

# Pack 105, Item 2

Type: Interview

January 2017

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**Friendship and farming: Intercropping cowpea with cereals**

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**Notes to broadcaster**

Cowpea is grown on more hectares than any other legume crop in Ghana, and is the second biggest legume in terms of yield. The crop is an important and cheap source of protein for rural and urban families. Indeed, cowpea is often referred to as “the poor man’s meat” because it has so much protein. The potential yield of cowpea is up to 1.5 tonnes per hectare, but the usual yield in Ghana and the rest of West Africa is less than 500 kilograms per hectare.

Cowpea tolerates shade and therefore can be intercropped with maize, millet, sorghum, and other crops. This makes cowpea an important part of traditional intercropping systems, especially in the dry savannah zone. In these areas, dried stalks of cowpea are a valuable animal feed.

Cowpea provides rural families with food, animal feed, and cash income. Processed products include cowpea flour, cowpea cake, cowpea fritters, and cowpea chips. These are sold in village markets.

In this drama, two farmers live with their families in a town called Yenkyi. The two families are closely knit together by friendship and share their ideas together—ideas about their farms and every other aspect of their lives. Then they decide to expand their farms by growing cereals alongside cowpea.

You might choose to present this drama as part of your regular farming program, 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.

You could also use this script as research material or as inspiration for creating your own programming on growing cowpea or similar topics in your country.

Talk to farmers and experts who are growing cowpeas or are knowledgeable about the crop. You might ask them:

Is intercropping cowpea with cereals or other crops common in your area? If so, which crops? And what are the results, in terms of yield, income, and livelihood?

What challenges do farmers face with intercropping cowpea? Have some farmers devised solutions to these challenges that they could share on your program? What do extension agents and other experts say about these challenges?

Estimated running time for the script: 20 minutes, with intro and outro music.

Estimated running time: 25 minutes, with intro and outro music.

**CHARACTERS**

ABU: A 45-year-old man who is a cowpea farmer and a determined person. He has a sense of humour, and is married to Sarah.

MUSA: A 47-year-old man who is a cowpea farmer and is married to Lydia. He is shy, mostly reserved, and modest compared to his friend, Abu.

SARAH: A 32-year-old woman, married to Abu

LYDIA: A 30-year-old woman, married to Musa

CHIEF: A 60-year-old man and chief of Yenkyi town

MR. OPPONG: A 40-year-old man and the agric extension officer in the town

CITIZENS: Citizens 1 and 2 represent the citizens of Yenkyi community.

NARRATOR: The story teller of the play. He passes along vital information on intercropping cowpea with cereals.

**NARRATOR:**Hello, I am Abdul, and you can call me Ab the storyteller.

Today, I have an interesting story titled *Friendship and farming*. There lived two farmers in a small town called Yenkyi. As the title suggests, they were very good friends, so close that their wives and children shared the same bond of friendship, and the two families considered themselves as one.

They also shared the same occupation. Their only means of livelihood was farming, and they enjoyed working together on each other’s farm.

In their town, cowpea farming was the main occupation, and the townsfolk stuck to it. Nobody dared to farm other crops because that was the status quo, and change wasn’t appreciated. It was believed that their soil was only good for cowpea and that no other crop would survive on their land.

Everything went the way it should until Abu decided to break the status quo. He decided to grow cereals alongside cowpea, after he heard on the radio that it is possible to do so. He even learnt that there are benefits from intercropping cowpea with cereals. Why not give it a try, he thought.

Now let’s see how Abu fares with his decision. Will he succeed in changing the townspeople’s perception of farming?

Let’s follow him as he tackles something new, and learn from his successes and failures, his limitations and strengths. We must watch out for his bosom friend who also catches up with him!

SCENE 1

SETTING: ABU’S HOUSE

CHARACTERS: MUSA, ABU

**SFX:**  BIRDS CHIRPING

**MUSA:** Abu, are you still sleeping? Won’t you go to the farm today?

**ABU:** I will, but I overslept.

**MUSA:** You and sleep!

**ABU:** It’s not my fault; my wife is a tigress at night! Oh my, doesn’t she wear me out! (GIGGLES)

**MUSA:** Hahahaha … you never cease to amuse me. But keep your bedroom matters to yourself.

**ABU:** Look who’s trying to be modest! Don’t forget that I know you inside out.

**MUSA:** Stop bragging; no-one knows me better than my wife. And keep quiet—the children are around.

**ABU:** Well, that was just by the way.

(PAUSE) I have been thinking about expanding my farm. I want to add some cereals to the cowpea this season and I need advice on what to do. I heard on the radio that it is possible.

