

ICIMOD Manual 2017/1

# Community Training Manual



Greening the Honey and Chyura Products Value Chains

ICIMOD

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 Himalaya (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.



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The Governments of Afghanistan, Australia, Austria, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Norway, Pakistan, Switzerland, and the United Kingdom.

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## Greening the Honey and Chyura Products Value Chains

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# About Transboundary Landscape Initiatives in the Hindu Kush Himalaya

The Hindu Kush Himalaya 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 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<sup>2</sup> 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.

## About Chyura

Chyura, also known as the 'Indian butter tree' or (chyuri or chiuri in Nepali), grows abundantly in the Kailash Sacred Landscape, in villages of Pithoragarh District, Uttarakhand, India, and the far western, mid-western and central districts of Nepal. Chyura is a multi-purpose tree and plays an important role in the rural economies of these districts. Its leaves can be used as livestock fodder, its flowers support beekeeping for honey production, and the 'ghee' produced from its seeds is used for cooking, as medicine to treat rheumatism, ulcers, and itching, and as a pesticide and insect repellent.



## 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, local authorities, and cooperatives working with honey and/or chyura products. The ideal number of participants ranges from 20 to 30. Up to 60 participants may be accommodated if the amount of time provided is doubled.

**Aim:** Participants understand the relationship between a healthy and sustainable ecosystem and an improved production as well as marketing of honey and chyura products. Participants will also be able to understand the impacts of climate change on the honey and chyura production.

**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

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.

An efficient and successful training session on Greening the Honey and Chyura Products Value Chains 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 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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# Part 1

## Honey Value Chain



# 1. The relationship of climate change, ecosystem and bees

## Aim of the topic

Participants understand the link between honey production and ecosystem and are able to analyse the impact of climate related changes on beekeeping in their area.

## Remember

## Messages

- Bees provide pollination services that enhance crop production and maintain biodiversity.
- More bees mean better production and a healthy ecosystem.
- Changes in climate can affect long-term beekeeping positively and negatively, so react through adaptation measures in time:
  - Observe the availability of bees in your area;
  - Observe any changes of availability of plants which are important for the beekeeping (e.g. chrysa or other plants) in your area;
  - Observe, if the bees have migrated to other areas and/ or to other ecosystems;
  - Take actions based on your observations (e.g. plantations, sustainable harvesting, shifting of beekeeping activity).



## Describe the pictures and tell stories



### Indicators of the pictures

- 1 Field of flowers with bees
- 2 People observe landscape with fewer flowers and bees
- 3 Plantation of trees in new area



## 2. The honey value chain: Traditional practices

### Aim of the topic

Participants are able to identify the different steps of the honey production, and understand the concept of a value chain.

### Remember

### Messages

- Traditional beekeeping involves the use of logs and wall hives, crude extraction process, local packing and selling practices.
- A value chain marks the process of developing a product from its source all the way through to consumption.
- Every product passes through a chain of different value adding inputs or actions before it reaches the final consumer.
- Value chain inputs include natural resources, agricultural inputs and labour from various persons.
- Labour inputs refer to producing, harvesting, processing, transporting, packaging, marketing and selling.



## Describe the pictures and tell stories



### Indicators of the pictures

- 4** Traditional log hives
- 5** Traditional wall hives
- 6** Traditional method of honey squeezing
- 7** Traditional packaging of honey
- 8** Individual selling/trading of honey in the village
- 9** Consumption of honey in the village



### 3. Conservation concerns and possible value additions

#### Aim of the topic

Participants are able to identify and implement various ways of improving honey yield, honey quality and honey sale.

#### Messages

Beekeeping practices can be improved through:

- Adoption of improved beehives that increases honey yield and quality;
- Use of honey extractor that increases hygiene and quality;
- Development of attractive packaging;
- Introducing product branding and establishing market linkages;
- Promotion of collective action through self-help groups or cooperatives;
- Facilitating access to microfinance;
- Selling honey in shops.

Remember



## Describe the pictures and tell stories



### Indicators of the pictures

- 10** Improved beehives
- 11** Beekeeping training
- 12** Use of honey extractor
- 13** Groups equipped with containers, labels and hygienic packaging
- 14** Sale of honey in market
- 15** Access to bank and microfinance by group





## Part 2

# Chyura Products Value Chain



## 4. Usefulness of the chyura tree, its importance in the ecosystem and in climate change

### Aim of the topic

Participants understand the importance of the chyura tree for their livelihoods, its role in the ecosystem and are aware of the changes occurring due to climate change.

