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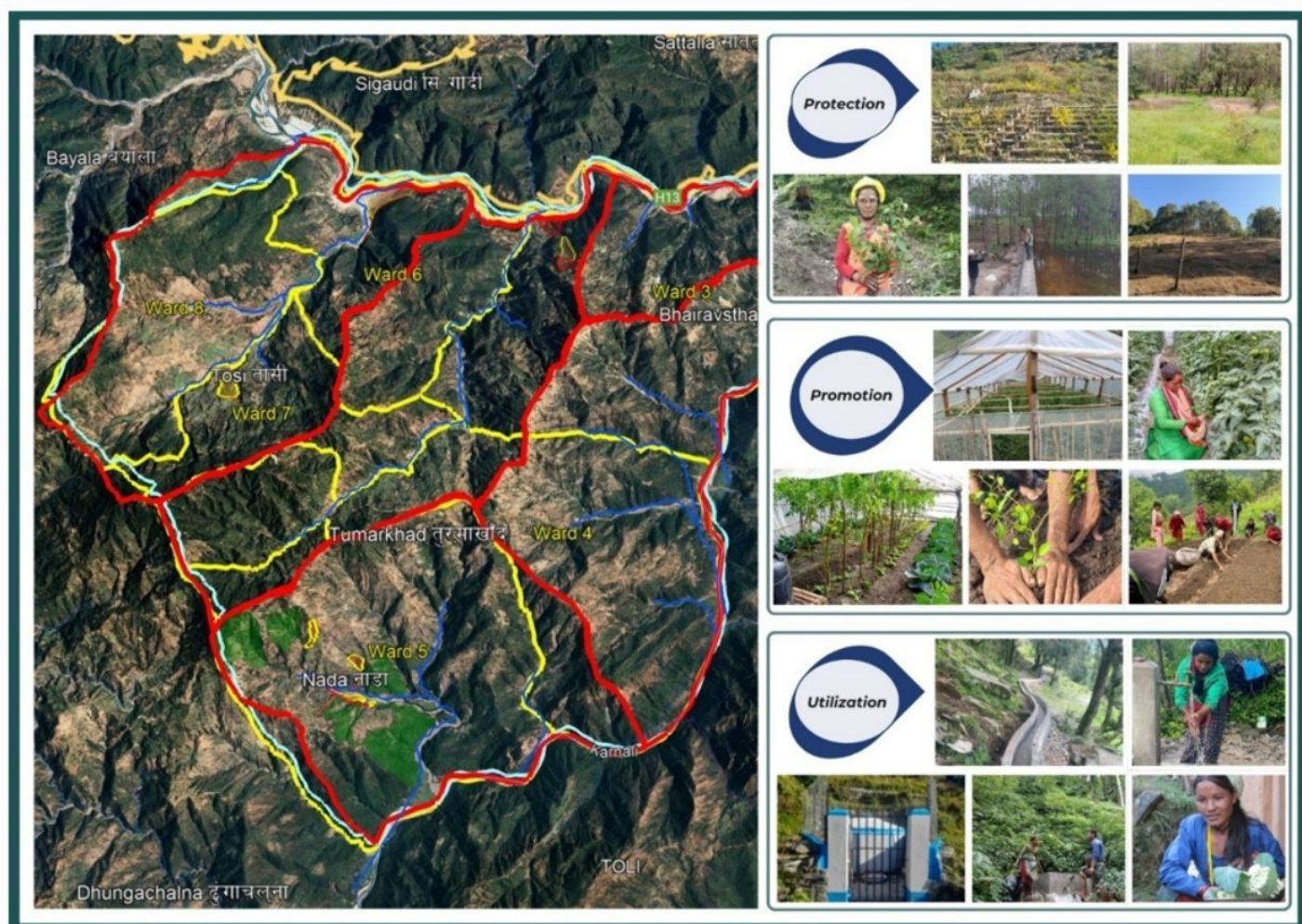
SUOMI
FINLAND



LOCAL ADAPTATION
TO CLIMATE CHANGE
LACC PROJECT

LACC'S MODEL LANDSCAPE-CATCHMENT APPROACH IMPLEMENTATION GUIDELINE

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1 INTRODUCTION

In Nepal, especially in ecologically sensitive and geographically diverse regions like Karnali and Sudurpashchim Provinces, communities depend heavily on forests, land, and water for their livelihoods. Yet, they also face growing risks from climate change, including land degradation, drying water sources, floods, landslides, drought, and debris flows. Poor land use and forest degradation in upstream areas often lead to erosion, flooding, and sedimentation downstream, affecting communities across multiple local governments (LG). This reality calls for planning approaches that are aligned with natural systems rather than administrative lines.

Up to this date, planning and development activities have been organized along administrative boundaries, such as provinces, local levels, and wards, even though natural processes operate beyond these divisions.

As a multi-sectoral project, LACC seeks to improve coherence and build natural synergies across its result areas and scope of work. The cross-cutting objectives of the project include gender equality, non-discrimination with an emphasis on disability inclusion, climate resilience, low emission development, and protection of the environment with an emphasis on safeguarding biodiversity. To realize the cross-sectoral nature of the project, integrated implementation efforts are required across the result areas and different sectors.