**MUSA:** Ah, but why the sudden change of heart? We are cowpea farmers, you and I and every other farmer in this town. You can’t grow cereals. They won’t survive this long drought.

**ABU:** They will, but only if I intercrop my cowpea crop with cereals. The benefits are good. And I learnt that there is a better chance that the cereal crop will survive during a long drought if it is intercropped with cowpea.

**MUSA:** Hmmn … okay, but don’t say I didn’t warn you. I prefer to grow my cowpea as usual, but I will consider your proposal later.

**ABU:** Who said this was a proposal? I was only telling you my own decision.

**MUSA:** (LAUGHTER) You will never change. I’ll take my leave now.

SCENE 2

**NARRATOR:** So Abu decided to grow cowpea with cereals. And he wasn’t bluffing—he boldly planted cowpea and millet!

But before planting, he learnt from a radio program that there are many varieties of cowpea in Ghana. He chose the spreading types because they are best for intercropping, while the erect or semi-erect types are better for sole cropping.

Abu made a lot of progress, even though every farmer in his community was waiting for him to fail. On the contrary, his wife Sarah is very excited about her husband’s bravery and won’t stop bragging about it. After all, her husband is the first farmer in their town to drift away from growing only cowpea. She believes they can make a lot of money from this harvest and can’t wait to buy herself a new pair of shoes. Sarah visits Musa’s wife, Lydia, and they talk about their husbands*.*

SETTING: LYDIA’S HOUSE

CHARACTERS: SARAH, LYDIA, MUSA

**SARAH:** Lydia, Lydia, are you home?

**LYDIA:** Yes, come in, Sarah, I am preparing my children’s favourite meal.

**SARAH:** You still prepare *mpotompoto* for your children? I thought they had outgrown it.

**LYDIA:** That is very funny—nobody outgrows *mpotompoto*! *(Editor’s note:* mpotompoto *is a Ghanaian dish made from a combination of soup and any root crop—yam, cocoyam, sweet potato, etc.)* It’s still a family delicacy and you know that vitamin A is essential for everybody. Orange-fleshed sweet potato does the trick.

**SARAH:** Good for you, my dear. Well, I came to inform you about my husband’s success on the farm he intended to expand.

**LYDIA:** You mean he finally grew cowpea with cereals?

**SARAH:** Exactly!

**LYDIA:** And it worked?

**SARAH:** Of course it did. We have survived the drought so far, and we will have a bountiful harvest in no time.

**LYDIA:** Wow, that is brave. I always thought we could grow a lot more than cowpea … only that it seems my husband is scared of change.

**MUSA:** Who is scared of change? Me? Not at all. I’m only being cautious. You know how tragic it can be to lose your crops by taking rash decisions. But your husband will be my inspiration to try something different next season.

**SARAH:** Copycat! So that’s what you intend to do? Copy my husband? (LAUGHS)

**MUSA:** I am no copycat. I am simply following in his footsteps. I would rather he starts before me so that I can learn from his mistakes. I can’t afford any losses this season; my rent is due and I need the money from my cowpea farm to pay it off.

**LYDIA:** Okay, enough! I have heard enough of your blabbering! My special delicacy is ready!

**SARAH:** Yes!

**MUSA:** Yes, I am hungry.

But on a more serious note, Lydia, is it true that you don’t have to add fertilizer to the soil when you grow cereals with cowpea? I heard cowpea was already rich in nitrogen. Do you know if your husband applied any fertilizer to the soil?

**SARAH:** (CONTEMPLATING) Hmmn, I cannot give you an accurate answer, but you can ask my husband later. All I know is that we saved some money that was supposed to be for fertilizer, and gave it to our daughter.

**MUSA:** How much money are you talking about?

**SARAH:** Musa, stop interrogating me—it was enough to cover my daughter’s sanitary wear for the month. But we still bought some fertilizer … yes … phosphorus, we bought more of that. My husband says that phosphorus helps the cowpea to fix its own nitrogen. He is certain that this will increase the yield. I can’t wait to see the harvest.

**MUSA:** Wow, that’s good news. Fertilizer is very expensive these days.

**SARAH:** It is. But enough of all this serious talk; I am enjoying this meal (EXHALES WITH SATISFACTION). Lydia, I am not leaving this house without sending my husband a taste of this delicious *mpotompoto*.

**ALL:**  ROARING LAUGHTER

SCENE 3

**NARRATOR:** Musa has done all of his investigations about Abu’s new farming practice. He learnt from the agricultural extension officer that Abu didn’t have to use much fertilizer because, when cowpea is intercropped with a cereal, it transfers some of its nitrogen to the cereal, which helps the cereal grow stronger and increases yields.