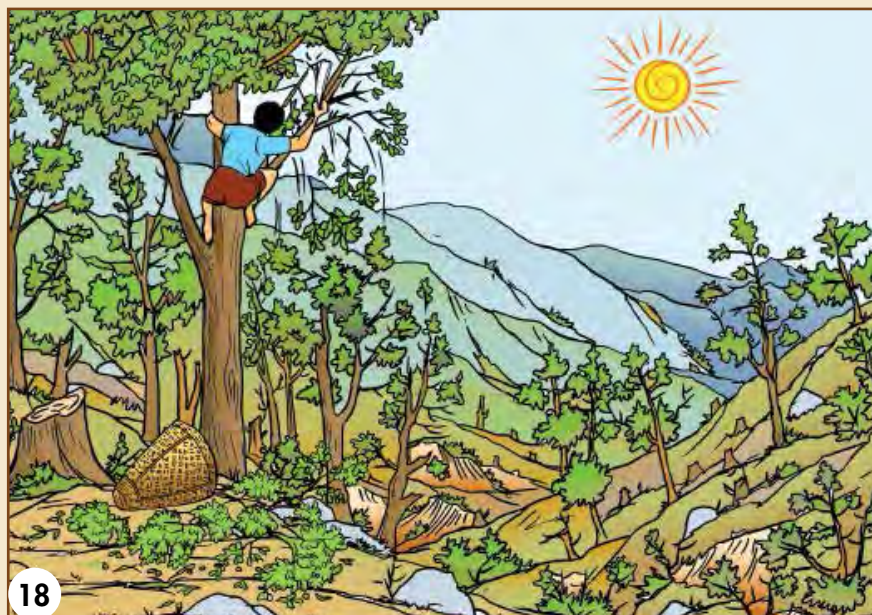
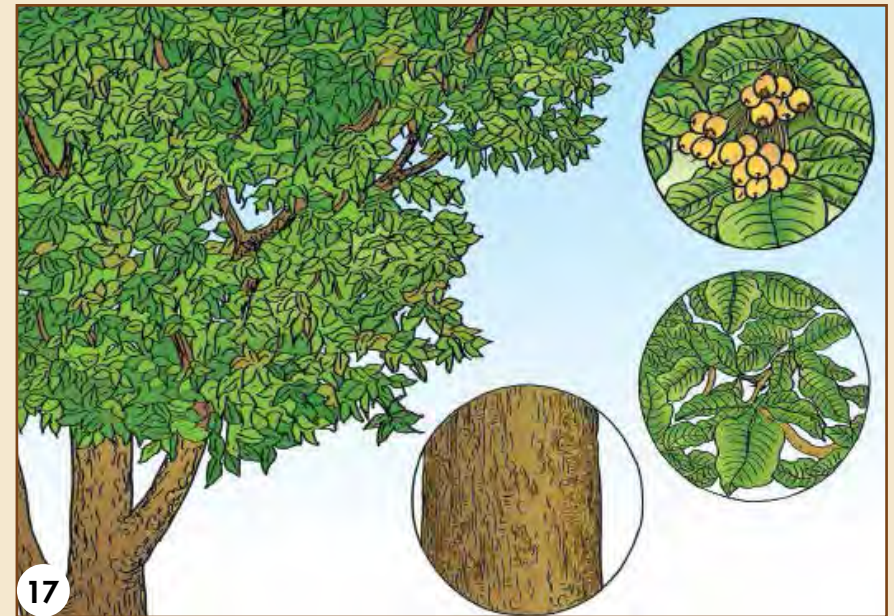
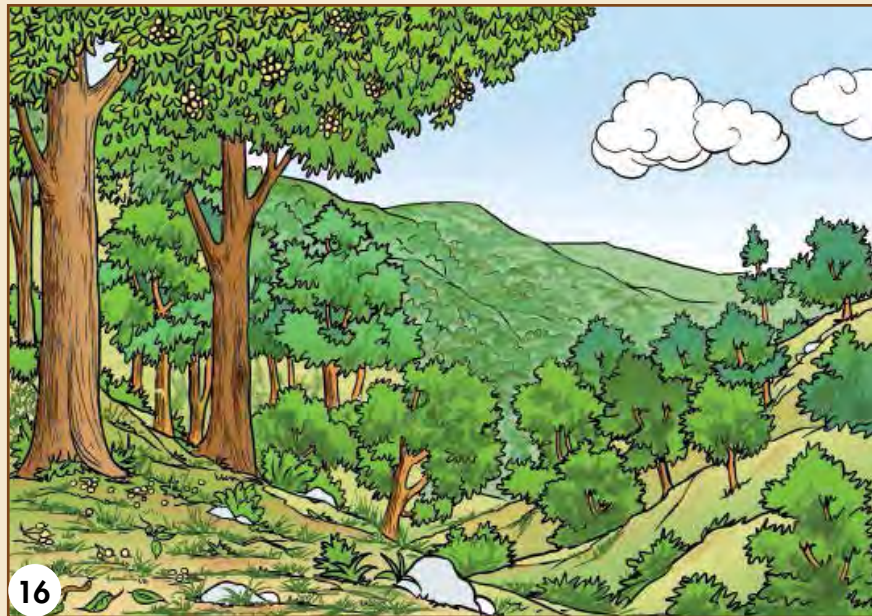
### Remember

### Messages

- Chyura is an important tree in the ecosystem.
- The chyura tree is indigenous to certain areas and highly adapted to the local climate.
- The chyura tree is excellent for soil and water conservation.
- Chyura has multiple uses:
  - Seeds for butter (ghee)
  - Leaves as fodder
  - Wood for furniture and fuelwood
  - Bark to make medicine and insecticide
  - Oil cake is used as insect and mosquito repellent.



## Describe the pictures and tell stories



### Indicators of the pictures

- 16** Landscape with chyura trees
- 17** Chyura tree with details of leaves, seeds and bark
- 18** Farmer lops chyura tree for fodder



## 5. The chyura product value chain: Traditional practices

### Aim of the topic

Participants are able to identify the different steps of the chyura butter production.

### Messages

#### ■ Traditional steps and practices in chyura butter extraction:

- Collection of seeds during the monsoon
- Storing of some seeds for production
- Boiling of seeds
- Grinding of seeds to remove the shells
- Drying of seed kernels
- Roasting of kernels traditionally using fire
- Extraction of oil using oil expeller
- Heating of oil with butter milk to purify it and reduce its bitterness
- Household consumption

Remember



## Describe the pictures and tell stories



### Indicators of the pictures

- |           |                                |           |   |
|-----------|--------------------------------|-----------|---|
| <b>19</b> | Collecting chyura seeds        | <b>24</b> | Roasting seed kernels on fire                                   |
| <b>20</b> | Storing seeds                  | <b>25</b> | Extracting oil using oil expeller                               |
| <b>21</b> | Boiling seeds                  | <b>26</b> | Heating oil with butter milk to clarify and improve the quality |
| <b>22</b> | Shelling seeds                 | <b>27</b> | Household consumption of chyura butter                          |
| <b>23</b> | Drying seed kernels in the sun |           |   |



## 6. Improved value chain for chyura products – self-help group formation

### Aim of the topic

Participants are able to understand the advantages and rules of collective bargaining through the formation of a self-help group and value chain analysis.

### Messages

Measures to improve sustainability in the value chain for small-scale producers:

- Form a self-help group (SHG)/joint liability group (JLG) or cooperative;
- Define all actors involved in the value chain;
- Ensure that all actors and players act together;
- Ensure that all actors and players in the value chain follow the same rules and have common objectives;
- Put in place a robust value chain improvement plan:
  - Plan with all players;
  - Set common rules and goals for all;
  - Ensure that everyone sticks to the agreed rules;
- Monitor the changes regularly.

Remember



## Describe the pictures and tell stories



### Indicators of the pictures

- 28** Farmers sit together to discuss formation of SHG
- 24** Actor in value chain: Roaster of seeds
- 25** Actor in value chain: Oil expeller
- 29** Self-help group sits together to agree on rules



## 7. Improved value chain for chhyura products – sustainability measures

### Aim of the topic

Participants are able to identify and discuss ways for the improvement and sustainability of the chhyura product value chain.

