ICIMOD Manual 2016/3

ICIMOD

Community Training Manual

Greening the Yak Dairy Value Chain

FOR MOUNTAINS AND 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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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 thanadministrative 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 km² 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.

Contributors

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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 discussion.
- 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 and local authorities in high-altitude rangeland areas. The ideal number of participants is

20 to 30, but can reach up to 60 (which would require twice the time).

Aim: Community members, local authorities, and yak herders understand the connection between a healthy

environment, yak in the landscape, and the possibility of improving their own livelihoods by developing a yak

herder cooperative, dairy product facilities, and appropriate product marketing.

Duration: 1.5 to 2 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.

General rules for the training

- Give everyone a chance to express his or 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 clearly and forcefully.
- Listen to each participant attentively, and give her or him the feeling that every answer is important.
- There are no wrong answers.

An efficient and successful training session on greening the yak dairy value chain has three parts:

- Preparation
- Conducting the training
- Assessment

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

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 the proper order. Seats should be arranged in a semi-circle. Ensure that 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 pictures, take the next one according to the order suggested in the manual.
- **Step 5** After all 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.
- **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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| 4. | Managing Yak Health and Breeding | 16 |



1. Yak Herding and Its Contribution to the Ecosystem

Aim of the topic

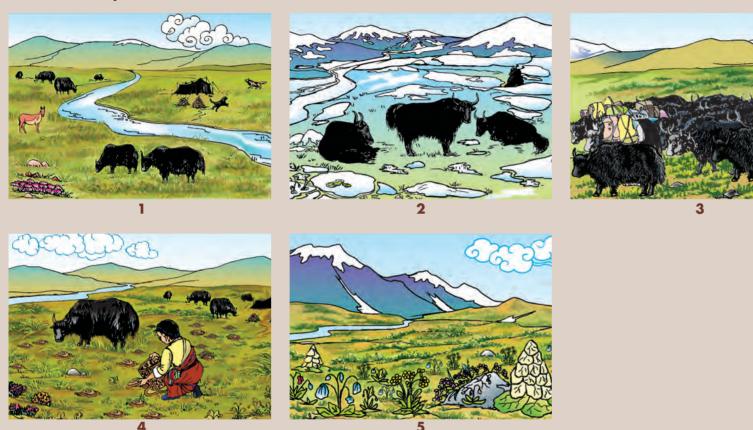
Participants understand the importance of yak in the ecosystem.

Messages

- Yak are an integral part of the ecosystem in high altitude rangelands and make use of scarce resources.
- Seasonal traditional migratory practices are based on traditional knowledge and support landscape protection.
- Yak grazing contributes to plant diversity and overall stability of an area's biodiversity.

Remember

Describe the pictures and tell stories



Indicators of the pictures

- 1 High altitude grassland with high biodiversity and grazing yak
- 2 Less feed/fodder during winter time
- 3 Migrating yak herders
- 4 Yak dung as important source of soil nutrients for rangelands
- 5 Intact grasslands with high plant diversity



2. Livelihood Values of Yak and Their Products

Aim of the topic

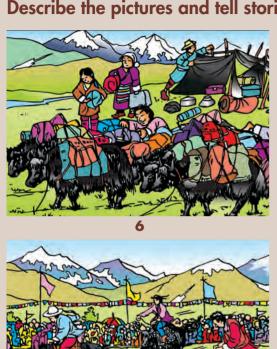
Participants can explain the value of yak for herders and their communities as well as the traditional value chain for yak dairy products.

Messages

- What we receive from yak:
 - butter, hard cheese (churo), butter tea, and yoghurt from milk
 - fresh and dried meat
 - tents, traditional clothing, blankets, and carpets from wool
 - fuel from dried dung
- How we use yak:
 - for transportation (it is the only means of transport in snowy mountains)
 - for cultural services (festivals, etc.)
- Traditional yak milk processing requires large amounts of scarce energy and hard labour, especially from women.
- Most products are only consumed within the family without generating income.
- Bartering of yak dairy products with farmers in the lowlands is hard work and often not possible.

Remember

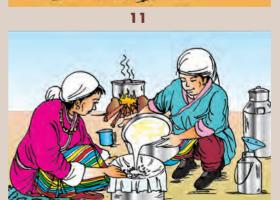
Describe the pictures and tell stories











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Indicators of the pictures

- Traditional herding families on pasture land with tents and animals
- Products from yaks: tents, dung for fuel, and wool for clothing and carpets
- Yaks used for transportation
- Yaks have cultural value and are important symbols in festivals
- 10 Milking yak while bribing with salt
- 11 Boiling milk for dairy product processing using large amounts of fuelwood/dung
- 12 Churning milk using a traditional butter churn
- 13 Warming buttermilk for cheese production
- **14** Separating warm buttermilk for cheese production







13

12



3. Improving the Yak Dairy Products Value Chain for Herder Communities

Aim of the topic

Participants can identify steps in modernizing the yak organic dairy product value chain and understand its benefits.

