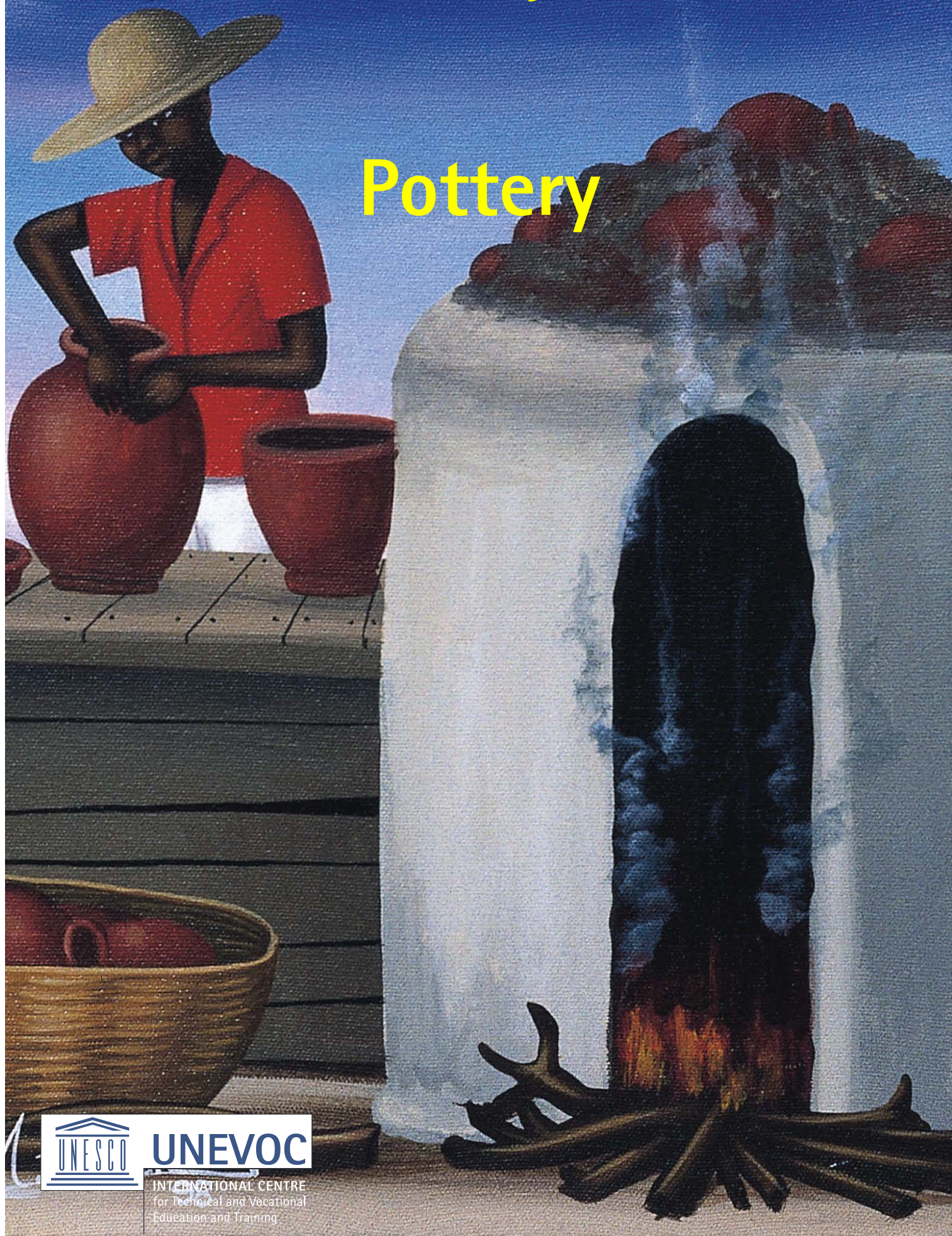


# Global Action Programme on Education for All Youth Project

## Pottery



**UNEVOC**

INTERNATIONAL CENTRE  
for Technical and Vocational  
Education and Training

# Learning and Working

## Motivating for Skills Development: A Campaign Package

Version February 2006

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## Booklet 7.09 – POTTERY

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This booklet complements the video clip on "Pottery" on DVD 2. It gives a short summary of the content of the video and contains illustrations followed by technical texts, which will make it easier to understand and recall the activities shown in the video. The booklet can be copied and handed out to participants, so that they can make notes on them or use them as a reference for later.

A transcript of the soundtrack of the video is included at the back of the booklet. Whenever the locally spoken language is different from the language used in the video, the facilitator may wish to use this text transcript as a basis for comments and explanations in a local language.

### Comments and Observations

The video focuses on a hand driven potter's wheel, but there are also other types of wheels that the facilitator might wish to introduce to his/her audience.

The kick wheel, or momentum wheel is one of the oldest and simplest types of wheel used to make hand-thrown pottery. The potter powers the wheel by kicking the flywheel in rhythm. Using this type of potter's wheel takes some physical energy and practice, but it allows the potter to work by him- or herself.

Information on how to build a kick wheel can be found, for example, in the internet, e.g. at:

[http://www.motherearthnews.com/library/1970\\_November\\_December/Build\\_Your\\_Own\\_Potter\\_s\\_Kick\\_Wheel](http://www.motherearthnews.com/library/1970_November_December/Build_Your_Own_Potter_s_Kick_Wheel)

Another option is the wood-framed treadle wheel. It is a more recent design development. A crankshaft system, driven by the seated potter's rocking left foot, allows momentum to transfer to the wheel head. A lightweight flywheel assists the rhythmic foot motion to spin the wheel head. An instruction on how to build a treadle wheel can be found in "The self-reliant potter" by Andrew Holden, published in 1984 by Van Nostrand Reinhold Company. It has excellent drawings and pictures of a treadle wheel. Unfortunately this book is out of print, but it may be obtained at public libraries or second hand. Instructions for building a kick wheel can be also found in the internet, e.g. at:

[http://www.duke.edu/~msm5/pictures/treadle\\_plans.html](http://www.duke.edu/~msm5/pictures/treadle_plans.html)

### Video POTTERY: Summary

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Clay is a material that needs quite few tools to be worked on (a potter's wheel, a build, an oven – as well as the potter's hands) – compared to the masses of using objects you can make of it: jugs, plates and dishes, but also bricks, window pane and tiles.