### Messages

Ways to improve the chhyura value chain:

- Support a chhyura tree plantation/nursery
- Secure access to microfinance from banks
- Use a decorticator for seed shelling
- Use improved efficient technology for extraction
- Support training on soap making and other chhyura products
- Undertake branding and improve packaging
- Sell products in fair trade shops

Remember



## Describe the pictures and tell stories








### Indicators of the pictures

- 28** Farmer sit together to discuss formation of SHG
- 3** Plantation of trees in new area
- 30** Use of decorticator for seed shelling
- 31** Soap making training
- 32** Branding and packaging
- 33** Chyura products being sold at market in town
- 34** Access to bank account





## Summary of the pictures






No.	Picture	Indicator of picture
1		Field of flowers with bees
2		People observe landscape with fewer flowers and bees
3		Plantation of trees in new area
4		Traditional log hives
5		Traditional wall hives

No.	Picture	Indicator of picture
6		Traditional method of honey squeezing
7		Traditional packaging of honey
8		Individual selling/trading of honey in the village
9		Consumption of honey in the village
10		Improved beehives



## Summary of the pictures



No.	Picture	Indicator of picture
11		Beekeeping training
12		Use of honey extractor
13		Groups equipped with containers, labels and hygienic packaging
14		Sale of honey in market
15		Access to bank and microfinance by group

No.	Picture	Indicator of picture
16		Landscape with chyura trees
17		Chyura tree with details of leaves, seeds and bark
18		Farmer lops chyura tree for fodder
19		Collecting chyura seeds
20		Storing seeds



## Summary of the pictures

No.	Picture	Indicator of picture
21		Boiling seeds
22		Shelling seeds
23		Drying seed kernels in the sun
24		Roasting seed kernels on fire
25		Extracting oil using oil expeller

No.	Picture	Indicator of picture
26		Heating oil with butter milk to clarify and improve the quality
27		Household consumption of chyura butter
28		Farmer sit together to discuss formation of SHG
29		Self-help group sits together to agree on rules
30		Use of decorticator for seed shelling



## Summary of the pictures

No.	Picture	Indicator of picture
31		Soap making training
32		Branding and packaging
33		Chyura products being sold at market in town
34		Access to bank account

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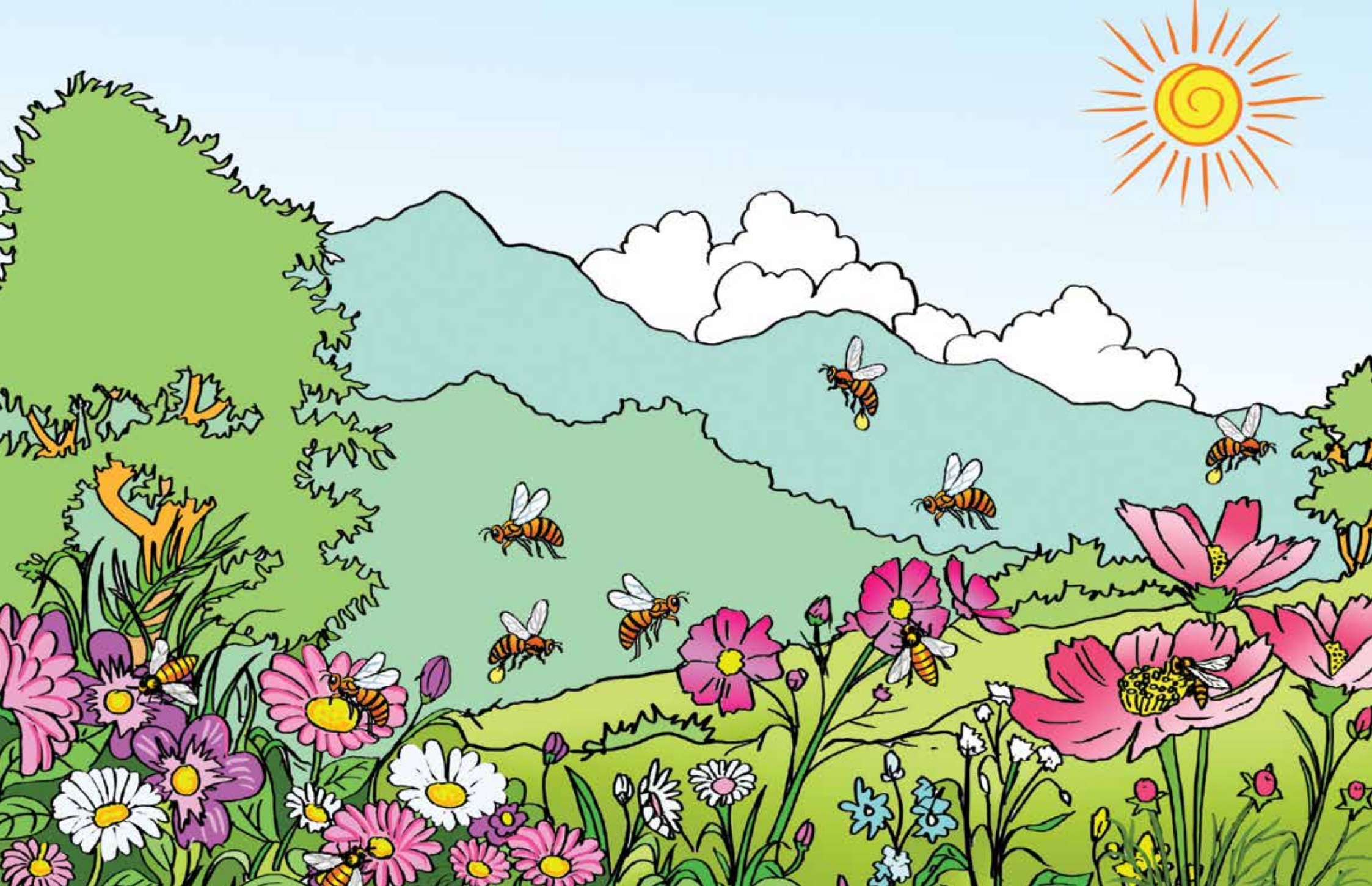
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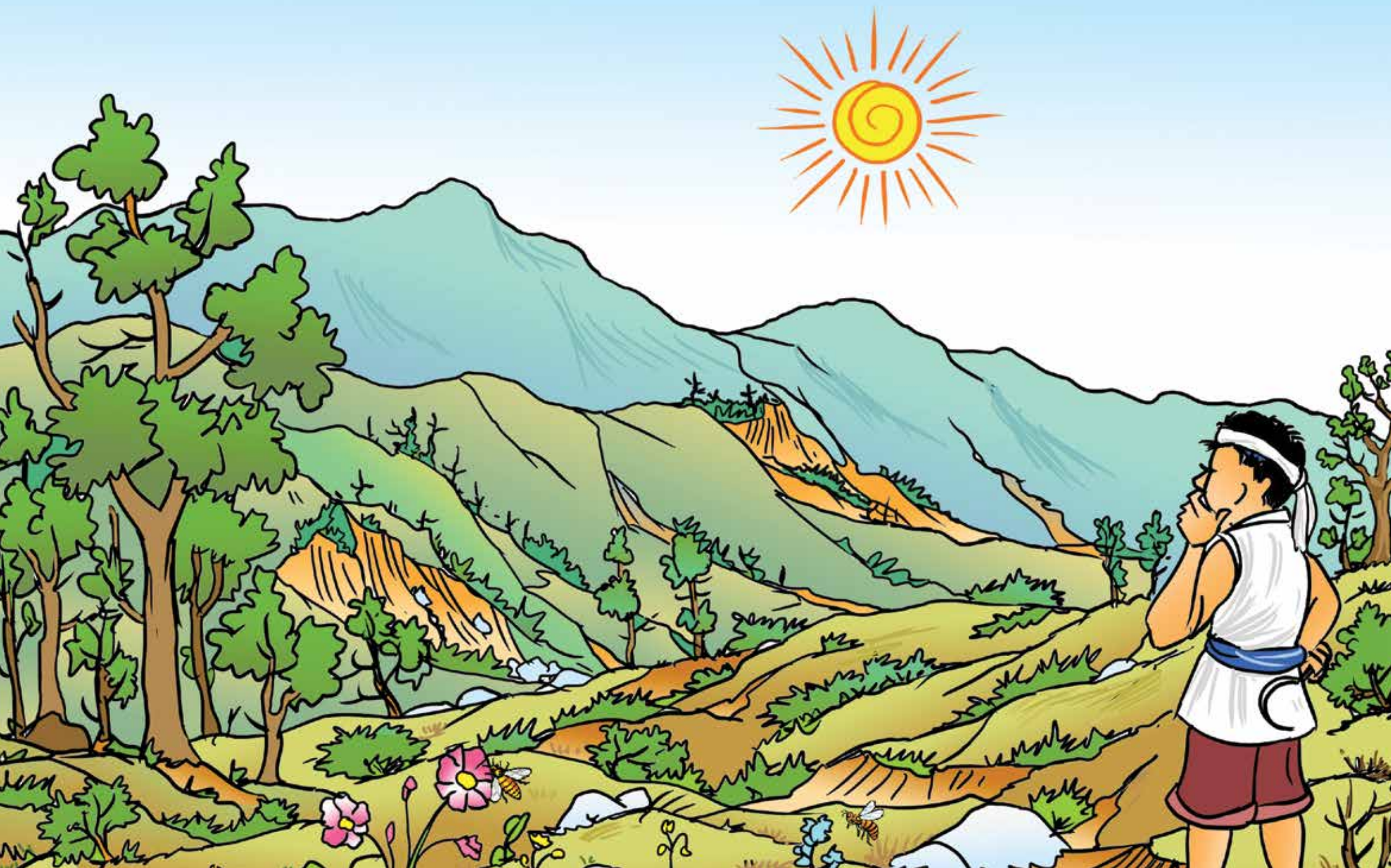
ICIMOD



