphasis on socioeconomic and decision-making opportunities for natural resource-dependent social groups. The programme will promote transboundary cooperation for institutionalizing the regional cooperation framework, building the capacity of institutions and organizations, and developing the national and regional knowledge base.

Plan Overview

The plan has been prepared for a five-year period from 2012 to 2016 according to a programmed cycle of a long-term strategy based on participatory approaches and an improved regional knowledge base. The plan also envisions building the capacity of national and local institutions to implement the conservation strategy and comprehensive environmental monitoring plan. All the programme components would be implemented in pilot areas through participatory action research in order to simultaneously document changes in the physical and socio-cultural environment including gender relations. Increased awareness of community institutions about ecosystem goods and services and their involvement in participatory and gender sensitive and responsive natural resource management planning will pave the way for a better policy environment and the equitable sharing of benefits from biodiversity. It is expected that towards the end of the first five years, several trends in regional biodiversity and resource use patterns will emerge that could help formulate plans for the following five years.

The programme will focus on institutions on the ground (including community institutions), line agencies at the district/prefecture levels, and those at the state/province level that are in coordination with national lead institutions. It is envisaged that community institutions will be engaged through a continuous dialogue and strengthened through participatory and gender responsive and gender responsive resource management, equitable sharing of ecosystem goods and services, informed decision making, and better resilience to environmental changes. Changes in the functioning and performance of the institutions that have a stake in the landscape will be targeted. Policy adjustments and building the capacity of institutions at the state/provincial and national levels are envisaged as well. At the regional level, a technical advisory committee will be established to provide regular input. It will also provide a platform for regional cooperation, scientific exchange, policy cross-learning, programme steering, and capacity building of institutions.

This programme aims to support the implementation of the KSLCDI over an initial phase of five years. The plan revolves around a transboundary participatory ecosystem management approach for enhancing the resilience of communities in the landscape. The main components are:

- innovative livelihood options and adaptations;
- participatory and gender responsive ecosystem management for sustaining services;
- access and benefit sharing towards the development of resilient communities;
- long-term conservation and environmental monitoring; and
- regional cooperation, enabling policies and knowledge management.

The cross-cutting issues of capacity building, social and gender equity, and communication are integrated into these themes. During the preparatory phase, it was realized that the region is subject to rapid changes with external factors like infrastructure development, economic development, and climate change playing a predominant role. Unique natural and cultural heritages make it necessary to build regional monitoring capabilities based on strong

national capacities to assess environmental changes and propose appropriate measures for adaptation. However, this has to be done keeping a series of overriding challenges in view. The programme will focus on institutions from all levels that are present on the ground. The target will be improving the functioning and performance of the institutions that have a stake in the landscape, and development and capacity-building results are expected to be seen on the ground. Policy adjustments and institutional capacity building will happen at the state/provincial and national levels. Regional cooperation for scientific exchange, policy cross-learning, programme steering, and institutional capacity building will take place. The knowledge generated will be packaged and promoted for informed decision making in the context of management and adaptation to climate change across the landscape, as well as in other parts of the Hindu Kush Himalayan (HKH) region.

Review of Earlier Work and Plan Development Process

Review and past references

ICIMOD and its partner institutions in the HKH region have been advocating conservation-based sustainable development through transboundary landscape approaches, ecosystem management, and community involvement for more than a decade (Chettri et al. 2008; Messerli 2008). Within its regional HKH mandate, ICIMOD has brought together stakeholders and government officials from regional member countries to discuss common platforms for transboundary regional cooperation on biodiversity conservation. ICIMOD's experiences in the Mount Everest Ecosystem (Sherpa et al. 2003), the Hkakabo Razi Complex (Chen 2002), and the Kangchenjunga Landscape (Sharma and Chettri 2003; Chettri et al. 2008) have highlighted the value of regional cooperation for facilitating transboundary landscape and ecosystem management approaches to conserve biodiversity in the HKH. As part of its long-term commitment to this effort, ICIMOD has prioritized transboundary landscape approaches to biodiversity conservation among its key areas of focus.

The ecosystem management approach does not aim for short-term economic gains, but rather to optimize the use of an ecosystem without damaging it. UNEP defines ecosystem management as an approach to natural resource management that focuses on sustaining ecosystems to meet both ecological and human needs in the future. It further states that ecosystem management is adaptive to changing needs and new information. It promotes a shared vision of a desired future by integrating social, environmental, and economic perspectives to managing geographically defined natural ecological systems (UNEP 2009). Another definition of ecosystem management is that it is an approach to maintaining or restoring the composition, structure, function, and delivery of services of natural and modified ecosystems for the goal of achieving sustainability. It is based on an adaptive, collaboratively developed vision of desired future conditions that integrates ecological, socioeconomic, and institutional perspectives applied within a geographic framework and defined primarily by natural ecological boundaries.

Realizing the importance of the KSL for the inhabitants of the region especially natural resource-dependent social groups such as women, indigenous peoples, and marginalized ethnic/caste populations, for the millions of people who live in the basins downstream of its four major rivers, and for the multitude around the world who regard this region as culturally and spiritually significant, partners in China, India, and Nepal have come together with ICIMOD to propose a vision for a long-term conservation and development initiative based on a regional transboundary ecosystem approach. This approach holds that conservation and sustainable use of natural resources addressed at the landscape level – defined by ecosystems rather than administrative boundaries – will bring benefits to each country. It puts people, especially poor, marginalized caste ethnic groups, and women, and their socio-cultural resources at the centre of environmental planning and includes cultural conservation, an essential first step in natural resource conservation. Successful resource conservation translates into sustainable and equitable development and, by working at the landscape level, it also addresses national concerns and benefits the people downstream and beyond.

The three-year preparatory phase of the KSLCDI ended in February 2011. It was based on an agreement between the governments of China, India, and Nepal to work on a common regional cooperation framework for conservation and ecosystem management of the KSL. During this period, the KSL Feasibility Assessment Report was prepared (Zomer and Oli 2011) and the three countries moved forward with an innovative and participatory

consultative approach to establish institutional networks, a policy-enabling environment, and a knowledge base for regional collaboration. This process, based upon principles of national ownership and sovereignty, was facilitated by ICIMOD, but it was led by respective national institutions. As a core component, the KSL conservation strategy was developed at both regional and national levels by national partners as the basis for future biodiversity conservation and management, livelihood improvement, sustainable development, and climate change adaptation (ICIMOD 2010a). The conservation strategy envisions a set of mechanisms to promote and facilitate collaboration among the various actors and stakeholders and to augment and improve regional knowledge and information exchange networks. The conservation strategy promotes strengthening the local capacity for conservation, sustainable development, and climate change adaptation to maintain the cultural and aesthetic integrity of the landscape and to enhance the socio-ecological resilience of mountain communities. The conservation strategy is accompanied by a strategic plan for comprehensive long-term environmental monitoring (ICIMOD 2010b).

During the preparatory phase of the KSLCDI, partners in China, India, and Nepal completed KSL feasibility assessments, which underlined the importance of transboundary landscape and ecosystem management approaches in the region, particularly in terms of addressing management issues that require regional cooperation. Further, it was noted that these approaches need to be implemented within a fairly short timeframe to manage and mitigate the significant impacts of projected change in the region if important environmental and cultural landscapes and resources are to remain intact and available for future generations. The initial preparatory phase of the conservation and development initiative produced a short draft KSL Regional Cooperation Framework (ICIMOD 2010c) setting out the vision, goal, objectives, processes, principles, and mechanisms for transboundary ecosystem management of the landscape. It outlines how the three countries will promote regional cooperation in the KSL for the conservation and sustainable use of biological and cultural resources and associated indigenous knowledge which entails the collection, analysis, exchange, and dissemination of information on the environment, ecology, climate, and biodiversity of the landscape.