Messages

- Mobilize yak herders to work together, become milk cooperative members, and establish a dairy factory.
- Members of the cooperative:
 - bring milk to a collection site daily at the same time
 - check fat content and quantity
 - get payment for fresh milk regularly (according to quality and quantity)
 - set rules and regulations for cooperative members
- At the cooperative/factory level:
 - Cooperative members/cooperative committee can develop a cooperative factory in coordination with local authorities.
 - Cooperative members provide skilled labour to produce yoghurt and cheese, and enhance their skills as per new requirements.
 - The cooperative/factory decides to specialize in certain products (cheese, butter, or yoghurt).
 - Yak dairy products must be checked for quality, branded, certified, and packaged.
- Marketing is important!
 - Products must be marketed and sold at the district-, national-, and international levels.
 - Female cooperative members must be trained in marketing products and managing the business.
- Fodder management and production help ensure yak milk productivity.

Remember

Describe the pictures and tell stories



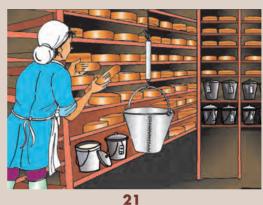


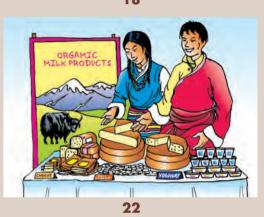










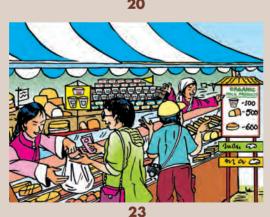


Indicators of the pictures

15 Community members, herders, and cooperative members discuss developing a cooperative

19

- 16 Individual milk collection, weighing, and fat content measurement
- 17 Payment for milk delivery
- **18** Central weighing, fat content measurement, and transport
- 19 Delivery to dairy product factory
- **20** Hygienic, large-scale production by trained cooperative members
- 21 Storage of dairy products like cheese and yoghurt







- 22 Sale of dairy products like cheese and yoghurt
- 23 Tourists visiting a dairy product factory shop
- 24 Clean residential neighbourhood of a herder community with school children
- 25 Fodder management for yak herders



Managing Yak Health and Breeding

Aim of the topic

The participants understand the importance of managing yak health and breeding.

Messages

- Periodic yak health monitoring by animal health workers is important for controlling diseases in yak herds.
- Collection and laboratory testing of biological samples from sick animals is needed to manage disease.
- Exchanging of strong yak bulls between herds will reduce inbreeding and improve breed quality.
- Oestrus synchronization and artificial insemination can be adopted to improve the yak breed.

Remember

Describe the pictures and tell stories





Indicators of the pictures

- **26** Animal health worker visits a yak herder
- **27** Testing of biological samples in laboratory
- **28** Exchanging of yak bull between herds
- 29 Artificial insemination





Summary of the pictures

| No. | Picture | Indicator of Picture |
|-----|---------|--|
| 1 | | High altitude grassland with high biodiversity and grazing yak |
| 2 | | Less feed/fodder during winter time |
| 3 | | Migrating yak herders |
| 4 | | Yak dung as important source of soil nutrients for rangelands |
| 5 | | Intact grasslands with high plant diversity |

| No. | Picture | Indicator of Picture |
|-----|---------|--|
| 6 | | Traditional herding families on pasture land with tents and animals |
| 7 | | Products from yak: tents, dung for fuel, and wool for clothing and carpets |
| 8 | | Yaks used for transportation |
| 9 | | Yaks have cultural value and are important symbols in festivals |
| 10 | | Milking yak while bribing with salt |

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| 11 | | Boiling milk for dairy product processing using large amounts of fuelwood/dung | 16 | | Individual milk collection, weighing, and fat content measurement |
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| 13 | | Warming buttermilk for cheese production | 18 | | Central weighing, fat content measurement, and transport |
| 14 | | Separating warm buttermilk for cheese production | 19 | | Delivery to dairy product factory |
| 15 | | Community members, herders, and cooperative members discuss developing a cooperative | 20 | | Hygienic, large-scale production by trained cooperative members |

