

“Predatory Sedentism”: Intimidation and Intensification in the Nigerian Savanna

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While many studies have explored how agriculture changes when population density rises, this paper examines actions farmers may take to control whether population density rises. Using information from ethnographic fieldwork, colonial archives, and air photography, two agricultural groups migrating into an agricultural frontier in the Nigerian savanna are compared. Population density in Kofyar communities has risen to over 100/km²; Tiv communities, although older, have maintained population densities of around 50/km², in part through intimidation of encroachers. This use of intimidation is a component of a distinctive adaptive strategy that includes settlement stability, high population mobility tied to witchcraft accusations, relatively extensive cultivation allowing considerable off-time, and reliance on social networks to facilitate residential mobility and land access. Population pressure must be seen as an integral part of this adaptive strategy, rather than as cause or consequence.

KEY WORDS: agriculture; population; settlement; land tenure; conflict; Nigeria.

The reason for migration from Abinsi Division was in every case the desire for fresh land. *It can hardly be called a need.* The Tiv are accustomed only to use land for four years and then leave it for an indefinite period.

—R. E. Alford, 1935 (NAK, 1935, emphasis added)

Asst. District Officer Alford was discussing the migration of Tiv farmers into an agricultural frontier in central Nigeria in the early 1930s. Other colonial officers shared Alford's impatience with Tiv land hunger, as have other farmers the Tiv have run into in the years since. A Kofyar informant, embroiled in land conflict with the Tiv in 1994, used the same terms: “The land is something they take, not something they need.”

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Yet from an external perspective, the “need” for land is hard to assess; it is usually *possible* to get by on less land by intensifying agriculture. This has been the subject of a substantial body of research on relationships between population and agricultural change.² However, this body of work concerns what happens *when* population density rises. What it neglects are differences in the actions farmers take to control *whether* population density rises.

I report here on an area of frontier settlement in the Nigerian savanna where Tiv have relied on intimidation of other ethnic groups to protect stable settlements with relatively high per capita land holdings. This adaptive strategy of “predatory sedentism” contrasts both the creeping settlement of the Tiv homeland and the smallholder farming practiced by Kofyar settlers on the frontier.³ I examine five components of the adaptive strategy of predatory sedentism: settlement stability, high population mobility tied to witchcraft accusations, use of intimidation to protect low population density, relatively extensive cultivation allowing considerable off-time, and reliance on social networks to facilitate residential mobility and land access.⁴ These are mutually reinforcing components of an adaptive strategy within which population pressure is both cause and consequence.

Kofyar Settlement Ecology

Frontier settlement by Kofyar, reported elsewhere (Netting *et al.*, 1989; Stone *et al.*, 1990; Stone, 1996), provides an instructive point of reference. Kofyar and Tiv came to the frontier from opposite directions and from contrasting agrarian adaptations. The Kofyar homeland, at the southeastern corner of the Jos Plateau (Fig. 1), had a distinctive pattern of high population density (approaching 500/km² in places), intensive cultivation, dispersed settlement in privately-controlled farmsteads, and small households (Netting, 1968): a prime example of what Netting (1993) defined as intensive smallholder farming. Kofyar began to establish bush farms in the Benue Lowlands in the early 1950s, especially in a “Core Area” immediately south of Namu (Stone, 1996). The initially low frontier population allowed extensive cultivation, which the Kofyar practiced enthusiastically

²Boserup’s (1965, 1981) principal influence on agrarian scholarship has been the argument that “As the population–land ratio increases, farmers are “forced” to employ greater labor and technical inputs to achieve greater production” (Kates *et al.*, 1993, p. 8; see also Turner *et al.* 1977; Netting, 1993; Stone, 1993, 1996).

³For a comparative historical study of European responses to population increase, see Grigg (1980).

⁴“Predatory sedentism” is meant to highlight the contrast between agrarian settlement at Asamu and the Bohannans’ description of the Tiv homeland, not to invoke the connotations of plunder and robbery of the term prey. As the following discussion makes clear, property rights in the disputed area are ambiguous.

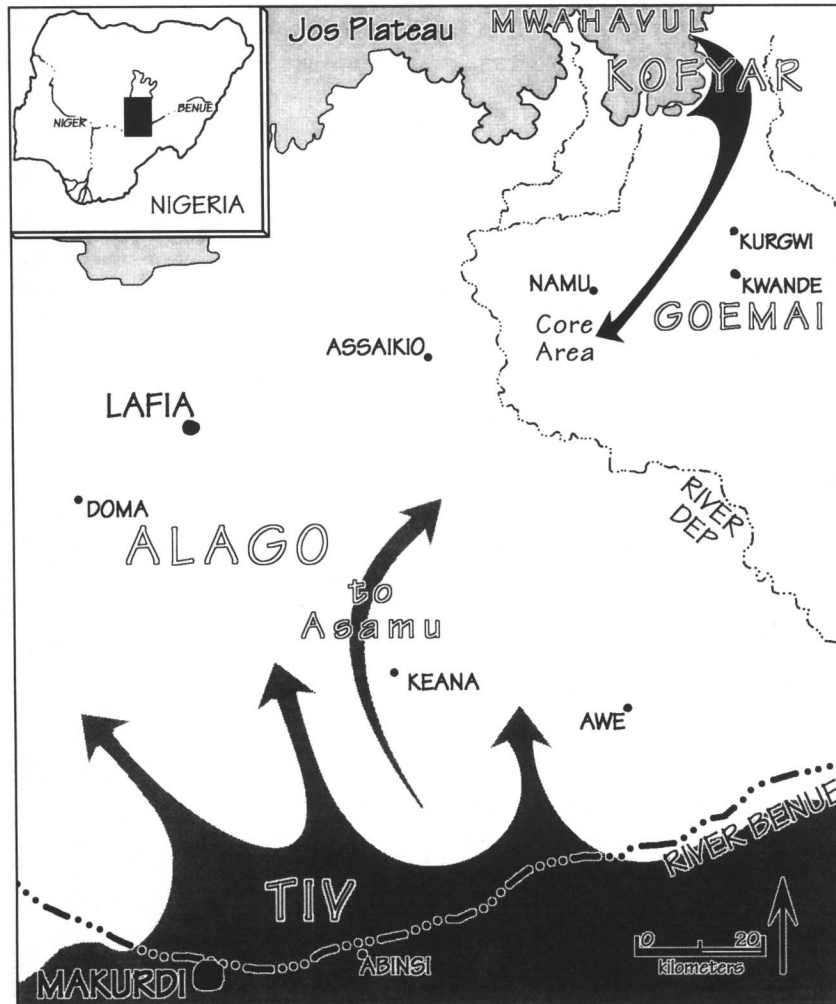


Fig. 1. Central Benue Lowlands, Nigeria.

