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A Quick Trip into the Sahel

Bobo-Dioulasso, Haute-Volta  
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Dear Peter,

I have finally gotten a quick glimpse of the Sahel. A friend has been working on a grain exchange project in Djibo, a couple hundred kilometers (roughly 125 miles) north of Ouagadougou, and had invited us to come up for a visit. So my husband, LeRoy, and I decided to drive up and spend the night.

The drive north from Ouagadougou revealed a very different landscape than what we had seen elsewhere in Upper Volta. The Mossi Plateau is very densely populated, and as a consequence, very sparse in vegetation. LeRoy said there was much less vegetation than he had seen in the Kalahari Desert in Botswana, an area with less rainfall and fewer people. He suggested that perhaps in the future the area might be renamed the "Mossi Desert".

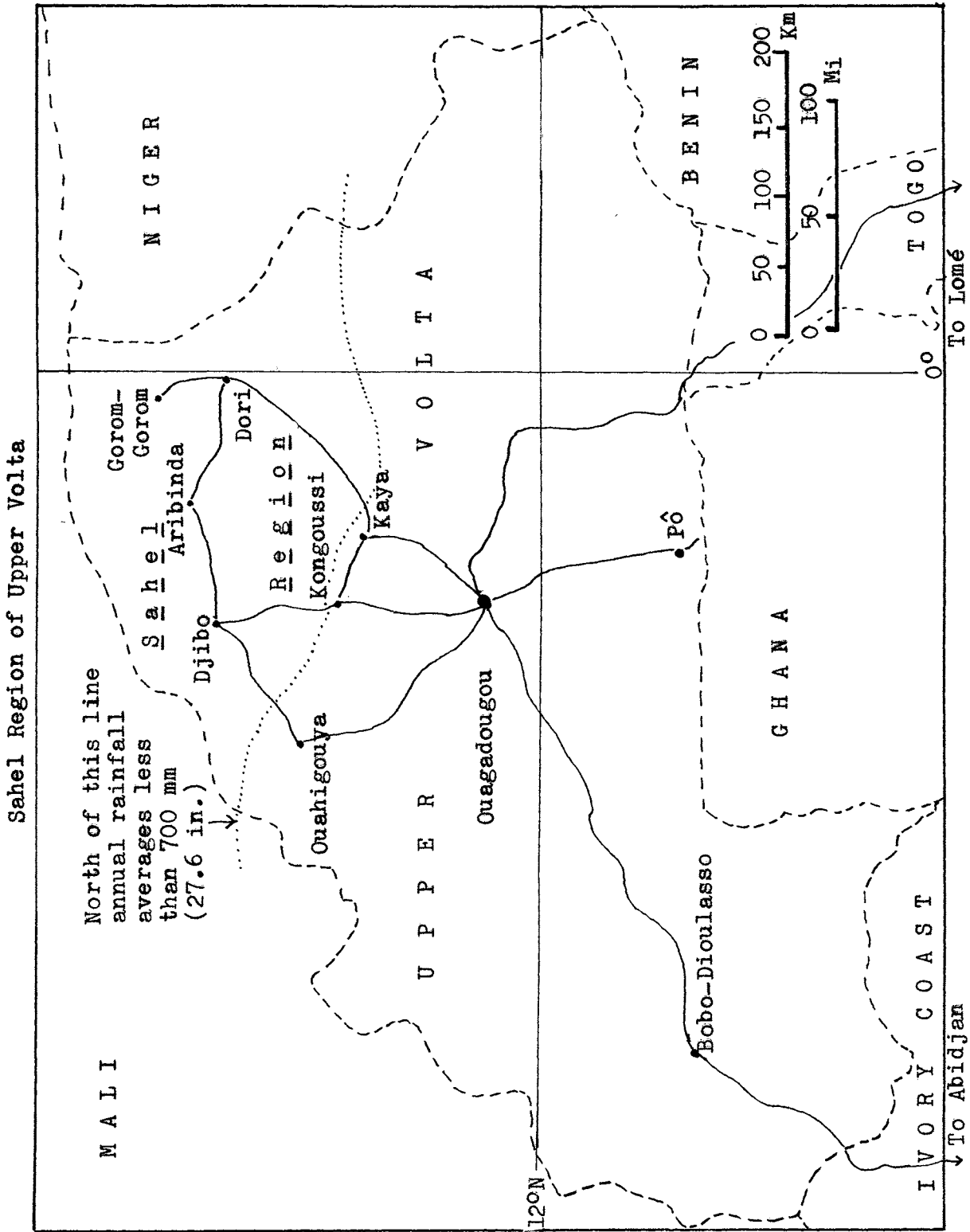
We saw some people working in their fields, clearing the land to plant millet. They were using dabas, short-handled hoes, to break up the dirt. Even young children were helping, using dabas scaled down to their size. Although some fields are prepared with animal-drawn plows, or more rarely tractors, the vast majority still seem to be worked by hand. The fields are generally prepared in May, as there have already been a few rains, and the once-a-year rainy season generally occurs between mid-June and mid-September. Most of the land just north of Ouagadougou has been cleared for agricultural fields. In a few areas, such as just south of Kongoussi, we saw a number of good-sized trees, such as the shea-nut (Butyrosperum parkii) trees, growing in the fields.

