# english blackPackage 90, Script 2

April 2010

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Innovative farmer uses pounded maize cobs to protect stored maize**

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### **Notes to broadcaster**

Farmers experience huge losses after harvesting cereals in general, and after harvesting maize in particular. Between planting and the time when the ear emerges from its sheath, maize is a target for many fungal diseases, insect pests, birds and rodents. If the farmer is able to avoid all those difficulties, the harvest is very good and promises better days for the whole family.

However, the farmer often loses the whole harvest because of damage caused by weevils during storage. Weevils are insects with drill-like mouth parts. Once they have made a hole in a kernel, they store their eggs inside of it. After hatching, the larvae feed on the kernel. They emerge from the kernel at the adult stage. The adult insects lay their eggs in another maize kernel, and the cycle begins again.

At the end of this process, the farmer is left with a sack of maize emptied of its nutritional value and that cannot be planted.

This radio script discusses an option for managing weevils in stored maize.

This script is based on actual interviews. You could use this script as inspiration to research and write a script on a similar topic in your area. Or you might choose to produce this script on your station, using voice actors to represent the speakers. If so, please make sure to tell your audience at the beginning of the program that the voices are those of actors, not the original people involved in the interviews.

**Characters**

Host

Mr. Bio Doko, farmer

Setting: Gbégourou, one of the market villages of Parakou, a large city in Benin.

*Signature tune to introduce the show, then fade out*

**Host:** Hello, dear listeners! Welcome to your show. Today’s talk will be about a method to protect maize from pests during storage.

Farmers store maize not only for their family’s food needs but also to keep some for sale later in the year when prices rise, allowing them to earn some cash. But many farmers do not get the results they expect because they do not use good storage methods. Good storage methods would prevent the heavy losses experienced every year and would allow farmers to save a lot of time.

Ladies and gentlemen, recently we were in Gbégourou, near Parakou, Benin, a village renowned for its food crops.

The weather was nice that morning, and the villagers were busy. Some were returning to their fields, while others were preparing to sell sacks of maize. We had made an appointment with Mr. Bio Doko to visit his farm. He has always been a role model for other farmers because he sells healthy, good quality maize. After our visit, he kindly agreed to come to our station, answer our questions, and share his knowledge on maize storage. Welcome!

**Bio Doko:** Thank you for inviting me.

**Host:** Friends and faithful listeners, we know many of you are with us. Thank you for listening to this interview with Mr. Bio Doko.

*Fade up of musical interlude, then slow fade out under narration (5 seconds)*

**Host:** As a native of this place, could you explain to us how farmers usually store maize?

**Bio Doko:** Usually, in areas like ours that are difficult to access because of bad roads, harvest takes place late, and the farmer dries the maize ears before storing them in the granary.

But very quickly, the granary is invaded by weevils that destroy the ears. This puts the farmer in a difficult situation during the period between the exhaustion of food reserves and the following harvest. It forces the farmer to sort the grains, to separate the damaged from the healthy grain.

At the end of this process, a significant amount of maize is useless, and a lot of time has been wasted in sorting the good maize from the bad.

**Host:** What does the maize destroyed by weevils look like?

**Bio Doko:** The kernels are full of holes, and they break down when you press them between your thumb and index finger. They are not good for eating and they do not germinate when planted. So you can’t sell them.

**Host:** How does maize stored this way lose its value?

**Bio Doko:** Adult weevils lay their eggs and place them inside the grain. The larvae that come out of the eggs feed mostly on the inner part of the kernel, which is the most nourishing part. Thus, these grains attract no-one in the market, neither for eating nor for planting.

*Fade up of musical interlude, then slowly fade out under narration (5 seconds)*

**Host:** What methods have you used to prevent losses like those experienced by your neighbours?

**Bio Doko:** I use two methods. But whatever the method, it’s important to always observe the following rules:

First, harvest at the right time. A late harvest increases the chances of pest attacks in the field. Farmers should understand that the most serious problems always come from trying to store grains that are already infested. Then, you must choose the best ears in the batch before storing them. Thirdly, dry the maize to reduce the moisture. Finally, you must store the maize in a granary which is treated with a safe and effective insecticide.