Plan development process

The implementation plan has been developed following discussions with national partners and consultation with different levels of stakeholders on their requirements. The main objective was to develop a transboundary framework for conserving, maintaining, and promoting biodiversity through ecosystem and landscape management approaches and maintaining and promoting the aesthetic and cultural integrity in the KSL. The planning process follows the guidelines which were developed during the fourth KSL regional workshop held in Kathmandu in June 2010.

In 2011, the nodal institutions within each country developed country-specific implementation plans following an extensive consultative and participatory process. Local and national issues were identified within each country with the help of a diverse group of stakeholders ranging from different line agencies of the concerned state and provinces to local community institutions. Inputs received during these consultations formed the basis for identifying issues and priority needs in the landscape. In addition to wider consultation meetings, extensive in-country and transboundary tours (landscape yatras) were organized between India and Nepal by the participants. These yatras resulted in the generation of first-hand information to better understand the needs and priorities of stakeholders, the state of natural resources, and prospects for development in the landscape. More importantly, the yatras were instrumental in establishing better linkages with people living in the landscape including the most vulnerable community groups such as women and local ethnic populations, community institutions like Village Forest Committees (van Panchayats), grassroots-level non-governmental organizations, relevant government agencies, district and subdivision-level administration, educational institutions, and various cultural institutions. Inputs received from such consultations have been incorporated into the plan. Similarly, within China and Nepal extensive consultations with local communities and partner organizations were held to prioritize programme activities and partner mapping to fix roles and responsibilities depending upon their mandates and capacities.

Programme Components and Implementation Strategies

Programme Components

The major components of the programme to be implemented during the next five years (2012–2016) are as follows. Each component has been defined with an output, broad activities, and outcomes as presented in the log frame (Annex 1).

■ Innovative livelihoods and climate change adaptations

Based on poverty analysis and the vulnerability of marginal communities, especially poor, women, marginalized caste/ethnic groups, and indigenous people, to changing climate in the KSL, this component focuses on innovative livelihood inputs to engage the population in alternate income-generation activities and reduce pressure on natural ecosystems. High-value niche products, such as cultivable medicinal and aromatic plants, bay leaf, and other organic farm products, would be identified, their value chains mapped, and institutional mechanisms and linkages strengthened. Other options with high potential to generate alternate income include responsible heritage tourism, organic farming, water storage and quality management, local production systems, and energy-saving devices. The plan would simultaneously address the climate change vulnerability of local communities and make appropriate plans to enhance their resilience.

■ Ecosystem management for sustaining services

Numerous ecosystem goods and services flowing from the KSL and interrelationships among various landscape elements will be assessed through participatory action research for comprehensive ecosystem management planning. This requires the participation of various stakeholders and analysis of the state of various ecosystems, the sustainability of current land use practices, and immediate threats. The local communities in most of the landscape consider nature as sacred. This culture has had great influence on people's attitude and behaviour concerning the environment. The conservation potential and contribution of such sites to maintenance of ecosystem integrity will be analysed and leveraged. National and local institutions would be oriented and trained in ecosystem management planning, the preparation of resource management plans, and their implementation. Gender and socially sensitive and responsively community-based natural resource management plans for different landscape elements such as rangelands, wetlands, forests, and agro-ecosystems would be prepared by community-based organizations with help from experts and line agencies for implementation. This component would also require external technical support, especially in preparing ecosystem management plans.

■ Access and benefit sharing to develop resilient communities

Conforming with the CBD's 2010 Nagoya Declaration, an access and benefit sharing (ABS) protocol will be developed which allows for the equitable sharing of benefits that arise from using genetic resources and indigenous knowledge systems. Local communities in remote areas of the KSL will be organized and engaged in the formation of Biodiversity Management Committees (BMCs), which will be trained in the preparation of local biodiversity registers and documentation of related indigenous knowledge. Likewise, community-based organizations (CBOs) and civil society organizations need to be made aware of legal rights related to specific products from high-value chains. Sustainability of the harvest of various products would be analysed and impacts of other enterprise-based livelihood options need to be assessed within respective countries and socioeconomically and environmentally vulnerable groups therein. Local-level resources would be linked with national-level registrations for equitable benefits and patency protection.

■ Long-term conservation and environmental monitoring

Several elements of ecosystems, components of biodiversity, environmentally sensitive sites, and species have been

identified for conservation and long-term monitoring at the landscape level with the help of national partners. The conservation and monitoring plans would particularly focus on protected areas (PAs), critical biological corridors, transitional zones, and interfaces such as PA–buffer, forest–rangeland, rangeland–wetland and agro-ecosystems. Restoration of highly degraded ecosystems and monitoring of various environmental parameters at different spatio-temporal scales would be executed through national partners and local institutions that are trained, equipped with the appropriate equipment, and provided with technical support in terms of international expertise from time to time. Monitoring systems for important transitions and interfaces (e.g., forest–grassland, rangeland–wetland) would be established and key thematic areas such as climate change, land use change, the cryosphere, water systems, ecosystem function and services, biodiversity and ecosystems, health determinants affecting human and livestock, mountain economies, and societal and environmental change have been incorporated in the implementation plan.

■ **Regional cooperation, enabling policies, and knowledge management**

In order to promote transboundary cooperation for ecosystem management and an enabling policy environment in the region, effective coordination and strong institutional support is essential. All programme components listed above will be coordinated by ICIMOD with the help of partner institutions within each country. Thematic working groups will be established in respective countries to review existing policies and suggest appropriate amendments for ecosystem management at the landscape level within the KSL. A regional platform for scientific information exchange, policy cross-learning, and programme steering mechanisms will be established. Good practices related to conservation and gender and socially inclusive development in the landscape will be documented and disseminated.

Implementation Strategies

Innovative livelihoods

- **Identifying high-value, niche products (such as cultivable medicinal and aromatic plants and bay leaf) and mapping their value chains to strengthen institutional mechanisms and linkages.** Outputs include: assessment of threats and constraints related to pro-poor value chains and identification of leverage points; strengthening of institutional mechanisms and linkages (vertical and horizontal) to manage niche products; enhancement of the capacity of target groups for sustainable harvesting and commercializing; strengthening of access to market information and finances; and the initiation of a branding process for selected high-value products.
- **Developing and implementing comprehensive, community-based tourism plans in each site in the three countries.** Outputs include: designing, development, and implementation of responsible heritage tourism models and strategies leading to improved conservation of sacred landscapes, cultural heritage, and biodiversity; identification, piloting; implementation of innovative community-based livelihood options within the tourism value chain leading to increased local income and employment from tourism; enhancement of the capacity and awareness of key stakeholders to protect cultural heritage and improve livelihoods through the promotion of responsible heritage tourism initiatives; and involvement and mobilization of institutions related to tourism to implement heritage tourism plans.
- **Assessing water resources and energy systems at the local level and supporting communities especially vulnerable groups, including women.** Outputs include: analysis of water resource availability and demand; assessment of water storage and quality management for local production systems such as agriculture, hydropower, and drinking; assessment of the potential compensation for community contributions and development of a management mechanism; and use of conservation and adaptation strategies to manage community water and energy needs including that of vulnerable groups, including women.
- **Assessing adaptive capacities of local communities following autonomous and planned adaptations and development of capacity through innovative options.** Outputs include: evaluation of carbon financing potentials in different land use systems and development of payment mechanisms; development of adaptation strategies to respond to different stresses and testing in different settings; and establishment of feedback mechanisms to establish a two-way flow between on-the-ground experiences and national adaptation plans.

