

PEACE CORPS FARMER

by Ron Harley, Journalist
Expert in Agricultural Materials for Peace Corps Recruitment

Editor's Note: This article is a journalist's impression of the experience of a Volunteer couple serving in Chad. It aptly expresses the change in lifestyle that most Volunteers experience and learn to appreciate and the changes they can bring to isolated spots of the world, in this case in the form of innovations in agriculture and home arts. The author, Ron Harley, has worked in the field of Agricultural Journalism since 1961. He has written articles for the Des Moines Register & Tribune and has worked as editor/photographer for the Farm Quarterly Magazine. He has also worked as a freelance journalist for a number of magazines and agencies. He holds a BS in Agricultural Economics and Journalism from Purdue University.

NACTA J. Editor's Note: This article was submitted by Jim Carpenter, Peace Corps, and appeared in Vol. 1, No. 9 of the Action/Peace Corps Program and Training Journal, September, 1973.

The village of Bessada in the Republic of Chad, one of the poorest and most isolated countries in Africa, is a long way from the farm on Tabor Road in Bucks County, Pennsylvania. But Jim Diamond, 34, who farmed and taught high school vocational agriculture in Bucks County before joining the Peace Corps two years ago, seems perfectly at home in Bessada.

He tosses an armload of dry sticks on the open fire in the backyard, then leans back in a wooden kitchen chair to smoke his pipe and relax. It is dusk. It will be dark by the time the fire is ready for cooking. Chunks of antelope meat, a special treat for two visitors from the "States," will be roasted over the hot coals.

A few hundred feet away, the flames of other supper fires in the village create dancing shadows on the sides of mud brick huts. The pleasant suppertime smells and sounds drift in over the dried haya grass fence that encloses the Diamonds' backyard.

Jim knocks the ashes out of his pipe on a chair rung and refills it with fresh tobacco from a pouch.

"When Betty and I first got here we didn't know what to do with ourselves in the evenings. Back in Bucks County we had been involved in so many activities that we were attending meetings seven nights a week. There were F.F.A. meetings, Grange meetings, teacher meetings. There were times that I went to two or three different meetings the same night.

"Before we joined Peace Corps, we sold the sheep, rented out the farm, and resigned from everything. I remember our first evening in Chad. I was lost. I just didn't know what to do with all that free time."

The decision to join Peace Corps was not an easy one.

"After I decided to join, it took me about three months to talk Betty into joining," Jim recalls. "I kept that Peace Corps application in on the dining room table for about three months before she finally signed it."

Betty, who has left the kitchen to join Jim and the two visitors in the backyard, chuckles. "I finally decided that if I want-

ed to keep peace in the family I might just as well sign the application and get it over with."

The Diamonds came to Bessada as Peace Corps Volunteers in May of 1971. Officially, their assignment was to identify agricultural and rural development problems and to find solutions to those problems. Unofficially, Jim was to act as "a sort of county agent" in the Canton (district) of Bessada.

With its wooded savannah and semi-humid tropical climate, the Canton of Bessada bears little resemblance to Bucks County, Pennsylvania. The area is rich in animal and birdlife. There are elephants, antelope, giraffes, water bucks, hippopotamuses.

Farmers in Bessada are not particularly fond of elephants.

"The local farmers believe that if you have an enemy in another village, he will turn himself into an elephant at dusk and go into your fields and pull out your peanuts and millets," Jim explains. "The elephant will turn back into a man at dawn.

"I never question this belief. When you stop and think about it, it really isn't much stranger than some of the beliefs we have back in Bucks County."

The people here practice a traditional subsistence agriculture, raising small plots of crops such as millet, manioc, peanuts and mung beans for food. Cotton, which is virtually the only cash crop in Chad, is grown in Bessada and other parts of southern Chad.

There are chickens, sheep, goats, oxen and a few pigs in Bessada. For the most part, these animals don't get much special attention. Chickens, for example, have the run of the village. They scratch in the dirt for their food and lay eggs when and where they have a mind to.

Sheep and goats also run free. During the dry season when feed is scarce, they leave the village at dawn each day and head for the "bush" to browse for food. No one goes with them. They straggle back to the village in the afternoon when they get full, or when they get thirsty. The village well is the only source of water during the dry season.

Oxen are by far the most valuable domestic animals here. Most of the oxen are produced by Arabic herdsmen in the area and sold to the Sara farmers. A bull may sell for as much as 15,000 francs (\$60) and a cow for 25,000 francs (\$100).

Sara farmers use the oxen to pull their plows and two-wheeled carts. They are butchered for meat after they are past their prime as work animals.