even as they maintained their intensive home farms. But the Core Area soon began to exert a strong pull on Kofyar settlement. The distance from the homeland promoted longer term residence, the soils offered greater and more sustained yields, and the market activity offered lucrative opportunities for cash cropping. The seasonal bush farms gradually began to develop into stable primary residences. By the mid-1980s, population density had climbed to 101/km², and 70% of farmable land was in cultivation

(Stone, 1996, pp. 102–104). Responding to both the raised population densities and market demand, farm production in many areas underwent intensification. Fields were gradually destumped, carefully weeded, and sometimes manured.⁵

A study of the organization of Kofyar agricultural labor in 1984 revealed an extended season, with intricate crop and task sequencing to mitigate bottlenecks and fill slack times (Stone *et al.*, 1990; Stone *et al.*, 1995). Mean yearly work input was 1500 hours, as compared to 500–1000 hours for most extensive farmers in Africa (Stone *et al.*, 1990; Cleave, 1974). Work routines relied heavily on suprahousehold labor pools, both reciprocal groups and festive labor parties. Since the farms required the near-daily presence of the farmer, a great premium developed for residence very near the land being cultivated (Stone, 1996, 1997); settlement was atomized, with individual households averaging 6.4 persons residing in compounds centrally located on farmsteads typically 4–7 ha. in size. In the intensified areas, farmstead holdings were considered permanent.

By the late 1960s, significant numbers of Kofyar were also seeking land well beyond the Core Area, as were other Plateau groups such as the Mwa-havul. Some moved west toward Asamu, where there appeared to be large tracts of unused land between Tiv hamlets.

Tiv Homeland Settlement Ecology

In 1919, the Tiv homeland was estimated at 23,000 km, mostly south of the Benue River, with a population density of 15/km² (Temple, 1922 [1919], p. 295). Their economy was described as mixed farming, hunting, and fishing. Agriculture relied on a 3-year rotation of yam (and maize), sorghum, and benniseed, after which the land was fallowed (Temple, 1922 [1919], p. 301). Although the cultural emphasis on genealogical hierarchy was recognized early on, its role in settlement expansion and land conflict was unknown, and Temple was unsure if they were “a war-like or a timid race” (1922 [1919], p. 301). Fieldwork by Paul and Laura Bohannan 30 years later explored the relationships among agriculture, conflict, and the “intimate association” between centrifugal settlement expansion and sociopolitical structure (Bohannan, 1954a, p. 2; see also Bohannan, 1952; Bohannan and Bohannan, 1953, 1968; Bohannan, 1954b).

The Tiv population was organized in a segmented hierarchy, with each segment occupying its own territory, or *tar*. All of Tivland (*Tar Tiv*) was divided into nested tars, with each minimal segment’s tar abutting the tar

⁵However, agricultural change varied with the local constraints to production; where marginal returns to intensification were lowest, there was a greater tendency to abandon farmland within a decade (Stone, 1996, pp. 164–175).

of a sibling's minimal segment. To expand, one cleared a new farm on land of the most distantly related neighbor; "When he objects, you are thus assured of the largest possible supporting group in any litigation, argument, or fight which may develop . . ." (Bohannon, 1954a, p. 4). Tiv movement also took the form of *disjunction*, or emigrating out of the area controlled by one's agnatic kin; by the 1930s, the Pax Britannica allowed increasing movement into frontier areas (Bohannon, 1954a, b).

Expansion was in part a mechanism for mitigating population density and the need for agricultural intensification. Still, by the 1960s, population density may have exceeded 200/km² in parts of southern Tivland, tapering off to under 5/km² at the settlement fringe north of the Benue (Vermeer, 1970, pp. 303-304). In the most crowded areas, crop rotations were undergoing changes to adapt to soil exhaustion (Briggs, 1941; Vermeer, 1970).

In areas of continuous Tiv settlement, expansion was self-perpetuating, as farmers were motivated to expand against their neighbors as their own neighbors expanded against them. The result was likened to a steamroller (Bohannon and Bohannon, 1953). Ironically, this model of what came to be known as "predatory expansion" was based on the interior where Tiv were pushing against each other, not where Tiv settlement itself was actually expanding. The Bohannans did not visit the frontier north of the Benue (P. Bohannon, personal communication), although they did report that on the northern edge, Tiv were "moving into (and leaving behind as enclaves)" such groups as the Alago and Goemai (Bohannon and Bohannon, 1953). Sahlins (1961) used this report, along with Evans-Pritchard's (1940) account of the pastoral Nuer, in arguing that the salient feature of segmentary lineages was expansion against other groups.

Subsequent debates on predatory expansion have hinged on the causes and consequences of population density. Kelly (1985) held that Nuer territorial expansion was actually driven by the need for cattle for bridewealth; his claim that population pressure was more consequence has been contested by de Wolf (1990) and Hutchinson (1994, 1996). Among the Tiv, cases of heightened population density and some agricultural intensification have been reported in the homeland (Vermeer, 1970), but the northern frontier, where settlement was supposedly expanding in response to population pressure, has gone largely unstudied (one exception is Eyoh, 1990, 1992).

Tiv Settlement on the Northern Frontier

In the early twentieth century, the British viewed the Benue River as marking a divide in settlement and political organization in central Nigeria; Tivland was to the south, and the area north of Makurdi was dominated by Alago kingdoms headquartered in walled towns such as Doma and Keana

(Fig. 1). There were Eggon, Mada, Migili, and Akyi farmers in the countryside between and east of the Alago towns (although the timing of their arrival is uncertain and in some cases disputed). Further east were the towns of Goemai territory, and in between was a small, ethnically hybrid population.

