Developing Countries Farm Radio Network

Package 11, Item 5

Type: Script

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**Raising ducks in the paddy field**

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Information on this subject area was requested by DCFRN Participants in Argentina, Bangladesh, Bolivia, Cameroon, Chile, Colombia, Dominica, Dominican Republic, Honduras, India, Malaysia, Mexico, Nigeria, Palau, Paraguay, Philippines, Senegal, Sierra Leone, and Tanzania.

Presenter: George Atkins

Interviewee: Wu Su, farmer

Interpreter: Lei Qi Shi

**Special notes**

1. All information in this item was obtained in an interview with a rice grower at the edge of his paddy field in China. This information is only applicable to farmers who grow rice in small, shallow water paddy fields.

Ducks could not be raised, of course, in paddy fields where chemical pesticides or herbicides are used that would be harmful to the ducks or to people who later eat them. (A warning to this effect is included in the item).

2. Re interpreting/translating this information for farmers you serve in their local language or dialect:

a) The Chinese land measure unit is the "mu" (pronounced "moo")

15 mu = 1 hectare (1 mu = 1/15 hectare)

6 mu = 1 acre (1 mu = 1/6 acre)

b) The farmer being interviewed speaks only Chinese, so all English language answers to my questions are by my Chinese interpreter, Lei Qi Shi.

In most cases, I repeat information I get in the answers in somewhat different wording. I have done this to help you get the essential information from the interview as clearly as possible to pass on to your farmers.

**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.

Today we have information on how some rice growers in China save money and make money. Here's George Atkins.

**GEORGE ATKINS:** Have you ever heard of farmers who keep ducks and who have them swimming around in the water in their paddy fields? Lots of farmers in the People's Republic of China do this.

Not long ago, I was in Fujian Province in Southeastern China. Lei Qi Shi was my interpreter and we recorded this.

We're here on the An Yuan Commune and I'm chatting with Mr. Wu Su who is a farmer. We're standing right in front of his paddy field which has ducks in it. How many ducks are there in this paddy field now?

**LEI:** Mr. Wu says that there are 257 ducks in this paddy field.

**ATKINS:** And how old are these ducks?

**LEI:** They're about 40 days old ... we put the ducks into the paddy field for controlling the insects.

**ATKINS:** What kinds of insects are these ducks able to control in the paddy field?

**LEI:** Several kinds of insects. One is the paddy field flea; another is an insect that grows on the bottom (under the water) in the paddy field on the roots.

**ATKINS:** What's the best depth of water to grow the paddy rice in if you have ducks in it?

**LEI:** The depth of water is 1 to 2 inches (2-1/2 to 5 centimetres) for having ducks in the paddy field.

**ATKINS:** Right now I'm looking at a duck and he has just taken an insect right off of one of the leaves of a paddy plant—and now I see some others with their bills right down in the bottom of the paddy field. So they eat different kinds of insects. How many different kinds of insects might they be able to control?

**LEI:** The ducks can eat several different types of insects. They save us money that we would otherwise have to pay for pesticides. Normally we save about 4-1/2 kilograms of powdered pesticide per mu (68 kilograms per hectare or 60 pounds per acre) by having ducks in the paddy field for controlling insects. By raising ducks in the paddy field, we've reduced the cost because insects have been eaten by the ducks.

**ATKINS:** Let's just go over that again. One reason Wu Su has ducks swimming around in his paddy field is to control insects in his growing crop. In fact, because of the ducks, he doesn't need to buy any insecticide to control insects in his paddy field. He says that, the way he does it, it's best if the water is between 1 and 2 inches (2-1/2 and 5 centimetres) deep. Of course the ducks won't have any trouble swimming in water as shallow as that because they're not very big.

Now, we've learned that Mr. Wu not only grows rice, but he also raises ducks. The question is, however, how many ducks must a farmer have to control insects in his or her paddy fields? Here's Mr. Wu's answer:

**LEI:** We put 200 ducks into the paddy field per mu (3,000 per hectare or 1200 per acre). 200 ducks can control the insects in 5 mu (1/3 hectare or 3/4 acre) of paddy field because they eat the insects in this paddy field, and then the ducks go into another paddy field and later into another field. And then 1-1/2 months before harvesting the rice, we move the ducks out to some other places.