In this video, inhabitants of two Haitian villages show us how to make all these objects from clay. It is also a good opportunity to present the principles how the two ovens with different firing work.



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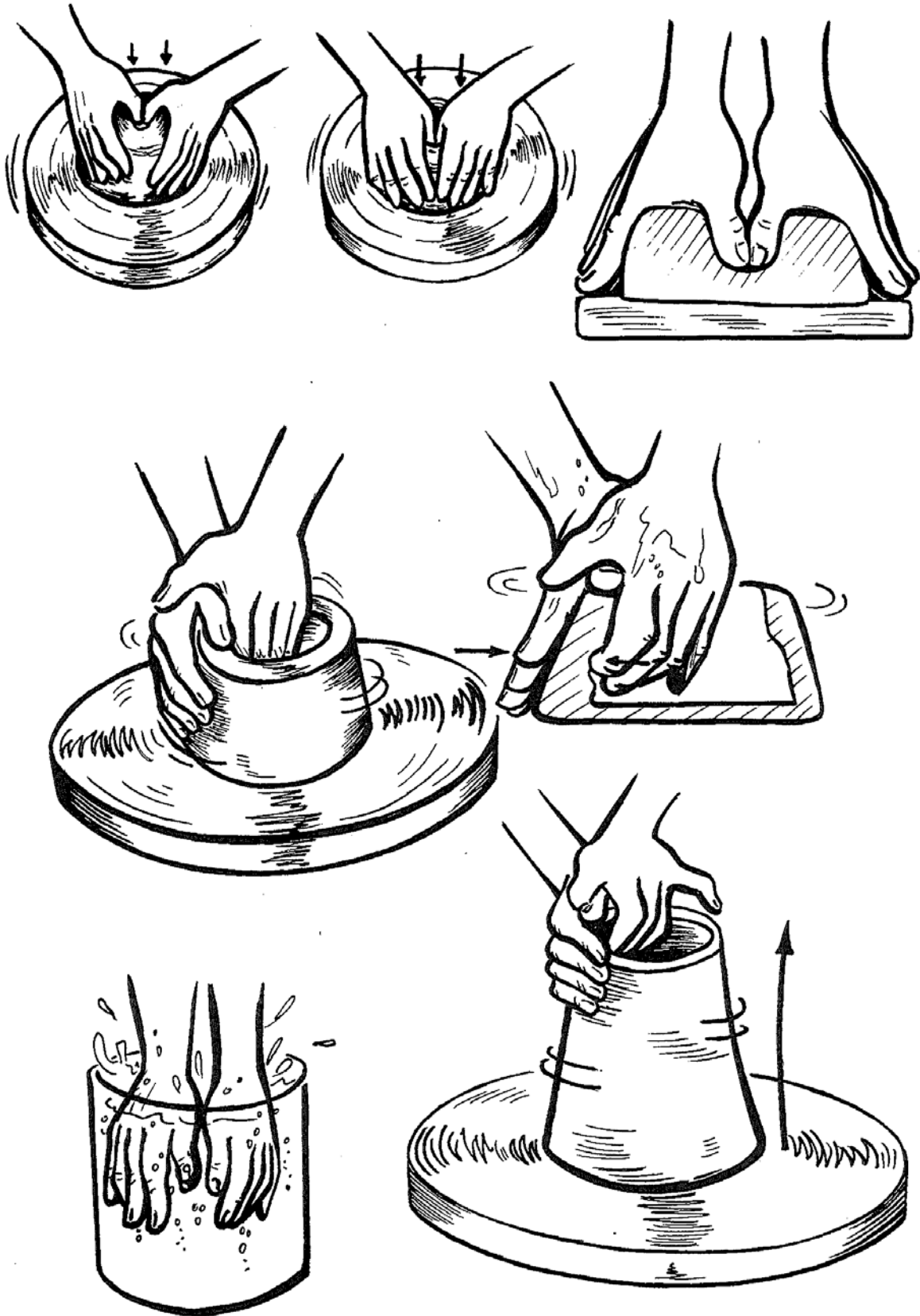
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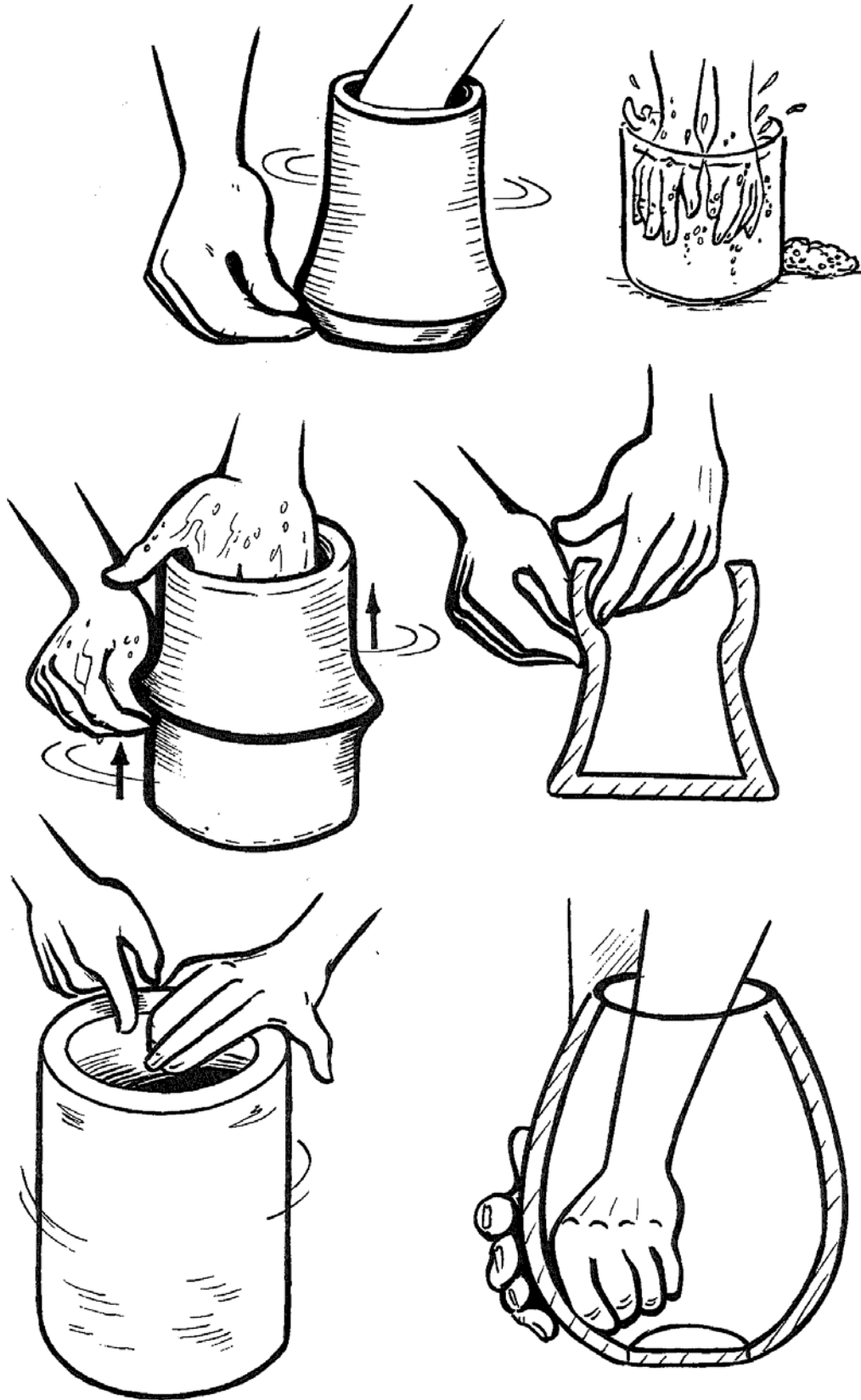