Yet there had been Tiv north of the Benue well back into the nineteenth century, when they were hired by the Alago as mercenaries. There was a significant population of Tiv on the North Bank by 1914, and by 1935 Tiv pioneers were moving northeast, toward the scantily populated bush between the Alago and Goemai (NAK, 1914, 1935). This is where the Asamu area is located, although its precise location is being withheld because of ongoing land disputes.⁶ Tiv first appeared at Asamu in approximately 1939, and by 1945 there were the hamlets of Ukwese, Tse Uche, Utume, and Shamga (Fig. 2).

By the early 1960s, these hamlets were still in place. They had grown to varying degrees, and some had attracted satellites (hamlets or compounds established with permission of the previous settlement). The market town of Gari had developed and an Akyi man named Sholu had been appointed "Chief of the Farmers" by a local district head, ostensibly with jurisdiction over the Asamu hinterland.

By 1970, Kofyar landseekers were appearing at Asamu and found Sholu willing to sell land. Air photographs from 1972 show the first compounds of Dashe, the first Kofyar settlement in Asamu (Fig. 2), at the interstice between Ukwese and Tse Uche. Sholu had also appropriated 15 ha. of land near Ukwese for his own use (Fig. 3).

By 1978, air photos show clear growth in the Kofyar community of Dashe and the beginning of additional Kofyar and Mwahavul communities to the west. By 1979, the Kofyar community of Daligit was beginning to grow at the interstice between Tse Uche and Utume.

The fundamental components of the mosaic settlement of 1979 were still in place in 1994. Kofyar and Mwahavul occupied several areas, their settlements consisting of sets of contiguous farmsteads, typically 4–6 ha. in size, each occupied by a single household. There was one church located in the Mwahavul area. The Tiv settlements were more varied: Ukwese had 13 contiguous compounds, forming a hamlet but lacking secondary functions; Ukwese's two satellites were both single compounds; Tse Uche comprised two large contiguous compounds and a small satellite compound; and Utume was a village with four very large multifamily compounds and a primary school.

⁶Names of people and places in the Asamu area in this paper are pseudonymous, including "Asamu" (an amalgam of Assaikio and Namu). Asamu is comparable to the Kofyar Core Area in ecology, infrastructure, and markets.

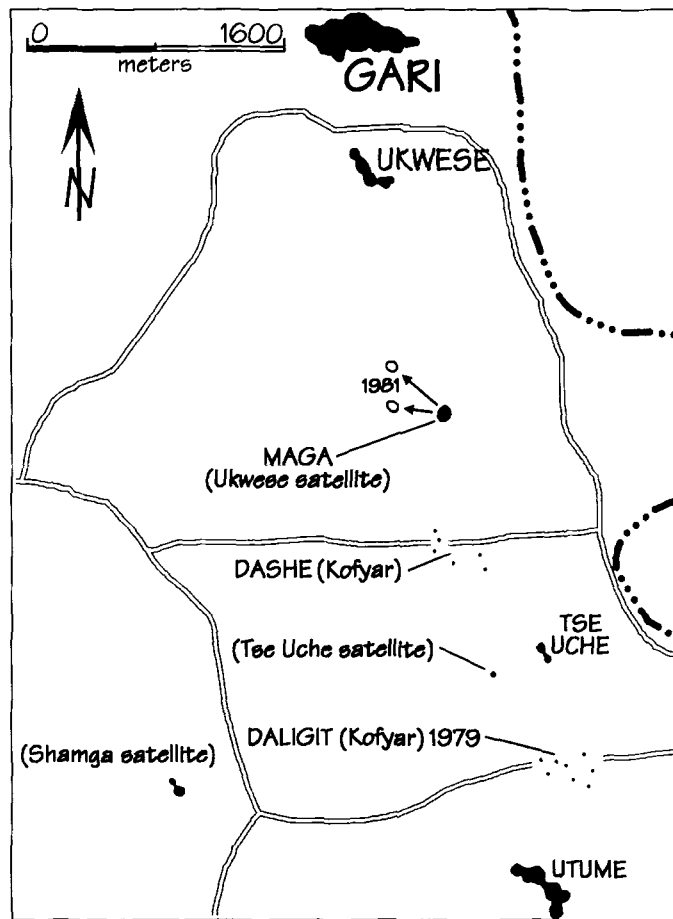


Fig. 2. Detail of Asamu area. Settlements and territories are depicted as of 1972 unless noted otherwise. The double lines indicate the approximate division of the landscape according to the Asamu Tivs' view of land rights.

What was quite unexpected was the stability of Tiv settlements at Asamu, given the history of creeping settlement in the homeland. The only Tiv settlement abandonment was at Maga, an Ukwese satellite founded in 1948, which fissioned in 1981. Otherwise, while there have been some changes in morphology, the Asamu Tiv settlements had been in place for roughly 50 years by 1994. Yet settlement stability can be quite different from population stability, as described in the next section.

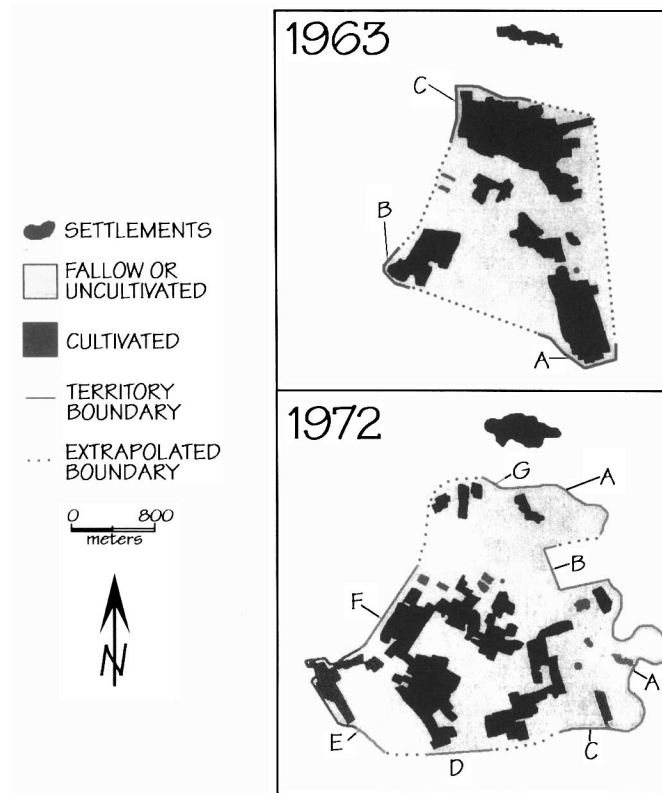


Fig. 3. Land use and territory for Ukwese hamlet in 1963 and 1972, based on analysis of air photographs. The settlement north of Ukwese is the town of Gari.