**ATKINS:** So there you have it. Wu Su says he grows his paddy in several small paddy fields. Altogether, he grows rice on 1/3 of a hectare (3/4 of an acre) of paddy fields. He says he can control the insects on that much land with 200 ducks. The way he does it is first to put them into one of his small fields where they eat up all the insects; then he moves them into another paddy field—then to another, and so on.

So he keeps rotating the flock of ducks among all these paddy fields until about 1-1/2 months before harvest time. If you try out Mr. Wu's method, remember that.

You should also remember, of course, not ever to put ducks into a field where you may have recently used any chemical insecticide. The chemical could be bad for the ducks or for people who eat them.

Now two important plant nutrients that rice plants need are nitrogen and potassium and many farmers buy them in fertilizer to put on their paddy field to get a better crop. I had heard that by having ducks in the paddy field the ducks help to add this kind of fertilizer, so there in Wu Su's paddy field in China, I asked this question:

Is there any advantage in having the ducks in the paddy field because of their droppings or manure? Does that help the rice any?

**LEI:** This has increased the nitrogen and the potassium in the paddy field.

**ATKINS:** Well then, I can see the advantage in raising ducks in the paddy field is the fact that Mr. Wu actually doesn't need any insecticides and he also saves on fertilizer. But what if he kept the ducks in the river or fed them on rice back at his home? Would the ducks grow faster than they do in the paddy field?

**LEI:** Mr. Wu says that when he raises the ducks in the paddy field, it only takes 3 months to the time when he can sell the ducks in the market. Raising the ducks at home, however, it will take 6 months and will take more feed and thus it will cost more.

**ATKINS:** So now, we've seen that Wu Su's ducks reduce his cost of growing rice and that by having them in his paddy field, the ducks themselves grow big enough to sell sooner—and that, in turn, reduces his cost of producing ducks for selling in the market. Now we'll find out about managing the ducks, starting with this question: How old are the ducks when they are first put in the field?

**LEI:** The ducks can be put in the paddy field when they are between 7 and 10 days old.

**ATKINS:** How old can the ducks be and still be useful in the paddy field?

**LEI:** The ducks can be grown to the weight of 1 kilogram (just over 2 pounds). After reaching that weight of 1 kilogram (just over 2 pounds), their efficiency in controlling (eating) insects is reduced; and also when the ducks weigh more than 1 kilogram (just over 2 pounds) they can be sold in the market. They sell very well at about 1-1/2 kilograms (3 pounds). The big ducks can be grown to 2-1/2 kilograms (5-1/2 pounds).

Before we sell the ducks in the market, we keep them for some time in the yard at the house.

**ATKINS:** What about feeding the ducks in the paddy field? Must you feed them anything else in addition to the insects they eat?

**LEI:** The ducks mainly eat insects in the paddy field. In addition, we also feed them some rice. We feed the rice to the ducks when they come back to the house in the evening.

**ATKINS:** So then the ducks are just in the paddy field through the day time?

**LEI:** Yes, in the day time. Then when the ducks come home, we feed the ducks.

**ATKINS:** How does he gather up the ducks in the paddy field to bring them back home? How does he do that?

**LEI:** With a whistle—(tweet, tweet)—(tweet, tweet, tweet). We just use a whistle to call the ducks to come home. There are two persons. One has the whistle—(tweet, tweet, tweet).

**ATKINS:** Oh yes—so one calls (leads) them with the whistle and the other goes behind them?

**LEI:** Yes.

**ATKINS:** Supposing the farmer lives five kilometres (3 miles) from his paddy field. He wouldn't take them home every night. He would have a little place for them to live near the paddy field, wouldn't he?

**LEI:** Yes, he could. He could build a very simple little house (shelter) for the ducks and a small yard of bamboo near the paddy field rather than taking the ducks home. Normally, we just have people to stay on guard for the young ducks.

**ATKINS:** All night long?

**LEI:** Yes and you have two people taking turns (watching the ducks and resting).

**ATKINS:** Thank you very much, Mr. Wu Su here on the An Yuan Commune in Western Fujian Province in China. I've been talking with Mr. Wu with my interpreter Lei Qi Shi of the Chinese People's Association for Friendship with Foreign Countries.

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

**Notes**

1. This item deals with two different types of agricultural enterprises that can be carried on at the same time, each helping the other, thus saving and making more money for the farm family. They are raising ducks and growing rice in small shallow water paddy fields. A later package will contain an item with information on raising fish and growing rice in the same paddy fields.