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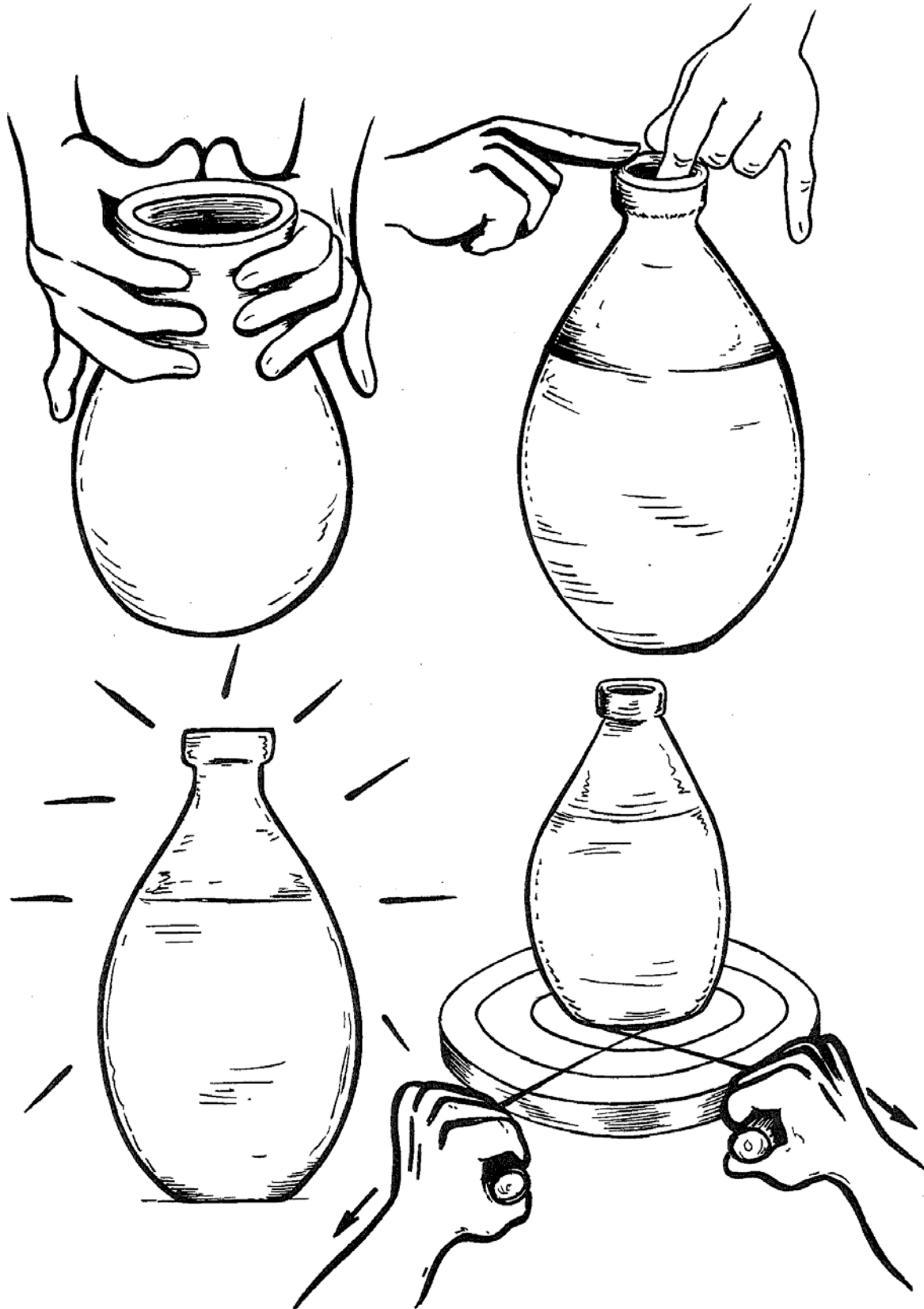