Tsav and Mobility

A feature of frontier Tiv life histories is a startlingly high rate of residential movement of individuals and households. Residential moves are made by individuals, household segments, households, or multihousehold compounds. Moves may be between compounds in a village, within villages in a cluster, between frontier locations, or between frontier and Tiv homeland.

Residential moves are generally attributed to *tsav*—the Tiv concept of power or talent, which can be turned to malevolence at night (Bohannon 1989[1957], p. 163). *Tsav* is often translated as witchcraft, but as is often the case in Africa, it has little in common with the Western concept of extraordinary occult practices; every Tiv in a position of authority has *tsav*,

and almost all are assumed to put it to pernicious use on occasion. The Tiv attribute virtually every case of infirmity, injury, or infertility to tsav. The culprit is usually a male elder living near the afflicted party, but if there is doubt, a diviner (*orshior*) is consulted. The remedy is usually to leave the premises. Every settlement history collected on the frontier included at least one episode of residential movement triggered by tsav.

Yet while tsav can explain specific moves, the general pattern of high mobility is shaped by the need for an extensive land base. This was recognized explicitly by Tiv in Asamu. Refugees from tsav may be taken in by immediate kin, but moves are often to frontier areas where the immigrant seeks out a host who will serve as protector against tsav. The refugee is considered the guest (*ovanya*) of the protector. It is a patron–client relationship, in which the host provides access to land and protection from tsav, in return for support in local social and political issues. This requirement of patronage affords Tiv settlements considerable control over immigration by other Tiv. Thus, the frontier lacks the homeland’s contiguous blocks of agnates who can collaborate in settlement expansion; moves are mostly by disjunction, and settling where one lacks a powerful patron is considered highly reckless. The first moves into Asamu did not require such patronage since there was no threat from tsav, although these moves were precipitated by tsav elsewhere.

The case history of Maga illustrates the effects of witchcraft and patron–client relationships on movement of households and individuals. Maga was at risk from a witch in Tivland and sought help from his mother’s brother, Ukwese. Ukwese had no land to offer, but he took him to a lineage-mate near the edge of the frontier who accepted Maga as an *ovanya*. Maga and his brothers moved to this patron’s village in 1941—part of the general northeast Tiv expansion, but specifically located by considerations of tsav. The patron died a few years later, but a few years later Ukwese founded the hamlet named for him, and Maga built a compound nearby, as an *ovanya*. Maga died in 1969, and Ukwese in 1975. Unwilling to stay in Asamu without Ukwese’s protection, most of Maga’s compound left the area, but two sons stayed to build their own compounds in 1981 (Fig. 2).

Most other cases of mobility on the frontier involve shifts between settlements which are themselves stable. The overall result is a constant churning of the population, a state of demographic agitation in which individuals are often moved from more to less crowded situations. Yet overall it is hardly an efficient mechanism for redistributing population, and the settlement histories from Ukwese alone contain numerous cases of movement into greater land scarcity (as with Maga’s heirs who returned to the Guma area).

Table I. Population Density and Land Use Among Tiv (in Ukwese, 1963–1994) and Kofyar (in Core Area, 1985)

	Cropped	Fallowed/ unplanted	Use unknown	Total territory	R	Pop.	Pop. (km ²)
Ukwese							
1963 ^a	88	288	0	376	23	95	25
1972	119	407	0	526	23	146	28
1994	129	129	159	417	50 ^b	212	51
Kofyar ^c							
1985	-	-	-	-	72	-	101

^aThe measurements of 131 ha. of "used" land has been adjusted by 33% as explained in the text. If the additional 0.8 km² (discussed in the text) is added to Ukwese's unused land, the territory's area rises to 456 ha. and the R value drops to 19.

^bThe R value pertains to the mapped portion of Ukwese's fields.

^cKofyar data are from the Core Area in 1985 (Stone, 1996). I estimated 70% of the land to be in crops and 3% of the land to be unfarmable (roads, streams, and compounds), yielding an R of 72.

Territory and Landuse Intensity

Most Tiv huts can be reliably identified on air photos from 1963, 1972, and 1978, and the growth of population history of Ukwese village is summarized in Table I.⁷ The period from 1963 to 1994 had an annual growth rate of 2.6%. Ukwese has grown more swiftly than the other Asamu settlements, where growth rates were probably under 2%. This is quite low given the overall population influx into the region over the past three decades. In comparison, immigration and reproduction together pushed population in the Kofyar core area from 752 to 3174 between 1962–1984, for a mean annual growth rate of 6.8%.

To compare cultural responses to population density in a cultural mosaic we must recognize some form of territories, but the nature of territorial boundaries may change through time. In the early stages of Tiv migration, there were widely-spaced settlements from which fields radiated. In places, the fields of different settlements approached each other, constituting a segment of a perimeter; elsewhere, it is possible to delimit the area actually in use but not the territory (what *could* have been used). The air photos record the filling of the landscape and the increased number of perimeter segments, making it easier to delineate perimeters; but these are by no means unambiguous territories, since the meaning of perimeters can change with the infilling process. This is especially true with the Tiv, who may see

⁷For the Tiv, population is a relatively unambiguous variable to measure. Unlike the Kofyar who split their time between frontier and homeland farms (mandating use of weighted indices to measure population), almost all the Tiv in this study had a single residence where they live and farm. The relationship between huts and population here is based on analysis of three compounds and their populations recorded in 1994 ($\text{Pop} = 1.5(\text{huts}) + 13.7$, $r^2 = .996$).

