

The Sierra Leone Journey 1979-81

Preamble

The Sierra Leone Journey 1979-81 is an annotated photolog of my 27-month service in the U.S. Peace Corps in West Africa. No chronology is re-told. Here you will find a collection of unvarnished personal anecdotes conjured from memory about people, places, culture, and agriculture.

Back then, up-country Sierra Leone was utterly cut off from the modern world apart from short-wave radio transmissions: BBC, VOA, Armed Forces, Radio Moscow, and Peking [sic] for the budding communist. We had no smartphones, two-way radios, or an internet link to the world outside. I never figured out how emergencies were handled. Thank God for that.

Sadly, Sierra Leone remains one of the world's poorest places. Civil war, social change, and the impact of Western aid on an ill-governed and grossly mismanaged country all have left their imprint on Sierra Leone. To live in Africa and understand its ways was like shock therapy to cure the ever-prevailing but uninformed American perception of a world revolving around our ideals and way of life.

The photographs in this collection are well-aged, and it shows. Some of the scenes depicted here are extremely rare, perhaps among the few surviving relics of a vanished world. These images, a few cherished artifacts, and fading memories are all that's left of Sierra Leone for me. Enjoy.



Sierra Leone is a sovereign republic on the west coast of Africa. The name 'Sierra Leone' might evoke images of a Spanish town or a charming Portuguese colony, but in fact, the country has a long history of association with Great Britain. The name, however, is Portuguese: In 1462, the voyager Pedro da Cintra compared the ear-splitting thunder rolling over the western mountains to a lion's roar. Ever since that time, this land has been known as the 'Land of the Lion Mountains'.



Tribal dancers twist and shake during a festival. During the 1960s and 70s tribal life in Sierra Leone was largely untouched by political turmoil. That changed with the collapse of the government in 1992, and a bloody civil war lasting till 2001.

Located at the corner of the West African hump, between 7° and 10° north latitude, Sierra Leone is a small country of 71, 740 km². The climate is hot and humid, characterized by alternating wet and dry seasons. As much as 3,800 millimeters (150 inches) of rain falls between May and October, while the months between November and April are relatively drier. The capital is Freetown, located at the tip of the Western Area peninsula.

The history of Sierra Leone before European colonization is not well known. Some present-day tribes may have migrated from the Fouta Jallon region in present-day Guinea. The Mende and Temne are the largest tribal groups, followed by Limba, Kuranko, Susu, Kono, Kissi, among others. Tribal people occupy the 'up-country' engaging in agriculture, fishing, and diamond mining. Krio people (repatriated slaves) are concentrated around Freetown and form a cultural group separate from the interior tribes. Early on, trade in Sierra Leone was influenced by migrating Fulani people and by Middle Eastern (Syrian, Lebanese) merchants. Sierra Leone gained independence from Britain on 27 April 1961.

The nation's principal food crop is rice. Other staples are cassava, yams, sweet potatoes, peanuts, millet, pigeon peas, and oil palms. Production is carried out exclusively by small holders. Livestock rearing is restricted to the hardiest breeds of goats and poultry, whereas cattle are primarily found in the extreme north of the country.

Sierra Leone's mineral resources include iron ore, bauxite, and a significant quantity of diamonds.



Typical flooded rice small holding in Kenema district, Sierra Leone.

I arrived in Sierra Leone in 1979, age 22, attached to a cohort of agriculture volunteers, so-called ‘aggies’. We spent our waking hours slogging around the floodplains and valley swamps of Sierra Leone on a mission to promote more efficient use of the wetlands for rice production.

Smallholder production in Sierra Leone was sustained through upland “slash and burn” cropping throughout the country. But slash and burn yielded barely enough for subsistence. A mounting rice deficit loomed, and the battle cry was “develop the swamps!” But farmers preferred growing the traditional upland “country” rice. Therein lay a contradiction...

Our primary goal was to educate farmers about water control in seasonally flooded swamps, which was critical for improving rice yields. I didn’t win many converts. First, building a swamp rice farm involved hard physical labor. Swamps in Sierra Leone were, not without reason, places associated with disease. Moreover, the idea of controlling the environment, apart from slash-and-burn, was alien to the traditional farmer. For guidance, I studied traditional farming methods, particularly those for upland rice. How can you introduce change if you don’t understand the rationale for the farmer’s traditional practices? An age-old question! My primary project was building an irrigated rice farm near the Ahmadiyya Secondary School for on-site training and grain production. I trained Ahmadiyya students in wetland rice production methods and led GCE-level agriculture science classes. Life in Sierra Leone was not always blissful, but looking back, the experience was unique and transformative. In time, a well-seasoned ‘aggie’ acquired a thirst for untold prospects: learning to use a hand forged native machete, attending funereal exorcisms, visiting remote bush farms while tolerating diarrhea, malaria, driver ants, foul food and water, and the threat of bilharzia. These quotidian events framed the picture of life in the bush, as the photos that follow amplify. In short, up-country Sierra Leone was a place where you prepared for anything, while counting on nothing but the monotone cadence of human toil from cradle to grave.



The mapped territory of Sierra Leone reveals a country divided into four political units: Northern, Eastern, and Southern Provinces, and the Western Area. The Western Area comprises the mountainous peninsula upon which the capital, Freetown, is situated. The airport at Lungi occupies a south-facing peninsula across the bay from the capital; hence, one does not 'fly' into Freetown. Even today, the only way to get there is by boat! The Northern Province is characterized by rugged topography, with the country's highest elevation, Bintumani, rising 1,948 meters (6,390 feet) in the Loma Mountains. My area of operation was Kenema District in the Eastern Province, circled in red. For two years, I stayed in the small town of Joru, which is not shown on the map. The other three months were spent at various training sites, mainly in the Southern Province. Kenema was the 'big town' where amenities such as cooking gas, instant coffee, kitchen utensils, etc., were procured, and the scene of occasional weekend flings in a native 'disco'. Kenema also had a post office, that all-important source of letters from home.



When I first began this project in 2002, Google Earth didn't exist. Now it's possible to hover over practically any point on the planet, scanning the ground with astonishing detail. Here's an image of Joru, looking almost unchanged from the time I trod its dusty compounds and footpaths 40 years ago. The red arrow points to the inland valley swamp where a motley crew of rice evangelists excavated drainage ditches, raised earthen bunds, set out rice, and cut its golden panicles. Scenes from this swamp and from Joru and its surroundings circa 1980 are presented later. This image is dated March 2014, the high dry season. The brown area in the lower-right corner is probably a slash-and-burn farm that hasn't been planted. It's not possible to tell from the image if the Ahmadiyya rice plots are still being tended. In my imagination, they are.