Outcome indicators

- Income level of target communities including that of vulnerable groups, including women, increased by 30 per cent
- At least a 5 per cent increase in income generated from heritage tourism
- At least one interest group in each sub-watershed is engaged in active trade of local niche products

Ecosystem management for sustaining services

- **Identifying important ecosystem services and conducting and analysing vulnerability assessments at pilot sites.** Outputs include: identification and valuation of important ecosystem services (provisions such as food, freshwater, wood and fibre, and fuel; regulating services such as climate, flood, disease, and water purification; and cultural services such as aesthetic, spiritual, educational, and recreational services); identification of critical and vulnerable ecosystem elements; analysis and assessment of local and national-level institutional mechanisms for implementing ecosystem management; and study and analysis of integrated land use planning based on ecosystem principles.
- **Providing training and support to national institutions, local institutions, and communities in preparing social and gender sensitive and responsive ecosystem plans for each pilot site.** Outputs include: dissemination and sharing of results of the action research with local and national stakeholders; training of national and local institutions in preparation of ecosystem management plans for rangelands, wetlands, community forests, and watersheds; orientation of local communities (e.g., women and other resource-dependent groups) on the importance of rare, endemic, and threatened species and their habitats.
- **Supporting community resource management plans through the development and implementation of modern, adaptive co-management plans for each pilot site.** Outputs include: preparation of community-based resource management plans for different land uses by CBO's with help from experts and line agencies; incorporation of results of action research into management plans; implementation of community-based resource management plans based on social justice and principles of social justice and modern adaptive co-management are ensured by CBOs and local institutions.
- **Identifying sacred natural sites and carrying detailed assessments of their role in maintaining ecosystem integrity and services.** The sacred landscape is dotted with a number of such sites that are endowed with immense associated indigenous knowledge. Outputs include knowledge distilled from ethnographic surveys as well as scientific research shedding new light on the value of indigenous ways of ensuring ecosystem health. This could lead to improved governance to ensure sustainable conservation of these sites in current times of rapid transition in the society with regard to traditional value systems. Simultaneously several modules on sacred landscape and ecology would be developed targeting different audiences.

Outcome indicators

- Comprehensive ecosystem management plans for each country implemented by national-level institutions by the end of the third year
- At least three sacred natural sites are analysed for their significant role in ecosystem integrity and functioning
- Eighty per cent of the community involved in the implementation process at each site shows satisfaction

Access and benefit sharing for the development of resilient communities

- **Protecting indigenous knowledge systems.** Outputs include: formation and training of community Biodiversity Management Committees; preparation of community biodiversity registers and documentation of related indigenous knowledge; generation of awareness on legal procedures for protection of indigenous knowledge systems among civil society groups; and integration of local biodiversity registers with state/provincial and national biodiversity authorities.
- **Evaluating community rights and sharing in value chains.** Outputs include: analysis of rights related to specific value chain products; awareness generation for community institutions on gender issues and rights and

responsibilities related to equitable benefit-sharing results; results of analysis fed into innovative livelihood approaches.

- **Linking enterprise with conservation.** Outputs include: identification of high-value bio-resource products and methods of conservation; determination of scope and limits of harvest for further conservation and development planning; evaluation of impacts of tourism on heritage and local culture and incorporation of results into conservation plans; and bringing institutions focusing on both enterprise and conservation to common discussion forums.

Outcome indicators

- Community-managed systems functional for protecting local knowledge systems and ensuring equitable benefit sharing
- Systems meet all the criteria of equitable benefit sharing and 80 per cent of involved community members show satisfaction in the performance of the system as determined through surveys

Long-term conservation and monitoring

- **Implementing conservation strategies.** Outputs include: preparation of rehabilitation plans to balance biodiversity conservation and rural livelihoods in highly degraded ecosystems; assessment of carrying capacity of alpine rangelands and use of assessment in conservation planning; development of mechanisms to reduce conflicts between protected areas and people; exploration and promotion of alternate livelihood options for communities highly dependent on protected areas, especially that of women and local ethnic/caste groups; exploration and inclusion of options for declaring community conservation reserves in conservation plans; and identification of critical conservation corridors within the landscape and mainstreaming of these corridors in the conservation planning.
- **Developing monitoring systems.** Outputs include: implementation of monitoring systems in each pilot site at the local level, specifically the establishment of institutional mechanisms for systematic recording of environmental changes including climatic variables; building of regional and national capacity for environmental monitoring and long-term ecological research; establishment of monitoring systems for important transitions and interfaces (e.g., forest–grassland, rangeland–wetland); and incorporation of key thematic areas – climate change, land use change, cryosphere, water systems, ecosystem function and services, biodiversity and ecosystems, health determinants affecting human and livestock, mountain economies, and societal and environmental change – in the monitoring plan.
- **Building the capacity of institutions.** Outputs include: training of local community institutions, including men and women, in biodiversity and socioeconomic monitoring; preparation and implementation of community level environmental and socioeconomic monitoring and conservation plans by CBOs and local institutions; and implementation of exchange programmes for scientific, management, policy and community-level institutions.
- **Improving data sharing and knowledge management.** Outputs include: establishment of mechanisms for data acquisition and collation; harmonization of data and analysis for quality control; development of mechanism for data sharing that ensures access for all the countries; and mainstreaming of information and experiences from community monitoring into conservation action.

Outcome indicators

- Institutional monitoring mechanisms (national line departments and research institutions, gender and socially sensitive community-based participatory plans, committees, and interest groups) for various parameters are functional and have comprehensive implementation plans
- Protocols and designs (like GLORIA and MEA frameworks) for monitoring at different levels used in each pilot site

- Community institutions are capable of preparing and implementing resource availability maps and change detection at each pilot site
- Baseline data and initial monitoring trends are communicated using a common format

Regional cooperation, enabling policies, and knowledge management

- **Supporting national and local policy forums.** Outputs include: Mapping and analysis of institutional (vertical and horizontal) and social arrangements by the countries at the regional level with reevaluation at the end of the project to illustrate change; establishment of thematic working groups in respective countries; completion of policy review and analysis to complement landscape conservation and development with reassessment at the end of the project to document change; and synthesization and implementation of complementary policies, gaps, and institutional roles and responsibilities at the regional level
- **Forming a regional platform and regional exchange.** Outputs include: analysis of institutional landscape and linkages at the regional level and use in programme implementation as well as comparison at later stages; establishment of a regional platform for scientific information exchange, policy cross-learning, and a programme steering mechanism; development and implementation of common methodologies for programme components at the landscape level; building of capacities of national institutions in compliance with the needs of programme components; and exploration and utilization of regulatory mechanisms and incentives-based funding to good practices related to programme components.
- **Improving knowledge management and communication.** Outputs include: documentation and dissemination of good practices related to conservation and development in the landscape keeping gender and social equity issues in mind; sharing of results of action research through publication and other means targeting various stakeholders such as communities, local managers, civil societies, policy makers, and academia; and establishment of a regional information and knowledge sharing platform to support communication and knowledge exchange using appropriate and need-based communication pathways.