CATCHMENTS/SUB-WATERSHED Our Water Source

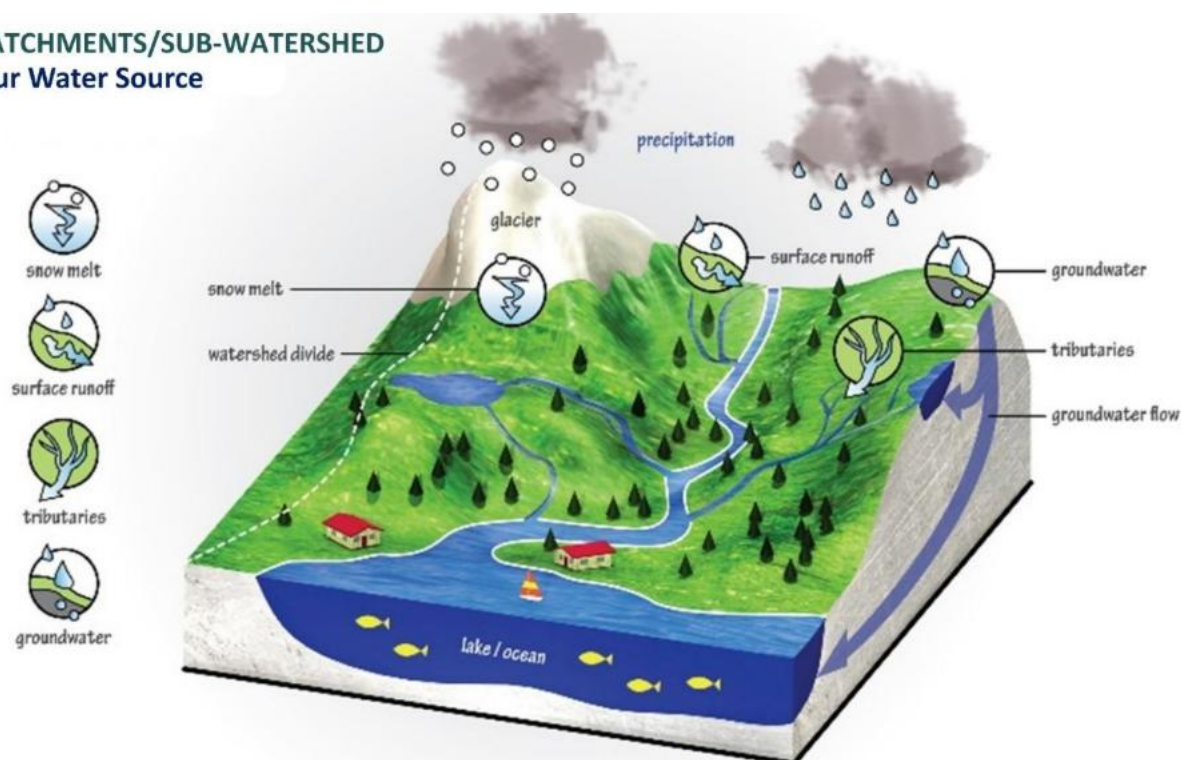


Figure 1: Sample catchments.

A catchment is a natural landscape unit where all surface water drains toward a common outlet, such as a river, stream, or lake. **Catchment approach** forms the basis for integrated water resources management and related water uses such as irrigation for agriculture and water supply to households. At the same time, they bring together upstream and downstream areas, including forests, farmland, settlements, and water bodies, that are closely connected through ecological and hydrological processes. They are thus crucial for sustainable land use, forest and environmental management. Because changes in one part of the catchment affect the whole system, managing these landscapes in an integrated way is essential for sustainable environmental management.

For instance, a drinking or irrigation water source may serve a downstream community, while the forests, recharge areas, and land management practices that sustain it lie upstream in a different LGs. These upstream–downstream linkages mean that actions taken in one location directly influence conditions elsewhere. A catchment approach acknowledges these connections and works with the natural geography and hydrology of the landscape.

The catchment approach links closely with the so-called **landscape approach**. The landscape approach is a valuable framework for sustainable land management that seeks to harmonize the needs of people and the environment. The landscape approach is increasingly recognized as essential for addressing global challenges such as climate change, biodiversity loss, and food security. It applies systems thinking for managing land that integrates ecological, social, and economic factors to achieve sustainable development and biodiversity conservation.

In practice, the landscape approach has a set of concepts, tools, and methods aimed at achieving multiple economic, social, and environmental objectives through the integration of various land uses and community interests. It emphasizes the interconnectedness of people and nature, recognizing that productive land uses, such as agriculture and forestry, often compete with environmental goals. The landscape approach recognizes multi-functionality, i.e., that landscapes provide a variety of ecosystem services, such as water purification, carbon storage, and biodiversity conservation, alongside agricultural and economic functions. The approach also emphasizes stakeholder engagement, particularly of the marginalized groups.

1.1 RATIONALE OF CATCHMENT AND LANDSCAPE APPROACHES IN BRIEF

The major reasons for adopting catchment and landscape approaches are:

- **Holistic Understanding and systems thinking:** It provides a complete picture of how natural resources, human activities, and socio-economic factors are all linked within a specific area. This comprehensive view is vital for addressing complex challenges.
- **Problem-Identification and Solving:** Pinpoints the root causes of environmental problems like forest fires and water scarcity, leading to more effective and targeted solutions. It also creates joint efforts of solving common issues/problems among different communities/institutions within the catchments like forest fire management, grazing management etc.
- **Coherence and cross-sectoral synergies:** Action from different sectors support each other and form a whole package: Creates a systematic and logical connection and consistency across sectors, and integrates the diverse elements of the project.
- **Inclusive Community Involvement:** This framework encourages active participation and ownership from local communities including women, dalit, janajati and persons with disability in problem identifying, planning and decision-making, ensuring that interventions are tailored to their specific needs and enhance the biodiversity protection in the catchment.
- **Aligned with local planning and decision-making:** Wards are the smallest administrative units of LGs. Existing Wards are responsible for collecting community demands and sector-wise prioritization through inclusive Tole/settlement level consultations. Implementation can be aligned with the existing formal, endorsed LG level sectoral plans.
- **Efficient resource allocation:** With a catchment perspective, different resources (human, financial) can be allocated more effectively and equitably, maximizing their impact.
- **Effective implementation and monitoring:** A catchment assessment establishes a baseline, making it easier to track progress and evaluate the long-term effectiveness of management efforts on both the environment and community well-being.
- **Impact on improved livelihoods:** By mapping resources and challenges across the catchment, opportunities to improve livelihoods, enhance food security, and support income diversification for local communities become clear.
- **Impact on sustainable management:** It helps to identify how activities like land use and forest management affect water and soil. This understanding allows for the creation of effective, sustainable practices that protect natural resources and the environment.