Summary of the pictures

| No. | Picture | Indicator of Picture |
|-----|--|---|
| 21 | | Storage of dairy products like cheese and yoghurt |
| 22 | - Company of the Comp | Sale of dairy products like cheese and yoghurt |
| 23 | | Tourists visiting a dairy product factory shop |
| 24 | Geo Ge | Clean residential neighbourhood of a herder community with school children |
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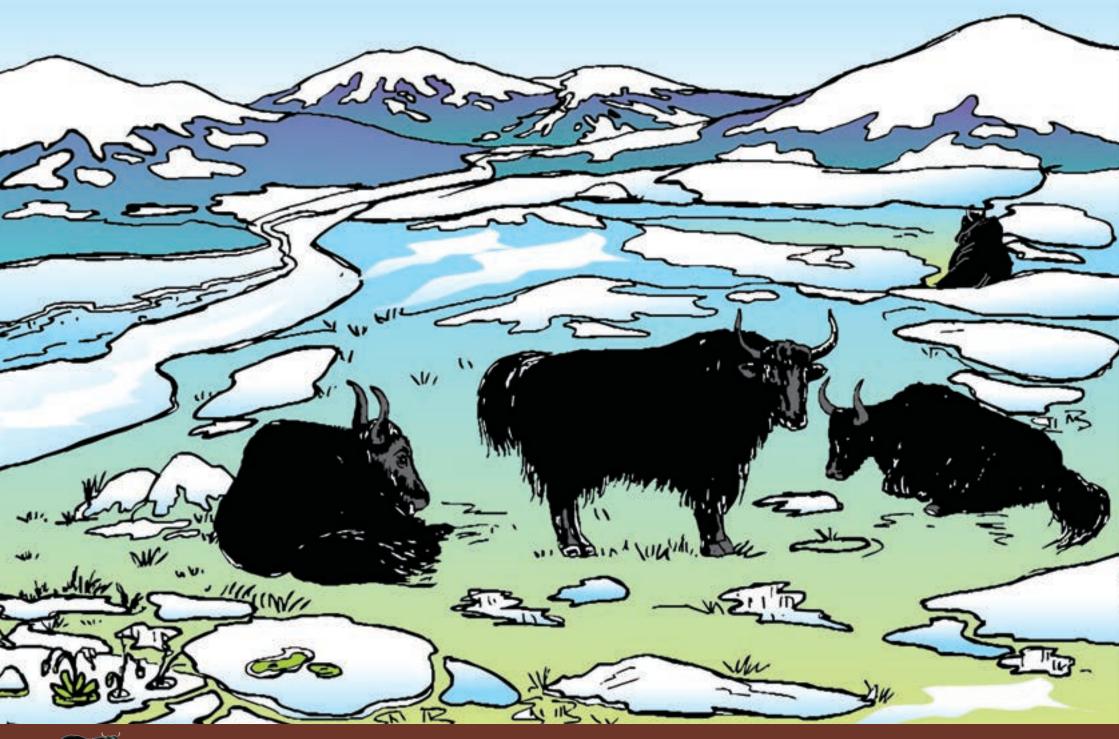