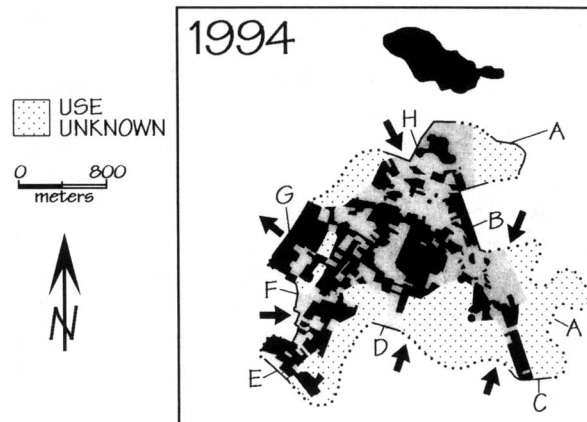


Fig. 4. Land use and territory for Ukwese hamlet in 1994, based on ground land use mapping and analysis of air photographs. Key is the same as Fig. 3.

their own territory as including land they once cultivated that has been taken over by others during fallowing, and land cultivated by others but which they plan to take. Culture-specific population densities must take into account such qualitative changes in people:land ratio through time.

Figures 3 and 4 depict the history of land use for Ukwese and its satellites. Figure 3–1963 shows the area when there was probably “negative land pressure.”⁸ Segments A–C are defined by the meeting of Ukwese fields with those of other Tiv settlements. Thus defined, the territory contains 3.76 km². However, there were no neighbors to the east because of the river, and the extrapolated boundary could have been extended to include an estimated 0.8 km² of arable land to which Ukwese had free access.

Figure 3–1972 shows Ukwese just at the threshold of the Kofyar influx. Boundary segments labeled A show limits of farmable land west of the river for which Ukwese was without competition. Segment B shows the parcel Sholu commandeered in the late 1960s. Segment C is defined by the meeting of Ukwese fields with cultivation by the first Kofyar to settle in Dashe; six Kofyar compounds are visible on the air photograph. Segments D and E are based on meeting of Ukwese’s fields with those of other Tiv

⁸The 1963 photos allow discrimination between used and unused portions of the land, but unlike the later air photos, the resolution and contrast do not allow reliable separation of actively cultivated from short fallowed fields. The “used” portions on the map therefore include land that may have been fallowed up to several years. From analysis of later air photos I have estimated a conversion factor of 33%, meaning that one third of the “used” area is assumed to be in fallow. Used areas can usually be assigned with confidence to particular Tiv settlements, based on location and paths.

settlements, while segment F is defined by land used by Migili farmers to the west.

Figure 4 shows Ukwese in 1994. Segments labeled A show the limits of arable land west of the river. Segment B marks the area taken over by Sholu, expanded since 1972. The southwest corner of Ukwese's territory is little changed from 1972, but the nature of the boundary has undergone an important change. Ukwese residents still identify Segment C as their boundary with Tse Uche, but Dashe has developed into a large block of contiguous farms, so that the territory boundary is actually defined by Kofyar landuse. Segment D marks the edge of Mwachavul and Kofyar settlement, which have been growing since the mid-1970s; Ukwese residents see this as land on loan to the Plateau "visitors." Segment E is the Ukwese-Shamga boundary. Segment F marks where Ukwese's 1972 territory has been encroached by Migili, while segment G marks where Tiv have encroached Migili fields. This is the only case where air photos show Ukwese's holdings having expanded against their neighbors. Segment H marks where the northwest corner of Ukwese's territory was taken, with little compensation, by an agricultural development project headquartered nearby; the project has since dwindled to almost nothing, but the land has not been returned.

The arrows on Fig. 4 show four areas where Ukwese's territory has contracted since 1972, as land has been lost to the Kofyar, Mwachavul, Migili, the agricultural project, and the chief of Gari. It also shows the one case of expansion, along Ukwese's western border, against the Migili. Table I summarizes the changes in population over this time period, along with measurements of the changing Ukwese territory as I have described them. The rise in population:territory ratio over 30 years has resulted from Ukwese losing (1) land that it intended to use but had not used; (2) long-fallowed tracts near village territorial borders; and (3) short-fallowed areas including land quite near the village. This has been coupled with a steady, if relatively slow, population growth. Population density (measured as Ukwese population against territory as described above) has gradually climbed to 50/km², and *R* (the portion of territory currently in crops, on a scale of 100) has gradually climbed to 51.

While the Tiv claim of having ever less land per person is true, the Ukwese population density in 1994 was only half of what the Kofyar Core Area was in 1984, and Ukwese had twice the proportion of its land in fallow. Intensity of land usage by Tiv is also lower than Kofyar because of a lower commitment to market production; data from the nearby Lafia Agricultural Development Project suggest the Tiv have the lowest levels of market production of any ethnic group in the area (Eyoh, 1990, 1992, p. 31).⁹ This, in theory, should allow them to pursue extensive farming with

⁹ The contrast in market production by Kofyar and Tiv on the frontier was clear in the early 1960s as well (Netting, 1968, p. 214).

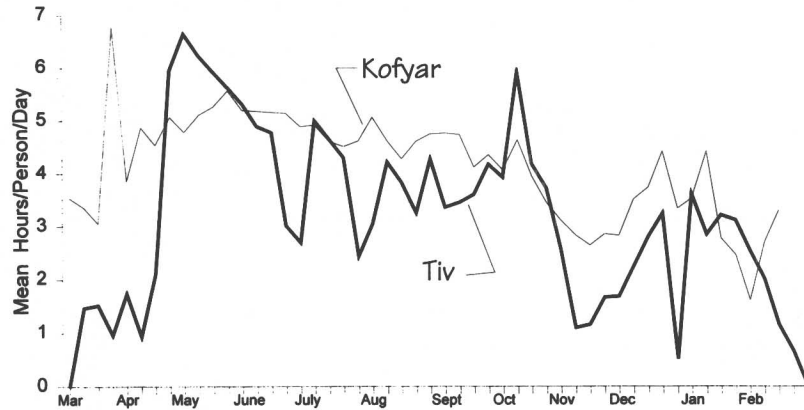


Fig. 5. Agricultural work profiles among Tiv (in Asamu, 1994–95) and Kofyar (in Core Area, 1985).

significantly lower labor costs than the intensive-farming Kofyar. To allow this comparison, four young men recorded work inputs (including task, duration, location, and social organizational details) for a sample of adults in Ukwese, Tse Uche, and Utume. The labor study is ongoing, but results of a preliminary analysis are available.¹⁰