- **Impact on climate resilience:** A catchment assessment highlights areas vulnerable to climate change and identifies vulnerable groups such as women, persons with disabilities, the elderly, and marginalised communities, enabling the development of targeted and inclusive adaptation and mitigation strategies. This is crucial for building resilient ecosystems and communities.

1.2 LACC'S MODEL LANDSCAPE-CATCHMENT APPROACH IN BRIEF

LACC's model landscape-catchment approach brings together the rationales of the catchment and landscape approaches, including problem-identification & solving priority; coherence and cross-sectoral synergies; community involvement; alignment with local planning and decision-making; efficient resource allocation; effective implementation and monitoring; impacts on livelihoods, sustainable management, and climate resilience. LACC implements a model landscape-catchment approach to address the requirements for more sustainable, multi-sectoral, integrated approaches within more natural boundaries in practice.

The idea of the approach is to select one model landscape-catchment where tangible results from multiple project sectors are expected to be seen in a specific catchment area, being integrated with each other to the extent possible: Geographical concentration of activities improves effectiveness of implementation, builds synergies, and enables efficient use of project resources. The model catchment approach is the solution for LACC in finding ways to use up to its full palette of implementation options within a suitable location. It also supports the project in achieving its objectives and targets.

LACC's catchment approach has four steps, described more in detail in the following sections: The first step begins by conducting catchment assessments by LACC (Section 1); continued by the second step: prioritizing catchments for model landscape-catchment selection (Section 2); and step three: Endorsing catchment priority by PMCs (Section 3). The fourth step describes LACC's working modalities within the selected model landscape-catchment(s).

An intensified number of focused cross-sectoral implementation activities is planned by LACC within the selected model landscape-catchment.

The model landscape-catchment approach still allows all types of LACC activities to take place across the LG area outside the priority landscape-catchment(s), as per LACC targets and local requirements.

2 CONDUCTING CATCHMENT ASSESSMENTS

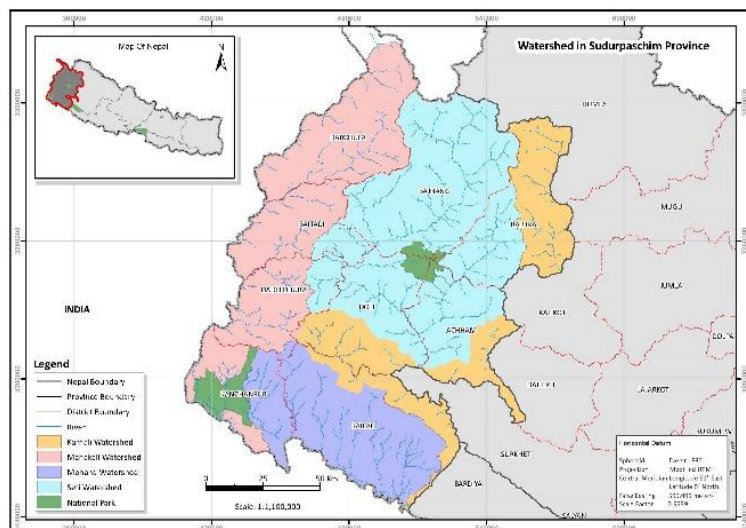


Figure 2: Watersheds in Sudurpaschim Province

- **Municipal and Ward Boundaries**
- **Topography and Land Use**
- **Major rivers and tributaries:** This is the backbone of catchments which allows us to understand the status of key rivers, their tributaries, and confluence locations. This also supports delineating the catchment boundaries.
- **Catchment Boundaries:** This is the most critical layer, delineating the natural watershed area. By overlaying these different layers, planners can see how political boundaries intersect with natural systems.

After the initial mapping, all catchment boundaries are double-checked thoroughly within a specific LG. This step is crucial because it ensures the inclusion of all the interconnected sub-watersheds. It provides a clear and accurate foundation for the next steps.

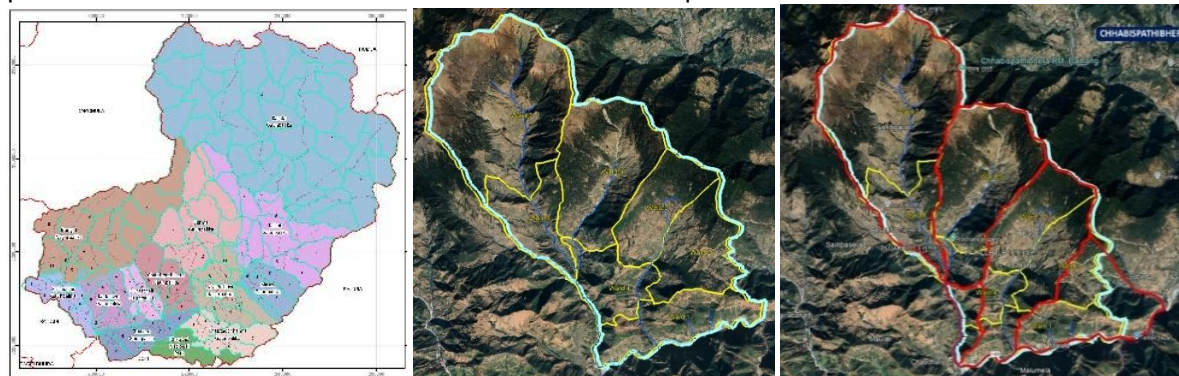


Figure 3: Catchment delineation at LGs.

The assessment includes desk study and gathering existing information, plans and policies, including local planning documents such as LG profile, periodic plan, land use plan, WASH Plan, WUMP, LIP, DPRP, LDCRP, and LAPA. This helps to get an understanding of the catchments, identifying the vulnerability, issues and their potential for LACC interventions, resources and challenges.

This step aims at getting a good overlook of the catchments and their topographical structure in project LGs. In this step, the LACC Project collects relevant spatial information about the catchments for a prioritization process.

