ICIMOD Manual 2016

Community Training Manual

Springshed Management in the Hindu Kush Himalayas

Governance for Springshed Management

ICIMOD

FOR MOUNTAINS AND PEOPLE

ACWADAM

german cooperation

UKaid from the British people

About ICIMOD

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 (HKH) – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – based in Kathmandu, Nepal. Globalization and climate change are having 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 and downstream issues. ICIMOD supports regional transboundary programmes through partnerships with regional partner institutions, facilitates the exchange of experiences, and serves as a regional knowledge hub. It strengthens networking among regional and global centres of excellence. Overall, ICIMOD is working to develop economically- and environmentally-sound mountain ecosystems to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream – now and in the future.

ICIMOD gratefully acknowledges the support of its core donors:
The Governments of Afghanistan, Australia, Austria, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Norway, Pakistan, Switzerland, and the United Kingdom.

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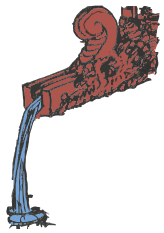


Springshed Management in the Hindu Kush Himalayas

Governance for Springshed Management

International Centre for Integrated Mountain Development, Kathmandu, Nepal, September 2016

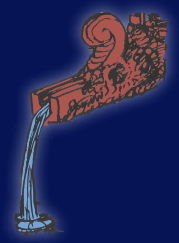
About Transboundary Landscape Initiatives in the Hindu Kush Himalayan Region

The Hindu Kush Himalayan region is extremely varied, yet there are many interlinkages between biomes and habitats as well as strong upstream-downstream linkages related to the provisioning of ecosystem services. The Convention on Biological Diversity advocates for the use of landscape and ecosystem approaches for managing biodiversity in the region, recognizing the need for increased regional cooperation. ICIMOD and its partners have identified seven transboundary landscapes for programmatic cooperation. From west to east, these are: Hindu Kush Pamir, Karakoram-Pamir, Kailash, Everest, Kangchenjunga, Far Eastern Himalayas, and Cherrapunjee-Chittagong. The transboundary landscape concept makes it possible to address the conservation and sustainable use of natural resources (biodiversity, rangelands, farming systems, forests, wetlands, and watersheds) in landscapes defined by ecosystems rather than administrative boundaries. The approach is people-centred and includes cultural conservation, which is an essential first step to resource conservation efforts in the region and helps translate collaborative action into sustainable and equitable development.

About the Kailash Sacred Landscape

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 km^2 and represents a diverse, multi-cultural, and fragile landscape.

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.



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Picture Series: A methodology for inclusive adult education

Picture Series is a participatory, inclusive adult education training method for communities and other local level stakeholders in development programmes.

This method:

- Simplifies difficult technical subjects into the language and messages that resonate with the local communities, NGO staff, and other stakeholders in the field.
- Allows participants to be actively involved in discussions.
- Provokes and steers the participants' thought processes.
- Is an intensive process for participants, as well as trainers, that results in new insights on the topic of the training.

The material can be used by local authorities or field staff of governmental or non-governmental organizations working in an area related to the respective topic and who have adequate knowledge.

How to Use This Manual

Target group: Community members, barefoot hydrogeologists, water user groups, womens' groups and local authorities in and around springshed areas. The ideal number of participants is 20 to 30, but can reach up 60 (which would require twice the time).

Aim: Participants understand the connection between groundwater, rainfall, infiltration, hydrogeology, good governance, and the management of a spring as well as the springshed.

Duration: Approximately 2 – 2.5 hours

Note: *In addition to using the picture series as a whole during a well-organized training session, trainers can also use individual pictures to conduct short, flexible, ad hoc awareness-building activities for a specific purpose.*

This is the second of two manuals presently existing on springshed management. The second manual is about 'Springshed Management - Governance'

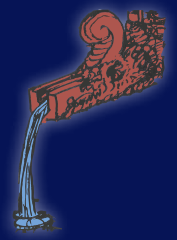
General rules for the training

1. Give everyone a chance to express his/her point of view freely and without interruption.
2. Actively involve women and quieter participants in the discussion, as they may remain quiet while more active participants express their opinion more emphatically.
3. Listen to each participant attentively, and give her/him the feeling that every answer is important.
4. There are no wrong answers.