Puumui Buaa

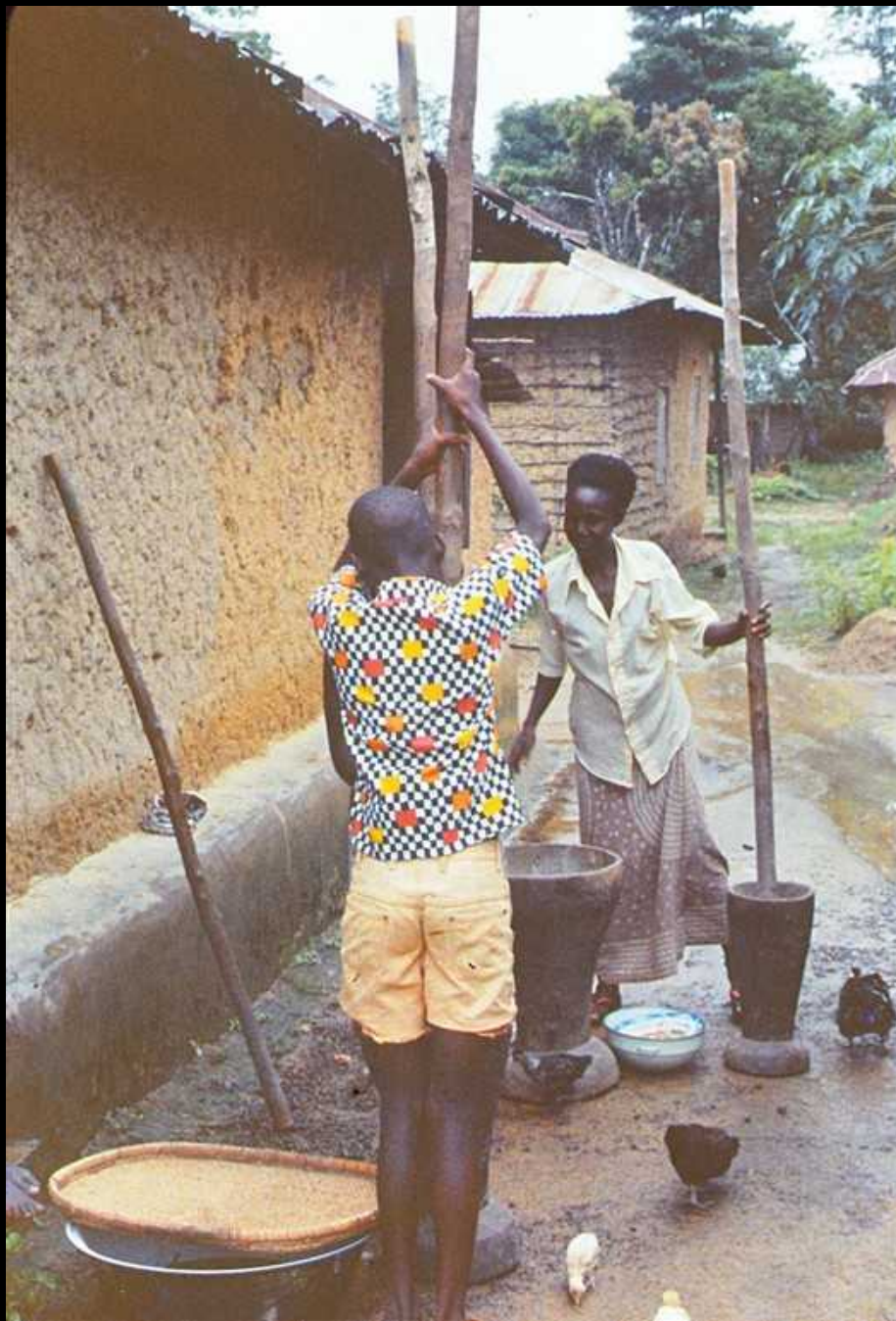




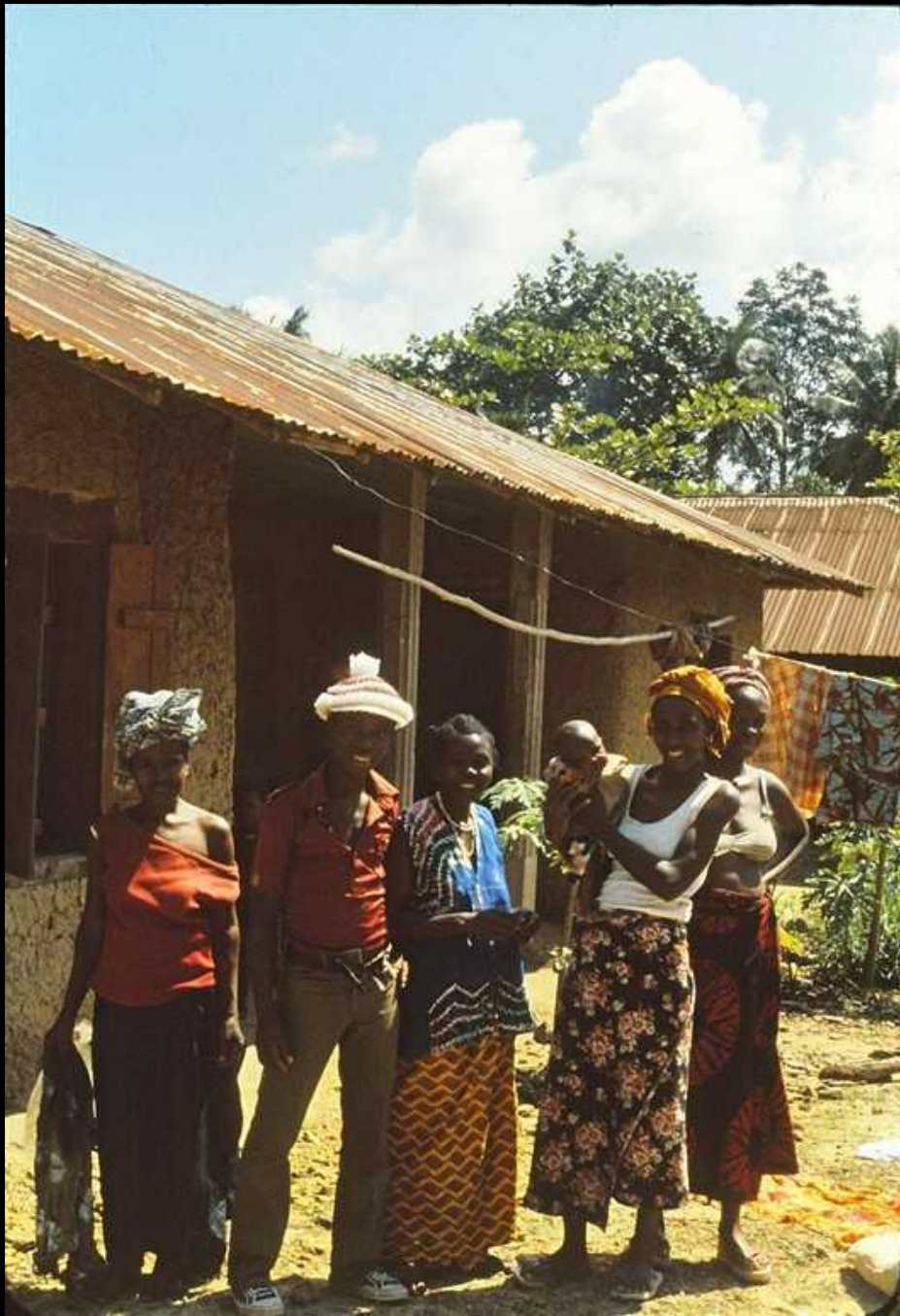
Welcome to the neighborhood! Entering a new world is always riddled with misgivings. What on earth was I thinking by coming here? For trainees, three months in the Sierra Leone upcountry was enough to answer that question before taking the plunge. Following the insignificant pomp and ceremony of Peace Corps swearing in, there was no turning back, just heading for parts unknown in a crowded, sweaty, “mammy” wagon. After signaling the cargo handler to stop and pitch my duffel bag, its forty-pound limit of worldly flotsam thudding with exhalations of red dust upon the bare ground, the reality of a place I would call home for the next two years began, hesitantly, to take shape. The locals were charmed. Everyone ran home to share the fantastic news: The Bank of America had arrived!



Let's take a virtual walk around Joru. Most permanent residents here are Mende, the dominant tribal group in Kenema and the surrounding districts. Each political district is divided into smaller jurisdictions, or "Chiefdoms". Joru was in Gaura Chiefdom, the site of the paramount chief's compound. The town is laid out in a rectilinear pattern, considered 'modern': square houses, mud-block or mud-and-wattle buildings topped with sheets of galvanized metal. There was no electricity or plumbing. Kerosene lanterns were used for illumination. Sanitary facilities were spare to non-existent: a shared latrine consisting of an enclosed or open concrete pad with a few roughed-out holes was quite luxurious. In the foreground, cocoa beans are drying on a raffia mat. What you don't get from this picture is the typical village smell: a medley of wood smoke, cooked rice, and palm oil. Even today, the scent of wood smoke takes me back to the country life in Sierra Leone.