In practice, LACC identifies the main catchments in each LG via Geographic Information System (GIS) mapping. The mapping uses available satellite and topographic maps for analysis. Detailed digital maps are created that layer:

3 PRIORITIZING CATCHMENTS FOR MODEL LANDSCAPE-CATCHMENT SELECTION

The next step after catchment identification via GIS mapping is the selection of a model landscape-catchment. Prioritization is based on the potential of the catchment for cross-sectoral implementation across the project scope of activities vis-à-vis project targets. This cross-sectoral integration is important for coherent, effective and efficient implementation of the LACC project. The aim of reaching the defined project targets and goals means that in practice the model landscape-catchment selection must be based on the number of potential beneficiaries, as well.

As the selection of the model catchment is based on LACC Project's requirements, **the initial prioritization work is conducted by the LACC cluster teams**. The model landscape-catchment selection criteria can be divided into four domains: 1) relevance to the project, i.e., potential number of beneficiaries and land areas under various activities; 2) GEDSI related considerations; 3) hardship, disaster risk vulnerability related considerations; and 4) potential for LACC interventions and their cross-sectoral integration across the scope of work. LACC may consult relevant LG sections, Ward/Tole level representatives and other relevant stakeholders to collect the existing data, plans and verify the means of scoring.

The LACC cluster teams propose a model landscape-catchment to the PMC (Step 3). Should the cluster team have a good candidate for a model landscape-catchment based on their existing knowledge or prior implementation work, **the selection can be completed as a consensus decision in negotiation within the PMC, without a more specific assessment or scoring.**

If the selection cannot be made via reaching a consensus in the PMC, a detailed assessment and scoring of the potential catchments is required. The following text describes how the selection should be in this case done:

For scoring the candidates for the model catchment, there are altogether 13 indicators under the before-mentioned four domains 1) relevance to the project, i.e., potential number of beneficiaries and land areas under various activities; 2) GEDSI related considerations; 3) hardship, disaster risk vulnerability related considerations; and 4) potential for LACC interventions and their cross-sectoral integration across the scope of work. The indicators are based on LACC Result Framework output indicators that reflect the overall LACC's palette of activities – see a-types of questions in the format. The potential for integration with other LACC activities is accounted for in the scoring, as well – see the b-types of questions in the format. For guiding the experts on cross-sectoral integration, a related key activity linkage map is presented below in Figure 4. The same information is given in text format in **Annex 1**.

Each indicator is assessed by expert teams on a Likert scale: very high potential (5), high potential (4), moderate potential (3), low potential (2), very low potential (1), and no potential (0). A higher score indicates greater relevance of project interventions. Most of the indicators have a maximum score of 5, matching with the Likert scale. Indicators 1, 4, and 11 have a bigger maximum score – in these cases the Likert score will be multiplied accordingly to fit in the given range.

Table 1 is a scoring format that supports the model catchment selection. The template enforces the selection team to go through the full palette of possible LACC activities in the area, finding potential for integration of the activities, and project values, such as the focus on the neediest hardship areas, vulnerable and marginalized groups. At the same time, the template should be seen as a support to the selection process. The total score of the format is set to be between 0 and 100.

Table: Assessment format for model landscape-catchment (and communities) selection for LACC's Integrated Landscape-Catchment Management Plan process.

Catchment name/number:				
	Most potential communities for cross-sectoral integration within the catchment	Other selected potential communities within the catchment	TOTAL	
Community name(s) within the catchment			100	
	Justification and description	Justification and description	Max points	Sum of row points
Potential beneficiaries vis-a-vis LACC targets (30 p.)				
1. Appr. number of potential beneficiary households in the area, across LACC scope of work; their willingness to cooperate?			30	
GEDSI related considerations (10 p.)				
2. Proportion of Dalit, Janajati and persons with disability groups? Which?			5	
3. Presence of gender-based violence and social taboos including menstrual isolations? Which?			5	
Vulnerability and disaster risk related considerations (10 p.)				
4. Presence of hardship terrain, such as dry slopes? Presence of extreme vulnerability towards natural disasters? Which hazards and locations? On which season/time?			10	
Result Area 1: Agriculture and livelihoods related potential (20 p.)				
5a. Potential for agro-forestry; plant nurseries; nature-based solutions; water conservation and wetland protection schemes? Which type?			5	

5b. Potential for the agro-forestry; plant nurseries; nature-based solutions; water conservation and wetland protection schemes to be integrated with other LACC actions in the community? Which?				
6a. Potential for agricultural practice improvement or livelihoods schemes, such as greenhouses or homegardens? Which type?			5	
6b. Potential for the agricultural practice improvement or livelihoods support schemes to be integrated with other LACC actions in the community: Which?				
7a. Potential for new irrigation command area increment?			5	
7b. Potential for the new irrigation command area increment to be integrated with other LACC actions in the community: Which?				
8a. Demand for ICS and IWM schemes? Which types?			5	
8b. ICS and IWM schemes’ potential to be integrated with other LACC actions in the community? Which?				
Result Area 1: Forestry related potential (10 p.)				
9a. Demand for CFOP/LFOP planning and capacity-building support? Group names?			5	
9b. Potential of CFOP/LFOP planning support to be integrated with other LACC actions in the community: Which?				
10a. Demand for CFUG/LFUG implementation support, such as forest plantations and tending? Group names?			5	

10b. Potential of the possible CFUG/LFUG implementation support to be integrated with other LACC actions in the community: Which?				
Result Area 2: WASH and schools related potential (20 p.)				
11a. Demand and potential for implementation of MUS (identify which type of MUS) or DWS with CR WSP as per WASH Plan priority list? New or rehab?			10	
11b. Potential of the MUS/DWS to be integrated with other LACC actions in the community: Which?				
12a. Demand and potential for Climate-Smart School support? Which types of actions needed?			5	
12b. Potential for the CS School support to be integrated with other LACC actions in the community? Which?				
13a. Demand and potential for Total Sanitation program in the community?			5	
13b. Potential for the Total Sanitation programme being integrated with other LACC actions in the community? Which?				

4 ENDORSING SELECTED MODEL LANDSCAPE-CATCHMENT

Project Management Committee's (PMC) role is to:

- 1) Approve (or disapprove) use of the model landscape-catchment approach for LACC implementation.
- 2) Endorse the model landscape-catchment for LACC.