1 High altitude grassland with high biodiversity and grazing yak

















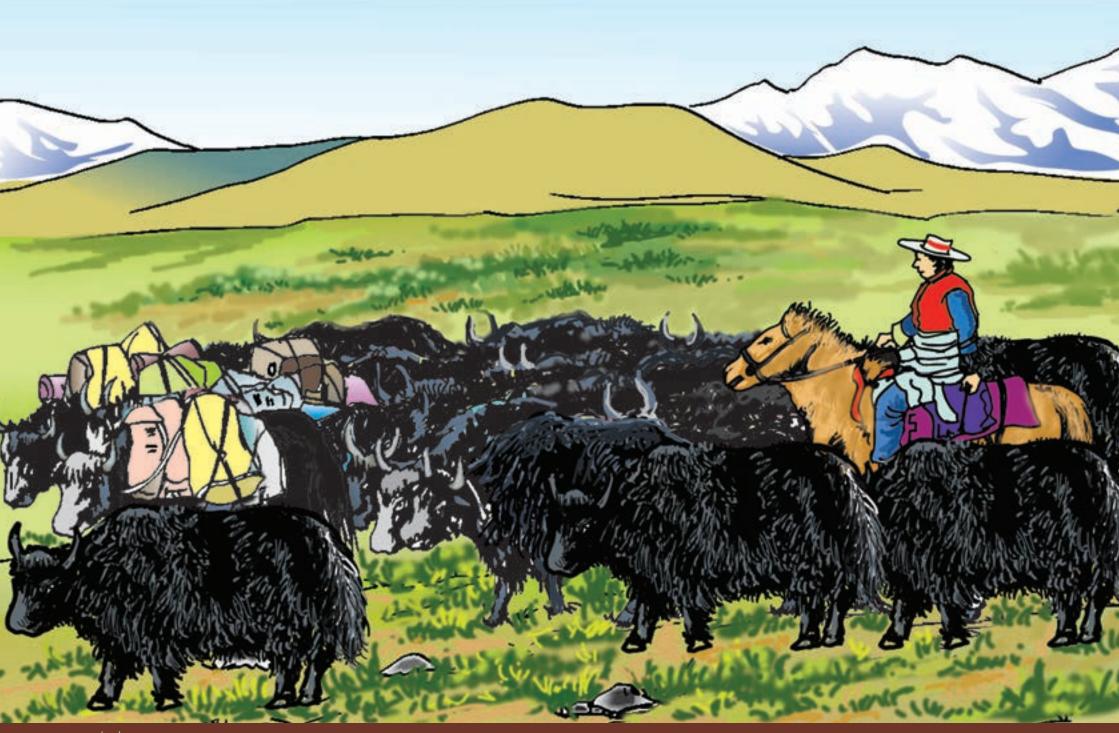
Less feed/fodder during winter time

























Migrating yak herders























4 Yak dung as important source of soil nutrients for rangelands

















Intact grasslands with high plant diversity



















6 Traditional herding families on pasture land with tents and animals

















Products from yaks: tents, dung for fuel, and wool for clothing and carpets

















8 Yaks used for transportation



















Yaks have cultural value and are important symbols in festivals









































11 Boiling milk for dairy product processing using large amounts of fuelwood/dung

















12 Churning milk using a traditional butter churn









































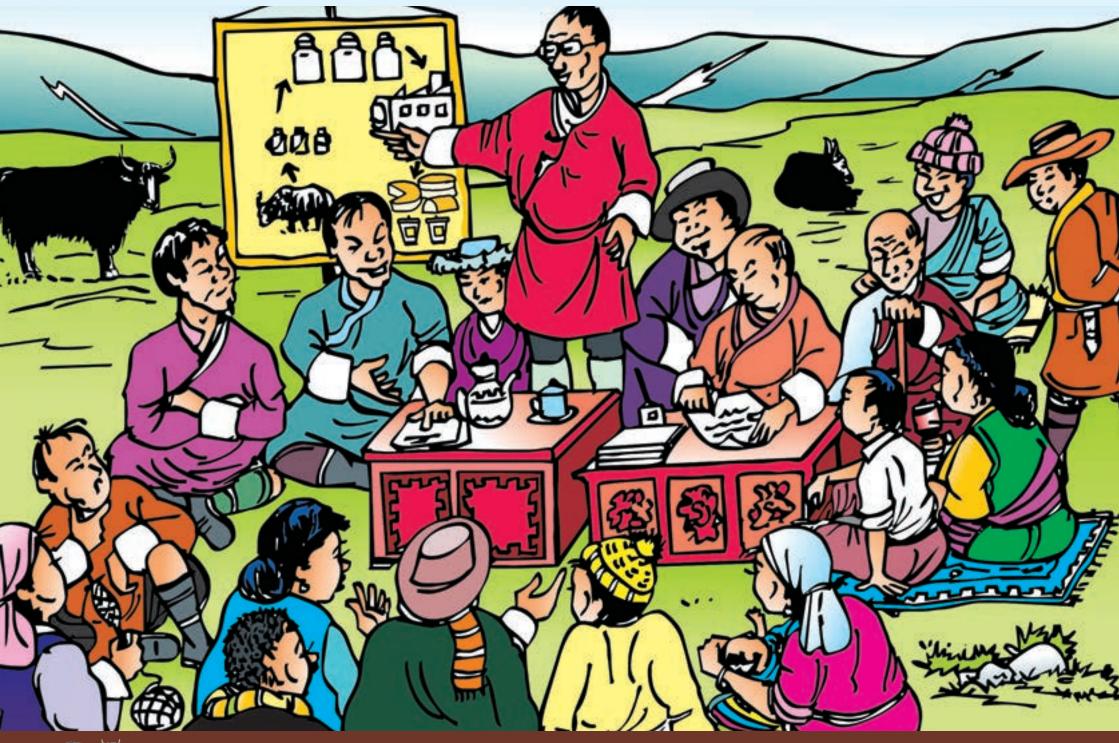






14 Separating warm buttermilk for cheese production



















15 Community members, herders, and cooperative members discuss developing a cooperative















16 Individual milk collection, weighing, and fat content measurement

















17 Payment for milk delivery





















18 Central weighing, fat content measurement, and transport

















19 Delivery to dairy product factory



















20 Hygienic, large-scale production by trained cooperative members



















21 Storage of dairy products like cheese and yoghurt



















































24 Clean residential neighbourhood of a herder community with school children













































































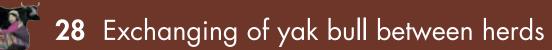




























29 Artificial insemination