Daily meal preparation, village style. First, rough dry (unhusked) paddy rice is placed in a wooden mortar and pummeled rhythmically with a long wooden pestle to remove the husk. It's a two-person job: As one pestle is raised, another is thrust downward thump-thump-thump in rapid-fire synchrony. Trust me, it's hard work. After husking, the grain and chaff were dumped into the winnowing pan next to the boy's left leg. The chaff was separated by skillfully tossing the mixture in the air without losing the rice; even the slightest breeze would blow it away. Only one cooked meal was prepared each day, usually in the evening. A typical plate of so-called 'country chop', consisted of rice, palm oil, smoke-dried *bonga* (shad) or 'mystery meat', cassava-leaf meal, and flaming hot pepper. But beware the "dried" *bonga* fish: it could be moldy, a situation that your local cook might remedy undetected by scraping away the bad parts with a knife. Food poisoning was a constant risk (twice stricken), but the Mendes seemed oddly immune to this. Outside of the occasional bush meat offerings, fresh beef was scarce, and the chicken was anything but KFC. As for drinking water, there was nothing but God-given rain. Failing that, I partook indifferently from the communal cup, preferring not to ask about its source. Expecting anything approaching Western standards of hygiene when dining in the bush was futile. Our medical kits included iodine tablets, but iodine-treated water was quite undrinkable. Pass the swamp bilge, please.



Joru neighbors posing for the camera. Overall, the country people were gentle and curious by nature. Still, it was difficult being a foreigner because everyone marked you as the cure for their personal ills. Friends and strangers constantly begged: Do you have any pills to cure my sickness? Even though my monthly Peace Corps stipend was paltry by Western standards, I was considered rich by Sierra Leoneans. I could always reach Kenema to buy whatever food I needed while they went without. From time to time, I helped; however, one had to think very carefully about setting bad precedents, particularly with money. Learning to say “no”, even though it left you feeling callous and indifferent, was the first, perhaps most inevitably necessary, step toward adapting to life in Sierra Leone. Having a sense of humor also helped.



Walking around town with a camera was a casting call, particularly for the “pickins” who craved attention. The bloated bellies above bear witness to the twin effects of malnourishment and endoparasites. Food shortages were most acute during the rainy months of July and August. This was called the ‘hungry season’ when native rice stocks were at their lowest, with few dependable alternatives available other than imported goods. Hungry faces beckoned everywhere. Joru.



Wherever a bush farm was established, a shelter like this was pitched. Such multipurpose “farmhouses” served as temporary quarters for new rice, a cookhouse, dining quarters, and shelter from inclement weather. Usually, the family never stayed here overnight; come evening, everyone packed up and walked back to the village compound. The tall grass surrounding the house is upland rice, still immature. A pumpkin (squash) vine can be observed tendriling over the roof, happily cohabiting with rice and other crops. Crop monoculture, as practiced in modern “industrial” farming, did not exist in Sierra Leone. But Sierra Leone was hardly an agroecology paradise. Coaxing a living from an unforgiving land by means of native axe, machete, and grub hoe tools, all fabricated by hand from recycled truck spring metals, was a daily struggle every Mende faced from cradle to grave.



Thrashing grain by stick, native style. Here, a Mende woman beats rice sheaves on a mat. Women, as well as men, were very muscular and built for tackling any job in the bush. The traditional Mende practice of tooth-prying bottle caps induced the confessional cry: *"These people are different from me!"*



After separating the rice grain from the panicle, the liberated grain was gathered for storage. Threshed rice was usually placed strategically above a cooking fire to keep the grain dry and free of insects. Sometimes dried hot peppers were mixed with the rice as an insect deterrent, a clever example of native wisdom applied to food preservation. Despite the grueling labor involved in food preparation, any foreigner was treated as an honored guest at the Mende table. Mende farmers were very proud of their abilities (rightly so) and always eager to share the native bushcraft with curious interlopers like me.



A traditional slash-and-burn farm in Sierra Leone was inter-seeded with multiple crops, all broadcast by hand from the same bucket. Sesame (*Sesamum indicum*), a.k.a. “benniseed”, is pictured on the left interplanted with upland rice. Sesame seeds were molded into thin wafers for sale around the lorry parks and at open-air stalls in and around Kenema. At right, a twining yam (*Dioscorea* spp.) grows upon a framework of sticks. Yams, like Irish potatoes, are propagated by cutting a mature tuber into smaller pieces, or “setts”. Yams are usually planted in mounds of deeply loosened soil and grow to an enormous size when moisture is not limiting. Note that the farmer has placed mulch around the emerged sett. The practice of mulching, or “capping” yam mounds, was widespread. The root system of the yam is poorly developed and cannot extract moisture from a large volume of soil. Capping helps to lower soil temperature and conserve moisture during hot, dry periods. Of course, I don’t have to tell you a yam is different from a sweet potato, right?



Left: Cotton plant in the squaring stage, intercropped with rice on an upland farm. Cotton is the source of fiber from which native textiles, such as the renowned Sierra Leone country cloth, are manufactured. The native Mende upland cotton produced a coarse fiber that stood up very well to wear. Cotton is a perennial plant that can reach a height of 2+ meters when allowed to grow unhindered. Right: A melon called Egusi (*Citrullus vulgaris*) bears an uncanny resemblance to watermelon. Alas, if you consumed an Egusi melon hoping for sweet refreshment, you'd be disappointed because the flesh is utterly insipid. Egusi melon seed is processed into a product popularly used in traditional West African soups and plasas. The seed also yields a valuable oil.