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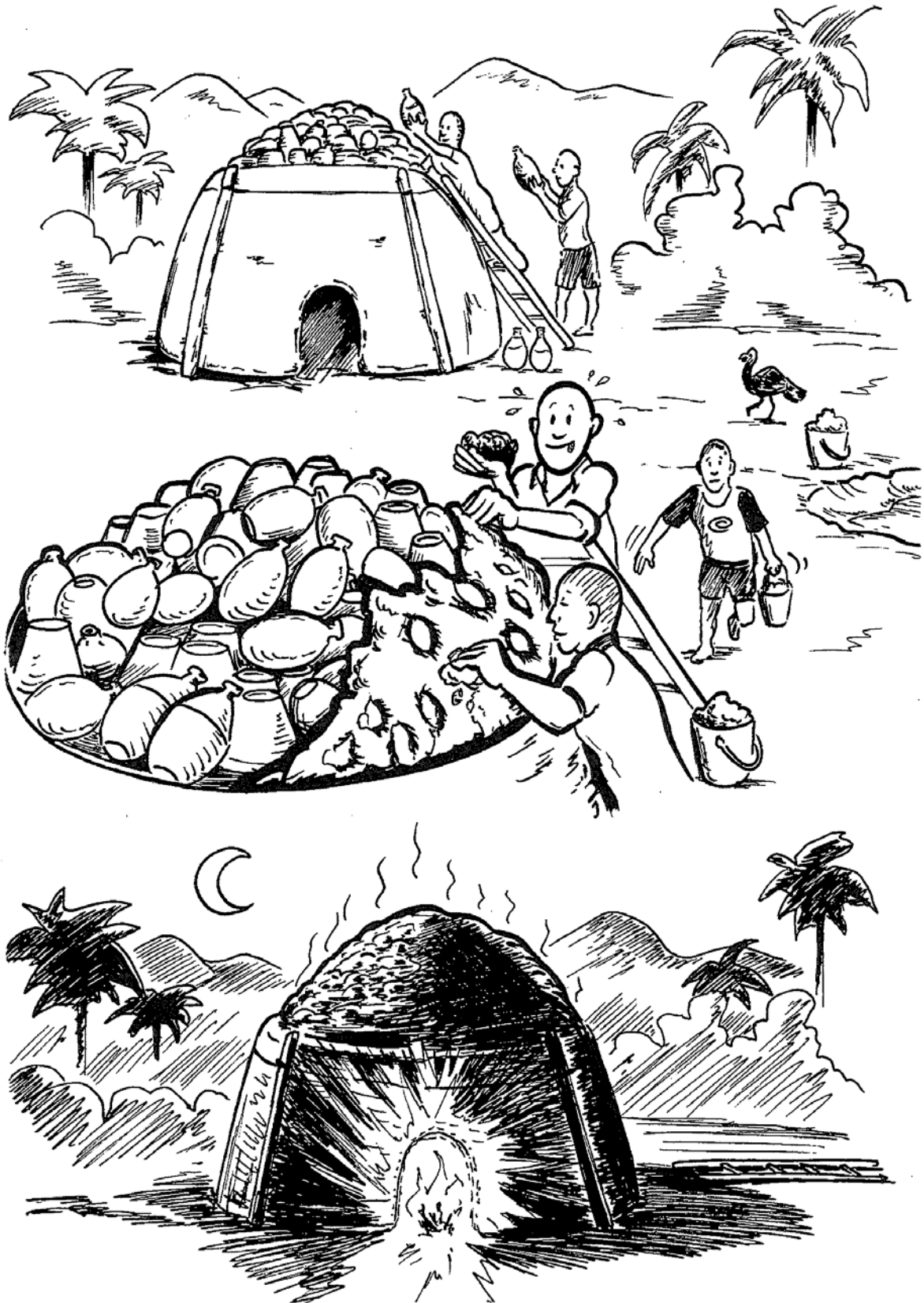
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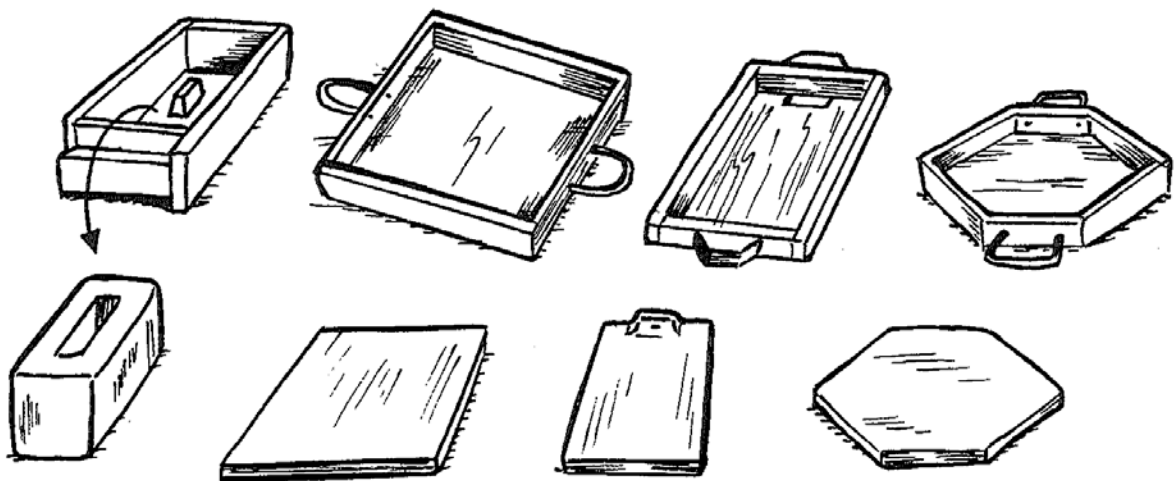
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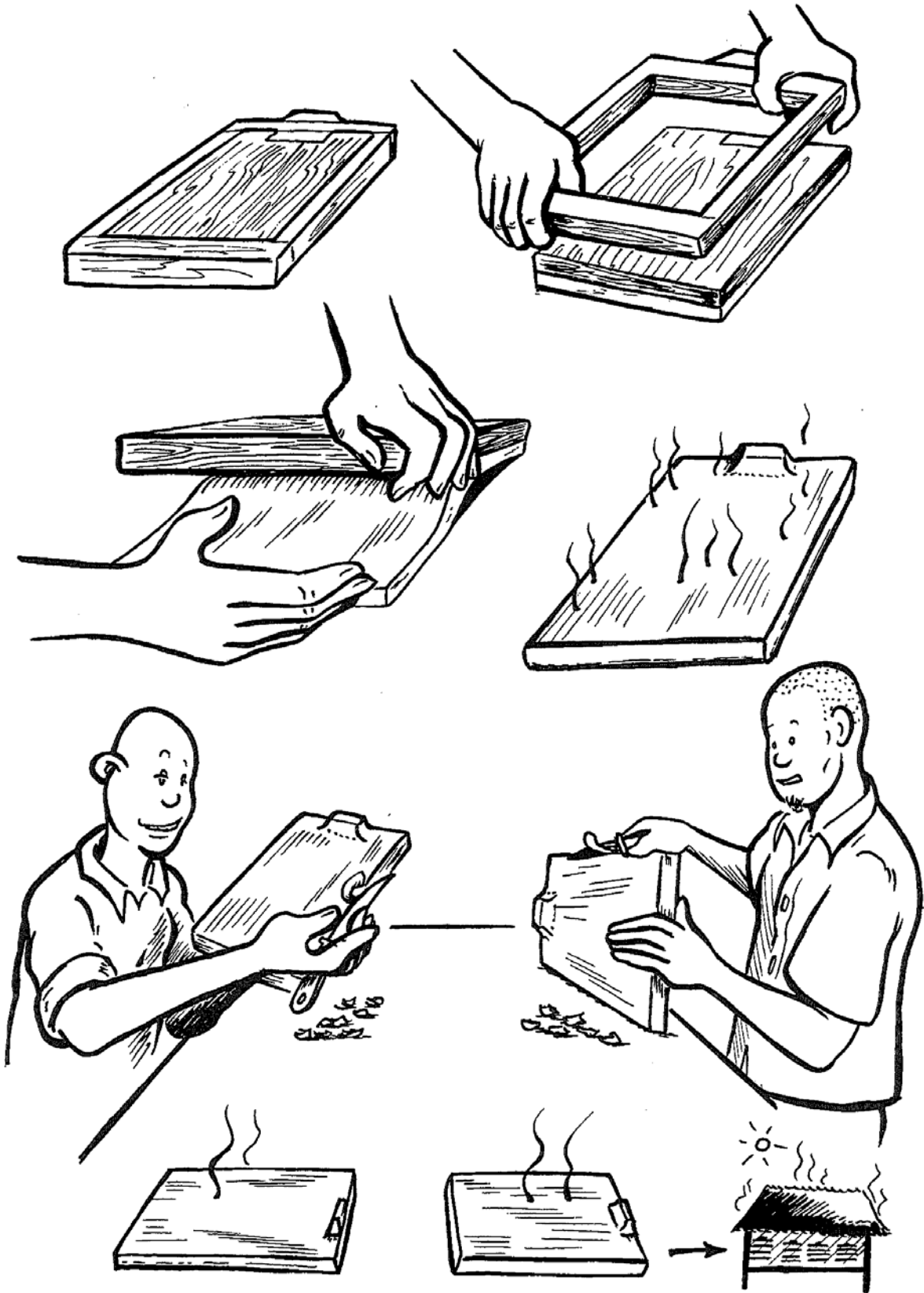