# 1 Field of flowers with bees







## 2 People observe landscape with fewer flowers and bees









### 3 Plantation of trees in new area



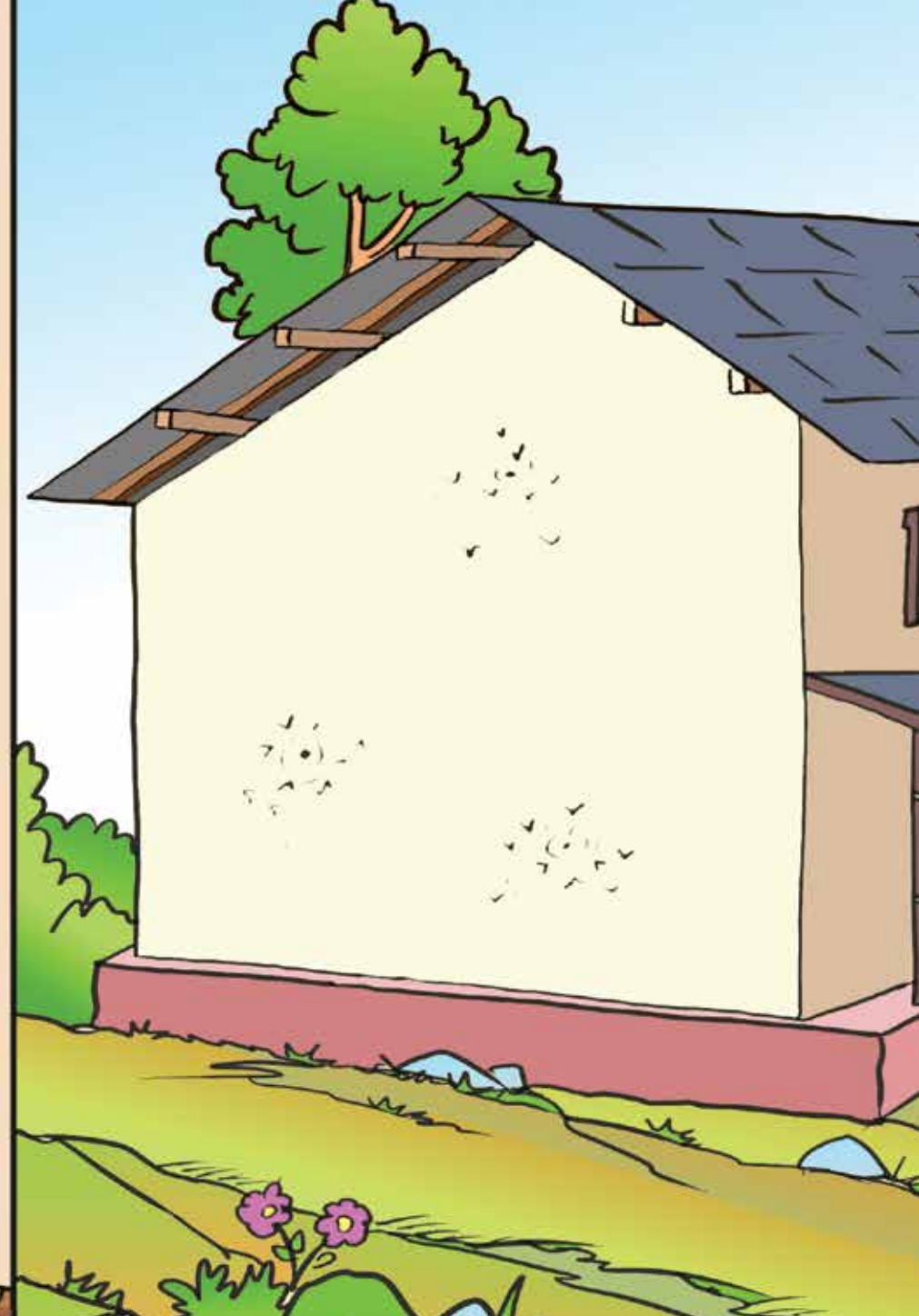
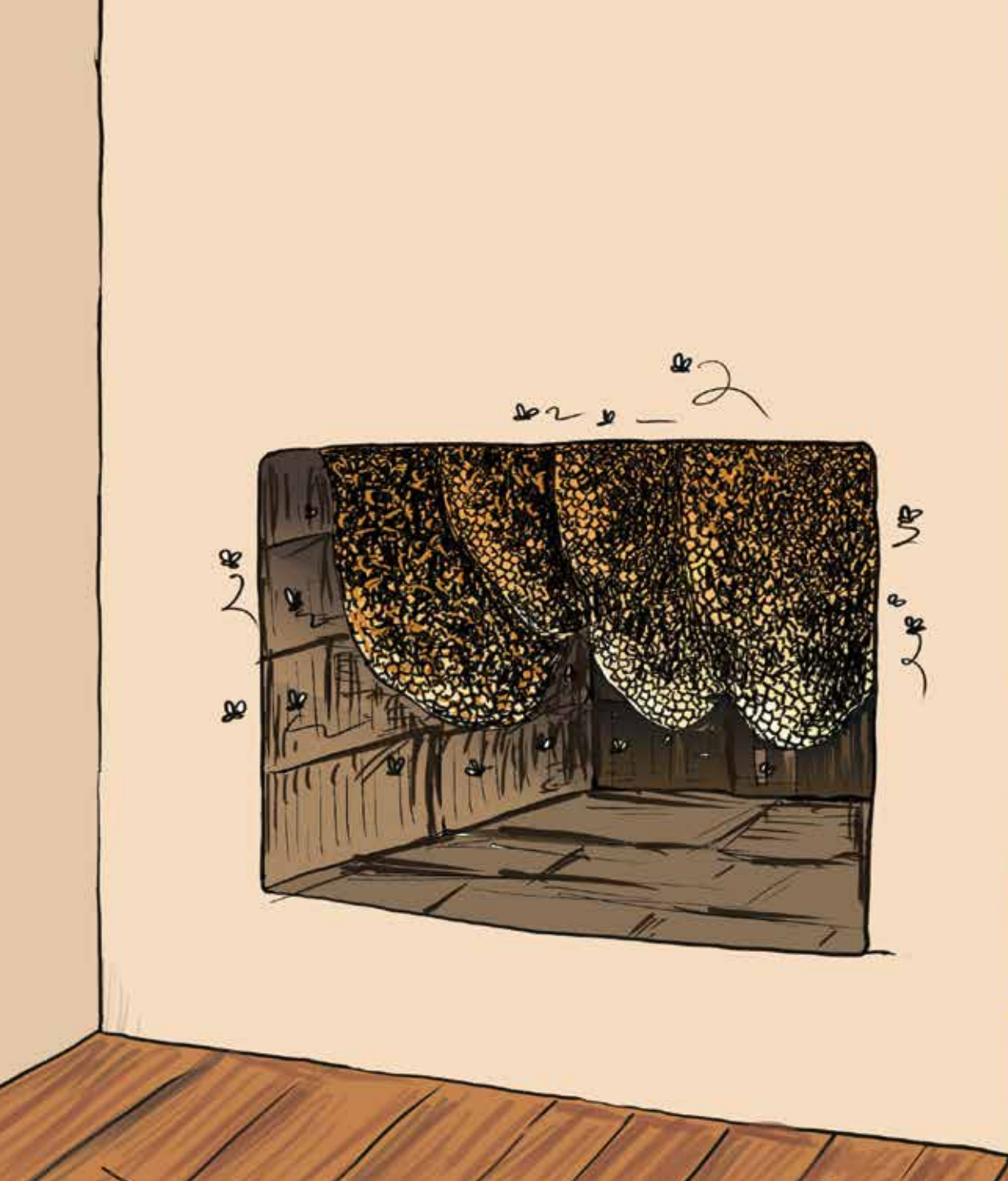