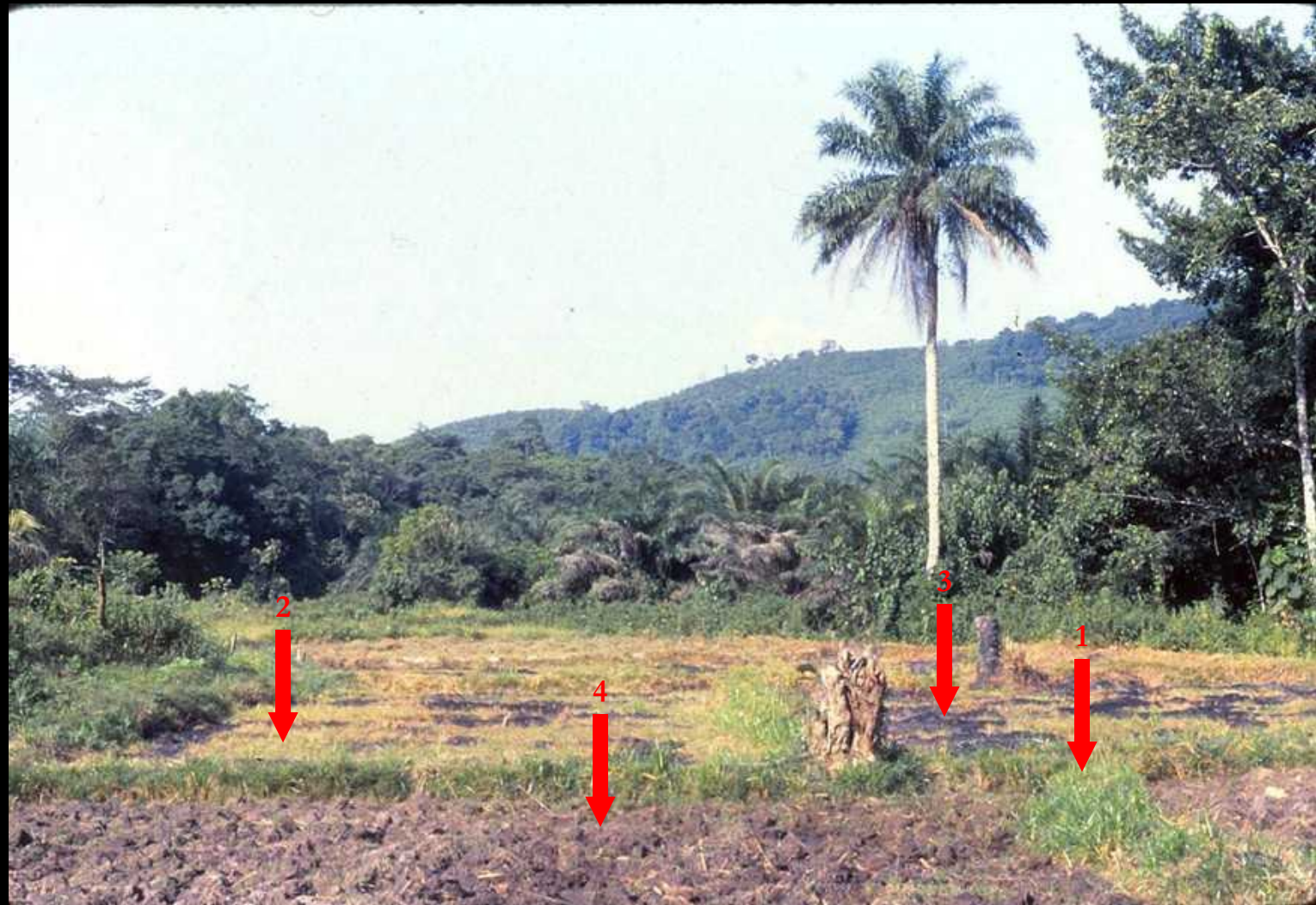
Cassava (*Manihot esculenta*), also called manioc, was the principal root crop in Sierra Leone. The scaly, bloated roots are high in starch content but low in protein and vitamins. Cassava roots were boiled in pepper sauce or fermented and ground up to make 'gari' meal. In Sierra Leone, cassava leaf was a dietary staple. The leaf tissue was macerated in a large wooden mortar, then boiled before eating, because all parts of the cassava plant contain poisonous hydrocyanic glycosides. The glycosides are rendered harmless by a combination of mechanical and thermal processing. Red arrows show puckered cassava leaves, a symptom of African cassava mosaic virus. Whiteflies transmit cassava mosaic virus and can dramatically reduce cassava root yield (the virus is not toxic to humans). I introduced virus-resistant cassava to farmers as part of my assignment, but the activity was only partially successful (as discussed below).



Getting down to business in the swamp. By December 1979, the Ahmadiyya rice farm was beginning to take shape. Here, I'm helping excavate the head bund, the main floodwater barrier. Construction of drains and water-control structures was restricted to the dry season, when water levels in the swamp were low. The hillside behind me was recently slashed by Mohmoh, a local farmer (you'll meet his family later). What's up with the shaved head? In fact, bath water was scarce in the dry season, and shampoo didn't exist in Sierra Leone. Problem solved!



Bird's eye view of the Ahmadiyya rice farm in August 1981. This project consumed a tremendous effort involving a rotating crew of student work gangs, occasional paid laborers, rice buddy Charles Stedman of the British VSO, and myself. Many scars left their imprint on my feet and legs! There was an incentive, though: you might get lucky by finding a diamond while digging in the alluvial wash. Water control structures include: 1) head bund; 2) main drain; 3) side drain; and 4) interior bunds. The bunds, or dykes, were raised with subsoil excavated from the drainage system. The entire farm was gravity-fed with water entering and exiting through pipes embedded in the bunds.



The farm was first divided into sub-plots by a series of interior bunds (1). These enclosures helped control the water level in the plots, allowing flood irrigation in some while keeping others dry. The next step was cutting down emerged vegetation ("brushing") in the sub-plots (2), followed by a drying period of several days before burning (3). Plowing the plots (4) inverted the soil and mixed the vegetation, turning it into soft mud after flooding.



Subplots were sequentially planted with rice to stagger labor requirements for planting and harvesting over 2-3 months. Plowing loosened the soil (1), followed by flooding. A small dam was constructed in the main or side drain to raise the water to a level where it would flow into the plot. Once flooded, the task of 'puddling' began (2). The purpose of puddling was to create a soft, soupy, structureless mud into which rice seedlings could be transplanted. It also reduced internal drainage and helped to bury weeds. Puddling was done with bare feet as livestock were practically non-existent. Puddling was a filthy but not altogether unpleasant job, usually involving 3-4 people, and taking 2-3 hours per plot. You could bathe afterward in the main drain, although it didn't leave you smelling fresh as a daisy.



One subplot was reserved for the rice nursery, pictured here. Rice seeding was staggered to ensure a consistent supply of transplants across planting dates. Nursery beds were made by piling mud into raised beds. Rice seed was scattered thickly on beds that, upon germination, developed into a turf-like sward seen here. Rice seedlings were pulled from the soft mud and tied into bundles for transplanting. The transplanting method involved staking a string line across the plot and setting one plant every 12 inches along it. Setting rice usually involved two people, one at each end, working toward the middle. After one line was planted, the stakes were moved down to the next position. With practice, setting rice was like meditation in motion.



At the height of the rainy season (July-August), the rice plots were fully flooded. Sometimes heavy rains threatened to overflow the interior bunds. The problem now was removing excess water, which was not a simple matter because the drains were fully flowing. Newly constructed bunds were most vulnerable where the soil was unsettled or lacked sufficient time to establish stabilizing vegetation.



At left: rice panicles nearing maturity. Rice varieties planted in Sierra Leone's constructed inland valley swamps were mainly the Asian *Oryza sativa japonica* cultigen. Improved *japonica* varieties, bred in places such as the International Rice Research Institute (IRRI) in the Philippines, were then increased by the West African Rice Development Association (WARDA) for dissemination in Sierra Leone. The *japonica* types responded better to fertilizer NPK and controlled irrigation but lacked the culinary qualities of the native Mende upland 'red rice' (*Oryza glaberrima*). Many *japonica* varieties had high levels of amylopectin in the starch that cooked up 'badly' (sticky). Mendes complained that it was watery rather than 'sweet' like their own rice. Although the native upland rice was less productive, it was favored for its distinct properties. Who could argue? I agreed with the locals. When Mende rice could be had, I'd snag all I could get. Rice produced on the Ahmadiyya farm was destined to feed boarders who had little choice in matters of cuisine. But I did learn a valuable lesson about the Green Revolution: people won't grow something just because it yields more. It must possess, among other things, the same culinary properties as the traditional grub. Ultimately, I think there was no alternative to expanding rice production in the inland river valley swamps. This would be necessary to feed an expanding population already facing food shortages. But why ignore upland rice? I was unaware of any breeding programs to improve upland rice in Sierra Leone, nor of any initiatives to stabilize upland production systems.¹ The answer lay in the swamps, or so I was led to believe. After two years, I concluded this was a flawed idea. But what did I know?

¹The interspecific upland hybrid *sativa* X *glaberrima* a.k.a. NERICA was finally introduced in 1996 by the Africa Rice Center (né WARDa). NERICA's creator, Monty Jones, won the 2004 World Food Prize for his efforts.



A precious bundle of new rice from the Ahmadiyya farm. Though I stayed in-country long enough to plant two rice crops, I did not participate in harvesting the second, largest crop because my time had run out by September 1981. Months after returning home, a letter arrived from a former student with news that the second crop had been cut. This was encouraging, as I feared interest in the Ahmadiyya rice farm would fade after my leaving. Sadly, I do not know what has happened to the farm since then.