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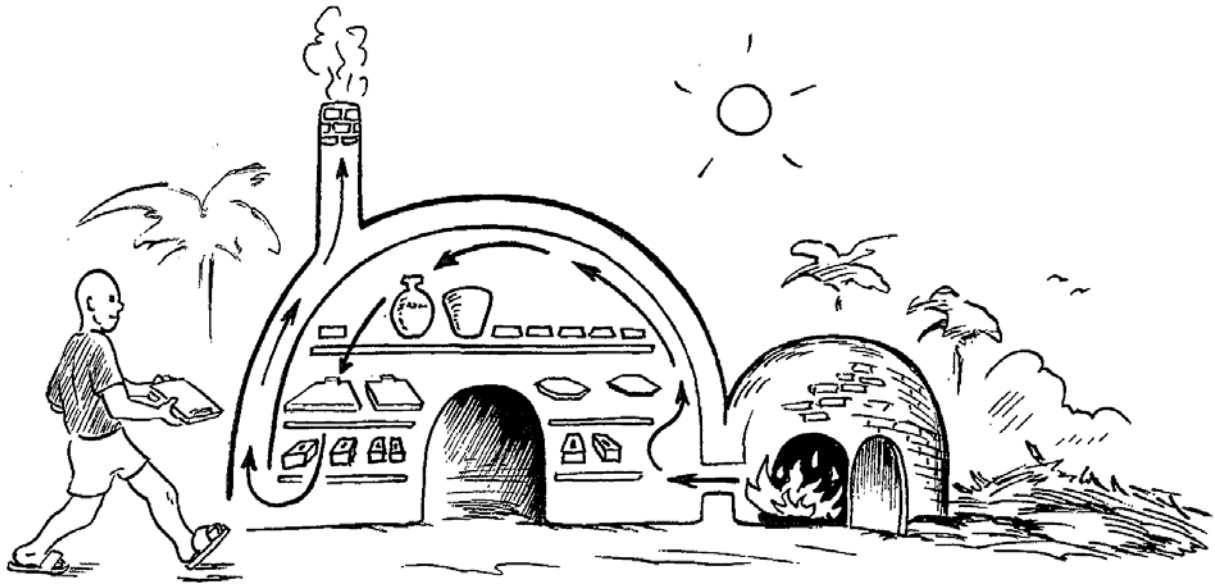