## 4 Traditional log hives



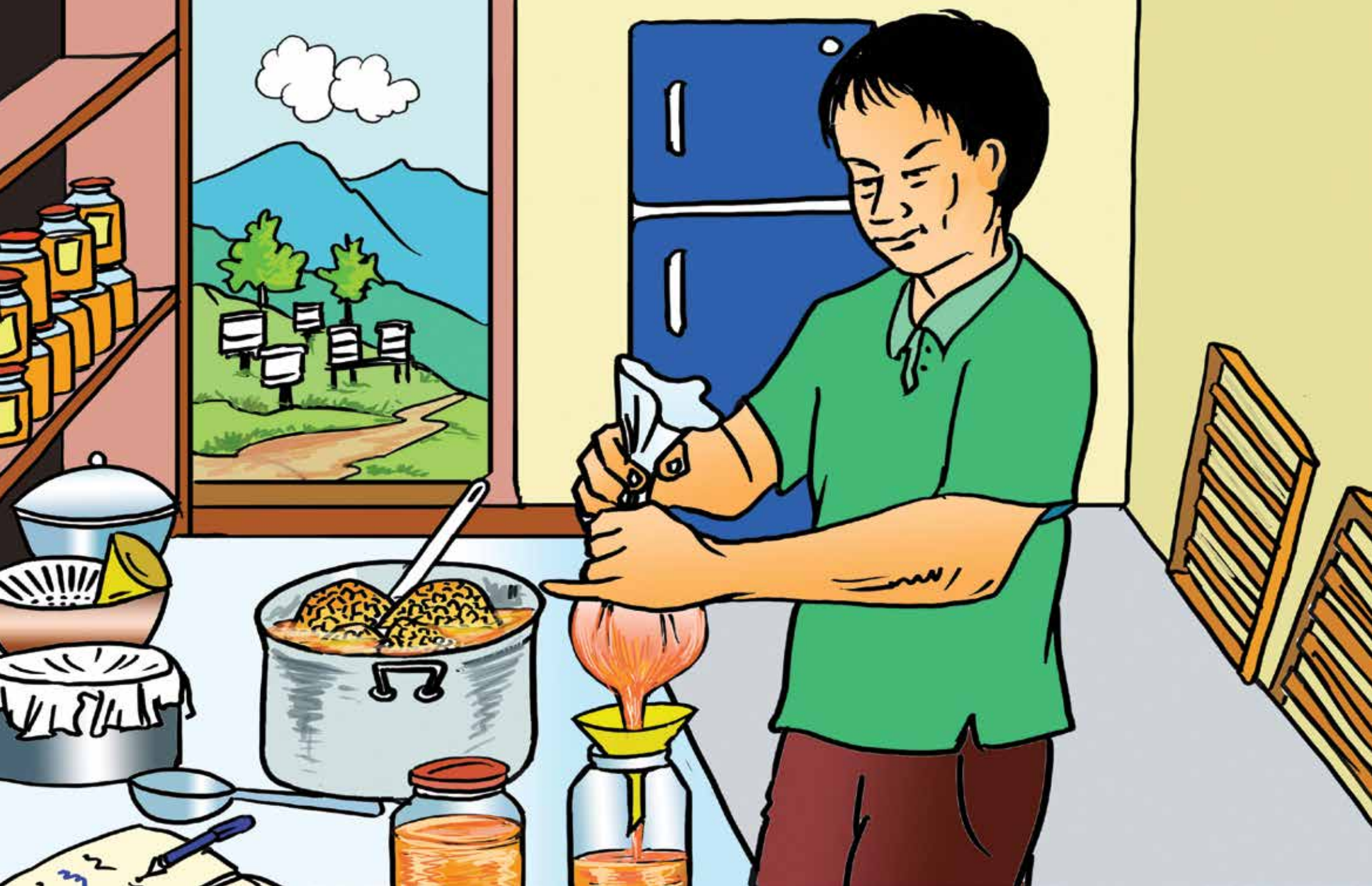




## 5 Traditional wall hives







## 6 Traditional method of honey squeezing







## 7 Traditional packaging of honey







## 8 Individual selling/trading of honey in the village







## 9 Consumption of honey in the village







## 10 Improved beehives



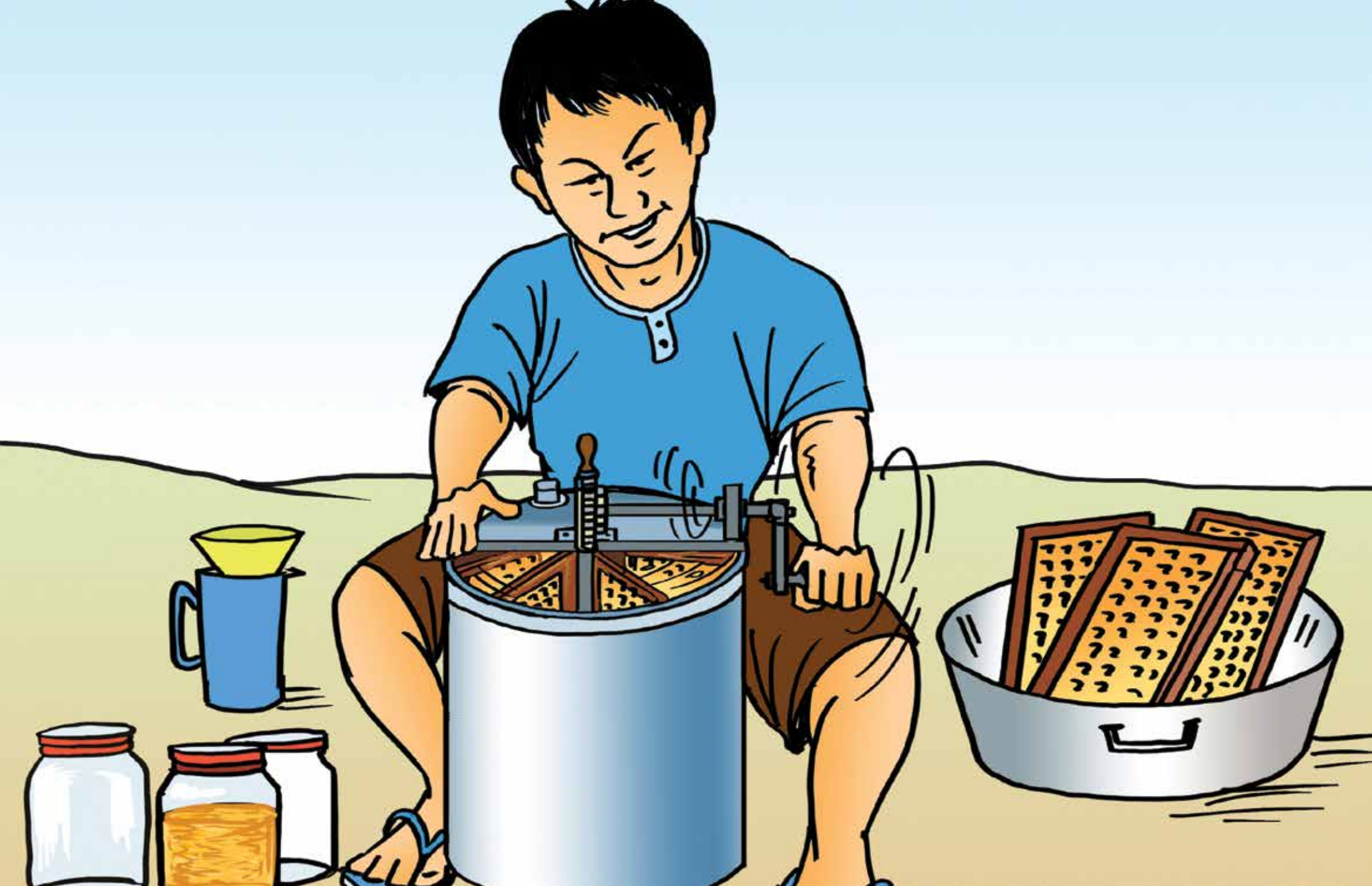