Kini Mohmoh and Kulah built their farm beside our swamp. Being neighbors, we swapped work and became friends. Often, I relaxed in the shade of their farmhouse while Kulah fussed with food preparation. Sometimes I brought rice, palm oil, and fish, and we'd dine under the palm thatch together. Like most Mende women, Kulah worked the farm with her husband and children. Here she's preparing a batch of palm kernel oil. The native oil palm yields two kinds of oil: a bright reddish-orange extract prepared from the fleshy mesocarp of the palm oil fruit and a greasy black oil recovered from the nut kernel. The red oil was consumed daily in plasas, for Mendes believed it gave strength and courage to the eater.



Kulah gathered many different plants from the bush for *plasas*, an oily mixture of fish and vegetables eaten daily with rice in Sierra Leone. This was called 'country chop'. Mendes did not discriminate between field and forest when gathering food. On the other hand, we 'moderns' think that food, properly speaking, derives from cultivated plants and animals with a pedigree raised under government-approved practices and sold in vacuum-packed, shrink-wrapped, or congealed packets at the supermarket. Foraging from the wild is something we consider 'backward' and 'primitive'. Mendes were not so picky, knowing nothing about supermarkets or pedigrees.



Kulah ladles palm kernel oil while her youngest, Musa, watches. The palm nut kernels were placed in a wooden mortar (at left) and mashed to a pulp before cooking down.



At left: mortar and pestle after processing palm nut kernels. At right: an iron pot filled with palm kernel oil. The inky black oil looked repellent but, curiously enough, was quite palatable in its final culinary state. Or maybe my taste buds had acclimated to the savor of 'country chop'?



Slash-and-burn farming was practiced throughout the Sierra Leone uplands. The dry season was when farmers, with the paramount chief's blessing, selected a promising place in the bush to establish a farm. After being cut and slashed, the vegetation was left to dry in place before being burned. Bushfires spread rapidly and were completely out of control; therefore, it was risky to walk through the cut-over bush without an escape route. Farmers always signaled to one another by hollering when a fire started. This was the bush telegraph: if you were within earshot, you better beat feet! Near Joru.



A new slash-and-burn farm, unplanted. By late April, heavy rains two or three times per week signaled the start of upland rice planting. April was the so-called 'tornado' season, a transitional time marked by brief but very destructive rainstorms. An unprotected hillside like this was already severely eroded by the time of rice planting. The native fertility, much of it locked up in living biomass, was rendered to soluble ash by burning. The residual nutrients sustained the rice crop but could also be lost through runoff. Unlike the rice introduced from Asia, native upland rice varieties favored by the Mendes were more tolerant of acidic, low-fertility soils. Near Joru.



Early-season upland rice farm in Kenema District.



Mid-season upland rice farm, near Joru. Mendes usually staggered rice planting to spread the risk of crop failure and extend the harvest over several months. Early rice, traditionally planted in the lower parts of the farm, where soil moisture was better, was ready for harvest by late August. Later plantings were harvested sequentially through December. The red arrow points to a fallow slash-and-burn farm undergoing re-growth. A period of ten to fifteen years' rest is needed for enough biomass to accumulate. Population pressure in the eastern fringes around Joru was relatively low, giving fallow land more time to recharge and, in some cases, long enough for high forest to regenerate.



Slash and burn farm at the beginning of re-growth. Most upland farms were cropped for one or two years, depending on the soil fertility. The farm pictured above was not completely abandoned, however: cassava, yams, sweet potatoes, and various native greens were continually tended by farmers until the forest closed in. Favorable sites permitted one year of rice cropping followed by 1 to 2 years of cassava, groundnut, and/or cowpea. Upland soils in Sierra Leone were primarily deeply weathered and acidic, enriched by oxides of iron and aluminum, some of which hardened to plinthite ('laterite') upon exposure to the elements. Soil hardening, coupled with loss of fertility and encroaching weeds, limited upland cropping to a brief cycle.



A family cookhouse. Meal preparation was all done outdoors, and the work was shared among the wives and children. Polygamy was permitted in Mende culture; having many wives was a sign of wealth and power. The women did not object to this arrangement, as it conferred a certain status on them as well. But Mende culture overall was rigidly patriarchal, with women subordinated to the men.



Limba palm-tree tapper. The oil palm (*Elaeis guineensis*) is truly a multipurpose tree providing food, shelter, and drink. For some reason, the palm-tapping trade in Sierra Leone was exclusively the province of the Limba people. Palm tappers employed a raffia harness to assist climbing (barefoot, no less). To tap an oil palm, an incision was made in the stem beneath the growing point, or inflorescence. The sap trickled into a receptacle, or *bulli*, which could be anything from calabash gourds to cast-off jerry cans or sacs fabricated from old rubber inner tubes. The sap was then set aside and, after fermentation, yielded a cloudy, vaguely sweet alcoholic beverage. Palm wine was the cheapest 'swill' available and freely consumed. Drinking palm wine was frowned upon in Joru because the town elders were observant Muslims. But if you whispered for a cup of palm wine, it would appear as if by magic!



The fiery orange-red fruit of the oil palm grows in massive spiny bunches. It is natively harvested by climbing the palm tree in a harness and cutting off individual bunches, borne just beneath the crown, with a machete-tipped stick (a variant of the 'Go-to-Hell' tool used in cacao). Planted oil palm plantations typically have dwarf cultivars, which can be harvested closer to ground level. Chewing the raw fiber-laden palm fruit was a favorite pastime in Sierra Leone, like chewing tobacco in the U.S. Kola nuts served the same purpose and were exchanged as tokens of friendship. Raw kola nut is extremely bitter. I could never overcome its power. Kola nut is also loaded with caffeine, giving the chewer an energy boost. On the other hand, coffee, the beverage, was rarely consumed by Mendes. Coffee was grown as a cash crop for export, repatriated only as instant Nescafé sold in Lebanese shops in Kenema and other market towns.



A calabash gourd nest. Calabash gourds were prized for making various household utensils. Great care was taken to nurture a well-shaped fruit as pictured here. Gengalu.



Pictured at left: cacao (*Theobroma cacao*) fruit arising directly from a woody stem (cauliflory). Cacao was grown primarily on smallholdings as a cash crop. Cacao is adapted to growing under an open canopy of trees; thus, a cacao farm could be established without slash and burn. In modern terms, this would be called 'eco-friendly'. Pictured at right: the breadfruit tree (*Artocarpus communis*) of South Pacific origin, also long established in Sierra Leone. A single mature breadfruit tree could produce a prodigious crop of globe-shaped fruit that tasted, when cooked down, a little like bread (you had to use your imagination). The fruit matured in the rainy season, providing an essential source of energy and carbohydrates when rice was scarce.