It didn't take long for Jim to identify some of the problems. It was obvious that one of the major problems was lack of

knowledge and experience in caring for the oxen.

"We first came to Bessada in the middle of the dry season," Jim recalls. "Shortly after we got here, I was riding through the bush with the French veterinary officer and I saw all those oxen out there. And I said, 'My God, what do all those oxen eat?' And he said, 'The farmers feed them peanut and bean vines and a little cottonseed, and when that's gone they just turn them loose in the bush.'

"Well, the truth is that there was just nothing for the oxen to eat during much of the dry season. They looked like walking skeletons. Sometimes they would travel seven or eight miles from the village trying to find something to eat.

"Then I experienced my first rainy season here. There was tall green grass everywhere you looked. And I began wondering why the people didn't make silage with the grass so they would have something for the oxen to eat during the dry season."

(Nearly all of Chad's annual rainfall — about 28 inches in the Bessada area — comes between July and September. Betty remembers the rain water leaking into the upstairs bedroom, flowing down the steps, through the downstairs hall, and out through the kitchen door.)

"I asked some of the Chadians why they didn't make silage. But they didn't even know what silage was. Had no inkling.

"It seemed to me that it would be very simple to dig a hole, fill it with grass, and cover it with soil. I remembered that my dad had always had a trench silo at home.

"Some of the French agricultural officials who were in southern Chad at that time told me a pit silo wouldn't work here because the termites would eat the silage. But I thought there was a good chance that the acidity of the silage would keep the termites away. At any rate, I thought it was worth a try.

"So I started going from village to village holding meetings. A Frenchman went with me. I would explain silage making the best I could in French, then he would translate into Sara Madjingbaye, the tribal dialect. The meetings were held outside — usually under a big shade tree. I'd dig a little hole with a shovel, then I'd chop up some grass with a machete and show them how to put the grass in the hole and cover it with dirt.

"Nineteen farmers in nine villages volunteered to try the pit silos. It wasn't difficult to get volunteers because I promised to pitch in and help them with the silos.

"We dug the silos about 6½ feet deep and about 6½ feet in diameter. And we filled them with a very common native grass called 'haya' which sometimes reaches a height of 10 feet.

"We started filling silos early in September and finished about the middle of November. We'd work in one village at a time – and I mean to tell you we worked. At one time I counted eleven blisters on my hands.

"We opened the first silo in January of the following year. And there must have been at least 40 people standing around waiting to see what the silage looked like. At first they didn't believe the oxen would eat that smelly stuff. They'd never seen anything fermented except 'Billy-Billy,' the locally made millet beer.

"I told them to get some oxen and we'd see whether they would eat the silage. I held my breath because sometimes an animal won't eat a strange food right away. But those oxen tore into that silage like they had never tasted anything better.

"And then you should have heard the people – you should have heard them. They were all yelling 'Ki, Ki, Ki,' a Sara expression that means something like 'Wow' or 'Fantastic.'

"The word really got around as we opened more of the silos. Some of the silage was just excellent – just like the silage back home.

"Last year we really got into the silage business here – we had 48 silos. We worked three months to fill them. Some nights we chopped silage by moonlight. It's almost like daylight when you have a full moon here.

"I think these people will continue to make silage even after there are no Peace Corps Volunteers here. For that reason, I think the silage program is probably the most significant thing I've been involved in here. After all, the goal of a Peace Corps Volunteer is to come in and teach the people techniques that they will use after he leaves."

Word of the successful pit silo program has, in fact, spread far from the Canton of Bessada. The Chadian government is now encouraging use of pit silos in other parts of the country. And with Jim's help, government agricultural officials have prepared illustrated booklets and posters on pit silos for free distribution.

Interest in the Bessada pit silos has spread also to other African countries where the perennial shortage of livestock feed during the dry season has been even more severe in recent years. A United Nations Food and Agriculture Organization (FAO) official said recently that millions of head of cattle have died of starvation this year in Mauritania, Senegal, Mali, Upper Volta, Niger and Chad.

Jim has helped upgrade oxen management in a number of other ways in the Canton. For example, he initiated a tick spraying program last year and helped local farmers spray close to 1,500 head of oxen.

"I bought the insecticide with my own money," he explains. "Then I figured how many head I could spray with each can of chemical and calculated that I could do the spraying for about five francs (two cents)

per head. The farmers argued a little about the high cost of spraying, but not much.

"I could probably have done the spraying for nothing, but the idea was to teach them the principle of paying for a service. And in the end I think they appreciated that.

"You don't do these people any good by giving them things. The government of Chad gives them vaccine (when it's available) for the oxen, and many of the missionaries come in here and give them clothes and other things. I don't think that's good; I think it destroys their pride.

