The need of today is to conserve, recycle and use resources efficiently, and to save waste. To do this many types of stove have been developed and taught around the world, in order to save fuel in cooking.

One method of cooking while saving fuel is called the **Hay Box**. Food such as rice, pulses and vegetables are brought to the boil on a traditional stove, and then immediately placed in a box packed with straw, and covered. The food continues to cook even though it is not on a stove, because the heat in the pan is enough to keep cooking the food, while the box and straw stop the heat from escaping. After some time the pan is removed and the food is ready to eat.

In this booklet we describe how to make and use a hay box out of locally available resources, to conserve fuel use in the home.
Advantages of using the Hay Box

- Food can be cooked with less fuel (wood, kerosene, gas, electric, etc.)
- Because food is not boiled for a long time, many vitamins are saved
- Because pots are in the flames less, they last longer
- Less time is spent cooking, so there is more time for other activities
- The hay box can be made from local resources
- It doesn’t require much skill to make and use.

Once the traditional stove has brought the food to the boil, the packing of the hay box (hay, straw, wool, cotton, etc) keeps the heat in and this is enough to keep the food cooking. This may take 10-20 minutes longer than if using a direct flame. In this way, for example, rice is brought to the boil, packed in the hay box and covered. It will continue to cook itself and will be ready in about 20 minutes longer than on a normal fire.

You can make a Hay Box in your own home for your own use. There’s no need for any special skill. In this booklet we show how to use a traditional bamboo basket to make the “box”. But instead, a wooden box, cardboard box or even an old fridge or drum can be used. The size of the “box” should be about 4-6 inches wider than the width of the pot. Because in Nepal the bamboo basket is available everywhere, we find this easiest to use.
Method

Straw, hay etc. is packed tightly into whatever type of box or container is available. While packing, leave enough space for the size of pot you will be using. Keep some straw aside to cover the pot later. Keep a towel or blanket ready. The box is now ready for use.

Instead of straw, dried grass, wool or cotton can also be used.

Once the box is ready, the cooking can begin in the kitchen. Start to cook your usual food, such as rice, vegetables, etc., on your traditional stove, as you would normally do.

In the pictures on the next 4 pages we use the example of cooking rice in the hay box. But whatever food you are cooking, use the stove just to bring it to the boil. As soon as the food is boiling it is removed from the stove and placed in the hay box.
In the kitchen, start to cook your usual food in the usual way.

In a few minutes the food will start to boil. Then, cover the pot and remove it from the stove.

Then completely wrap the pot in a blanket or towel.

Place the wrapped pot in the middle of the packed straw.

Cover it all with sacking or a blanket.

Pack more straw on top to completely fill the box.
Finally, place a rock or heavy object to weigh down the lid.

In 20-30 minutes the food in the pot will finish cooking by itself. After this, you can remove the food whenever you are ready to eat.

Here the rice is cooked perfectly.

Maintenance

How to use the Hay Box

After a short while the food in the pot will start to boil. Then, cover the pot and take it off the stove. Then, completely wrap the pot in a thick towel or blanket. Put the pot in the middle of the packed straw. Cover it with more packed straw to completely fill the box. Cover the box with a lid, and finally place a weight on the lid.

The food will cook by itself inside the box in 20-30 minutes. After this, you can remove the food to eat, or you can leave it there for 3-4 hours or until you are ready to eat, and it will stay warm.
Inside the box with its lid and tightly packed straw, food cooks and stays warm for a long time. It works in the same way that freshly boiled tea is kept hot for a long time inside a thermos flask.

Another benefit of using the hay box is that because the food is not boiled for a long time, vitamins are not lost in over-cooking, so the food is more nutritious.

**Another way of saving fuel in cooking**

Just by keeping the lid on the pot while cooking saves a lot of fuel. Nutrients in the food are also saved.

From Humla district capital Simikot Mrs Shivakala Rokay is a member of Jolimundra Vegetable Growers Group. She's made and used a hay box - let's read about her experience.

> “I find this hay box really easy to use and very beneficial. I can start cooking then go off to the fields or the forest and just at the time when I start to feel hungry come home and the food is ready, hot and fresh in the hay box. I boil the rice in the pot and skim off the excess water, then wrap the whole pot with rice and lid in a thick cloth and place inside the hay box, and it’s cooked in just half an hour. I reckon that it saves about the same amount of fuelwood that I’d use to cook the vegetables each meal. I really like methods like this, that can make our lives easier as well as helping to protect the environment.”

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Subjects Related to the Hay Box

Good benefits can be had from the information in this book about the hay box. However, this information is also linked to other methods. For extra benefits let’s read, learn and practice from other related chapters.

Hay Box
Chapter

Improved Stove
Chapter
In Nepal 95% of households use firewood for cooking food. Everyone knows the effects of too much smoke in the kitchen but what to do? Now let’s learn about an easy and successful method.

Diet and Nutrition
Chapter
Many diseases can be prevented by a healthy diet. In this chapter, information is given about the benefits provided by different types of food.