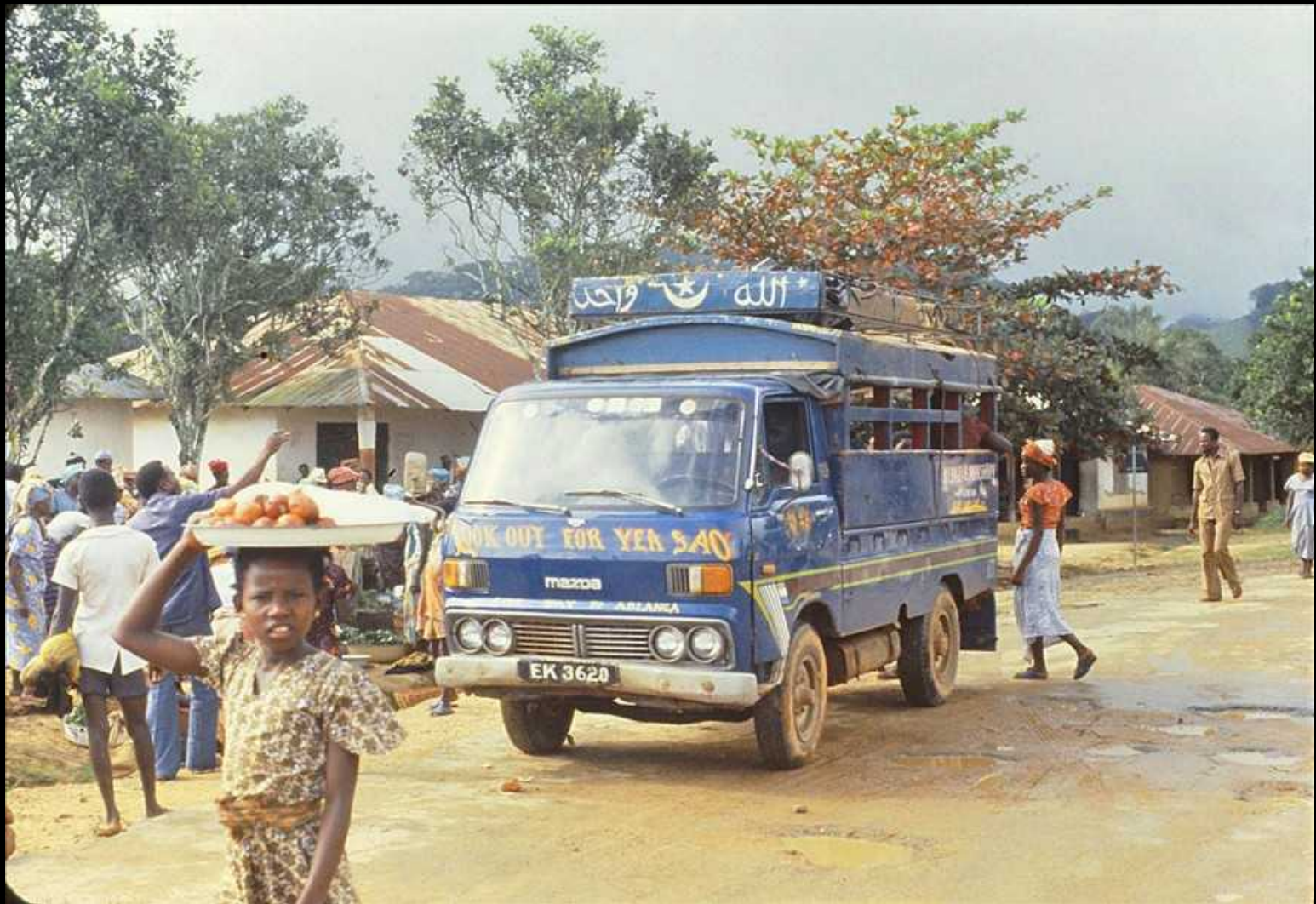
At left: a raffia palm thicket. Raffias were vine-like trees infesting swampy places. Some unforgiving species were armed with vicious thorns. Not exactly a promising prospect if you were making a farm! Raffia palms are still of great economic value to Sierra Leone. The upper epidermis of the very young leaflet is stripped to form the fiber raffia commonly used in basket and mat weaving. The midribs of the leaflets are used for whisk brooms, while piassava fiber from the leaf sheaths and lower parts of the petioles are used for brooms and brushes. The climbing palms also provide a source of natural cordage for making beautiful jungle suspension bridges.



Land of the Lost? Africa's landscapes conjure many images. Here, a vapor-filled vista recalls a scene of primordial wildness. Wandering dinosaurs would fit right in. Near Lalehun.



Local entertainment, country style: watching the *puumui* take a river bath. A naked white man was something to behold hereabouts! In the bush, there was no plumbing, so public bathing, urination, and defecation were everyday affairs. It just takes some getting used to. Near Lalehun.



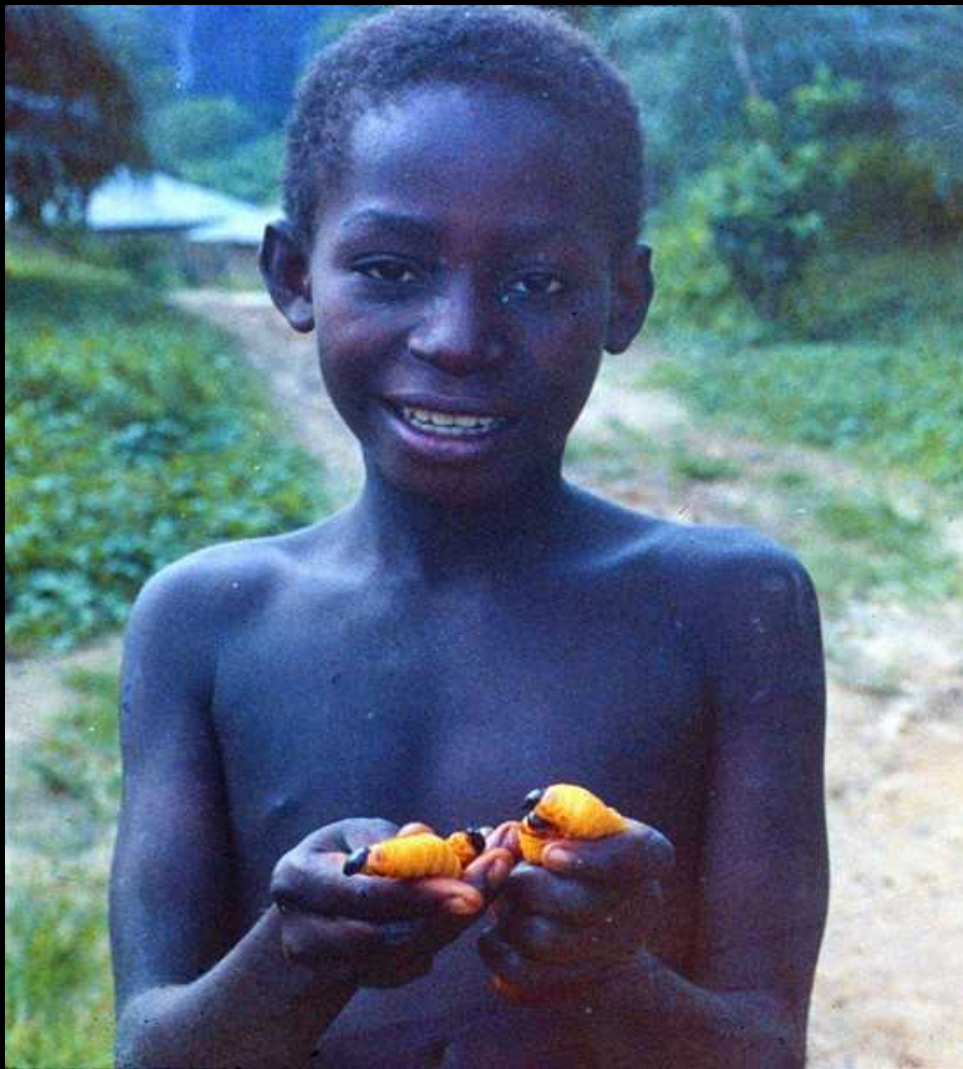
The universal mode of public transportation in Sierra Leone was the 'lorry', or 'mammy wagon' pictured here. Lorries were four-wheel-drive trucks with an iron canopy suspended over the bed. Cargo was piled atop the canopy, and a canvas tarp rolled down the sides to keep out rain and dust. Situated in the flatbed were three wooden benches: one spanning each side, and one down the middle. Passengers were packed inside like sardines in a tin, tight enough to make your balls turn blue. Drivers never understood the words "There's no room!". Road dust mingled with cigarette smoke, poultry dander, and kiddie vomit left no speck of clean air to breathe. It made you long for some good industrial pollution.



Hemorrhoid-inducing vehicle roads were the rule in Sierra Leone. Lorries would go to settlements anywhere in the bush, often traversing bush tracks like this. To illustrate how deceptive published maps can be, the track in the picture on the left is the main road to Pendembu, as indicated by the red arrow on the map on the right. Looks good on paper, but it's a different story on the ground. Heavy rains often rendered travel impossible.