The road to Djibo is a hard-packed dirt road, in generally good shape. We did have a few rough spots on the way up, just before we reached Kongoussi. Before arriving at Kongoussi, we saw some large hills to the east. The map indicates a molybdenum mine in these hills, but I have no idea whether or not it is still active.

North of Kongoussi the road was in better shape than the section to the south. There was also, surprisingly, more vegeta-

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Map adapted from: Michelin's map #153, Africa - North and West, Paris: 1983; and Jean Renard's Atlas de Haute-Volta: Cartes des Principaux Éléments Climatiques, Centre Voltaïque de la Recherche Scientifique, Ouagadougou: 1969. Map Scale 1:400000.

tion, as the population density thins out. In a few restricted areas, where we saw no indications of agricultural activities, there were thick patches of brush and numerous baobab (Adansonia digitata) trees. A few places also showed evidence of shifting sand.

We arrived in Djibo about three-and-a-half hours after leaving Ouagadougou. Djibo is a small town, with perhaps ten thousand inhabitants. It lies to the west of a large permanent lake. There is a small market in the center of town, about the size of a small city-block. The town boasts one hotel. An administrative center for the region, Djibo has an airfield, a post and telecommunications office, and national and local police stations. There are also a few gas stations and a small private hospital. The town is the largest in this corner of the country, before reaching the Malian border.

Djibo lies in the northern, arid region of Upper Volta known as the Sahel<sup>1</sup> (see map). Djibo receives an average of less than 700 millimeters (27.6 inches) of rainfall a year. Average rainfall, however, means little in the Sahel, as there is incredible variability from one localized spot to the next, and from one year to the next.

The friend we went to visit, Julian Carr, is working on a short-term grain exchange project for the local British Save-the-Children office<sup>2</sup>. This project is part of a larger umbrella group of donor organizations, known as "Sahel 84", working to avert famine in the Sahel.

In the northeastern region of Upper Volta, such as around Gorom-Gorom and Dori, rains were very poor last year. As a consequence, crop failures in many villages ran to 60-80 percent or higher. The Upper Volta government has estimated that the past harvest fell short of normal yields by 120,000 metric tons for the country as a whole. One-quarter of this shortfall is for the Sahel region alone, an area inhabited by 200,000 people.<sup>3</sup>

To date, large amounts of grain have been brought into the country and distributed by the Sahel 84 group. This donor group works with the Voltaic Rural Development Organization (ORD) in distributing food aid. Insofar as is possible, the food aid is distributed in ways that will work through existing community development and market structures, so as not to undercut incentives for agricultural production. The donors transport grain to rural ORD centers, and the ORD is responsible for distributing it to "groupements" (community development co-operatives) of rural residents.