Outcome indicators

- Information/knowledge sharing mechanisms used by all partners at the local, national, and regional level
- At least two formal scientific and community-level exchange visits occurred
- At least two regional meetings and dialogues held each year of the project period

Impact Pathways

The programme will ensure that outputs are translated into desired outcomes by facilitating changes in the knowledge, attitudes, skills, and practices of end users, practitioners, and policymakers. This requires a considerable effort to closely track the progress of annual and block-wise action plans. A Programme Management Unit (PMU) will be responsible for keeping track of theories of change, showing how various outcomes will be achieved, and identifying opportunities to leverage developmental change for vulnerable communities. This would be achieved by capacity building, change of policy or practice, working with the private sector, identification of key partners and end users essential for change to happen, and an impact monitoring and learning system to make changes as needed during the programme period. This will be developed through the programme partnership and tracked through the programme's internal monitoring system.

The KSLCDI seeks to generate impact by building the capacity of community institutions; engaging CBOs and civil society organizations in developing enabling policies at local, district/prefecture, and national levels; and seeking transboundary scientific collaboration and exchange. This would be achieved by arranging regional workshops involving professionals and practitioners, sharing methodologies, sharing information or data when possible, and looking for common solutions to common problems. The programme fosters platforms for scientific and policy exchange at various levels.

Implementation Process

General

Transboundary landscape management implies the use of an integrated approach to manage extended landscapes in which both the conservation and sustainable use of the components of biological diversity are considered. This is in line with the current thinking among the global conservation community which advocates going beyond conventional concepts of protected area management that tend to view people and nature as separate entities, often requiring the exclusion of human communities from areas of interest, prohibiting their use of natural resources, and seeing their concerns as incompatible with conservation (Sharma et al. 2010). Understanding the socioeconomic, socio-political, and socio-cultural aspects of biodiversity and cultural conservation is essential for conservation efforts in the HKH region to be successfully translated into the sustainable and equitable development of this fragile mountain area. The transboundary landscape management approach as visualized in the KSL conforms to the Convention on Biological Diversity's (CBD) ecosystem approach and depends on regional cooperation for the management of critical transboundary landscapes. This approach, which involves the community in the inclusive decision-making process, has been strongly recommended for linking effective biodiversity and water resource conservation with sustainability in medium and long-term perspectives. It places human needs at the centre of biodiversity management, which have to be ensured by environmentally sound resource use and conservation at the landscape level. This has to be strongly linked to policy processes and adjustments in local and national policies supported by regional and global frameworks. Furthermore, it aims to manage the ecosystem based on the multiple functions it performs and the products of these functions. The KSL is strategically placed to provide benefits regarding biodiversity and water resources to downstream populations and for global goods and services in terms of conservation of genetic resources, which can be only achieved by integrating local human needs in conservation and development programmes.

The three neighbouring countries that share the KSL agree that transboundary landscape and ecosystem management approaches are urgently required and should be identified, developed, and implemented within a fairly short timeframe to manage and adapt to the significant impact of projected changes in this region, both environmental and developmental. Mechanisms for maintaining and enhancing biological diversity, essential ecosystem goods and services, and the cultural integrity of this sacred landscape are required if local livelihood options – mainly livestock production, nomadic herding, subsistence agricultural activities, and tourism growth – are to be balanced with environmental conservation and sustainable development goals. The need to adapt to on-going local and global environmental change processes adds extra urgency and complexity to sustainable development and conservation efforts in this region. Many urgent issues confronting the KSL are best addressed through increased regional cooperation, as per the application of a transboundary ecosystem management approach. This is especially relevant for specific issues such as tackling the illegal cross-border trade in timber, medicinal plants, wildlife, and other endangered biodiversity. Such activities have to be included in national implementation plans. Effective mechanisms can only be established through the participation of local authorities and local people.

The transboundary approach to maintaining the ecological and hydrological integrity of this headwaters region will help secure the flow of water and environmental services to communities and populations downstream. Ecosystem-based management seeks to enhance the resilience of mountain societies as well as the landscape and bio-resources they depend on. Consequently, this management strategy will help secure the supply of ecosystem services that support the basic needs of human societies well beyond the boundaries of the KSL itself. Socioeconomic aspects of the programme will aim to improve local livelihoods, especially of forest-dependent social groups such as women, the poor, indigenous peoples, and marginalized ethnic/caste groups, in the KSL through the broader context of ecosystem management and sustainable use of natural resources.

Major Tasks and Key Activities

With an expected duration of five years (2012-2016), this plan intends to execute priority tasks and activities, as delineated and prioritized during the preparatory phase, based upon the detailed strategy, framework, and work plans. Specific tasks and activities under various programme components are outlined below. (See programme implementation schedule Annex 3).

Task 1 Innovative livelihood options and climate change adaptation

Activities

- 1.1 Analysis of poverty and socioeconomic vulnerability of selected local communities in the KSL to inform future interventions
- 1.2 Analysis of the value chains of five high-value products with specific focus on climate change adaptation and water/energy management
- 1.3 Address leverage points identified by the five value chain analyses to increase communities' income level, adaptive capacity to climate change, and ability to effectively manage water/energy
- 1.4 Capacity building of tourism stakeholders for heritage/tourism with specific focus on climate change adaptation and water/energy management
- 1.5 Develop and implement heritage tourism management plan to increase communities' income level, adaptive capacity to climate change and ability for water/energy management

Task 2 Ecosystem management for sustaining services

Activities

- 2.1 Training of CBOs in community-based, gender and socially equitable participatory natural resource management (PNRM) planning which may include planning the sustainable use of water resources and improved resource governance
- 2.2 Support to CBOs for implementation of PNRM plans; seed money given to CBOs/line agencies for specific activities including fodder development, eco-restoration of degraded sites, and control of alien invasive species
- 2.3 Preparation of site-specific conservation plans for sacred natural sites
- 2.4 Preparation of area-specific conservation, development, and harvest (CDH) plans for high-value medicinal plants
- 2.5 Promotion of organic farming/horticulture/mushroom cultivation/beekeeping, conservation of local land races, and crop and livestock insurance
- 2.6 Support to line agencies for comprehensive management planning of buffer zones, protected areas, and Ramsar sites; eco-engineering of watersheds and peatlands (on the Chinese side); minimizing pollution (Nepal side)
- 2.7 Participatory action research on valuation of ecosystem services; and raising awareness about ecosystem services
- 2.8 Ex-situ conservation and propagation of threatened plants, including orchids
- 2.9 Participatory management of buffer zones, critical habitats, and corridors
- 2.10 Capacity building and training of CBOs to reduce human-wildlife conflicts

Task 3 Access and benefit sharing (ABS)

Activities

- 3.1 Formation of Biodiversity Management Committees (BMCs) at select pilot sites and preparation of community-based biodiversity registers
- 3.2 Capacity building of BMCs and civil society members in ABS processes that safeguard the needs and interests of poor, women, marginalized groups

- 3.3 Preparation of awareness-raising materials on indigenous knowledge and on-going national ABS processes
- 3.4 Documentation of indigenous knowledge associated with biodiversity and mountain farming/agro-biodiversity
- 3.5 Support to countries for adherence to the CBD through implementation of ABS mechanisms

Task 4 Long-term conservation and monitoring

Activities

- 4.1 Capacity building of national and local institutions for the implementation of the conservation strategy
- 4.2 Capacity building of national and local institutions for the implementation of the CEMP
- 4.3 Training of frontline staff and local volunteers in the implementation of conservation strategy and CEMP
- 4.4 Exchange visits of scientific, technical, and frontline staff and CBO workers; landscape yatras
- 4.5 Implementation of conservation strategy; in-depth studies on hot-spots critical habitats (timberline, wetlands, forest agriculture ecotones), corridors and selected rare, endemic and threatened (RET) species; interface management at pilot sites
- 4.6 Implementation of comprehensive environmental monitoring plans; geospatial analysis of land use and land use and land cover change (LULCC); historical trend analysis on climate change; determination of bio-physical and socioeconomic baselines; repeat observations on rare, endemic, and threatened species and habitats; setting up sites for monitoring alpine vegetation (GLORIA Experiments); developing institutional mechanisms for monitoring agro-biodiversity; establishing and testing protocol for monitoring ecosystem health and flow of services.