He also learnt that he must plant the second cowpea crop right after the first cowpea is harvested. The extension officer told him that, after every four rows cowpea, he should plant two rows of cereal. This spacing helps both plants to grow well and minimizes the competition between the two of them for sunlight, water, and soil nutrients.

Musa was even more fascinated by the fact that cereals are more likely to survive during calamities like drought, pests, and disease when they are intercropped with cowpea. By this point, Musa knew he was more than ready to follow in the footsteps of his friend. But what really sealed the deal was Abu’s successful harvest.

SETTING: MUSA’S FARM

CHARACTERS: ABEL, MUSA

**SFX:**  BIRDS CHIRPING, SOUND OF HOEING

**ABEL:** Daddy, why are you creating rows?

**MUSA:** Abu made the mistake of broadcasting his seeds. I helped him harvest his crops, and we struggled. We harvested a mixture of millet and cowpea, but it was thoroughly mixed up, and that made it very difficult to separate them.

**ABEL:** Oh, so that explains why all his produce ended up as Winnie mix. (LAUGHTER) (*Editor’s note:* “Winnie mix” *is a powdered mixture of cereals, legumes, or grains that is usually considered baby food in Ghana.)*

**MUSA:** It wasn’t so bad. He made some income, but I don’t want to repeat his mistake.

**ABEL:** So what are we going to do?

**MUSA:** We will plant in rows, as advised by the extension officer. Four rows of cowpea, then two rows of sorghum.

**ABEL:** Ok, that makes sense. So you are saying that planting in rows is the best method when you intercrop cowpea and cereals.

**MUSA:** It is the best way to grow any crop, whether you are intercropping or mono-cropping. It makes it easier to apply fertilizer.

Wait, don’t start planting yet. Here … feel the soil. The extension officer told me that intercropped cowpea can affect the yield of the cereal if the soil is stressed.

**ABEL:** (HAPPILY) Oh, so it’s a good thing that our soil is fresh and moist. But why are we not planting the cowpea today?

**MUSA:** Well, Mr. Oppong says that, when you interplant sorghum and cowpea, you must plant your cowpea three weeks after planting the sorghum.

Fortunately, we have enough moisture in the soil to help boost our cereal yield. You should also remember that we need to return in two weeks to weed the farm; we cannot entertain any weeds.

**ABEL:** (CLAPS HANDS) That sounds really good to me. I don’t want a delay of school fees next term.

**MUSA:** What delay? Ah, give me some credit.

Remember thatwe won’t harvest the cowpea and cereal at the same time. That is why the spacing between the cowpea and the cereal is an arm’s length wider than the spacing between the cowpea rows. That way, we won’t damage the cereals when harvesting the cowpea—or vice versa.

**ABEL:** Ok dad, but you know that …

**MUSA:** (INTERRUPTING) Get to work; you talk too much. You will understand financial difficulties once you are old enough to be in my shoes.

**SFX:**  GRUMBLING FROM ABEL

SCENE 4

**NARRATOR:** Abu’s second harvest and Musa’s first harvest were bountiful. They planted their crops at the onset of the rains, which prevented the rains from soaking their grains. By planting them at the outset of the rains, the farmers ensured that they were mature and they had enough time to dry them well. Abu planted his millet at almost the same time as his cowpea while Musa planted his cowpea three weeks after planting his sorghum. They also learnt from Mr. Oppong that intercropped maize and cowpea must be planted on the same day.

The two farmers are excited because a buyer from the city wants to buy all their harvest for a factory in Accra. There is merry-making in the town.

The townspeople people were afraid that the cowpea yields would decrease with intercropping. But their fears were relieved when they learned that good management can ensure that crop yields are not decreased.

They also learned that the two crops cooperate with each other. The cowpea transfers its nitrogen to the sorghum and increases its yield. And the sorghum does not interfere with the cowpea yield. When intercropped, the yields of the two crops together will probably be higher than if farmers grew both of them alone.

Everybody is happy about the two daring farmers and their success. The townspeople have gathered at the chief’s palace to celebrate and to learn from the two farmers.

SETTING: CHIEF’S PALACE

CHARACTERS: CHIEF, ABEL, MR. OPPONG, CITIZEN 1 & 2

**SFX:**  MUSIC IN THE BACKGROUND

**CHIEF:** We are gathered here to celebrate the success of our farmers Abu and Musa, who have not only succeeded in breaking the jinx we had about intercropping, but have landed themselves a big opportunity to make money. This has opened a great door for all of us.

**SFX:**  APPLAUSE

**CHIEF:** Abu managed to grow cowpea and millet while Musa planted cowpea and sorghum. They had a bountiful harvest and we are here today to encourage all the farmers in this town to try something different.