The possibilities of famine in the region are tied to two important factors -- adequate distribution of grain and the coming season's rains. Millet, the staple cereal crop, is needed

not only to eat, but also as seed to plant. With massive crop failures last year, many people have no seed grain to plant this year. Efforts to provide them with seed grain are very time-dependent: with short growing seasons in the Sahel, farmers must be provided with seed grain at the beginning of the rainy season.

Once the rainy season starts, the distribution of grain will become more difficult. The dirt roads in the region become impassable as the rains turn them to mud or wash away sections of the roads. Some villages can be cut off from the outside world for two to four months. Consequently, trucks transporting eating grain cannot make any deliveries. If adequate grain has not been provided prior to this time, then as people eat up their supplies, famine could occur. However, if this year's rains are again poor, that could also mean famine -- as there will be little millet at next fall's harvest.

Around Djibo there was adequate rainfall last year to produce a reasonable harvest to cover the local people's food and seed requirements, although not much surplus to sell. Djibo is in the same latitude as the drought-stricken region further to the East. Thus, the same type of fast-growing millet is used in both locations. This variety of millet was introduced after the major droughts of a decade ago, and grows much more rapidly than the millet varieties used in the more humid southern and western regions of Upper Volta.

The idea of the grain exchange is to obtain fast-growing millet from the Djibo area to use as seed grain in the drought areas. Local farmers are being traded millet grown in the south of the country, purchased by Sahel 84 disaster relief funds, for local millet. They can use the southern grain as eating grain and thus still have enough local grain for their own seed needs. A favorable "exchange rate" has been offered to entice villagers to participate in the exchange: eleven bags of southern "eating grain" are traded for every ten bags of northern "seed grain". In addition, the villagers are paid 500 francs CFA (about \$1.25) per 100-kilogram (220-pound) sack, for the labor of pounding the millet seeds off their stalks, prior to bagging.

Julian has spent about a month working on this millet exchange program with two associates, Chris Seward and Jean-Claude Kabore. Working with local ORD extension agents, they have gone to villages around Djibo to talk to groupements of farmers about the exchange program. This program has been more successful than they had originally hoped. The original target had been to obtain 50 metric tons of seed grain in a month, but they have actually acquired 80 metric tons.

While we were visiting Julian, we saw a bit of how logistically complicated such a project can be. It has always been

difficult for me to conceptualize what is involved in large-scale famine relief efforts. In the past I used to think of disaster relief efforts in terms of food being handed out to individuals to eat, as is shown in film clips of soup kitchens. While preventing the starvation of individuals is the ultimate objective, in Upper Volta these efforts are dependent upon the movement of large quantities of millet in large trucks.

Millet is commonly stored and transported in 100-kilogram (220-pound) burlap sacks. These sacks can be carried by two men, or by one man, if loaded onto his head and shoulders. Local laborers have been hired to work for the grain exchange project, to load and unload the trucks. They are paid the standard rate of 20 francs CFA (5¢) per sack.

A large 4 x 4 four-ton truck can be loaded with five to seven metric tons of millet, depending on the quality of the roads over which it will be driven. (The worse the roads, the lighter the load.) Thus each truck can be loaded with 50 to 70 sacks of millet. To transport 80 metric tons of seed grain will require perhaps 15 trips. In addition, there is also another 17 truck loads or so to originally transport the 88 metric tons of eating grain to Djibo for the exchange.

The trucks have to carry these loads over fairly long distances. Although it is only 188 kilometers (117 miles) from Djibo to Dori, the trucks may end up traveling 309 kilometers (192 miles), as the roads to the south, through Kaya, are in better shape than the direct roads between Djibo and Dori. Eating grain brought up from the south, such as from Pô or Bobo-Dioulasso, may have been transported over 400 to 600 kilometers (248 to 372 miles). Transport costs in Upper Volta average 38 francs CFA (10¢) per kilometer per metric ton, but can run a third or more higher for transport in the Sahel region. Thus to transport a metric ton of millet 600 kilometers would cost a minimum of 22,800 francs CFA (\$57) -- equal to one-quarter the cost of the millet itself (government-controlled prices). Relief grain given by international donors is generally shipped to either Abidjan, the Ivory Coast, or Lomé, Togo. From port to its eventual destination in the Sahel, grain may be transported up to 1500 kilometers (930 miles) by truck. Thus, given the logistics and expense, these relief efforts require a great deal of co-ordination and planning.