For this purpose, the PMC must be informed well about the following topics:

- Importance of the model landscape-catchment approach for enabling cross-sectoral, integrated implementation of the project activities. See the prior sections for more.
- Catchment assessment process description and its results within the LG.

PMC may consult relevant LG sections, Ward/Tole level representatives, and other relevant stakeholders to validate the scoring and endorsing the results.

An intensified number of focused cross-sectoral implementation activities will be planned by LACC within the selected model catchment in the following AWP. The idea of the approach is to select one model landscape-catchment where tangible results from multiple project sectors are expected to be visible in a limited area, being integrated with each other to the extent possible.

The model landscape-catchment approach still allows all types of LACC activities to take place across the LG area also outside the model landscape-catchment(s), as per LACC targets and local requirements. If the LG representatives are interested in formalizing the use of a (priority) catchment approach more generally in their LG, they may seek LACC support for the process.

5 LACC'S WORK IN SELECTED MODEL LANDSCAPE-CATCHMENTS

An intensified number of focused cross-sectoral implementation activities will be planned by LACC within the selected priority catchment in the following AWP. The idea of the approach is to select one model landscape-catchment where tangible results from multiple project sectors are expected to be visible in a limited area, being integrated with each other to the extent possible. Later, the implementation activities are based on Integrated landscape-catchment management plans that can be prepared for the selected model catchments with LACC support, to be fully aligned with the LG annual planning processes, the local Tole/Ward development plans, as well as LG sectoral plans.

The model landscape-catchment approach still allows all types of LACC activities to take place across the LG area also outside the model landscape-catchment(s), as per LACC targets and local requirements.

5.1 ENSURING INTEGRATED PLANNING ACROSS LOCAL ADMINISTRATIVE BOUNDARIES

LACC maintains a link to the local planning and decision-making by close cooperation and coordination with the Tole and Ward -level representatives, in practice Tole Development Committee/ward and members. In practice, LACC invites representatives from the relevant Toles/Wards for information-sharing and integrated planning aligned with their plans. This is to enable cross-boundary discussion across the local administrative boundaries, interaction, and joint planning between the relevant Toles inside the catchment area.

Close cooperation and coordination with the local decision-makers allows the integration of LACC's actions into the local planning process. LACC needs to align the catchment level implementation works with the LG annual planning (so-called 7-Step Planning Process) as well as with the Tole/Ward development plans effective in the catchment area. Furthermore, the work must be in line with the relevant LG level sectoral plans. To ensure this, LACC ensures that the following plans are being considered in the planning of LACC's implementation efforts:

- 1) Relevant Tole/Ward/LG level annual work plans (7-Step planning process)
- 2) Most recent Tole/Ward level development plans
- 3) Relevant LG level sectoral plans

For this purpose, LACC supports the development of integrated landscape-catchment management plans for priority catchments. The idea of the plan is to bring together information on LG level annual work planning, relevant Tole/Ward level development plans, LG level sectoral plans, and local information sources. The integrated landscape-catchment management plans are not separated from the other Tole/Ward level plans, but on the contrary, it brings them together, enabling cross-boundary discussion, interaction, and joint planning between the relevant Toles inside the catchment area, allowing integration and joint coordination of the annual plans and Tole level development plans.

It must be a light process that utilizes the existing plans for creating an integrated plan for the catchment. In this way, the integrated landscape-catchment management plans replicate the rationale of the model landscape-catchment approach, elaborated in the beginning of the guideline, including

problem-solving priority; coherence and cross-sectoral synergies; community involvement; alignment with local planning and decision-making; efficient resource allocation; effective implementation and monitoring; impacts on livelihoods, sustainable management, and climate resilience.

The integrated landscape-catchment management plans is a minimum 5-year plan aimed at sustainable management of the catchment area. It should come with concrete actions and related resources and budgets from the annual plans. The resources for the implementation of the plan (beyond LACC implementation efforts) should come from the normal LG level 7-step annual planning process, which means that the action presented in the plan must be included in the Tole/Ward level plans as well, and the other way around. **(Templates of integrated landscape-catchment management plans in Annex 2; stakeholder mapping template for landscape-catchment management plans in Annex 3; Catchment management plan preparation workshop in Annex 4, Validation workshop/contents in Annex 5)**

5.2 MAINTAINING LINKAGE WITH LOCAL RESIDENTS AND OTHER STAKEHOLDERS

As per requirement and local demand, LACC can support in organizing and facilitating meetings and capacity-building events for local people and stakeholders for supporting the planning and implementation processes under the model landscape-catchment approach. Such meetings may include planning and validation workshop support. (Catchment management plan preparation workshop in Annex 4, Validation workshop schedule/contents in Annex 5)

All potential stakeholders such as community people, in-direct beneficiaries, leaders, and Tole members may participate. The thematical needs may vary, but the workshops may consider some of the following:

- Elaborate on the idea and rationale of catchment and landscape approaches and introducing LACC's model landscape-catchment approach to the local stakeholders.
- Sharing the status of the relevant, most recent Tole/Ward level annual plans, development plans and LG level sectoral plans if they are relevant to the catchment area and scope of work in the catchment.
- Assessing and validating current realities of the catchment area from stakeholders' perspectives. Identifying the key challenges, opportunities and resources, as well as the key actions against the issues.
- Creating a shared vision of the catchment area for improvement/change the current situation.
- Sharing integrated landscape-catchment management plans content and seeking feedback, if the plan has been drafted / prepared.
- Collecting commitments from the stakeholders to implement the best options and to respond to the issues and to move towards the shared vision and mission.

The following considerations must be prioritized to ensure that the process is inclusive, context-sensitive, and equitable:

- **Ensure Inclusion:** Guarantee at least 50% women and proportionate participation from marginalized group participation. Promote meaningful participation of all genders, ethnic group and age group people.
- **Respect Local Context:** Use local language, respect traditions, and consider gender and cultural dynamics. Conduct separate discussions when needed to ensure open participation.