Every town had a 'baffa', an open-air shelter festooned with rope hammocks. Baffas were public spaces where anyone could loiter, puff tobacco, tell stories, kick back, and relax. I miss the baffa. Sadly, we don't have them in America. Joru.



What's for dinner? Catch of the day might be anything, including tasty insect grubs extracted from the trunk of the oil palm. The grubs pictured here are like those I later encountered in Peru, grilled on a skewer à la shish kebab. In Sierra Leone, insect grubs fried in palm oil were good eating. Flying termites (*Macrotermes bellicosus*) were also consumed in season. After the first rains of April, the winged adult termites swarmed after dusk and were highly attracted to light. Here's the termite recipe: (1) place a lighted lantern in a shallow pan of water; (2) termites ricochet off the glass dome into the pan and drown; (3) fry till crisp; (4) eat away! Next morning, your house was littered with a blanket of shed termite wings.



Market day arrived once per week, accompanied by colorful ladies bearing baskets brimming with local produce: fish, palm oil, rice, leafy vegetables, and fruits. Unlike advanced (?) economies in Europe and North America, the price of merchandise in open-air markets was never fixed. Aggressive bargaining tactics were the rule, particularly for foreigners, because all *puumuis* had leones stenciled on their foreheads, or so it seemed. Much haggling ensued. Market days were always welcome because you never knew what curious artifacts might turn up.



Market spread. Pictured here are the native fixins' for plasas: cucumber, aubergines (eggplant) of varying shades of green, yellow, and amber, sweet potato leaf, and the infamous red and dark green bush peppers packing enough heat to make a meal of rice and plasas a sweaty, cathartic baptism in culinary hell. Though supplied with a two-burner propane camp stove, I seldom cooked for myself. You were expected to hire someone who could fix proper 'country chop', a skill no *puumui* could ever manage. Also, I never cleaned house, nor hauled water for bathing. All the housekeeping chores were delegated to students, *bobos* or *titis*, always eager to earn a few leones. I dearly miss that luxury.



Secondary schools in Sierra Leone were required to provide instruction in vocational agriculture. The program is typically centered on a field practicum in which classroom learning is applied. Here, Admadiyya Form IV students have cleared a patch of bush for vegetable plots by staking off a grid and making traditional raised beds. Students planted the beds with native Sierra Leone crops and occasional novelties, such as the vegetable marrow (zucchini) pictured at right. The field practicum was an outdoor classroom where practical skills such as planting, applying fertilizer, calculating rates, safely handling pesticides, and protecting the soil were taught. Students were also required to maintain a field book of observations on crop germination and life cycles, insects, diseases, and related events. Tools, seeds, fertilizer, and pesticides were purchased with kind assistance from the American Embassy, which also financed my rice farm.



The Ahmadiyya School, located about 1 kilometer outside Joru. The Ahmadi sect is a branch of Islam centered in the Punjab region of Pakistan, where it is, presently, officially *kafir* (apostate). I found the Ahmadiyyas very gracious and kind, but they tended not to interact much with the locals. The Ahmadiyyas also operated a small medical clinic in Joru, but it was always closed because no qualified Ahmadis could be found to staff it. At school, discipline was firmly enforced and severe: 'spare the rod, spoil the child'. On the compound above, disobedient students were flogged in front of a jeering audience nearly every morning.



My multiplication nursery for mosaic-resistant cassava. The Sierra Leone Ministry of Agriculture and Njala Agriculture University vigorously promoted the newer virus-resistant cultivars from IITA in Nigeria. I was given some cuttings at a Peace Corps in-service training event, being advised to propagate them and give the offspring to farmers. Good idea in theory. In practice, it proved less redeeming. While the virus-free cassava increased beautifully, it wasn't a hit with the locals. "It's not sweet like our Mende *tanga-le*", they complained. Turns out, breeding for resistance to mosaic virus also altered the cassava leaf epidermis, increasing its thickness and fiber content. Breeding altered not only the culinary properties of the leaf, but the root as well. The virus-free cassava grew beautifully but was rejected for its inferior culinary qualities. Oh well, another lesson learned.



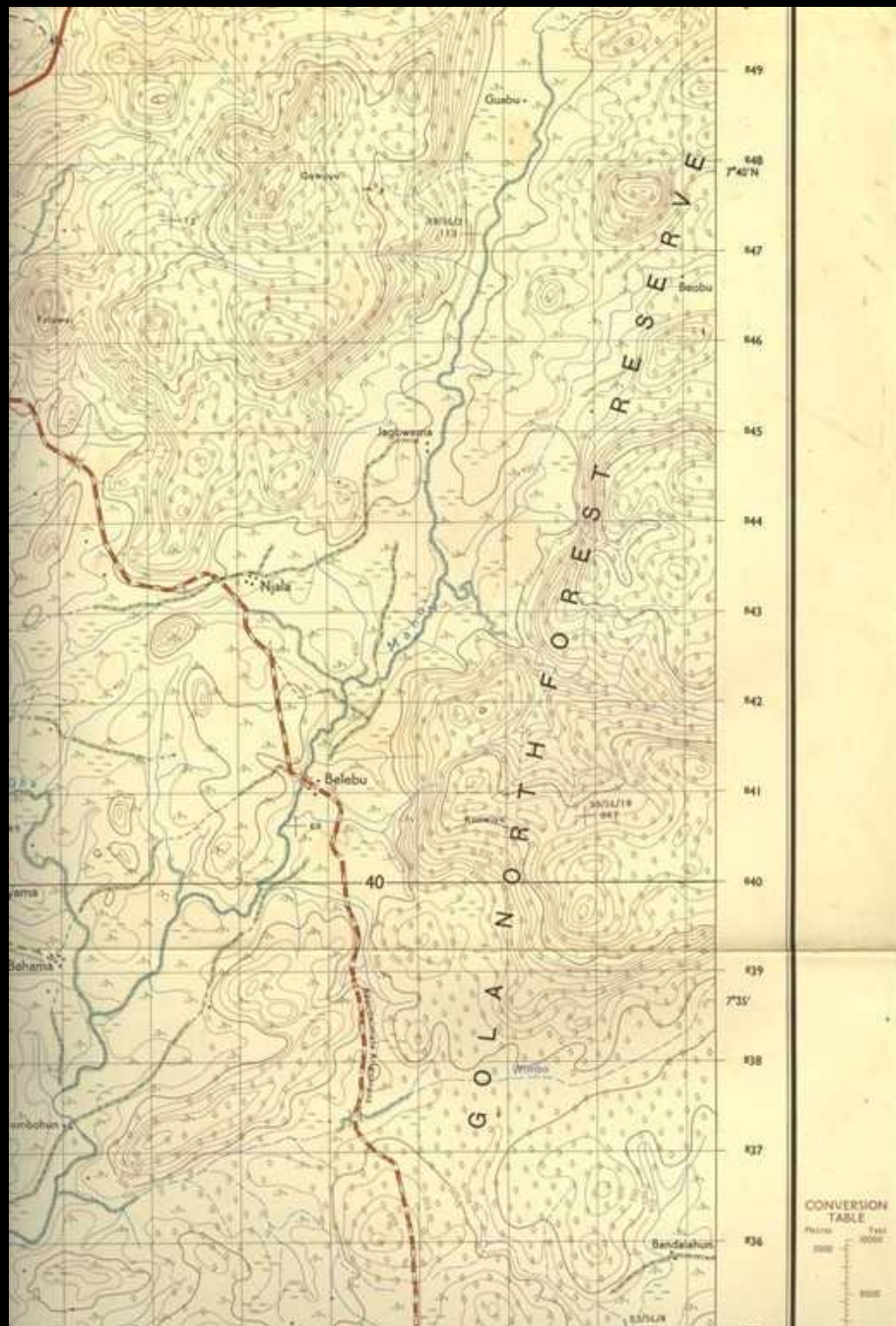
Most country towns in Sierra Leone had petty traders with fixed commissaries. These micro-shops opened from the verandah of the trader's house, often occupied by Fulani migrants from Guinea. Here one could find warm soda pop, Maggi cubes, tiny cans of Italian tomato paste, tinned sardines, salt, cigarettes, kerosene when available, batteries for your shortwave radio, and what-have-you. Mohammed Jalloh's storefront was a favorite after-hours hangout for me. Mohammed spoke decent English, and that was a big draw. The two Dutch aid workers in the photo are awaiting transport to Kenema. Back then, foreigners were uncommon in Sierra Leone's upcountry. No backpackers paging their Lonely Planet guides for cheap eats and lodging. Just your occasional Peace Corps comrades, and a few other weird visitors to break the monotony.