Task 5 Regional cooperation, policies, knowledge management, and communication

Activities

- 5.1 Development of an interactive knowledge sharing and database platform to capture and share data, reports, and communications
- 5.2 Knowledge management (e.g., organization of knowledge forums, debates, e-dialogues, and developing stories in local languages) and awareness raising at the local, national, and regional levels
- 5.3 Documentation of climate change adaptation (using the ICIMOD Vulnerability and Adaptive Capacity Assessment methodology)
- 5.4 Networking and partnering with national and regional research institutes
- 5.5 Harmonization of policies at national and regional levels through regional policy workshops
- 5.6a Database/information management flowing from conservation strategy and CEMP
- 5.6b Knowledge management and communication

Task 6 Programme management

- 6.1 Programme operation, coordination, and management; mid-term evaluation by international experts; experience sharing and feedback; monitoring and evaluation support

Implementation Mechanism

Regional coordination

The KSL programme will be managed by ICIMOD. The programme coordinator will be responsible for planning, implementation, and monitoring of the programme. Internal monitoring, decision making, and administrative procedures will follow ICIMOD's established guidelines and procedures. ICIMOD will, in accordance with the programme contract, assume the overall responsibility for planning, implementation, reporting, and monitoring. Key steps to implement the plan are outlined below.

- ICIMOD will enter into contractual agreements (LoAs, MoUs, etc.) with programme partners regarding international and regional cooperation. The LoAs will include institutional responsibilities for planning and implementation. ICIMOD will control, manage, and regulate the project funds. Funds needed by different national and strategic partners to implement the project will be disbursed through LoAs and contracts.
- Attached to the Programme Management Unit (PMU) will be a pool of non-permanent consultants, which will support the programme in strategic issues such as development of ecosystem management plans, capacity development of institutions including impact pathways, and an impact monitoring system.
- ICIMOD will form a Programme Steering Committee for overall technical guidance with respect to programme management. Likewise, it would also form a Regional Technical Advisory Committee to work in close coordination with the PMU. Meetings of a Technical Advisory Committee would be organized at least once a year on a rotation basis in each country.
- Each country has a National Coordination Committee including representatives from implementation agencies and local communities, the programme coordinator, and the responsible persons of the respective governments. These committees would meet twice a year.

Programme Steering Committee

Implementation of the regional programme will follow the advice and guidance of the Programme Steering Committee (see Annex 4), which is made up of representatives of strategic partners and participating countries.

The Programme Steering Committee will be responsible for making policy decisions and approving annual plans on the implementation of the programme. Its functions will include:

- providing strategic guidance and advice to the programme;
- reviewing annual work plans and budgets;
- recommending modifications in the implementation plan as and when necessary;
- reviewing annual progress and suggesting measures necessary to achieve programme objectives; and
- assuring the overall monitoring of the implementation of the programme.

The chair will be held by government representatives from different countries on a rotation basis. Its members include one representative from each of the three governments, heads of the lead agencies in each country, and representatives from donor agencies. ICIMOD provides the Secretariat.

The Programme Steering Committee will be the highest body for policy guidance of programme implementation. A pool of consultants will provide strategic support to the PMU for programme implementation and monitoring under the overall frame of ICIMOD's Strategic Monitoring and Planning. Programme monitoring will provide inputs to the Programme Steering Committee.

National Coordination Committees and partnership arrangements

National Coordination Committees shall be constituted by the respective focal ministries/agencies as per the agreed structure in the national implementation plans. A Regional Technical Advisory Committee will agree on regional methodologies, common frameworks, and guidelines that will be implemented through National Coordination Committees. The role of these National Coordination Committees is to ensure balance and linkages among different players, keeping gender, equity and poverty in view, both vertically and horizontally. Civil society organizations will act as sounding boards for National Coordination Committees. Interaction between players at different levels (nodal ministries, state/province, and community) will be ensured through programme activities and feedback mechanisms as shown in the flow chart. Partner mapping for component-wise implementation of the programme at different scales (national, state/provincial, district, and local levels) for the KSLCDI have been prepared and presented in Annex 2.

Reporting Mechanism

ICIMOD will serve as the regional PMU and will have overall responsibility for monitoring and evaluation. It will report to the Programme Steering Committee and programme donors. National programme coordinators – nominated staff of the partner organization in each of the three countries – will be responsible for reporting on the progress of their own national programmes to the PMU at ICIMOD. Overall reporting would be as per the logical framework of activities and indicators (Annex 1) and the programme implementation schedule (Annex 3). Accountability at the outcome and impact levels is foreseen through strategic results-based systems. Accordingly, the basis for the planning, monitoring, and evaluation cycle is the results-based logical framework. Process learning and monitoring will be built in to track how outputs have contributed to programme outcomes.

Risks and Assumptions

There is an inherent risk that the international standard this programme aims to achieve is beyond the current capacity of numerous organizations and stakeholders involved in the programme implementation. This needs to be managed through appropriate capacity assessment and training programmes together with systematic quality control of outputs. There will be a comprehensive capacity assessment of each organization working in the KSL area in the first year of the programme, which will also determine the needs of various organizations.

The programme is committed to building the capacities necessary for community-based conservation and natural resource management systems to capture and share both traditional and scientific knowledge. The community-based initiatives of the KSL will build on existing initiatives in pilot areas in each country. Earlier studies of these sites indicated on-going governments, NGOs, and community-based interventions. This approach should enhance the resilience of local communities and economies to a variety of threats including climate change and economic downturns. Climate change adaptation is addressed specifically by two of the programme components and, to a great extent, it will also be integrated into all other programme components and activities. Climate change is recognized to be a critical issue for the mountainous KSL region and there is already evidence of impacts of climate change and spontaneous local adaptation. Information gathering, monitoring, and targeted research in combination with community involvement and awareness-raising activities help decision makers understand that long-term solutions involving adaptation to climate change are feasible and result in the most benefits. In the event of an economic downturn that might affect the donors' ability to contribute financing, adjustments would be made to the programme work and budget and/or additional co-financing will be sought from other sources.

Implementation Support

Facilities and Materials

The programme visualizes the establishment of a network of weather stations across the landscape that allows for long-term monitoring of climatic parameters in the region. During the preparatory phase, a few automated weather stations were installed in Nepal's part of the KSL. More weather stations have been planned in the landscape to cover all three countries. ICIMOD and its partner institutions, will require hardware and software support for storage and analysis of climate data. Likewise, GIS facilities at each institution will need a regular supply of satellite data in order to establish effective decision support systems and regional databases on various ecosystem parameters including biodiversity, land use and land cover change, and socioeconomics.

The programme visualizes three field research-cum-training stations (one each in China, India, and Nepal) with basic facilities for a group of field research personnel. In the long-term, these facilities will be maintained and developed by partner institutions into basic facilities for researchers, experts, volunteers, CBO workers, and other stakeholders. Each field station will also have basic field equipment including computers, high-altitude camping gear, and equipment needed to conduct GLORIA experiments.

The high-altitude rangelands and alpine villages within the KSL require energy-saving devices and simple tools to manufacture bio-briquettes. More country-specific equipment and infrastructure requirements (e.g., medicinal plant nursery tools and poly-houses) have been listed in individual country plans.