A good chunk of disaster relief funds must be spent just on trucks, truck parts and repairs, and associated labor. The trucks being used have come from different sources. We saw one Food and Agriculture (FAO)/World Food Program truck, acquired with international contributions to the World Food Program. Another truck had been supplied to the British Save-the-Children organization by the public campaign organized by the British newspaper, the Sunday Mirror, and Bedford, the truck manufacturer, to "commemorate the visit of Princess Anne (of Great Britain) to Upper Volta in 1984".

The people working on these disaster relief efforts are not getting rich in the process. I don't know how much the truck drivers were being paid, but Julian was earning 2000 francs CFA (\$5) a day, plus food, for working 10-12 hour days. He and his co-workers were staying temporarily at the guest house of the local missionary doctor who runs the hospital in Djibo.

That evening, we went with Julian to try to arrange an exchange with a local merchant. Although Julian preferred to trade grain with local farmers, they had pretty much tapped all of those sources available. Only the merchants had much disposable grain left. A truck load of grain was driven to the merchant's warehouse. When we got there, along with eight laborers to unload the truck, the merchant decided that he didn't want to go through with the transaction. He had been offered 11 bags of southern millet for every 10 of northern millet, but no money as his millet had already been pounded and put into sacks. We weren't sure whether the merchant was trying to drive a more favorable bargain for himself or not -- he insisted that the millet was from Pô, not from Bobo-Dioulasso, and that he had no use for it. (He had previously traded grain with Julian with no problems.) Julian figured he wasn't about to offer the guy anything more, so we just left. It was the first time, in a month's work, that an exchange deal had fallen through.

Over supper we talked a bit more about the relief efforts and life in the Sahel. The doctor, in whose guest house we were staying, came to dinner with his wife, as did another missionary family. We had a good chicken curry dinner, made with a chicken that Jean-Claude had been given in one of the villages where they had traded millet. LeRoy and I had brought up some fresh fruit from Ouagadougou -- a rare treat this time of year in the Sahel, as most of the fresh produce is disappearing from the markets.

I was quite surprised to learn that the doctor had started and been running the local hospital for the past twelve years. His wife has been helping him with the records and general house-keeping of the hospital. He has had local nurses and other assistants, but for most of that time, he has been the only doctor working at the hospital. The hospital has eighty beds, but he cares for up to one hundred-twenty patients at a time. The doctor admitted it was always a hard choice -- he wanted to keep the number of patients down, so he could provide good quality care -- but when there was such great need, it was hard to turn patients down. The nearest hospital is in Ouahigouya, 120 kilometers (75 miles) away, over a rough road. Many of the patients who arrive at the hospital in Djibo may have already traveled 100 kilometers (60 miles) from Aribinda, or from points more distant. This situation may be typical for rural hospitals in Upper Volta, as the country has only one trained doctor for every 100,000 inhabitants.

After dinner we quickly got ready for bed. The sky was clear and bright with stars. Since it was cooler outside than in, we had decided to drag the beds and mosquito netting outside to sleep. Julian had said that it had only rained once in the preceding month in Djibo, so it seemed like a safe bet.

At 3:10 AM we were awakened as the wind started to pick up. Glancing up through the mosquito netting, I could see a dark cloud moving towards us. Julian turned on the butane gas lantern, so we could see to move our things inside the house. The air was quickly filled with thick dust. It was difficult to see more than a few yards, and we all started coughing. The wind was probably blowing at least 65 kilometers (40 miles) per hour.