Our analysis of Kofyar agriculture identified two main ways of raising the overall work effort: extending the season and filling in slack times. Figure 5 shows how the groups differ in both regards. While the Kofyar work profile spiked with the millet and sorghum planting in late March, the Tiv put in grains in late April; before this, there was minimal farmwork. Even more conspicuous is the difference in smoothness of the work profiles. Some of the raggedness of the Tiv profile results from the smaller sample size, but it also reflects a genuinely lower priority on filling in relatively slack times. For instance, the Tiv work profile shows a mid-November slump, which the Kofyar fill in with weeding, work on minor crops, and getting an early start on the harvest rice. Table II relates the groups' work inputs to differences in settlement and landuse described above. Note that

¹⁰The average number of workers monitored is 15. In almost every week, several in the sample were away on trips, and days lost to travel were excluded rather than being counted as 0 hours of work. The monitored sample of farmers was generally representative of the Asamu population in age and sex, but it did include one *ovanya* household that had an unusually small allotment of land; this family had almost no fallow and worked atypically long hours. The averages in Fig. 5 result from combining each week's reported hours for each agricultural task and dividing this total by the number of person-days reported for the week. See Stone *et al.* (1990) for a discussion of the Kofyar averages. Tiv averages are based on data collected between June 1994 and June 1995; the early months of 1995 are shown as the beginning of the agricultural year.

Table II. Summaries of Agricultural Work Among Tiv (in Asamu, 1994–1995) and Kofyar (in Core Area, 1985)

	Tiv	Kofyar
Mean length of agricultural work bout	5.0	3.1
Mean hours of agricultural work per year	1089	1501
Agricultural work bouts in sample	2184	17,066
Available ha per adult	1.97	.99
Mean hours per available ha per year	553	1516

the Kofyar yearly workload exceeds that of the Tiv by 38%, and the Kofyar were putting in 2.7 times the amount of work per available hectare as the Tiv.

The Tiv data show a much higher incidence of “off days” than would be found among intensive farmers; Tiv workloads are quite light in the late dry season (Fig. 5), and workers commonly take days off from farming even during the peak of the rainy season (Fig. 6). However, one of the principal nonagricultural activities is the travel occurring throughout the year (Fig. 6), which is an integral component of the frontier adaptive strategy.¹¹ Funerals are the most common reason for overnight travel, and funeral travel is taken seriously enough that the largest work society in Ukwese village is dedicated to sponsoring funerary travel and related expenses. It is made up of 40 adult women who pay entrance fees and weekly dues, and the group then hires itself out regularly during the growing season.¹² This frequent travel is vital for maintaining wide social networks and collecting updated information on social and ecological conditions in other localities. These networks and information, in turn, are indispensable in the Tiv adaptive strategy on the frontier, with its high rate of population mobility. The frequent residential moves would be impossible without fresh information and strong contacts in other localities, and the travel allowed by the relatively extensive cultivation regime is vital in this.

Politics and Polemics of Land Control

It is clear that the lower local population density is what allows the relatively extensive agricultural regime practiced by the Asamu Tiv. What is less clear is how low densities have been protected, given that Asamu is located in the center of an area that has for three decades received a sus-

¹¹Another productive non-agricultural activity is fishing, to which most young men and boys devote several hours per week. Fish are taken by various methods including hoop nets, weirs, and pole; fish are sometimes sold but they are mainly for subsistence.

¹²Frontier Kofyar women have comparable work societies, although payouts are rarely for travel (Stone et al., 1995).

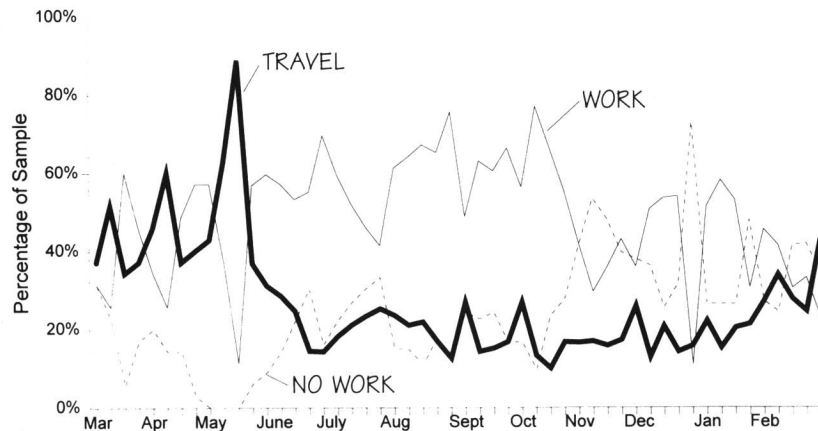


Fig. 6. Agricultural work, days off, and travel among Tiv in Asamu, 1994-95.

tained flow of immigrants from Kofyar, Mwahavul, Eggon, and other plateau groups.

In 1984, M. P. Stone and I visited the recently-founded Kofyar enclave of Daligit, located near the border between the Tiv settlements of Utume and Tse Uche (Fig. 2). The farmers here were typical of the population spilling out of the Namu Core Area: young families who had fissioned out of filled areas on the good soils, and older ones who had abandoned poorer soils where the returns to intensification were especially low (Stone, 1996, pp. 165-175). Quite a few other Kofyars were keenly interested in moving here, and in fact two land seekers arrived to request an audience with the neighborhood head (*mengwa*) on the afternoon we were with him.

But Daligit was a troubled place, and the *mengwa* discouraged the land seekers from coming there. The problem, we heard repeatedly, was the neighboring Tiv, who had seemed friendly at first but who had soon turned to increasingly vicious forms of harassment. Most households said they had had crops stolen. The *mengwa* claimed that the Tiv even organized festive work parties to steal their yams. The *mengwa* claimed the Tiv could remove the yam and then reform the heap, so that the hapless farmer would continue to tend a basically cropless field (a ploy that appears in West African trickster myths). Goats and sheep had been killed, and bicycles stolen.

This was a campaign to get the Kofyar to move on, even though they had paid for the land through what they saw as the proper channels. Farmers in Daligit had made payments, typically for ₦120 but ranging

from ₦40–200, to the chief of Gari.¹³ The chief of Gari had also demanded subsequent contributions, including a fee of one bundle of millet and three yams per household in 1993, assessed on the Kofyar but not on the Tiv.