"These are proud people – very proud people. And I don't think that pride should be destroyed."

Jim also taught local farmers the advantages of castrating their oxen. "I told them that when you castrate the bulls they get bigger, stronger and more docile," he says. "And I told them the meat would taste better when the bulls were butchered at eight or nine years of age. We castrated about 370 head the last year and about 600 head this year."

The Pennsylvania farmer-teacher showed the Bessada farmers how to make a rope halter and rope body sling so that the oxen could be thrown easily for castrating. For other work, such as spraying or vaccinating, he helped them build a handling chute with upright poles. Mangers, to reduce feed waste, were constructed of mud bricks.

"These projects have to be simple and practical," he says. "You have to improvise, using materials that are already here. The mangers are good because they are made of mud bricks that are made right here in the village. The pit silos are good because no special tools or crops are needed. The grass grows here naturally, and the farmers already have the machettes to chop the grass and the shovels to dig the pits."

It is obvious that the people here have a great deal of confidence in Jim's judgment and ability. A day seldom passes without one or more Chadians coming to him for advice or assistance on problems ranging from a sick ox to a broken plow.

It is obvious, too, that the people here are comfortable in their dealings with both Jim and Betty. Such rapport is a necessary ingredient to success of any Peace Corps Volunteer program.

"We've had a very satisfying relationship with the people here," Jim says. "These people know that we were asked to come here by their own government, and they know that we are here to serve them.

"In the past, they had been used to the French extension officials coming in here and ordering them around. I've never done that. I feel that if they want to try a new idea, that's fine. I'll do everything I can to help them. But if they don't want to try it, that's fine too. It's up to them."

A couple of projects have involved chickens. In one, Jim and Betty co-operated with a Swiss group in bringing some

European roosters in and turning them loose in Bessada to "sort of upgrade the local chickens."

The other project was a little more sophisticated. Jim helped a farmer in nearby Koumra construct a laying house with bamboo poles and a thatched roof made of palm leaves. Total cost of the structure, which has some of the features of the most modern laying houses in the United States, was 1,000 francs (about \$4).

The "slatted floor," which is about two feet above the ground, is constructed of bamboo poles with spaces between poles so that manure drops to the ground. The owner doesn't even have to go inside to gather eggs in this semi-automated operation. Newly-laid eggs roll out of the nests to a gently sloping ramp that carries them outside to a collecting trough on the side of the building.

Jim got into the plow rental business more by necessity than by design. It all started in April last year when he was in Fort Lamy, the capital city, talking to a U.S. Embassy official. The official mentioned that he had a tractor plow in the embassy warehouse.

"I went over to look at the plow, and it turned out that there were five plows instead of only one, and they were the kind of plows you pull with oxen," Jim says. "I told the embassy official we'd take the plows off his hands.

"I brought the plows back to Bessada, assembled them, and started a plow rental service. That seemed the fairest way to get them into use. I decided to charge 300 francs (about \$1.20) a hectare (2.47 acres) for use of the plows. All the money went into a reserve fund to be used for buying replacement parts for the plows and, hopefully, additional plows.

"I sent word out through the village that the plows were available, and you should have seen the line of farmers waiting at the door for me at 5:30 the next morning. There are a lot of farmers here who have a team of oxen and a two-wheeled cart, but just can't afford to buy a plow. A new plow costs a lot of money – from 9,000 to 11,000 francs.

"And in the past, farmers who didn't own plows usually had to hire their plowing done on a custom basis at a cost of 2,500 francs per hectare. It was expensive, and it was difficult for a farmer to get his plowing done on time if he had to hire it done."

It's been a busy two years. Jim has also found time to help plant and care for a 10-acre demonstrational cotton field; teach a six-week course in animal husbandry at the local elementary school; introduce long-handled hoes to the area; teach villagers to trim horses' hooves; and initiate a rabbit production program.

Betty came to Chad without an assignment. But she found plenty to do, including teaching cooking and sewing classes for women and girls in Bessada and neighboring villages. "I can't imagine a Peace Corps

wife just sitting in the house and doing nothing," she says. "Shortly after we got here, some of the village women started asking about sewing. And they wanted to learn to embroider.

"They had never used scissors — they didn't know how to hold the scissors and they'd get the giggles when I tried to show them — and half of them didn't even know how to thread a needle. One of the toughest things was teaching them to tie a knot in the thread when they were sewing.

"We didn't use sewing machines. I remember helping some women make a blouse by hand. We were all down on our hands and knees in the dirt under a big mango tree."