When we had gotten the bedding and cots inside the house, we closed up the metal ventilated window blinds. Chris moved the pick-up truck right in front of the house, joking that he wanted to be able to find it if it got buried in the dust. After about fifteen minutes of the dust storm, we noticed a few raindrops. There were six 100-kilogram sacks of millet in the back of the truck, so Chris and Julian decided that they had to be brought into the house, to keep them dry. LeRoy went out with them to carry the sacks inside, while I held the door open against the wind. Once all the sacks were inside, we relaid out our bedding and tried to go back to sleep as the rain started to pound down. It took me a while to doze off, as I kept wondering if my car was being buried in the dust or flooded.

I got up about 7 AM, to find the storm had passed. It was quite fresh and cool after the rain -- perhaps 20-25°C. (68-77°F.) -- considerably cooler than the 43°C. (109°F.) it had been the previous afternoon. The rain had settled all the dust outside, but the entire inside of the house was covered with a film of dust 3 millimeters (1/8th of an inch) thick. It took four of us two hours to sweep out and dust off everything in the small three-room house. Fortunately my car was in better shape -- it just had a very light layer of dust on the inside, except for a large deposit of dust in the trunk.

After the house was back in order, Julian got ready for a trip out to a nearby village to exchange some more millet. We decided that we had better head back to Ouaga, as we had no idea what shape the roads might be in.

The drive back was better than we had feared, but we did have several large puddles to drive through. The "rain barriers" -- gates used to indicate that the roads are legally closed after the rains (usually for an eight-hour period) -- had been lifted, but the roads were not yet completely dry. With a dirt road, the puddles are deceptive -- you never know if it's just a bit of water lying on top of the road surface, or if part of the former road surface has been washed away and there is now a large hole.

Although I was tempted to drive slowly and cautiously, I had to be careful not to drive too slowly, lest I get bogged down in the mud. Our small car was able to handle the road conditions, but it was quite obvious that with much more rain, the road would only be passable for 4-wheel drive vehicles. Once there is a lot of rain, the road may be closed for days at a time. Come fall, certain sections of the road will probably need major repairs.

Fortunately we got back to Ouagadougou before there were any further rains. We'd enjoyed our quick 30-hour trip into the Sahel, and agreed we'd have to find time to go back to see more of it. But at this point, we may have to wait until after the rainy season ends -- the roads should be passable again in October. Perhaps then we can find out whether the grain exchange program was successful in getting millet seed to Sahelian farmers, and whether this year's harvest is more promising than last year's.

Sincerely,

*Paula J. Williams*

Paula J. Williams

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Notes:

1. The term "Sahel" has numerous connotations. It comes from the Arabic word meaning "border" and refers to the area touching on the southern border of the Sahara Desert. Broadly, the Sahel is used to refer to a band of countries south of the Sahara -- Cape Verde, Mauritania, Senegal, Gambia, Mali, Upper Volta, Niger, and Chad. However, "sahel" can be used in a more restricted sense to refer to an area with specific climatic conditions or vegetation types. A "sahelian climate" is one that receives 500-750 mm (20-30 in) average annual rainfall over a 3-5 month rainy period. (A fuller discussion is provided in R.J. Harrison Church's West Africa, 8th Ed., Longman, New York, 1980). In Upper Volta, Sahel is also the name of an administrative province (a regional body of government). The term "Sahel" as generally used in Upper Volta refers to the northern third of the country -- where the Sahel climate, Sahel vegetation type, and old Sahel Département boundaries all overlapped. (Since the current government came to power on 4 August 1983, the old divisions of the country into eleven "départements" have been redrawn to make twenty-five new provinces. So the current Sahel province is only half the size of the previous Sahel département.)
2. There are over thirty-five different Save-the-Children organizations in existence. The British, American, Canadian, Dutch, and Norwegian Save-the-Children organizations all have separate activities in Upper Volta.
3. Most of these figures are from Julian Carr and Chris Seward. A few were published in Charlotte Louveaux's interview with Seydou Traoré, the Voltaic Minister of Rural Development, AfriqueAsie No. 322 (21 May 1984), pp. 26-27.