Human Resource Requirements/Staffing

In order to execute the programme at the regional level, one full-time Regional Programme Coordinator for the KSLCDI will be engaged at ICIMOD. The Regional Programme Coordinator will be supported by one Natural Resource Management Specialist, one Research Associate and a few short-term interns for specific tasks. The Regional Programme Coordinator will serve as a member secretary of the PMU at ICIMOD. International professionals within ICIMOD's Regional Programmes and Thematic Areas would contribute towards achieving regional targets and work closely with relevant national partners.

The programme visualizes the involvement of several international, regional, and national experts to build the capacity of partner institutions and to perform specific tasks. The PMU, in consultation with the Regional Technical Advisory Committee, will be responsible for preparing the panel of experts and developing specific terms of reference.

Other

Major components of the programme are regional cooperation, policy integration, knowledge management, and communications. Active involvement and utilization of these tools by the Regional Programme Coordinator is essential to enhance regional cooperation and transboundary ecosystem management in the KSL. Similarly, within each country a national forum is needed to enable ecosystem management approaches. Frequent policy reviews and updates within each country will be required to implement country-specific KSL conservation strategies and CEMPs, and attend regional workshops. Likewise, appropriate national and international authorities will be approached to facilitate the integration of social equity and gender issues into policies, ABS mechanisms, programmes and plans for conservation, sustainable resource use and development, and governance in the KSL at regional, national, and local levels.

The programme also visualizes the establishment of a functional, regional information and knowledge sharing platform and associated mechanisms. The PMU will develop and implement a communication strategy, including outreach, dissemination, and guidelines and processes for facilitating international and regional collaboration and national and local engagement in the KSLCDI.

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Annex 1: Logical framework for the Kailash Sacred Landscape Conservation and Development Initiative Programme Implementation Plan 2012–2016

Kailash Sacred Landscape Conservation and Development Initiative: Regional collaboration and participatory ecosystem management for conservation and sustainable development in the KSL of China, India, and Nepal

Overall programme goal (20-year):

The transboundary Kailash Sacred Landscape is established and the protection, sustainable use, and development of its resources are ensured by local communities.

Indicators:

- Registration under international convention/category (e.g., UNESCO Man and the Biosphere Programme)
- Internationally binding tri-party agreement between China, India, and Nepal
- Loss of biodiversity is slowed down or stopped
- Degradation of the condition and productivity of key ecosystems is slowed down or stopped
- Income diversification is increased
- Gross domestic product of the KSL area is increased

Means of verification:

- Registration documents
- Evaluations
- Reports
- World Bank, IMF and UN agencies monitoring indicators of human development

Assumptions/risks:

Three national governments remain committed to supporting the KSLCDI
Interventions are driven by demand

Overall programme objectives:

Framework conditions for the long-term development of the KSL are improved.

Indicators:

- Approaches for equitable livelihood options, management of the ecosystems, and benefit sharing among resilient communities of China, India, and Nepal are harmonized
- Assessment system for environmental and socioeconomic parameters for national and local institutions in China, India, and Nepal is jointly agreed upon
- Regional cooperation between China, India, and Nepal for promoting development and conservation of the KSL is functioning
- Human capacity building for the continuation and up-scaling of the KSLCDI is sufficiently developed

Means of verification:

- Evaluation reports
- Assumptions/risks:
- Three national governments remain committed to support the KSLCDI

Five-year programme goal:

To contribute to the improved livelihoods and resilience of mountain communities in the Kailash Sacred Landscape by applying transboundary ecosystem management approaches and considering both risks and opportunities of the changing climate.

Five-year programme objectives:

- Strengthened regional transboundary cooperation by institutionalizing the elements of the regional cooperation framework
 - Sustainable ecosystem management approaches and practices at all levels mainstreamed into national policies and plans in the context of climate change adaptation in the KSL
 - To build the capacity of key institutions for long-term environmental monitoring and socioeconomic research for better planning and inclusive decision making
 - To establish a regional knowledge sharing platform to support evidence-based decision making at regional and national levels
-

Intervention logic	Indicators	Means of verification	Assumption/risks
Component 1 – Innovative livelihood options			
Outcome 1: Innovative livelihood options adopted at the community level	Income level of target communities with marginalized focus on poor and marginasized increased by 30 per cent overall At least 5 per cent additional income from heritage tourism At least one interest group in each site engaged in the active trade of local, traditional products	Baseline study Evaluation missions and reviews with local communities and other stakeholders Reports from associated local stakeholders including local authorities, CBOs, and NGOs	Working conditions allow the implementation of activities across the region Interventions are driven by demand
Output 1.1: High value niche products identified, value chains assessed, and management linkages (vertical and horizontal) strengthened	At least five product value chains developed, managed and put into practice in each site	Monitoring system record review Progress reporting	-
1.2: Heritage tourism plans developed and implemented	Comprehensive, community-based tourism plans developed and implemented in each site	Monitoring system record review Progress reporting	-
1.3: Water resources and energy assessed and communities supported	Assessment of water resources and energy systems at the local level and support given to communities	Monitoring system record review Progress reporting	-
1.4: Climate change adaptation capacities built up at the local level	Assessment and building of adaptive capacities of local communities through innovative options following autonomous and planned adaptations	Monitoring system record review Progress reporting	-
Component 2 – Ecosystem management			
Outcome 2: Improved management of ecosystems through scientific understanding	Comprehensive ecosystem management plans for each country implemented by national-level institutions by the end of the third year Eighty per cent of the community involved in the implementation process at each site shows satisfaction	Reports on the implementation of the national and regional adaptation plans or strategies Reports of international conferences, journal articles Interventions made by national stakeholders at the global level	National and regional stakeholders and authorities are effectively involved and cooperate in the implementation of activities and take part in international political dialogues related to climate change
Output 2.1: Action research for valuation of ecosystem services implemented	Important ecosystem services identified Vulnerability assessments conducted and analyzed in three pilot sites	Monitoring and evaluation record review	-
2.2: Capacities of local institutions developed for preparing local ecosystem plans	National and local institutions and communities trained and supported in preparing ecosystem plans for each pilot site	Monitoring and evaluation record review Training data and reports	-
2.3: Community-based resource management plans developed and implemented	Adaptive co-management plans implemented in three pilot sites with special attention to women and ethnic groups	Monitoring and evaluation record review	-