Making the training a success is a difficult task and depends on the way you, as the trainer, address the community members.

An efficient and successful training session on Springshed Management in the Hindu Kush Himalayas has three parts:

- Preparation
- Conducting the training
- Assessment



Preparation

Choose the place for the training. Inform the participants about the place, date, and time well in advance. Gather all the materials and familiarize yourself with them. Arrange the pictures in order. Seats should be arranged in a semi-circle. Ensure there is enough light to see the pictures during the training. Encourage women to participate.

Conducting the training session

Step 1 Get introduced by the local leaders and/or the partner. Create a warm and positive atmosphere by telling a story about yourself, the topic, the area, and your visit.

Step 2 Select one volunteer and ask her/him to come to the front. Ask her/him to take the first picture and to show it to the audience. She/he can move around if necessary to ensure that everyone sees the picture properly. Take your time to ensure that everyone has seen the picture. Do not rush.

Remember: It is best if you show the picture yourself, as you can guide the direction, speed, and level of discussion, for example by requesting the participants to only look at the picture and to speak later.

Step 3 Ask the question: What do you see on the picture? Encourage the participants to describe and discuss the contents of the picture, but not the meanings or stories behind the picture. There are no wrong answers, as people are interpreting the pictures. Make sure they do not feel like they are making any mistakes. If they are not giving the desired answers, ask other questions to steer the discussion and to encourage people to consider other points of view. Do not describe or explain the picture to the participants at any time.

Step 4 If the participants (and you) are satisfied with the description of the picture, take the next one according to the order suggested in the manual.

Step 5 After all, or a few connected pictures from the first topic are shown, ask the participants to create stories using the pictures. Ensure that everyone understands the objective and messages of the topic. Only then move on to the next topic. Please leave only pictures relevant for the discussion visible to not disturb the through processes.

Step 6 Please note that you can be flexible regarding the order of the pictures. You can always go back to already used pictures, ask people to make the right order of a series of pictures, or ask them to set priorities. Adapt to the situation. Play with the pictures, and let others also play with them as well. For example, let sequences change, use volunteers to stand in different sequences with pictures, request new or better drawings, etc.

Assessment

At the end of the session, ask questions to find out if the participants understand the topic. Gather feedback on the material used and the training session. Make notes of the collected feedback after the training session and try to incorporate the feedback into your next training session.

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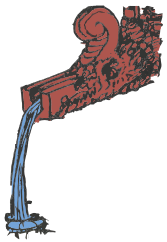
2. Taking care of springs 12
3. Structural measures 14
4. Measuring and monitoring spring water 16



1. Creating water user groups

Aim of the topic

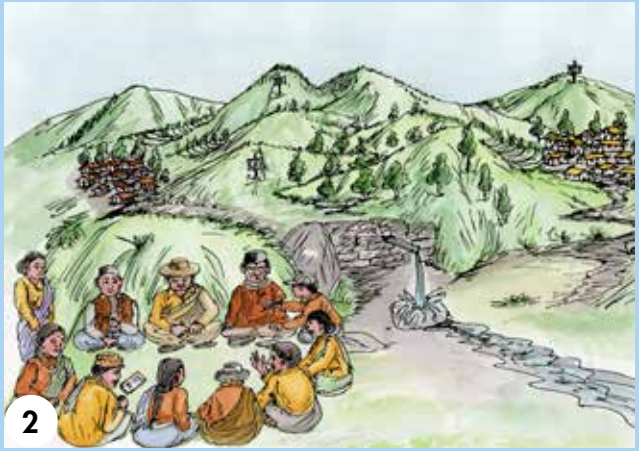
Participants understand that there are different ways to manage a springshed