After one to four months of storage, the external leaves and the kernels are removed. Then, the kernels are treated once again with a safe and effective storage insecticide and stored in sacks. This is one way of preventing weevil attacks.

The other way requires no chemicals. As soon as the cobs have properly dried, you must remove the kernels and pound the cobs in a mortar. Then, you must mix the pounded cob with the thin whitish films that are left behind when the kernels are removed from the cob.

This mixture is poured into jute sacks with the kernels and stored in a clean granary.

This method can save maize stocks from one season to another. In fact, with this method, they can be saved for up to 12 months.

*Fade up of musical interlude, then slowly fade out under narration (5 seconds)*

**Host:** Can you please explain to the listeners the basic principle behind this storage method?

**Bio Doko:** It is very simple! When the maize kernels are stored in the sacks, an adult weevil finds a kernel as soon as it emerges from another kernel. It attacks the second kernel, places its egg inside of it, and the cycle starts over again. After a while, the whole sack of maize is damaged.

But when the mixture is well compressed in jute sacks, the adult weevil that comes out of a maize kernel cannot find another kernel immediately. The fine film and the powder from the cob are obstacles to its movement. The adult weevil fights for a long time, then tosses and turns around, but finally gets tired and dies. So the chances that all the weevils coming out of kernels will find another healthy kernel dwindle and the maize is preserved.

**Host:** Because you have used this technique often, could you explain to us the advantages of compressing pounded maize cobs to store the grain, and why you are satisfied with this technique today?

**Bio Doko:** I have to say that I am doing pretty well and for several reasons. For one thing, I do not have to sort the kernels any more, after taking them off the cob. That saves me some time.

I have also established customer loyalty due to the quality of the maize I sell for consumption and for planting. Finally, I get my full payment on the spot. Others have to grant credit because of clients’ reservations about the quality of their products. So I am happy.

*Fade up of music, then slow fade out under narration (5 seconds)*

**Host:** Thank you, Mr. Bio Doko. To summarize, Mister Bio Doko recommends that farmers pound maize cobs in a mortar, mix that powder with maize kernels and pour the mixture into jute sacks. The mixture of cob powder and the fine films from the cobs significantly slows the weevils’ activity and hence the level of infestation. He also recommends making sure that the storage area is very clean. Monsieur Doko is a happy man. This method should allow farmers to store their maize with no problem, from one season to the next.

*Fade up of music, then slowly fade out under narration (5 seconds)*

**Host:** Dear listeners, thank you for your kind attention. Today, we talked about the practice of pounding maize cobs to store maize. Please discuss this practice amongst yourselves and contact the radio station if you have questions or suggestions. Good bye and be well.

*Fade up of musical interlude (10 seconds) then fade out.*

**Acknowledgements**

Contributed by: Issakou Yagui Assouma, Deeman Radio, Benin.

Reviewed by: Peter Golob, post-harvest consultant.

Translated by: Madzouka B. Kokolo, consultant.

Thanks to: Nestor Aho and Ganssou Kossou, professors and researchers at the University of Abomey-Calavi, Faculty of Agronomic Sciences.

**Sources of information**

Nestor Aho and Ganssou Kossou, “Storage and conservation of tropical food grains”, 1993, Les Flamboyants Edition, 125 pages.

Mr. Bio Doko, farmer, interviewed on October 25, 2009.

Special thanks to the Commonwealth of Learning (COL), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Food and Agriculture Organization of the United Nations (FAO), the Government of Canada through the Canadian International Development Agency (CIDA), the Donner Canadian Foundation, the World Association of Community Radio Broadcasters (AMARC), Inter Press Service (IPS) Africa, and the Technical Centre for Agricultural and Rural Cooperation (CTA), for supporting the radio scriptwriting competition on smallholder farmer innovation.

http://www.grade-eh.com/clipart/myflags/flagcanada50x25.gif

Picture3cta[1]cta[1]