**CITIZEN 1:** I beg your pardon, Nana *(Editor’s note:* ‘Nana’ *is the local title for chiefs in Ghana*). Are you saying that growing cowpea with other cereals is better than growing it alone?

**CHIEF:** Not at all. I am only suggesting that you all must embrace change. You are all aware that intercropping was branded a taboo in this community because of our inability to succeed with intercropping in our farms. Today they proved us wrong, and we must learn from their bravery.

**ABU:** Thank you. I’m very honored by this kind gesture, my chief and everyone present. I must say that it was not an easy journey for me. My first harvest did not go well, but I did not give up. Rather, I asked for help from Mr. Oppong, our extension officer.

I learnt that I have to plant in rows, and the spacing must be wide enough that I do not damage any of my plants when harvesting. Cowpea has different maturing stages and some of my plants will be harvested earlier than others. So spacing them correctly helps me to not lose yield.

**CITIZEN 2:** Why should we plant in rows? It is too much work. I have always sprinkled my seeds and I’m okay with that.

**ABU:** It is important to plant in rows because it helps you to manage your crops well. You know exactly where you planted your cowpea and where you planted your cereals. It makes it easier to apply fertilizer, it makes spraying the farm a lot easier, and it makes it much easier to manage weeds.

**MR. OPPONG:** That’s true. You must also make sure to examine your farm regularly for any increase in pests. Try your best to pick out all the beetles you find with your hands. I advise you to wear gloves because some beetles can produce liquid that burns the skin.

**CITIZEN 2:** Wow, isn’t that too much work?

**MR. OPPONG:** Hahaha—you can also spray your farm with neem seed extract or even sprinkle ash on it. This has also been proven to be effective. Most importantly, plant seeds of varieties which are resistant to pests and diseases; this method is very reliable. These practices will help reduce insect pests such as maruca pod borer and pod-sucking bugs that attack cowpea. But if all of these methods are not working for you, then you can consider spraying insecticide to increase the harvest.

Managing pests will help boost your cowpea yields, and the cereals will also be free from such insects.

Do your best to weed your farm two weeks after planting. This will prevent weeds from growing and competing with your crops for light, water, and soil nutrients, because this can greatly reduce your yields.

**CITIZEN 2:** Why two weeks? I thought we didn’t have to weed until four weeks after planting.

**MR. OPPONG:** I advise you to weed in two weeks because weeds mostly affect cowpea at the early stages. It’s best to complete the weeding by the end of the sixth week. After that, cowpea covers the ground, which stops the weeds. We noticed with Musa’s farm that the sorghum grew taller because the cowpea fixed nitrogen in the soil. But that did not affect his cowpea yields, and because he spaced his crops an arm’s length apart, he was able to manage the growth without stress.

**CHIEF:** Wow, all this is very eye-opening. Musa, tell us more?

**ABU:** (PAUSE, THEN CLEARING HIS THROAT) As you all know, Musa is shy, but I will cover for him. (LAUGHTER FROM CROWD) Even though we worked on two different cereals, we used almost the same methods.

We both decided to see Mr. Oppong for help and he guided us to our victory. Your yields will not decrease just because you practice intercropping. You can make up for any competition between the two plants with good farm management. If you manage both plants well, the result will be rewarding. Make a point of learning about the cereal you choose, whether it is maize, sorghum, or millet. This will help you balance the harvest you get from the two crops.

**SFX:**  ApplauSE from crowd

**CHIEF:** This has been insightful. I implore every farmer here to see Mr. Oppong for more information and answers to your questions. Let the drums begin and the merrymaking continue!

**SFX:**  applauSE, laughter, and shouts from crowd

## Acknowledgements

Contributed by: Abena Dansoa Danso, Farm Radio International, Ghana office.

Reviewed by: Prof. Samuel Adjei-Nsiah, International Institute of Tropical Agriculture, Tamale, Ghana

**Sources of information**

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Interviews:

Danley Colecraft Aidoo, Graduate research assistant, University of Ghana, Legon, May and June 2016.

Fitatalu Abdul (female), Edjura, Ghana, member of Freedom Farmers, grows maize and cowpea, May 2016.

Hawa Bawani (female), Edjura, Ghana, small-scale farmer and member of Christian Farmers, grows cowpea, maize, and groundnut, May 2016.

Salifu Zongo (male), Edjura, Ghana, small-scale farmer and member of Mayeden Farmers, grows rice, cowpea and maize, May 2016.

Abdul Rahman (male), Edjura, Ghana, small-scale farmer and member of Nokwadie Farmers, grows cowpea, maize, rice and millet, June 2016.

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