Betty has also served as Bessada's unofficial ambulance driver — taking sick or injured villagers to the mission hospital in Koumra (about 40 kilometers away) in the Land-Rover. Without this service, patients would either walk or be hauled to Koumra in an oxen cart.

The Diamonds, however, have not restricted themselves to serious activities. They formed an equestrian club in the village, and they directed a Sunday afternoon horse show in which 40 horsemen rode in intricate "Royal Canadian Mounted Police" formations. And when the local Grange back in Pennsylvania sent them

\$130 to sponsor a project, the Diamonds used the money to build swing and seesaw sets for the children at Bessada's local school.

Jim has taught a number of youngsters in the village to play chess. A couple of boys have become good enough to best their teacher occasionally.

The Diamonds also obtained movies to be shown in Bessada and neighboring villages. Anywhere from 300 to 700 people show up to see the movies which are projected on sheets tacked to the sides of buildings. Among the most popular movies to date has been one titled "The Harvest" dealing with American agriculture. A documentary movie on one of the U.S. moon landings, on the other hand, was a dismal flop. "It was just too far out for them," Jim says. "They just couldn't conceive of men landing on the moon."

When he first got the projector, Jim decided to have a private showing in his own backyard to see if the generator and project worked. "It was a mistake," he says now with a chuckle. "I was projecting the movie on the side of our house, and it almost caused a riot. Ten minutes after I started there were at least 200 people in the backyard. They came running from all over the village. They were so excited that they pushed over the fence and smashed

the gate down getting into the backyard."

Betty recalls the night they had Chadian friends over for a spaghetti supper. "It was a ball," she says. "They had a little trouble with the spaghetti because none of them had ever eaten with a fork. Finally, they folded up the spaghetti they couldn't eat in their paper napkins, covered it with boule sauce, and took it home with them. Chadians never waste anything."

It is late now. The last of the roasted antelope has long since disappeared, and the cooking fire is dying. A three-quarter moon has moved high into the African sky.

Betty begins carrying the supper dishes back into the house.

"You know, those people were farming here for thousands of years without the white man's help," Jim muses. "Sometimes I feel like an intruder, and I wonder if we've got any business being here. But then I remember that they asked us to come, and that makes it okay.

"I hope we've helped them. I hope we've taught them some things that they'll be able to use after we leave. There's no way of knowing. But I do know that being here has helped us. Before we joined Peace Corps and came to Chad we weren't living; we were just existing."

PRELIMINARY PROGRAM NACTA ANNUAL CONVENTION

June 19-20-21, 1974
Lincoln, Nebraska

University of Nebraska Continuing Education Center
33rd and Holdredge
Host Institution — University of Nebraska
*Communication Between the Agricultural
Classroom and the Consumer*

Wednesday, June 19

- 9:00-11:45 — Registration — Upper Lobby — Nebraska Center
- 9:00-11:30 — Executive Committee Meeting: Dr. Jerome K. Pasto, presiding
- 11:45 — Luncheon (on your own — Dining Room at Center is open)

First General Session:

Dr. Robert Alexander, Vice-President, presiding

- 1:00-1:30 — Welcome — Dr. Duane Acker, Vice-Chancellor for Institute of Agriculture and Natural Resources, University of Nebraska
- 1:30-2:00 — Progress Report — Dr. Jerome Pasto, President of NACTA and Associate Dean, College of Agriculture, Pennsylvania State University
- 2:00-2:45 — The Current Consumer Situation — Mr. Claude I. Carter, Executive Vice-President, Conagra, Omaha, Nebraska
- 2:45-3:15 — Refreshment Break
- 3:15 — Presentation by another speaker on theme, preferably by someone who is reflecting the consumer view, and who may be at variance with our view as agricultural producers
- 4:15 — NACTA Business Meeting: Dr. Jerome K. Pasto, presiding
- 6:30-8:00 — A picnic-type dinner and some entertainment

Thursday, June 20

- Breakfast (on your own)
- 8:30-9:30 — Late Registration — Upper Lobby, Nebraska Center

Second General Session: Presiding —

- 8:30-9:00 — Speaker on theme topic
- 9:00-10:15 — Meetings by disciplines to discuss application of ideas on "Communication in the Classroom about Consumer Attitudes."
 - A. Plant Sciences
 - B. Animal Sciences
 - C. Business, Economics, Marketing
 - D. Soils and other Natural Resources
 - E. Engineering and Technology
- 10:15-10:45 — Refreshment Break
- 10:45-12:00 — Invitational papers on the theme of the conference.
- 12:00 — Luncheon — Omaha Room — President-Elect's address, Dr. Robert Alexander

Third General Session: Presiding —

- 1:30-2:15 — Presentation
- 2:15-3:15 — Presentation