We could not investigate the alleged harassment in 1984, but the 1994 fieldwork allowed a fuller picture to emerge. Tiv at Asamu offer a compelling defense of acts of theft and intimidation. In the first place, the benefits of protecting a low local population density are quite real, as the figures indicate. It was precisely farmers like those in Daligit that the Tiv land base had to be defended against if the agricultural regime was to remain extensive. The Tiv argue that they have had the use of land in this area since the 1940s, and that some of the land these latecomers were now residing on was Tiv fallow. They recognized neither the sale of these plots nor the chief of Gari who had profitted. They point out that since they were farming this land decades before he was appointed chief, he has no right to the land even for his own use, let alone the right to sell Tiv land to Plateau immigrants.

The local courts are of little use in such disputes, since decisions are often based on tribalism or bribe (the various groups in the area agree on this, although it is always another tribe that is accused of bribing the officials). The legal basis for determining ownership—especially the vague Land Use Decree (Francis, 1984)—is ambiguous, providing no criteria for adjudicating competing ownership claims relating to different levels of landuse intensity. The Tiv face the options of intensifying cultivation, moving, or driving off other farmers.

As I have shown, they have intensified cultivation to some extent. Some of their own population has moved on as well, although it tends to be replaced and Ukwese continues to grow. The principal response has been to try to drive off other farmers through campaigns of harassment, and several Tiv in the area feel their right to the land is obvious enough that they admit to having physically attacked the intruders.

For instance, the tract just south of Ukwese that Sholu took over has been a site of continual and occasionally heated conflict. One Ukwese elder spoke with disgust of the then-chief of Ukwese who allowed the transgression to occur in the first place. “When Sholu’s son came to weed his millet, I had my boys beat him,” one elder told me. Among the more common acts are theft of crops and livestock. The Kofyars’ claim that Tiv were stealing yams from the fields is true. A more serious message is sometimes left by tearing out the vines and scattering them around the field.

¹³For comparison, the going rate for agricultural wage workers in 1984 was ₦5/day, and the Kofyar household income from cash crops averaged ₦1,160 per year. Yet this was a frontier area where much land was being claimed without fee, or for a token payment of less than ₦10 to a local chief.

Animals are taken by various means. A group of Tiv may bring a cooking pot when they are working on a field near a Kofyar compound. If they can lure a chicken out from the compound, they get it quickly killed, plucked and into the pot, and if the Kofyar comes out they say they brought the chicken with them. Tiv use an ingenious strategy to justify killings Kofyars' goats: they plant a single line of cassava along a shared border with Kofyar, ostensibly to delimit their land (see Stone, 1994). Cassava being a perennial, it attracts Kofyar goats, which roam freely during the dry season. All groups in the area recognize that the owner is responsible for their own goats' depredations, and when their goats are killed for eating dry season crops—even a single line of cassava planted as a lure—the Kofyar cannot object.

There has also been harassment of the Migilis who neighbor Ukwese to the west. This is the only portion of Ukwese's cultivated perimeter for which the air photos show Tiv expansion against another group, and even this is offset by encroachment of Tiv land by Migili (Fig. 4, segments F and G). The thrust of Ukwese's interaction with non-Tiv neighbors is a belligerent defense of land claimed decades ago and of the stable settlement supported by that land, rather than predatory expansion and creeping settlement.

Results of operations against non-Tiv encroachers have been mixed. The neighborhoods of Dashe and Daligit were still there in 1994 and showed no signs of capitulating; there was a Mwahavul neighborhood further west (immediately below segment D in Fig. 4), and another small Kofyar neighborhood west of that. There are still Migili farmers who put crops in Ukwese's westernmost fields when population movements leave blocks of land in fallow. However, the neighborhoods of Daligit and Dashe have shrunk slightly rather than grown, and several residents are looking for land elsewhere. The plight of these neighborhoods is well known enough to cause most Kofyar land-seekers today to try elsewhere.

DISCUSSION

Based on limited observation of Tiv communities near the Kofyar Core Area in the 1960s by Netting and in the 1980s by myself, I characterized the frontier Tiv adaptive strategy as centered on shifting settlement and highly extensive agriculture (Stone, 1993). This description was also influenced by a projection of the "predatory expansion," described by Paul Bohannan for the Tiv homeland, onto the frontier. Tiv settlements *were* being abandoned as Kofyar poured into the Core Area, but the recent research has made it clear that Tiv frontier settlements are not necessarily peripatetic.

The choice of abandonment versus belligerent entrenchment is primarily related to the relative size and arrangement of the separate ethnic

groups. Core Area Tiv, in relatively isolated settlements in an area rapidly filling with Kofyar, were unlikely to defend their holdings against encroachment; the Kofyar would have greatly outnumbered the small group of Tiv before they impinged on the Tiv landbase, and with abundant land to the east and south, movement would seem an obvious course. In contrast, Asamu residents had little problem with encroachment until almost 25 years into their stay. By the time Kofyar came, there were several hundred Tiv in an established network of hamlets, claiming ownership of all land from Ukwese down to Utume and over to Shamga. These Tiv were better positioned to defend their landbase, and they were more motivated to do so, as alternative locations were increasingly hard to find.

The "predatory sedentism" of Asamu is quite different from both the settlement expansion of the Tiv homeland and the smallholder adaptation of the frontier Kofyar. It has a distinct and compelling logic of its own, with five mutually reinforcing components. First is a pattern of hamlet or village settlements with great stability through time. Second is population growth held down by controlling immigration (via tsav) and protecting the land base with intimidation tactics, increasing in aggressiveness as the per capita hectareage declines. After 50 years on the frontier, Ukwese controlled twice the hectareage per person as Core Area Kofyar controlled after 30 years on the frontier. Third is a relatively extensive cultivation regime, allowed by an ample land base and a relatively low commitment to market production. Work investment per available hectare was 2.7 times higher for Core Area Kofyar than for Asamu Tiv. Fourth is a lighter workload allowed by the extensive cultivation, with a longer off-season and more sporadic labor peaks that allow greater opportunities for travel. Travel, which was even underwritten by local work/credit associations, allowed development and maintenance of relatively wide social networks. Last is a concept of tsav promoting residential mobility and shaping locational choices by requiring an invitation and protection from a patron. Access to such invitations and protection depends on social networks, and is consistent with a broader African pattern of plying social networks to secure land when resources tighten (Berry, 1993).