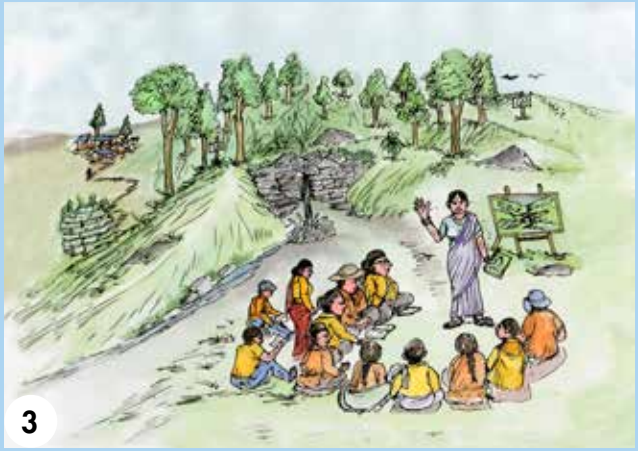
Remember

Messages

- Water user groups are important for the management of springs and their recharge areas.
- A water user group is needed to be formed with equal participation members from all socio-economic backgrounds. An equal women's participation must be assured.
- Communities with stakes in the recharge area of a spring must be involved in the management of the spring recharge area.
- The water user group committee consists of people of all castes and social backgrounds and women are equally represented.
- A community fund for maintenance of springs and the springshed is advised.

Describe the pictures and tell stories





Indicators of the pictures

1 Spring in different communities

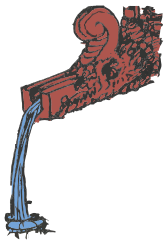
2 Equal distribution of water resources in springshed management

3 People (of all castes, women and men, and from different communities) attending an awareness and training programme

4 Collection of funds for spring management by water user groups

5 Well-managed spring

6 Healthy and happy community



2. Taking care of springs

Aim of the topic

Participants understand the need of specific rules in the recharge area and spring source to improve the water quality and quantity of springs.

Remember

Messages

- Do not cut of trees, shrubs, or bushes or openly graze livestock in the recharge area. Plant more trees, shrubs, and bushes.
- Do not openly defecate in the recharge area or spring source at any time.
- Do not throw garbage in the recharge area or spring source.
- Do not use chemicals in the recharge area or spring source.
- Assure avoidance of any forest or garbage fire in the recharge area of spring source.

Describe the pictures and tell stories

Indicators of the pictures

7 Rules and regulations in a well-managed recharge area

8 Planting of trees, shrubs, and bushes in the recharge area

9 No cutting of trees, shrubs, and bushes in the recharge area

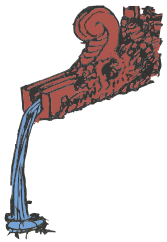
10 No open defecation in the recharge area

11 No use of chemicals and chemical fertilizers in the recharge area

12 No littering of waste in the recharge area

13 No human-induced forest fire in the recharge area

14 No burning of waste in the recharge area



3. Structural measures

Aim of the topic

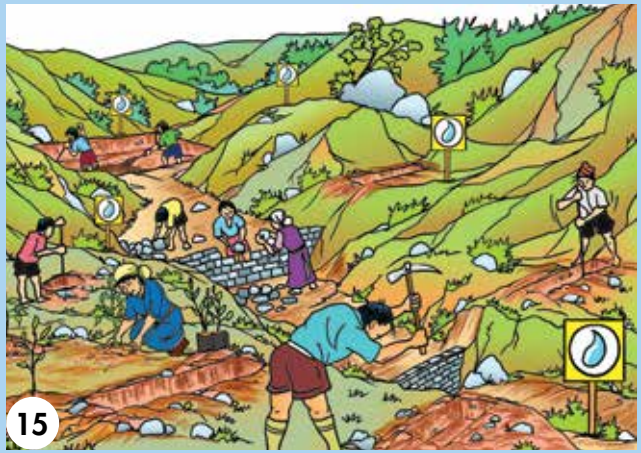
Participants understand that the recharge area and spring should be protected, maintained, and developed.