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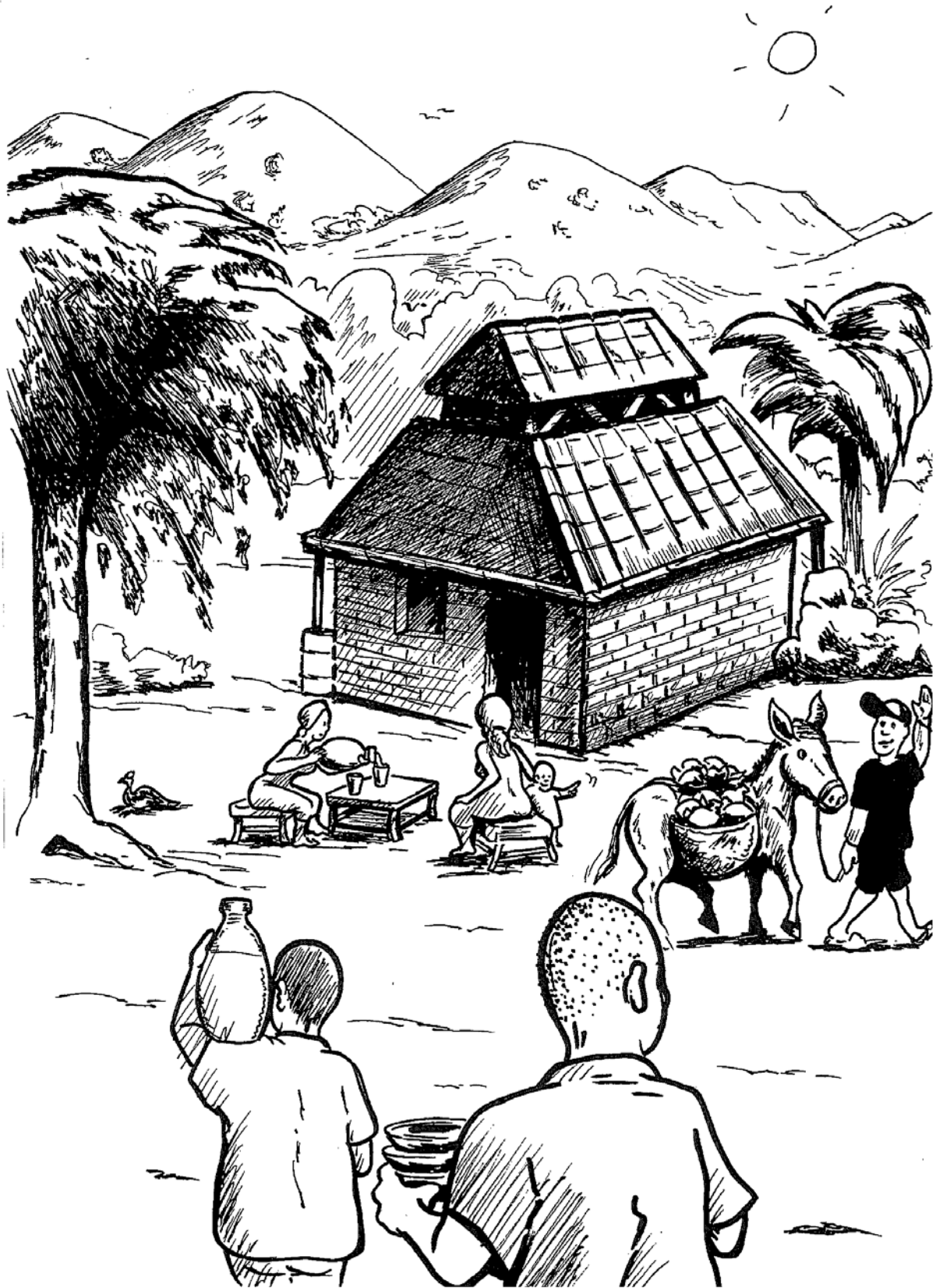




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## Video POTTERY: Technical Information

### Extraction of clay

Clay is found underground, sometimes several metres beneath the surface. Usually, it is dry and friable. To know if it is clay, mix it with water. If the blend becomes flexible and not muddy, it is clay. If you obtain a white foam or liquid or if the blend becomes black and very sticky, it is better not to use this soil.

### Preparing clay

The first step is to clean the clay of any extra material. Then, mix it with water until you obtain a supple and flexible blend. It is possible to store clay when it is damp and carefully covered. It is best to use bags or plastic buckets. Damp rags or sponges can also prevent the clay from getting dry. Protected like this, it can be stored for a long time.

### Beating and kneading the clay

In beating and kneading the clay you prepare it for the modelling. The beating eliminates air bubbles and you can mix the possible layers in the clay. Divide a clay scoop of the size of a melon into two parts – using your hands or a piece of wire – and press them together again. Repeat this 10 or 20 times until you obtain a completely flexible blend.

After beating, only knead the quantity of clay you need for your work. Use hands, palm and fingers, for about 20 minutes.

### Potter's wheel

Within regards to using the potter's wheel, it is better to ask an experienced potter for advice. The potter's wheel is always used to model containers with a round form. The plate of the potter's wheel rotates continuously while you are modelling. Before you start, put a scoop of clay in the middle of the plate which should be clean and damp.