These integral relations among components of an adaptive strategy, within which population density is simultaneously a cause and effect, make it difficult to isolate population pressure as a cause *or* result of settlement and production strategies (as in the ongoing Nuer debate cited earlier). In an adaptive strategy so committed to emigration by Tiv and to battling immigration by non-Tiv, it is impossible to envision population as an independent variable; by their own residential moves and by their endeavors to force residential moves of others, the Tiv are manipulating the local balance of population. This is not what Boserup discussed, but it is con-

sistent with her basic premises; the Tiv would agree with Boserup's model of increasing costs of intensification, just not with its inevitability. Population density is a variable partly susceptible to deliberate intervention, and the motivation to do so can be high when one is already beginning to feel the economic pinch of intensification. In a sense, the adaptive strategy described by the Bohannans also protected population density through movement and use of "predatory" tactics propelling others to move. The unexpected contrast has been that, at Asamu, predatory tactics were designed to protect the sustaining area of a stable hamlet rather than for the expansion for which the homeland Tiv are famous.

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REFERENCES

- Berry, S. (1993). *No condition is permanent: The social dynamics of agrarian change in sub-Saharan Africa*. University of Wisconsin Press, Madison.
- Bohannan, L. (1952). A genealogical charter. *Africa* 22: 301-315.
- Bohannan, L., and Bohannan, P. (1953). *The Tiv of Central Nigeria*. London.
- Bohannan, P. (1954a). The migration and expansion of the Tiv. *Africa* 24: 2-16.
- Bohannan, P. (1954b). *Tiv farm and settlement*. HMSO, London.
- Bohannan, P. (1989). *Justice and judgement among the Tiv* (originally published in 1957). Waveland, Prospect Hts.
- Bohannan, P., and Bohannan, L. (1968). *Tiv economy*. Longmans, Green & Co, London.
- Boserup, E. (1965). *The conditions of agricultural growth*. Aldine, New York.
- Boserup, E. (1981). *Population and technological change: A study of long term trends*. University of Chicago Press, Chicago.
- Briggs, G. W. G. (1941). Soil deterioration in the southern Districts of Tiv Division, Benue Province. *Farm and Forest* 2: 8-12.
- Cleave, J. H. (1974). *African farmers: Labor use in the development of smallholder agriculture*. Praeger, New York.
- De Wolf, J. (1990). Ecology and conquest: Critical notes on Kelly's model of Nuer expansion. *Ethnology* 29: 341-363.
- Evans-Pritchard, E. E. (1940). *The Nuer*. Oxford University Press, New York.
- Eyoh, D. L. (1990). National power versus local power: The Lafia project in Nigeria. *Canadian Journal of African Studies* 24: 216-234.

- Eyoh, D. L. (1992). Structures of intermediation and change in African agriculture: A Nigerian case study. *African Studies Review* 35: 17-39.
- Francis, P. (1984). "For the use and common benefit of all Nigerians": Consequences of the 1978 land nationalization. *Africa* 54: 5-28.
- Grigg, D. B. (1980). *Population growth and agrarian change: An historical perspective*. Cambridge University Press, Cambridge.
- Hutchinson, S. E. (1994). On the Nuer conquest. *Current Anthropology* 35: 643-647.
- Hutchinson, S. E. (1996). *Nuer dilemmas: Coping with money, war and the state*. University of California Press, Berkeley.
- Kates, R. W., Hyden, G., and Turner, B. L., II (1993). Theory, evidence and study design. In Turner, B. L., II, Hyden, G., and Kates, R. W. (eds), *Population growth and agricultural change in Africa*. University of Florida Press, Gainesville.
- Kelly, R. C. (1985). *The Nuer conquest: The structure and development of an expansionist system*. University of Michigan Press, Ann Arbor.
- NAK (National Archives, Kaduna, Nigeria) (1914). File SNP 10/2/324P/1914, Munshis of the North Bank of Benue, Administration of.
- NAK (National Archives, Kaduna, Nigeria) (1935). MAKPROF 4/14/AR/ASS/L/4, Reassessment report of Lafia Emirate Tiv.
- Netting, R. McC. (1968). *Hill farmers of Nigeria: Cultural ecology of the Kofyar of the Jos Plateau*. University of Washington Press, Seattle.
- Netting, R. McC. (1993). *Smallholders, householders: Farm families and the ecology of intensive, sustainable agriculture*. Stanford University Press, Stanford.
- Netting, R. McC., Stone, M. P., and Stone, G. D. (1989). Kofyar cash cropping: Choice and change in indigenous agricultural development. *Human Ecology* 17: 299-319.
- Sahlins, M. D. (1961). The segmentary lineage: An organization of predatory expansion. *American Anthropologist* 63: 322-345.
- Stone, G. D. (1993). Agricultural abandonment: A comparative study in historical ecology. In Cameron, C., and Tomka, S. (eds.), *The abandonment of settlements and regions: Ethnoarchaeological and archaeological approaches*. Cambridge University Press, New York, pp. 74-81.
- Stone, G. D. (1994). Agricultural intensification and perimetrics: Ethnoarchaeological evidence from Nigeria. *Current Anthropology* 35: 317-324.
- Stone, G. D. (1996). *Settlement ecology: The social and spatial organization of Kofyar agriculture*. University of Arizona Press, Tucson.
- Stone, G. D. (1997). Settlement concentration and dispersal among the Kofyar. In Silberfein, M. (ed.), *Rural settlement structure and African development*. Westview Press, Boulder (in press).
- Stone, G. D., Netting, R. McC., and Stone, M. P. (1990). Seasonality, labor scheduling and agricultural intensification in the Nigerian savanna. *American Anthropologist* 92: 7-24.
- Stone, M. P., Stone, G. D., and Netting, R. McC. (1995). The sexual division of labor in Kofyar agriculture. *American Ethnologist* 22: 165-186.
- Temple, C. L. (ed.) (1922). *Notes on the tribes, provinces, emirates and states of the Northern Provinces of Nigeria* (2nd Ed., originally published in 1919). Barnes & Noble, New York.
- Turner, B. L., Hanham, R. Q., and Portararo, A. V. (1977). Population pressure and agricultural intensity. *Annals of the Association of American Geographers* 67: 384-396.
- Vermeer, D. E. (1970). Population pressure and crop rotational changes among the Tiv of Nigeria. *Annals of the Association of American Geographers* 60: 299-314.