## 11 Beekeeping training





## 12 Use of honey extractor







## 13 Groups equipped with containers, labels and hygienic packaging









## 14 Sale of honey in market





## 15 Access to bank and microfinance by group





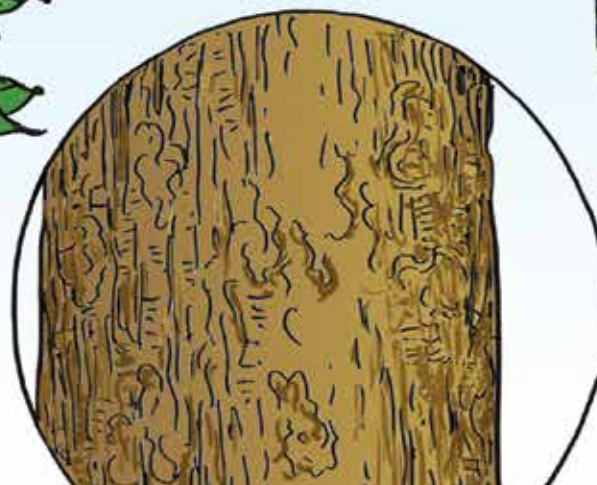
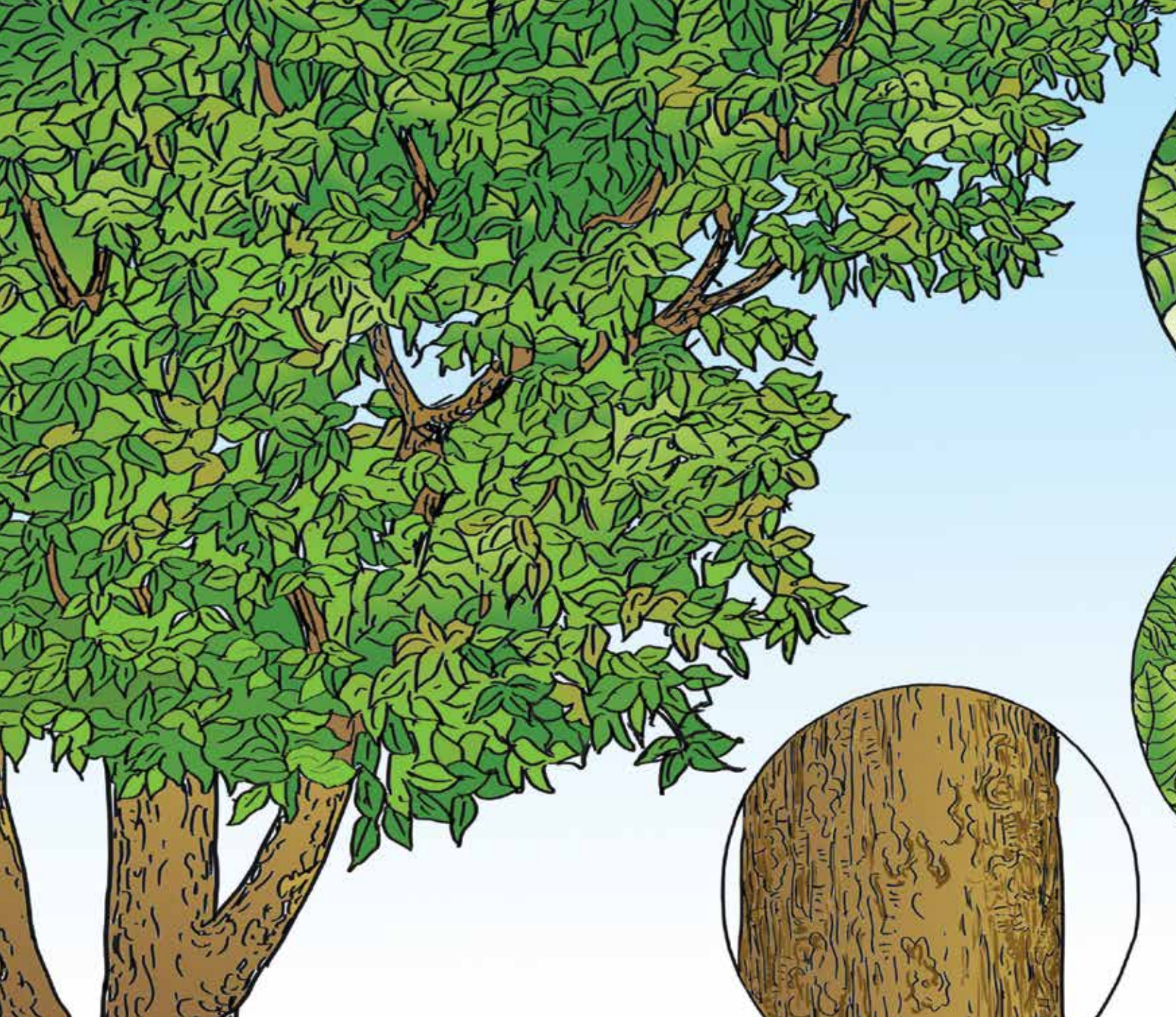