### Bottom and side

The golden rule: be sure that your hands and the clay are always damp. If not, the clay dries out and risks breaking.

To separate the mixture of clay press both thumbs in the middle of the scoop and press to open it until you get the

thickness you want for the bottom. The rest of the clay is used to make the sides. For Making the sides requires some experience. You work with the right hand, well damped, to press the border from the outside to the inside. The left hand is used to lead and to support the interior side. In combining the work with the two hands and the rotation of the clay, bit by bit, you will raise the side.

Remark: In case you fail, you can start again to model and shape the clay blend while it is still damp.

The intensity of pressure applied determines the diameter of the container. If you press more the inside, the sides get more potbellied. The diameter is reduced, if the pressure from outside is stronger. Avoid any abrupt movements and work with flexibility.

With the ends of the thumbs and the index finger you can shape the rim of the container. The edges and the nib can be modelled according to your own imagination.

Finally, after stopping the potter's wheel, remove the container from the plate with a metallic string.

### Finishing and decoration

Before drying, smooth the container with a round stone, a piece of wood or a damp sponge, and do not forget to remove the surplus clay. Correct the surface and draw any motif you like on the container.

### Drying

Before burning, the modelled pottery has to dry 8 to 10 days. After one day, the object gets the consistency of leather, but you still can work on it and clean it.

You recognize a completely dried pottery by its lighter colour and by the sound you can hear when you knock carefully on the clay.

Attention please: a dried pottery is still very fragile. Only after burning it in the oven does it become as hard as a stone.

### Modelling with casts

You can also model clay without a potter's wheel, either with your hands or with casts.

If you want to have a certain regularity in the size, it is advisable to use casts in which the clay is compressed. This method is used for materials as to build tiles, bricks or windows, for example. The casts can be made by a carpenter or a blacksmith. If the cast consists of two parts, the turning out is easier.

Before pressing or putting the clay into the form, coat it with water or – even better – with kerosene; this will later facilitate the turning out.

Materials made of clay are more expensive when you buy them, but the investment is worth it. They last longer and create a healthy indoor climate. The clayed tiles made in Haïti cost twice as much as the corrugated sheet metal, but they create a nice climate in the house. Furthermore, they can last up to 50 years.

### Burning

There are several kinds of ovens; we will describe two of them:

The first is a cylindrical oven made of soil with a flat roof: the firebox is inside. The heat rises from the inside and goes out of holes that are made into the roof and on which the pottery is placed. To avoid that the heat escapes too fast, cover the objects with cooked or damp soil.

The second oven is made of bricks with an adjacent firebox. A chimney carries the air supply, leading the hot gas from the firebox to the burning room. Those gases turn around the pottery and escape through the pipe.

To make the fire, you do not need to cut trees, because you can easily find cane trash or shells of coconut, or all kind of combustibles that burn very well.

## Video POTTERY: Text of Soundtrack

Clay is used in Haiti to make household items, construction materials, and many other things – all very beautiful. In the heart of Haiti's picturesque mountains is this village called Ophain. The people who live here decided to work together to produce everyday items.

Around here, all you have to do is dig to find dried clay, a very brittle substance.

This clay is then mixed with water. Very soon, you get a smooth supple and slimy mass that can be turned into practically anything.

After kneading his clay well, Jean Pierre makes balls the size of melons that will be transformed in the workshop.

In Ophain, they use a potter's wheel. It is made from a heavy rotating wheel.

This is attached to a disk on which the clay is placed. Traditional potter's wheels are made entirely out of wood.

But they can also be made out of modern materials – metal or cement. The working principle is always the same.

Thanks to the wheel's spinning motion, when the lump of clay is placed in the centre of the work surface, Mr Erice only has to press on one spot to change the shape of the entire mass. He can shape the sides of his pot with his fingers: no sudden gestures but gentle flowing movements on both the inside and the outside of what is slowly turning into a jug.

He wets his hands often to keep the clay from drying out and cracking, but he is also careful not to get it too soft and wet.

As soon as the sides take shape, Mr. Erice starts to widen his pot.

He brings his hands together to shape the neck of the jug, before flattening it down with his thumbs.

He uses a length of wire to remove his pottery from the wheel.

A few hours later, the clay is about as stiff as leather. It is ready to be trimmed and smoothed with a bit of wood or a stone.

The bottom is evened out too. And as for decoration, your imagination can run wild.

In Ophain, the kiln is made of clay too. It works well and is quite sturdy. Small cracks can be repaired easily, with more clay of course.

The flat groove can hold a great number of pots, and the holes guarantee that the heat rises evenly. Even once they have started to dry, the pots are still fragile. So Mr. Erice is very careful about piling them up on the kiln. The larger items go on the bottom, the smaller ones go on the top.

The heat must not escape too fast, so the openings are closed up with moist earth and pottery chippings.

The pottery is fired all night long, and becomes as hard as stone.

The next step is quality control. It all depends on the sound that they make – a high note means that the container is fine; a low note means that there are cracks – the pot is rejected.

Dried banana leaves are used to protect the pots from shocks during transportation.

The pottery goes down the mountain and into town on the back of a horse or donkey.

At journey's end, all this pretty and useful pottery will be sold in the streets of Port-au-Prince. The people of Ophain can be proud of their work.

Clay is used to make a completely different type of product in Lorie, near Cap-Haitian. 27 people from this village formed a cooperative that makes construction materials: bricks, floor tiles, and roof tiles.

After treading, the clay is kneaded by hand.

For the final shape, wooden or metal moulds are used. There is a different mould for each type of product, and different people are responsible. For example, for roof tiles, Francois Renaud is responsible for pressing the clay into the mould.

The excess clay is cut off with a piece of string or wire.