- **Promote Accessibility and Safety:** Schedule meetings at safe, convenient times and locations, especially for women and marginalized groups. Ensure physical and social accessibility for all.
- **Maintain Ethics and Confidentiality:** Use respectful language, obtain informed consent, and ensure confidentiality. Protect participants' dignity and handle sensitive information with care.
- **Alignment with other local government planning processes:** The planning must pay attention to and respect Tole/Ward level plans and the annual planning processes of the LG, as well as sectoral plans.

ANNEXS

Annex 1: Key activity linkage information

Key linkages and opportunities for integration for each types of LACC activity are presented in bullet points.

1. Agriculture and livelihoods

Business development; value chains; collection centers; cooperatives:

- Plant nurseries
- CR agricultural practices
- Climate-Smart Schools
- Livelihoods support, access to markets
- Agroforestry

CR agricultural practices:

- Business development; value-chains; collection centers; cooperatives
- Agroforestry
- Plant nurseries
- Irrigation schemes
- IWM
- Climate-Smart Schools
- Livelihoods support

Livelihoods support:

- CR agricultural practices
- Business development; value-chains; collection centers; cooperatives

Plant nurseries:

- Agroforestry
- CR agricultural practices
- Business development; value-chains; collection centers; cooperatives
- Climate-Smart Schools

Irrigation schemes:

- Nature-based solutions
- Water conservation; wetland protection
- IWM
- Agroforestry

2. Sustainable forestry:

Forestry implementation:

- Water conservation; wet-land protection
- Spring conservation; springshed management
- CFUG/CFOPs
- Agroforestry
- Plant nurseries

CFUG/CFOP:

- Business development; value chains; collection centers; cooperatives
- Agroforestry
- Forestry implementation

Agroforestry:

- Business development; value chains; collection centers; cooperatives:
- CR agricultural practices
- Plant nurseries
- Irrigation schemes
- Forestry implementation
- CFUG/CFOP

3. Nature conservation

Nature-based solutions:

- Water conservation; wet-land protection

Water conservation; wet-land protection:

- Nature-based solutions

Spring conservation; springshed management

- Nature-based solutions
- Water conservation; wet-land protection

4. WASH

Institutional WASH:

- MUS; DWS; CR WSP
- Total Sanitation
- Climate-Smart Schools
- Livelihoods support

Total Sanitation:

- Climate-Smart Schools
- Institutional WASH
- MUS; DWS; CR WSP
- ICS

MUS; DWS; CR WSP:

- Nature-based solutions
- Spring conservation; springshed management
- Irrigation schemes
- IWM
- Total Sanitation
- Institutional WASH
- Livelihoods support

5. Renewable energy and nutrition

Climate-Smart Schools:

- Agroforestry
- Plant nurseries
- Business development; value chains; collection centers; cooperatives:
- Livelihoods support
- CR agricultural practices
- Institutional WASH
- Total Sanitation
- ICS

ICS

- Total Sanitation

IWM

- Irrigation schemes

Annex 2: Templates on integrated landscape-catchment management plans

Sector-wise local information collection formats for supporting work in model catchment

1. Forest, Environment, Biodiversity Conservation and Management			
Issues/Challenges	Current status	Exact locations	Potential interventions to address it.
<i>Forest fire</i>			
<i>Uncontrolled grazing</i>			
<i>Forest governance (Backlog CFUGs)</i>			
<i>Unsustainable use of forest products (Over harvesting/Early harvesting)</i>			
<i>Wetland degradation, drying of water sources</i>			
<i>Invasive species</i>			
<i>Area of Community Forests not managed properly/forest area without forest tending operation</i>			
<i>Level of knowledge among the people on forest, environment and biodiversity conservation and management activities.</i>			
<i>Pressure in forest/fuelwood collection</i>			
<i>Human Wildlife Conflict</i>			
<i>Wildlife Poaching and Illegal trade</i>			
<i>Habitat Destruction and Fragmentation</i>			
<i>Destructive fishing practices in rivers and lakes</i>			
<i>Environmental Pollution (River, Forest, Land, Wetland, Air)</i>			
<i>Inappropriate land use system</i>			

2. Water infrastructures (IRR, DWS, Lift, IWM, MUS), Sanitation and Hygiene			
Issues/Challenges	Current status	Exact locations	Potential interventions to address it.
<i>Drying of water sources/depletion of water sources.</i>			
<i>Access to safe drinking water.</i>			
<i>Lack of irrigation facilities and its sustainability (Agricultural</i>			

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<i>land/Fertile land/Cultivable land).</i>			
<i>Water Quality</i>			
<i>Potential Multiple Use System</i>			
<i>Potential Irrigation Area</i>			
<i>Household sanitation</i>	.....	.....	....
<i>Solid waste disposal</i>	.....	.....	....
<i>Water borne diseases</i>	.....	.....	....
<i>Availability of water sources and multiple uses.</i>	.....	.....	....
<i>Frequent damages in water sources and infrastructures</i>			

3. Agriculture, Agroforestry, Livelihoods, Enterprises, Value Chain and Cooperatives			
Issues/Challenges	Current status	Exact locations	Potential interventions to address it.
<i>Decreasing agricultural productivity, soil fertility loss.</i>			
<i>Lack of knowledge and availability of climate smart technologies.</i>			
<i>Out migration (Productive barren land)</i>			
<i>Availability of productive land</i>			
<i>Availability of quality inputs suppliers</i>			
<i>Availability of local market and institutions.</i>			
<i>Potential commodities for value chain</i>			
<i>Unavailability of road for transportation and market linkage.</i>			
<i>Lack of Irrigation facilities</i>			
<i>Malnutrition</i>			

4. Disaster Risk Management.			
Issues/Challenges	Current status	Exact locations	Potential interventions to address it.
<i>High incidence of landslides and droughts.</i>			
<i>River cutting, soil erosion and sedimentation.</i>			
<i>Human casualty, property loss and infrastructure damage.</i>			
<i>Households prone to Forest fire.</i>			

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<i>Disaster-prone area prioritized by the local government plans such as DPRP, LDCRP/F, LAPA etc</i>			
<i>Human resources with knowledge on disaster risk management</i>	.....	.....	....
<i>Availability of early warning system</i>	.....	.....	....

