Developing Countries Farm Radio Network

Pack 12, Item 9

Type: Script

Date

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**Making copra, part 2 - Drying coconuts in your ViSCA dryer** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Information on this subject area was requested by DCFRN Participants in Brazil, Chile, Colombia, Dominica, Fiji, Ghana, Guyana, India, Lesotho, Malawi, Montserrat, Pakistan,Philippines, Thailand, Western Samoa, and Uganda.

Presenter: George Atkins

**Special note**

Before using the information in this item, please read Note 1 at the end.

**Suggested introduction**

We at this radio station are part of a world-wide information network that gathers farming information from developing countries all over the world. It's the Developing Countries Farm Radio Network, sponsored by the Canadian International Development Agency, Massey Ferguson, and the University of Guelph.

Through this Network, we bring you information on ways to increase food supplies for your family, or to sell—ways that other farmers have used successfully.

Not long ago on this program, we talked about how to build an efficient dryer for drying coconuts and making copra. With more, here's George Atkins.

**ATKINS:** The last time we talked about coconut drying, I told youabout the ViSCA dryer that was designed in the Philippines. It's a low-cost dryer that Segundino Cebu says any farmer could build. In fact, the only things you might have to buy are an old metal drum with both ends cut out of it, and perhaps a piece of sheet metal I'll mention later.

But let's start today on the subject of the actual drying ofcoconuts in your new dryer. To begin with, Segundino says that for the best copra, you should not harvest your coconuts until they are mature—after they've turned brown in colour; but don't leave them too long before harvesting. Certainly don't wait until they've sprouted.

Now after you've harvested a good batch of nuts, you have to dehusk them. When you do this, pile the husks near the dryer—they'll make good fuel for the first time you use your ViSCA dryer.

The next thing, of course, is to "split" the dehusked nuts into two halves. Segundino says to do this early in the day, because, to get the best copra, you must start drying them within four hours of when they've been split, and after you start drying, you have to keep the heat on until they're done. When splitting and handling the nuts, be careful to keep dirt away from the fresh coconut meat.

Now you're ready to loosely pack the split nuts on the drying platform inside your dryer. A good way to start doing this would be to put in the first split nut with the open side down. Then place another one the same way on top of it, then another and another. You can then lay this pile down on the drying platform against one side of the drying box. You can continue that row of split nuts, placing the coconut halves along that side until the row stretches from one end of the drying platform to the other. Now start laying in the next row right beside the first one; then another row, and another, until you have one whole layer of split, dehusked coconuts covering the drying platform in the bottom of the drying box.

Now you're ready to put in the second layer of split nuts. Segundino suggests that while these rows can be put in lengthwise on top of those in the first layer, this time you should start piling them in from the opposite end of the drying box. After this second layer is in, you can put in a third layer again from the opposite end—then, a fourth and even a fifth layer in this drying box.

Now see what you have—up to five layers of loosely packed coconut halves in your drying box waiting to be dried. It's important though that you get the fire going in the metal drum tunnel of your dryer right away. Remember, I said earlier—within four hours of when you start splitting the coconuts. I also suggested piling the coconut husks for fuel near the dryer the first time. Segundino says they'll give you plenty of heat; but build the fire well into the drum so the heat will flow intothe hole beneath the drying platform and on up through it to dry your split coconuts. To properly dry these nuts, you must keep a good fire going there in the tunnel for eight to 10 hours.

Now after eight to 10 hours of drying your coconuts, let them cool off overnight. The next morning, remove them from the dryer and separate the meat from the shells.

The next step is to put the meat back on the drying platform with any of the less-dried meat on the lower layers in the drying box. You then fire up the dryer for another eight hours or more and after that, you've got a good batch of high quality copra.

Now next season, when you dry copra again, a really good fuel can be the old coconut shells that were left from the copra you dried this time. A good thing about using these old dried shells is that if you can get a piece of sheet metal the right size, you can make a chute for feeding the coconut shells into the fire. That will save you time and effort tending the fire.

To make the chute, you'll need a piece of sheet metal about 1 metre (3 feet) long and 15 centimetres (10 inches) wide. Just bend it into a trough and set it on an angle so one end rests down in the middle of the metal-lined tunnel. It can be propped and tied into position with crossed sticks and wire or twine.

The way it works is that, after getting a fire going in the tunnel, you simply set the chute in place down into the fire. Then in the chute, you pile up a stack of dry coconut shells, one on top of the other from the bottom of the chute. Then, as the shells at the bottom slowly burn, shells in the chute move downward by themselves to where they too can burn. With this arrangement, all you have to do is add more shells from time to time when those in the chute are almost used up.

To store your copra until you can sell it, take it out of the dryer and keep it in a clean, dry place. Don't store it in sacks or other containers; it's far better to be left in an open pile under a roof where there's good air circulation.

Serving Agriculture, the Basic Industry, this is George Atkins.

**Notes**

1. This item is the second of two items in this package on the subject of drying copra. Please use Items 11 and 12 in the proper sequence.