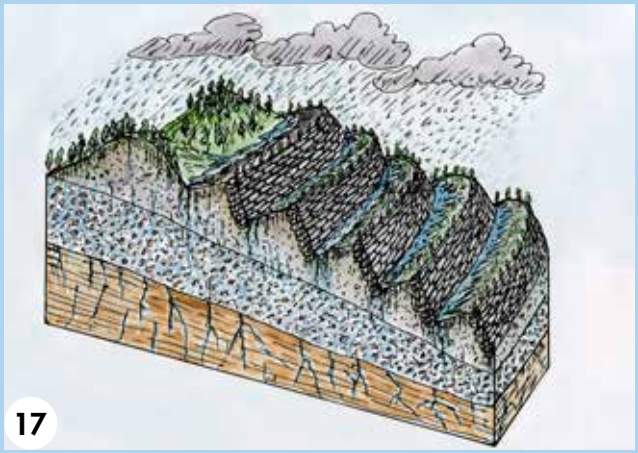
Remember

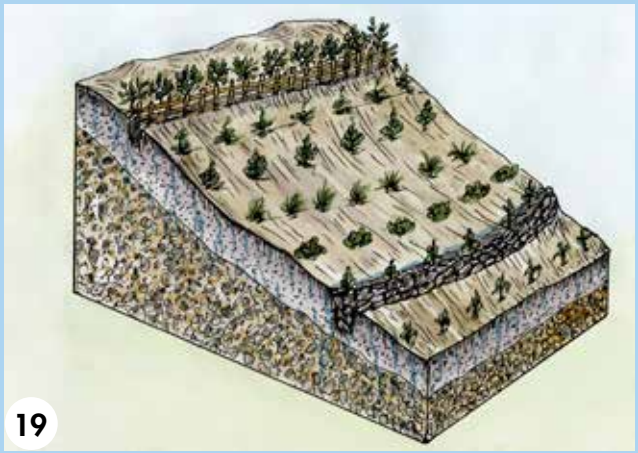
Messages

- No heavy construction close to the springs!
- Dig pits, ponds, and trenches and construct and maintain check dams in the recharge area.
- Consult technicians as required.
- Springs are ‘common’ resources, not just a source of water for human beings.

Describe the pictures and tell stories







Indicators of the pictures

15 Communities digging pits and ponds in the recharge area

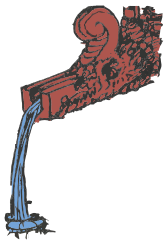
16 Check dams and gullies in the recharge area

17 Inward sloping of fields in the recharge area

18 Half moon pits in the recharge area

19 Stone and soil bunds in the recharge area

20 Application of mulch and compost in the recharge area



4. Measuring and monitoring spring water

Aim of the topic

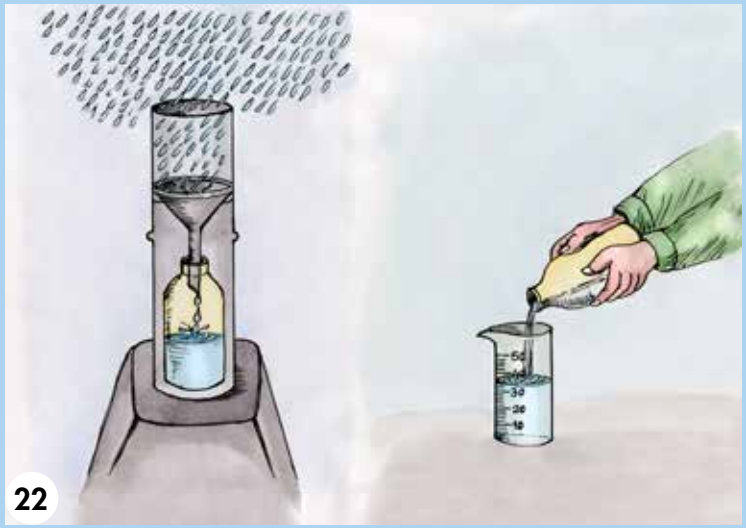
Participants accept that regular spring monitoring is needed and they know about the simple methods to organise the monitoring themselves.