One of my favorite photos from Sierra Leone. Despite living conditions that would make the average American wither, children in Sierra Leone always radiated with infectious charm. We, in the soft, overprivileged West, are always afraid of our little world falling apart if we can't get the latest iToy. We could learn a thing or two about fortitude, patience, and resilience from Africans. Lalehun.



Beware the bush devils! Islam was the dominant religion in the upcountry of Sierra Leone; yet tribal clans still privileged their traditional beliefs. In this other world, juju and exorcism were practiced trades, and evil spirits lurked omnipresently. Secret societies were the keepers of tribal knowledge; young men and women joined in adolescence as a matter of traditional rite. Poro was the male secret society; the Sande (Bundu) society was the female domain. When a devil was rumored to be walking about after dusk, village compounds went into a suspended state, for it was believed that anyone casting eyes upon a devil would suffer ill consequences. The devils in this spontaneous daytime performance in Joru were harmless actors, thankfully. It was OK to watch and even photograph them, though it cost me a dear Le 5.00 for the privilege.



In January 1981, at the height of the dry season in Sierra Leone, a female volunteer, Suzanne, whom I had never met, appeared at my doorstep, saying she wanted to explore the Gola Forest. Did I want to go with her? The Gola forest reserve, shown on the map at left, was a largely untracked area of virgin rainforest on Jorú's eastern flank (part of the Gola is now a National Park). I, too, wanted to explore the reserve, even managing to obtain, now long-forgotten, a few nice topo maps of the area. The die was cast. We packed a few essentials and took off. Transportation was hit and miss, so we hoofed the dirt track to the border town of Lalehun, obtaining food and water from villages along the way. Near Lalehun, our footsteps encroached on a bivouac of expatriate researchers studying chimpanzees. Moreover, their shiny 4x4 parked nearby beckoned to us! The expats carried us along an old logging road that intersected a bush trail known to a local guide they had employed. There, we said our goodbyes and disappeared into the forest. I'm sure these expats thought they would never see us alive again! Suzanne carried nothing; I had a machete, a small rucksack, and was sensibly shod in 'Ho Chi Minh's', peasant footwear fashioned from old rubber tires. We knew nothing about J. Peterman's! But the topo maps were accurate. We found remote settlements tucked away in the bush, where some residents, particularly children, were frightened by our appearance.



A popular idea, sparked by European and American explorers, is that rainforests are a kind of 'green hell'. Nothing could be further from the truth. An old-growth tropical forest has few ground obstacles, blissful compared to the razor-grass-infested, burned-over bush I was used to dealing with. The Gola forest was not totally uninhabited. Here and there, we encountered tiny settlements, all connected by bush tracks and completely cut off from the world outside.

In one trackless village, name forgotten, we stayed overnight. Yet the bedroom furniture there was unaccountably ornate. I could only guess how it got there: the same way we did, borne by human feet! Elephants roamed the reserve, but we never met one (probably a good thing). In the Gola, I felt totally safe, like hiking through the woods back home. Here, Suzanne stopped to rest, and I snapped this photo of her perched upon a serpentine root.



Many trees in the Gola had massive brace roots, such as the one pictured here. I do not know the reason for the development of these roots, but they are commonly observed dendritic features in old-growth evergreen rainforests.



Giants in the land. Canopy view from within a grove of ancient mahogany trees deep in the Gola forest, known to a local kamajor (hunter) hired by us. In this remote part of the Gola reserve, it was possible to glimpse what lower West Africa looked like even before native African tribes migrated from Guinea ages ago. Here, untouched, stood a true cloud forest, cloaked in thickets of aerial plants, home to many unique species. Do these trees still exist? I often wonder.

Departure

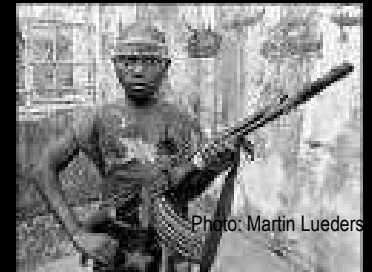


Leaving Sierra Leone was more difficult than arriving. Back home, there was no use for African country skills like carving rice farms out of swampland, growing cassava and sweet potato, and surviving in the bush. We had the option to extend service, which I considered. But after two years in-country, I was showing signs of what Africa long-timers called 'bush fatigue', a physical and mental state induced by too much chloroquine, palm-oil-saturated food, and a lack of personal hygiene. The shabby, deer-in-the-headlights look on my exit passport spoke volumes. It was time to go home. *Malo hoe, Sa'lone.*

Postscript

The fortunes of Sierra Leone since my departure have not been good. In 1991, civil war erupted, pitting the Revolutionary United Front (RUF) against the regime of Maj. Gen. Joseph Saidu Momoh. A year later, the government collapsed. The Sierra Leone civil war provoked incredible human suffering and inflicted lasting damage on the fabric of Sierra Leone's society. In 1998, United Nations troops were deployed to Sierra Leone, resulting in humiliation and defeat at the hands of RUF rebels. Thereafter, various soldier-of-fortune-style contractors, such as Executive Outcomes, were engaged to secure the diamond mines and keep the rebels out of Freetown. In 2000, international outcry forced British armed forces to intervene. A truce was declared in 2001, followed by the formation of a new government the following year. During this period, rebels coerced children, often with drugs, to take up arms in combat. Signature RUF terror tactics included hacking off limbs, eye-gouging, and other horrific bodily mutilations. In 1998, the United Nations declared Sierra Leone the worst place in the world to live. The Peace Corps evacuated before the civil war and has only recently re-established a presence in the country.

All of this seems incomprehensible to me. How could it happen? Part of the answer lies in the diamond trade. If diamonds are a girl's best friend, they were a fatal attraction to Sierra Leoneans. Mineral trade was monopolized by Middle Eastern entities engaged in a booming business smuggling 'blood' diamonds out of the country. Consequently, little of Sierra Leone's mineral wealth stayed in-country. This fostered a continuous downward spiraling of the economy, created social unrest, and ultimately fueled a civil war.



The civil war in Sierra Leone forced all of us who were there to ponder what effect our presence had on the country and the overall impact of Western aid in tottering nation-states. Was any purpose served? Was the influence of foreigners harmful, neutral, or beneficial? I have no answer. Sierra Leoneans bear the final verdict. Today, Sierra Leone is at peace, but the scars of civil war continue to haunt the nation. The recent (2014) Ebola epidemic in West Africa has only added to the misery. The struggles of Sierra Leone are sobering reminders that the human condition has not changed despite the apparent progress of civilization. We live beneath a fragile, diaphanous veneer of civil society, a kiss away from disaster even in so-called 'advanced' nations.

Additional archival images from Sierra Leone, courtesy of Peter C. Anderson, are available via the Sierra Leone Web portal (click the image below). A video clip (.mp4) of the civil war and Sierra Leone native 'Kamajors' is also linked below. The file is housed on my web server and is safe to view.