Intervention logic	Indicators	Means of verification	Assumption/risks
2.4: Scientific assessment of sacred natural sites (SNSs) in maintaining ecosystem integrity and services	Role of selected SNSs in ecosystem functioning assessed, traditional ways of management of SNSs evaluated, and improvement in their governance structures incorporated in conservation plans	Reports; endorsement by local agencies as well as by international programmes such as the IUCN Sacred Natural Sites programme; curriculum and contents for a course on sacred landscape and ecology prepared	The indigenous knowledge with regard to some sacred natural sites may already be on the decline and governance by community institutions may have eroded under rapid transition in society
Component 3 – Access and benefit sharing towards the development of resilient communities			
Outcome 3: Improved, equitable access to resources and benefit sharing mechanisms for communities	Community-managed systems functional for protecting local knowledge systems and ensuring equitable benefit sharing Systems meet all the criteria of equitable benefit sharing and 80 per cent of involved community members show satisfaction in the performance of the system as determined through surveys	Six bi-monthly and/or one annual report from implementing partner(s) Internal monitoring and evaluation system	Political, social, economic, and natural environment is sufficiently secure for target groups to invest in the development of income-generating opportunities
Output 3.1: Protection of indigenous knowledge systems	Community biodiversity registers prepared and integrated with national/provincial/local authorities	Monitoring and evaluation record review	-
3.2: Community rights and sharing in value chains analysed	Rights related to value chains of five specific products are analysed and integrated into the Innovative Livelihoods Component in each project site	Monitoring and evaluation record review	-
3.3: Enterprises linked with conservation	At least three conservation-based enterprises developed in each pilot site	Monitoring and evaluation record review	-
Component 4 – Long-term conservation and monitoring			
Outcome 4: Local and national institutions are capable of assessing and monitoring socioeconomic, environment, and biological parameters and their linkages at the local, national, and landscape level	Institutional monitoring mechanisms (national line departments and research institutions, community-based participatory plans, committees, and interest groups) for various parameters are functional and have comprehensive implementation plans Protocols and designs (like GLORIA and MEA frameworks) for monitoring at different levels used in each pilot site Community institutions are capable of preparing and implementing resource availability maps and change detection at each pilot sites Baseline data and initial monitoring trends are communicated using a common format	Six bi-monthly and/or one annual report from implementing partner(s) Internal monitoring and evaluation system	National and regional stakeholders and authorities are effectively involved and cooperate in implementation activities

Intervention logic	Indicators	Means of verification	Assumption/risks
Output 4.1: Conservation strategy implemented in each site	Conservation strategies implemented at the national and local level in each participating country	Supervision mission	-
4.2: Monitoring systems developed	Monitoring systems implemented in each pilot site at the community level	Supervision mission	-
4.3: Capacity building of institutions ensured at the local level	At least five community institutions in each project site trained in monitoring	Supervision mission	-
4.4: Data/information made available and accessible	Knowledge management systems are functional	Monitoring and evaluation records review	-

Component 5 – Regional cooperation, enabling policies, and knowledge management

Outcome 5: Regional cooperation for promoting the development and conservation of the KSL strengthened	Information/data sharing mechanisms used by all partners at the local, national, and regional level At least two formal scientific and community-level exchanges each year At least two regional meetings and dialogues held each year of the project period	Reports on the implementation of national and regional plans or strategies Reports of international conferences Interventions made by national stakeholders at the global level	National and regional stakeholders and authorities are effectively involved and cooperate in the implementation of activities, and take part in international political dialogues related to climate change
Output 5.1: National and local policy forums supported	Relevant national and local policy institution meetings held	-	-
5.2: Regional platform and exchange facilitated	Stakeholder representatives from all levels stakeholders participate in regional platforms and use common methodologies	-	-
5.3: Knowledge management and communication facilitated	Regional information and knowledge-sharing platform facilitated and supported two-way communication and knowledge exchange using appropriate and need-based communication pathways	-	-

Annex 2: Partner mapping for programme implementation

Programme components and activities	Partners			
	Regional	National	State/sub-region	Local
1 Innovative livelihood options and adaptations				
1.1 Analysis of poverty and socioeconomic vulnerability	-	Nodal institutions	-	-
1.2 Analysis of value chains of five high-value products with specific focus on climate change adaptation and water/energy management	ICIMOD	National partners to be identified	Forest/rural development departments State medicinal plants boards	Local enterprises and NGOs
1.3 Address leverage points identified by the five value chain analyses to increase communities' income level, adaptive capacity to climate change, and ability to effectively manage water/energy	ICIMOD		Forest/rural development departments State medicinal plants boards	Local enterprises and NGOs
1.4 Capacity building of tourism stakeholders for heritage/tourism with specific focus on climate change adaptation and water/energy management	ICIMOD	National partners to be identified	State culture and tourism departments/ bureau/tourism board	Local tourism enterprises
1.5 Develop and implement heritage tourism management plan to increase communities' income level, adaptive capacity to climate change, and ability to effectively manage water/energy	ICIMOD	National partners to be identified	State culture and tourism departments/ bureau/tourism board	Local tourism enterprises
2 Ecosystem management for sustaining services				
2.1 Capacity building of CBOs in participatory natural resource management (PNRM) planning	-	National partners	Provincial line agencies	CBOs, forestry and rangeland users groups
2.2 Preparation of PNRM plans, plan reviews, and implementation	-	National partners	Provincial line agencies	CBOs, forestry and rangeland users groups
2.3 Support to CBOs for specific activities including fodder development; eco-restoration of degraded sites, and control of invasive alien species	-	-	Provincial line agencies	-
2.4 Preparation of area-specific conservation, development, and harvesting (CDH) plans for high value medicinal and aromatic plants (MAPs)	-	National partners	-	-
2.5 Promotion of organic farming, conservation of local land races, and crop and livestock insurance	-	National partners	Provincial line agencies	CBOs, forestry and rangeland users groups
2.6 Support to local conservation agencies for management of buffer zones, protected areas, and Ramsar sites	-	-	State and provincial forest and protected area management authorities	-
2.7 Participatory action research for evaluation of ecosystem services	ICIMOD	National partners	State and provincial academic institutions	Local schools and colleges
2.8 Ex-situ conservation and propagation of threatened plants including orchids	ICIMOD	National partners	State and provincial academic institutions	
2.9 Interface management for critical habitats and corridors with community participation	-	National partners	Provincial line agencies	CBOs, forestry and rangeland users groups
2.10 Mitigation of human-wildlife conflicts	-	National partners	State and provincial academic institutions	CBOs