5. GEDSI/HRBA			
Issues/Challenges	Current status	Exact locations	Potential interventions to address it.
<i>Inclusive participation in local planning; Women, marginalized castes and ethnic groups hold key positions in institutions/groups</i>			
<i>People comply with laws and policy provisions, including local norms and standards</i>			
<i>Equitable access and benefit sharing arising from use of Natural resources (Leadership and benefit sharing of ecosystems services and products)</i>			
<i>Coordination between rural municipalities, municipalities, provinces and line agencies</i>			
<i>Women economic empowerment</i>			
<i>Gender equality (GBV, MHM)</i>			
<i>Disability inclusion</i>			
<i>Discriminative social norms</i>			

Catchment Management Plan Template

1. Introduction

- Composite catchment map and brief descriptions
- Summary table of physical and social features of the catchment area (Area, elevation, settlements, HHs, population etc.)

2. Assessment process and consultations

- Brief descriptions on assessment process
- Description on consultation made with stakeholders during assessment

3. Thematic wise Current status and key issues:

This section describes the current status of respective theme/sectors and the key issues to be addressed by different interventions. The thematic wise map will be prepared covering the current status, key issues and potential interventions.

3.1 Agriculture, Agroforestry, Livelihoods, Enterprises, Value Chain and Cooperatives:

- 3.1.1 *Current Status*
- 3.1.2 *Key Issues*
- 3.1.3 *Lists of potential interventions to address the issues*

3.2 Forest, Environment and Biodiversity Conservation and Management

- 3.2.1 *Current Status:*
- 3.2.2 *Key Issues*
- 3.2.3 *Lists of potential interventions to address the issues*

3.3 Water infrastructures (IRR, DWS, Lift, IWM), Sanitation and Hygiene:

- 3.3.1 *Current Status*
- 3.3.2 *Key Issues*
- 3.3.3 *Lists of potential interventions to address the issues*

3.4 Disaster Risk Management

- 3.4.1 *Current Status*
- 3.4.2 *Key Issues*
- 3.4.3 *Lists of potential interventions to address the issues*

3.5 GEDSI/HRBA

- 3.5.1 *Current Status*
- 3.5.2 *Key Issues*
- 3.5.3 *Lists of potential interventions to address the issues*

4. Catchment Summary

Based on the above thematic wise description of potential activities, the composite map shows the overall catchment level plan with summary descriptions. **Detail activities:** This section covers the catchment level detail activities plan with cost estimates.

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Detail activities plan for catchment

S.N.	Activity	Unit	Qty	Where (Exact Location- LGs, wards, toles, UCs, CFUG etc.)	When (Implementation Plan)					Who (Main Responsible)	Cost (Tentative)	Resource (Supporting agencies)	Remark
					Year I	Year II	Year III	Year IV	Year V				
1. Agriculture, Agroforestry, Livelihoods, Enterprises, Value Chain and Cooperatives:													
1													
2													
3													
2. Forest, Environment and Biodiversity Conservation and Management													
3. Water infrastructures (IRR, DWS, Lift, IWM), Sanitation and Hygiene													
4. Disaster Risk Management													
5. GEDSI/HRBA													

Annex 3: STAKEHOLDER MAPPING FOR LANDSCAPE-CATCHMENT MANAGEMENT PLANS

SN	Name of Stakeholder/Organization	Type (Government, I/NGO, Private sector, CSOs, CBOs)	Address	Working Sectors	Potential or Active for collaborations	Remarks

Annex 4: CATCHMENT MANAGEMENT PLAN PREPARATION workshop

A. Understanding of Priority Catchment and preparations for workshop:

Before conduction of the workshop, NRM Experts including Sectoral experts (Forestry, Agriculture, Engineers), interns visit the catchment area together with community people for better understanding of catchment geography, settlements, issues, challenges and possibilities. This understanding supports the facilitation of the catchment management plan preparation workshop. The team visits major sites like catchment ridge, primary water source, spring sources, water infrastructures, CFUGs/forest type, potential plantation areas, value chain, livelihood opportunities etc. During the visit, the team focuses on sectoral issues/challenges, status, exact locations, and potential interventions to address the identified issues. The team can use printed formats of *“Sector-wise local information collection formats for supporting work in model catchment”* for better information collection and updates.

GPS location of important sites, such as wetland, conservation ponds, water reservoirs, can be collected as a reference to locate this area in online geomaps to be used during the workshop. This helps the participants of the workshop understand catchment mapping and working locations on the map, as well as to validate and update catchments delineations.

During the day, the team also needs to ensure the participants of the workshop are listed/informed from all settlements and representing all sectors. They need to print a big size catchment map for the workshop and post it in visible places all participants can see during the workshop. Also, catchments printing (A2/A3 size) for group work and checking of required stationaries and tools for workshop.

B. Sector-wise participants selection:

- I. **Forest, Environment and Biodiversity Conservation and Management:** CFUGs, LFUGs/Religious Forest, Sub/Division Forest Office, FECOFUN (Palika Level), Ward Chairperson/Representatives, tole development committee representatives etc.
- II. **Water infrastructures (IRR, DWS, Lift, IWM, MUS) Sanitation and Hygiene:** Water User Groups (Irrigation, Drinking water, IWM), FEDWASUN, WASH Unit, Ward Chairperson/Representatives, UC networks representatives, tole development committee representatives and related technical personnel etc.
- III. **Agriculture, Agroforestry, Livelihoods, Enterprises, Value Chain and Cooperatives:** Farmers Group, Cooperatives, Agriculture section, Enterprises Development Section, Lead Farmers/Demo site representatives, Ward Chairperson/Representatives, tole development committee representatives, related technical personnel etc.
- IV. **Disaster Risk Management:** Key informants/groups from disaster prone areas, Disaster Risk Management Committee (DRM focal Person), Ward Chairperson/Representatives, tole development committee representatives etc.
- V. **GEDSI/HRBA:** Women/Mother Groups, women led CSOs, Religious Leaders/Dhami/Social leaders, Organization of person with disabilities (OPDs), Women representatives from Karyapalika, Female/DAG members of ward committee, Women and Children Section, tole development committee representatives, Other recognized local leaders working in human right based issues.