## 16 Landscape with chyura trees









## 17 Chyura tree with details of leaves, seeds and bark









## 18 Farmer lops chyura tree for fodder









## 19 Collecting chyura seeds







## 20 Storing seeds





## 21 Boiling seeds



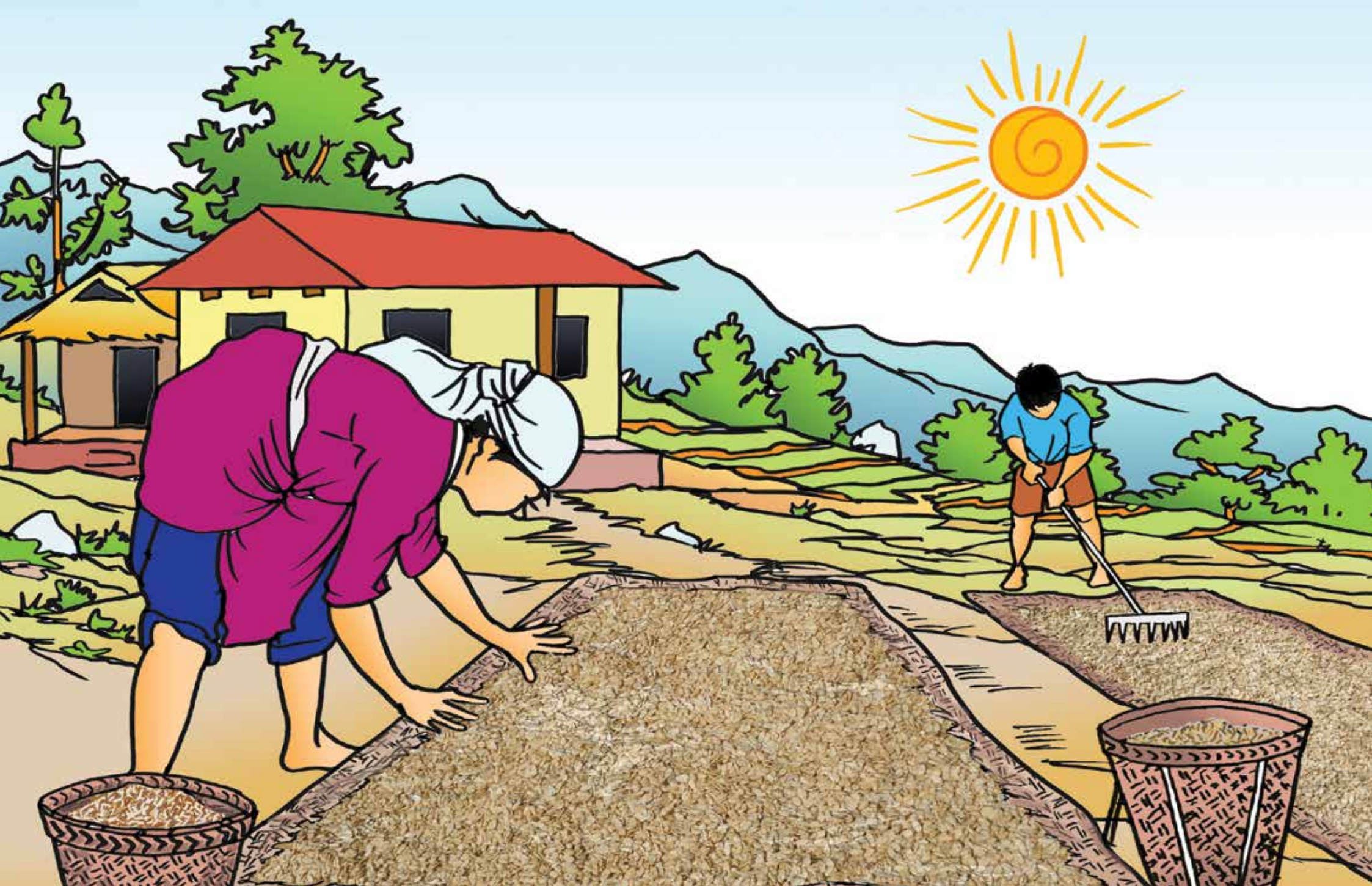




## 22 Shelling seeds









## 23 Drying seed kernels in the sun





## 24 Roasting seed kernels on fire







## 25 Extracting oil using oil expeller









## 26 Heating oil with butter milk to clarify and improve the quality





## 27 Household consumption of chyura butter









## 28 Farmers sit together to discuss formation of SHG

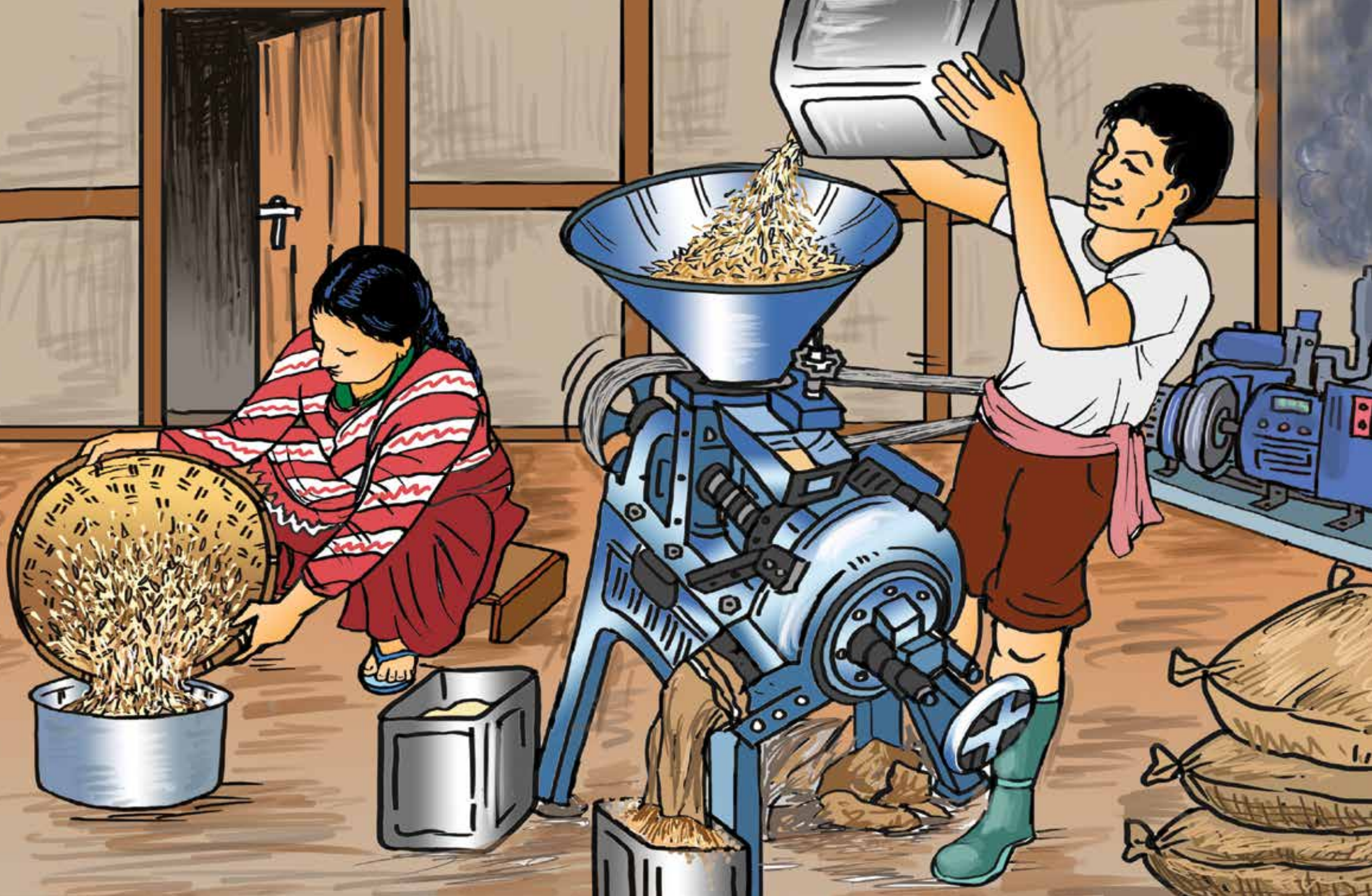






## 29 Self-help group sits together to agree on rules





### 30 Use of decorticator for seed shelling







## 31 Soap making training









## 32 Branding and packaging







### 33 Chyura products being sold at market in town







## 34 Access to bank account