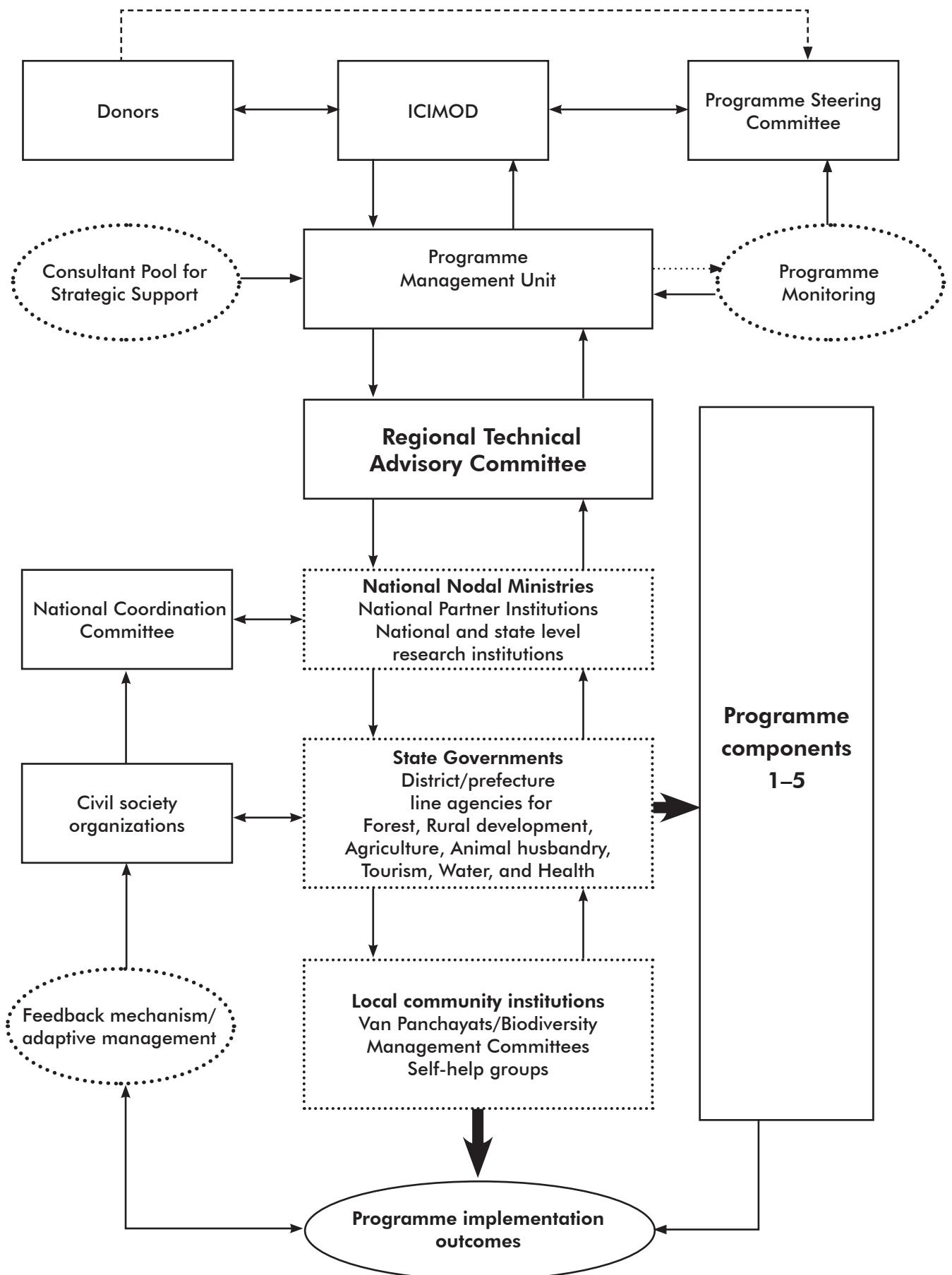
3 Access and benefit sharing (ABS) mechanism for community resilience				
3.1 Formation of Biodiversity Management Committees (BMCs) at pilot sites	-	National and state biodiversity boards	-	-
Programme components and activities	Partners			
	Regional	National	State/sub-region	Local
3.2 Capacity building of BMCs and civil society members	-	National and state biodiversity boards	-	-
3.3 Awareness raising on ABS; community rights and sharing on value chains; linking enterprises with conservation	-	National partners	Private/public organizations Civil society organizations	Local NGOs
3.4a Preparation of community-based biodiversity registers	ICIMOD	National and state biodiversity boards	Civil society organizations	Biodiversity Management Committees
3.4b Documentation and protection of indigenous knowledge associated with biodiversity and agrobiodiversity	-	National partners	-	-
3.5 Support to countries for adherence to the Convention on Biological Diversity (CBD) (ABS mechanism)	ICIMOD	-	-	-
4 Long-term conservation and monitoring				
4.1, 4.2, 4.3 Capacity building of national, provincial and local institutions	International institutions through ICIMOD	National partners; Research institutions	State/local institutions	CBOs
4.4 Landscape-level exchange visits (yatras)	ICIMOD	National partners; Research institutions	State/local institutions	CBOs
4.5 Implementation of conservation strategy	ICIMOD	National partners	State forest and wildlife departments; State agriculture departments; State departments of animal husbandry	CBOs and BMCs
4.6 Implementation of CEMP; establishment of monitoring systems	International institutions through ICIMOD	National partners; Research institutions	State/local institutions	CBOs
5 Regional cooperation, enabling policies, and knowledge management				
5.1 Interactive knowledge sharing and database platform/decision support system	ICIMOD	National partners	State	Community user groups
5.2 Awareness raising and knowledge management	ICIMOD	National partners	State/provincial academic institutions	-
5.3 Documentation of climate change adaptation	ICIMOD	National partners	State/provincial academic institutions	-
5.4 Networking and support to national and local policy forums	ICIMOD	Civil society organizations and national institutions	State and local governments	Civil society organizations
5.5 Policy review and harmonization	ICIMOD	National partners	-	-
5.6 Database/information management flowing from conservation strategy and CEMP; knowledge management and communications	ICIMOD	National partners	State/county academic institutions	-
6 Programme management				
6.1a Programme operation, coordination, and management	ICIMOD	National partner institutions	State/provincial line agencies	
6.1b Programme monitoring; mid-term evaluation; Regional Steering Committee meetings (annual) and National Coordination Committee meetings (annual)	ICIMOD	National partner institutions	-	

Annex 3: Programme implementation schedule – 2012–2016

Programme activities	Implementation Time (Year & Quarter)																			
	2012				2013				2014				2015				2016			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1 Innovative livelihood options and adaptations																				
1.1 Analysis of poverty and socioeconomic vulnerability																				
1.2 Analysis of value chains of five high value products with specific focus on climate change adaptation and water/energy management																				
1.3 Address leverage points identified by the five value chain analyses to increase communities' income level, adaptive capacity to climate change, and ability to effectively manage water/energy																				
1.4 Capacity building of tourism stakeholders for heritage/tourism with specific focus on climate change adaptation and water/energy management																				
1.5 Develop and implement heritage tourism management plan to increase communities' income level, adaptive capacity to climate change, and ability to effectively manage water/energy																				
2 Ecosystem management for sustaining services																				
2.1 Capacity building of CBOs in participatory natural resource management (PNRM) planning																				
2.2 Preparation of PNRM plans, plan reviews and implementation																				
2.3 Support to CBOs for specific activities including fodder development; eco-restoration of degraded sites, and control of invasive alien species																				
2.4 Preparation of area-specific conservation, development and harvesting plans for high value medicinal and aromatic plants																				
2.5 Promotion of organic farming and conservation of local land races, crop and livestock insurance																				
2.6 Support to local conservation agencies for management of buffer zones, protected areas, and Ramsar sites																				
2.7 Participatory action research for evaluation of ecosystem services																				
2.8 Ex-situ conservation and propagation of threatened plants including orchids																				
2.9 Interface management for critical habitats and corridors with community participation																				
2.10 Mitigation of human-wildlife conflict																				

Programme activities	Implementation time (year and quarter)																			
	2012				2013				2014				2015				2016			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
3 Access and benefit sharing (ABS) mechanism for community resilience																				
3.1 Formation of Biodiversity Management Committees (BMCs) at pilot sites																				
3.2 Capacity building of BMCs and civil society members																				
3.3 Awareness raising on ABS, community rights and sharing on value chains; linking enterprises with conservation																				
3.4 Preparation of community biodiversity registers; documentation and protection of indigenous knowledge associated with biodiversity and agrobiodiversity																				
3.5 Support to countries for adherence to the CBD (ABS mechanism)																				
4 Long-term conservation and monitoring																				
4.1, 4.2, 4.3 Capacity building of national, provincial, and local institutions																				
4.4, 4.5 Landscape-level exchange visits (yatras)																				
4.6a Implementation of conservation strategies																				
4.6b Implementation of CEMP/establishing monitoring systems																				
5 Regional cooperation, enabling policies, and knowledge management																				
5.1 Interactive knowledge sharing and database platform/decision support system																				
5.2 Awareness raising and knowledge development																				
5.3 Documentation of climate change adaptation; awareness raising																				
5.4, 5.5 Networking and support to national and local policy forums; policy review and harmonization																				
5.6a Database/information management flowing from conservation strategy and CEMP																				
5.6b Knowledge management and communication																				
6 Programme management																				
6.1a Programme operation, coordination, and management																				
6.1b Programme monitoring; mid-term evaluation; Regional Steering Committee meetings (annual) and National Coordination Committee meetings (annual)																				

Annex 4: Programme implementation framework





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