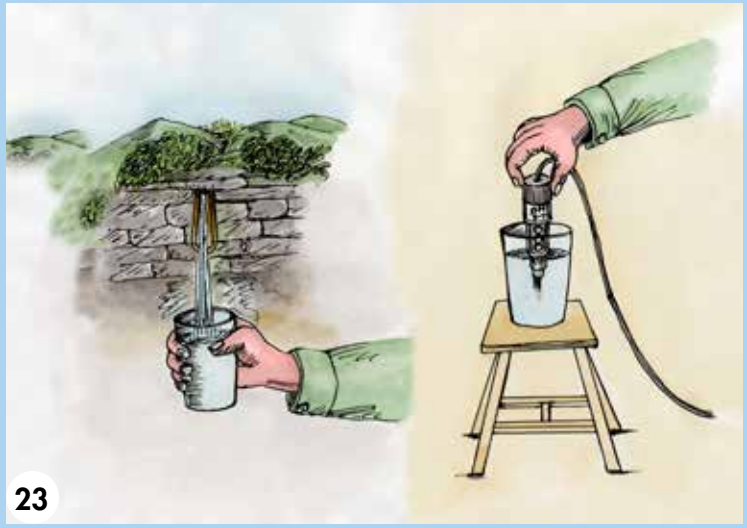
Remember

Messages

- Regularly measure spring discharge, water quality, and rainfall to understand the changes of quality and quantity of spring water over a longer period of time.
- Create a community team for monitoring springs, including both men and women and people from different socio-economic backgrounds, as well as teachers and students.
- Water quantity: Monitor and note down every 15 days by recording the time required to fill a container of a particular volume.
- Water Quality: Check and note down regularly its clarity, colour, smell, and the existence of certain plants in the water.
  (Alternative: Measure spring water quality using a tracer instrument that gives you data for salinity, total dissolved solids, electrical conductivity, pH, and temperature.)
- Rainfall: Measure and note down daily rainfall with the use of a rain-gauge.

Describe the pictures and tell stories





Indicators of the pictures

21 Measuring spring discharge

22 Measuring rainfall

23 Measuring water quality with tracer instrument

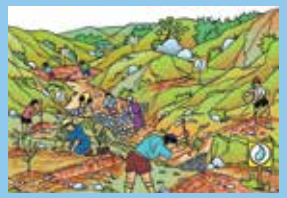
24 Measuring water quality based on smell, look, and content

Summary of the pictures

No.	Picture	Indicator of Picture
1		Spring in different communities
2		Equal distribution of water resources in springshed management
3		People (of all castes, women and men, and from different communities) attending an awareness and training programme
4		Collection of funds for spring management by water user groups
5		Well-managed spring

No.	Picture	Indicator of Picture
6		Healthy and happy community
7		Rules and regulations in a well-managed recharge area
8		Planting of trees, shrubs, and bushes in the recharge area
9		No cutting of trees, shrubs, and bushes in the recharge area
10		No open defecation in the recharge area

Summary of the pictures

No.	Picture	Indicator of Picture
11		No use of chemicals and chemical fertilizers in the recharge area
12		No littering of waste in the recharge area
13		No human-induced forest fire in the recharge area
14		No burning of waste in the recharge area
15		Communities digging pits and ponds in the recharge area

No.	Picture	Indicator of Picture
16		Check dams and gullies in the recharge area
17		Inward sloping of fields in the recharge area
18		Half moon pits in the re-charge area
19		Stone and soil bunds in the recharge area
20		Application of mulch and compost in the recharge area

Summary of the pictures

No.	Picture	Indicator of Picture
21		Measuring spring discharge
22		Measuring rainfall
23		Measuring water quality with tracer instrument
24		Measuring water quality based on smell, look, and content

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