Then the tile's surface is polished with a piece of plastic. This is easier to do when the plastic is moistened with kerosene.

The tile boss knows how to get the tiles out of their two-sided moulds.

The clay comes out of the wood easily. Then starts the first stage of the drying process. When the tiles become hard they can be cleaned.

Other products are being manufactured constantly. Take floor tiles for example. Jules Santana is

coating the mould with kerosene, so that the clay will be easy to remove. Each product has a different person in charge, but everyone here is used to working with clay and moulds; so, good results are ensured.

These different materials are fired inside a large kiln, which is big enough for someone to go inside. It is heated from the side. In Lorie, Sugar cane pulp makes perfect fuel. They use it to light the kiln once a month. The end result – high quality, long lasting building materials that provide better insulation than sheet metal does and are quite sturdy.

Cap-Haitian has a lot of homes with tile roofs. It is more expensive of course but it is a good investment because they are wind and weather resistant and can last up to fifty years – proof of the excellent quality of the Lorie men's work.

In addition, clay allows free reign for creativity. Beauty, practicality, or both – clay can be used to make a wide variety of different items suited to everyone's tastes.

## Further Notes

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## Further Notes

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## Further Notes

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## The Campaign Package

This Campaign Package has been developed and provided by the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training, Bonn, Germany. Its purpose is to facilitate the organisation of campaigns for mobilisation and motivation of young people, and for providing them with vocational orientation and guidance. The focus is on marginalised youth in the informal sector of least developed countries.

The package consists of eight components.

The current pilot version is being provided in English only. It will be evaluated in the field. Depending on the feedback that UNESCO-UNEVOC will receive, the package will be developed further.

The activities presented in this Campaign Package are not a guarantee of monetary success. The content is based on research, examples and advice from experts. Every attempt was made to ensure accuracy, and neither the authors nor the UNESCO-UNEVOC International Centre can be held responsible for incorrect information or changing circumstances.

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## Booklets accompanying the Video Series "Learning and Working"

The video series was filmed in Haiti. We would like to express our special gratitude to the people of Haiti.

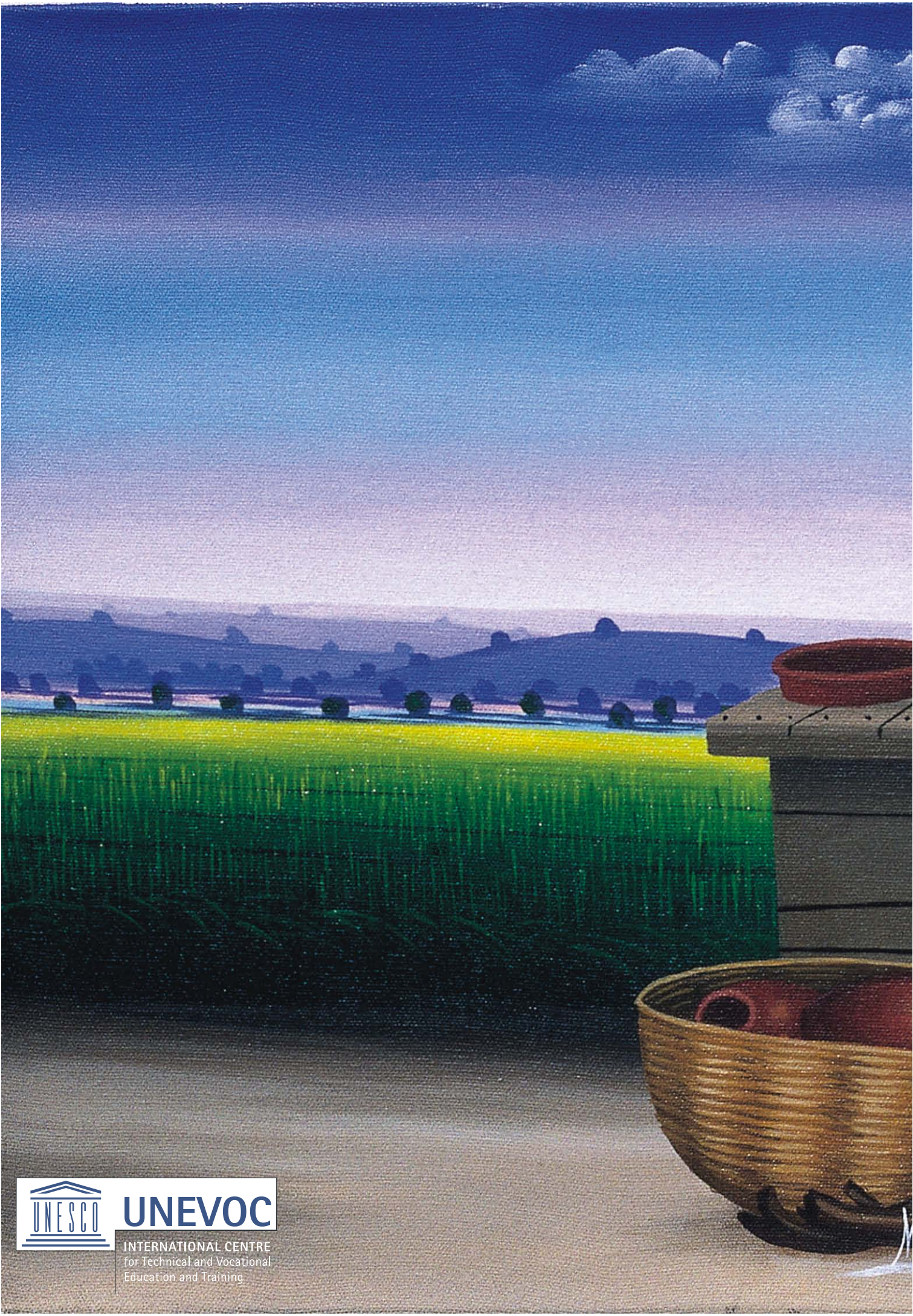
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