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C. Workshop content/schedule: (2 days)

Time (From-To)		Session Plan	Responsible Person, Facilitator	Remarks, Notes
Day-I				
10:00 AM	10:30 AM	✓ Registration		
10:30 AM	11:00 AM	✓ Welcome and Objectives of event. ✓ Brief introduction of LACC project. ✓ Brief introduction on LG level development/sectoral plans sectoral plans if they are relevant to the catchment area and scope of work in the catchment.		
11:00 AM	11:30 AM	✓ Brief session on climate change adaptation and its impacts.		
11:30 AM	1:00 PM	✓ Why catchment approach?? ✓ Sharing of catchment delineation and prioritization process. ✓ Sharing integrated Model Landscape-Catchment Management Plan Contents and seeking feedback. ✓ Group division (Sector-wise) for group work.		
Tea/Snacks Break: 1:00PM - 2:00PM				
2:00 PM	4:00 PM	✓ Sector wise group work: Issues/Challenges, Current Status, Exact Location, Potential Interventions to Address issues/challenges. I. <i>Forest, Environment and Biodiversity Conservation and Management Group- NRM/Forestry will lead.</i> II. <i>Water infrastructures (IRR, DWS, Lift, IWM, MUS) Sanitation and Hygiene Group- NRM/Engineers/TOS-engineering will lead.</i> III. <i>Agriculture, Agroforestry, Livelihoods, Enterprises, Value Chain and Cooperatives Group- NRM/Agriculture/Tos (Ag.) will lead.</i> IV. <i>Disaster Risk Management Group- Forestry/Engineers will lead.</i> V. <i>GEDSI/HRBA Group- Social/Sectoral experts will lead.</i>		- Printed catchment maps for all groups. -Some relevant sectors can be merged during the group division based on participants' availability.
4:00 PM	5:00 PM	✓ Group presentation and plenary discussion. ✓ Incorporate feedback from plenary to all groups. ✓ Closing of the day.		
Day-II				
10:00 AM	10:15 AM	✓ Review of day-I (Best learning and area of improvement)		
10:15 AM	12:15 PM	✓ Sector wise group work: Catchment management planning, Activities Name (Unit & Qty), Where?? With Exact locations (Ward, tole, UCs, CFUGs), When?? Implementation plan with priority (Year 1,2,3,4,5), Supporting Agencies. I. <i>Forest, Environment and Biodiversity Conservation and Management Group- NRM/Forestry will lead.</i>		-Some relevant sectors can be merged during the group division based on

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Time (From-To)		Session Plan	Responsible Person, Facilitator	Remarks, Notes
		<i>II. Water infrastructures (IRR, DWS, Lift, IWM, MUS) Sanitation and Hygiene Group- NRM/Engineers/TOS-engineering will lead.</i> <i>III. Agriculture, Agroforestry, Livelihoods, Enterprises, Value Chain and Cooperatives Group- NRM/Agriculture/Tos (Ag.) will lead.</i> <i>IV. Disaster Risk Management Group- Forestry/Engineers will lead.</i> <i>V. GEDSI/HRBA Group- Social/Sectoral experts will lead.</i>		participants' availability.
12:15 PM	1:15 PM	✓ Group presentation and plenary discussion. ✓ Incorporate feedback from plenary to all groups.		
Tea/Snacks Break: 1:15PM - 2:00PM				
2:00 PM	2:45 PM	✓ Potential value chain mapping ✓ Catchment delineation review/update, naming etc.		
2:45 PM	3:45 PM	✓ <i>Brainstorming/Envisioning exercise (How do you envision this catchment be like within 5 years? (Envisioning statement will be finalized and posted).</i> ✓ <i>Stakeholders mapping</i>		
3:45 PM	4:45 PM	✓ Work planning and commitments from CFUGs and other line agencies representatives for catchment planning. ✓ <i>Seven step planning processes to align with catchment management plan implementations.</i>		
4:45 PM	5:00 PM	✓ Closing		

Annex 5: VALIDATION WORKSHOP SCHEDULE/CONTENTS (1 day)

Time		Session Plan	Responsible Person/ Facilitator	Remarks/ Notes
From	To			
10:00	10:30	✓ Registration		
10:00	11:00	✓ Welcome and Objectives of event ✓ Brief introduction of LACC project		
11:00	1:00	✓ Sharing of catchment management plan preparation process ✓ Sharing of sector-wise activities plan. ✓ Planned activities validation and update: ○ Recall and sharing of VISION (Prepared during catchment management planning workshop) of catchment. ○ Ask question: Does all activities are enough to derive towards envisioning statements?? If no, which sector and activities are missing??)		
Tea and snacks Break: 1:00-2:00				
2:00	3:00	✓ Sharing the status of the relevant, most recent Toile/Ward level annual plans, development plans and LG level sectoral plans if they are relevant to the catchment area and scope of work in the catchment ✓ Sharing of 7 step planning process and discussion on how to align catchment plan to this process.		
3:00	4:00	Workshop closing and commitments for catchments plan implementation.		

**** Potential Lists of key participants:** The participants should represent from all sectors with words/toles (Catchment boundary), the key informants/representatives consulted during detail assessment must participate)

- LGs representatives with relevant section units
- Wards representatives with relevant section units
- Toile development committee representatives
- CFUGs, LFUGs/Religious Forest, Sub/Division Forest Office, FECOFUN (Palika Level)
- Water User Groups (Irrigation, Drinking water, IWM), FEDWASUN, UC networks representatives
- Farmers Group, Cooperatives, Lead Farmers/Demo site representatives, school representatives
- Key informants/groups from disaster prone areas, Disaster Risk Management Committee (DRM focal Person)
- Women/Mother Groups, women led CSOs, Religious Leaders/Dhami/Social leaders, Organization of person with disabilities (OPDs), Female/DAG members of ward committee, Othe recognized local leaders working in human right based issues.
