

Proceedings of The Symposium on Drought in Botswana

National Museum
Gaborone, Botswana
June 5th to 8th, 1978

(1979)

pp 91-97

ed. Madelon T. Hindley

Hanover, NH: The Botswana Society with Clark U. Press

Botswana Drought Symposium

social implications of water-tenure systems for agriculture and drought prevention were different in pre-colonial Africa and much less structurally distinct.

Goody (1971) has argued that, in most of pre-colonial Africa, the low development of production forces—particularly technology—and, more specifically, the absence of the wheel, limited irrigation technology and water-control systems in a way quite different from the drier regions of the Eurasian continent. Obviously many African societies possessed simple irrigation systems before western penetration. Goody gives the examples of Birifu (LoWilli) irrigation channels, the water systems of the Sonjo of Tanzania, the traditional rice-producing areas of the western Sudan, and the famous cisterns of 'the city of a thousand wells', Salafa. Apart from the Shaduf in the Sahara area, relatively sophisticated technology for water control in Africa has been generally lacking.

One may conclude that societies in different historical epochs have, within certain bounds, generally created sociocultural features to enable men to check and mitigate the effects of aridity and low rainfall. Some of the contemporary social problems of drought in many parts of the world arise because the natural balance between societies and the environments in which they exist has been rapidly altered without the culture having adjusted to provisions of the environment.

REFERENCES

- Beach, D. (1977) "The Shona economy." In *The Roots of Rural Poverty in Central and Southern Africa*, N. Parsons and R. Palmer, eds. London.
- Berry, Leonard, D.J. Campbell, and Ingema Emker (1977) "Trends in man-land interaction in the West African Sahel." In *Drought in Africa II*, R.J. Harrison Church, David Dalby, and Fatima Bezzaz, eds. (London: International African Institute).
- Brown, Lester (1974) *By bread alone*. (New York: Praeger).
- Cooke, H.J. (1978) *The problem of drought in Botswana*. Working Paper No. 17 (Gaborone: National Institute for Research in Development and African Studies).
- Dovitt, Paul (1977) "Coping with drought in the Kalahari." In *Drought in Africa II*, R.J. Harrison Church, D. Dalby, and F. Bezzaz, eds. (London: International African Institute).
- Faulkingham, R.H. and P.F. Thorbahn (1976) "Population dynamics and drought: a village in Niger." *Pop. Stud.* 29(3):463-450.
- Goody, J. (1971) *Technology, tradition, and the state in Africa*. (London: Oxford University Press).
- Le Roy Ladurie, E. (1972) *Times of feast, times of famine*. London.
- O'Keefe, P. and B. Wisner (1975) "African drought: the state of the game." In *African Environment: Problems and Perspectives*, Paul Richards, ed. (London: International African Institute).
- Prah, K.K. (1977) "Aridity, water systems, and society." Unpublished manuscript.
- Raynaud, Claude (1977) "Lessons of a crisis." In *Drought in Africa II*, R.J. Harrison Church, D. Dalby, and F. Bezzaz, eds. (London: International African Institute).
- Sandford, Stephen (1976) *Dealing with drought and livestock in Botswana*. A report prepared for the Government of Botswana.
- Schaper, Isaac (1976) *The Tswana*. (London: International African Institute).
- Wittfogel, K. (1967) *Oriental despotism*. (New Haven: Yale University Press).

The Traditional Response to Drought in Botswana

by R.K. Hitchcock

A/aise Sarwa from Man/otai, on the Nata River in north-eastern Botswana, once told me how he and his family coped with the 1960's drought. As they had done no ploughing the previous year, they had to survive by hunting and gathering. During the day his wife would leave their hut beneath the tall trees along the river and go out to the gathering areas (*mekgacha*) away from the river. Often she found these areas so ravaged by bush-fires there was little hope of bringing home much in the way of food. Their children went to the river daily to get water, but gradually the pools dried up and the water level in the sand dropped to the point where it could no longer be reached. They spent many lonely nights huddled in a shallow hole on the edge of one of the few remaining pools in the river, silently waiting for emaciated wildebeest and buffalo to come down to the river to drink. When they were sufficiently close the man would rise and hurl his spear at them.

Some days were spent out in the bush, collecting the bones of wildebeest which had died by the thousands in the Nata area. These bones, along with the tails cut from recently dead animals, he sold to Bobby Wilmot's store, later Haskins', in Nata Village. One day he heard of the disappearance of one of his cousins; it transpired that she had been the victim of ritual murder, the headman of Nata having killed her in order to make rain. Nights were hot and stifling, and one could smell smoke on the wind and hear drums beating in the distance along with plaintive pleas for rain. At one point, while out hunting near some pans away from the river, he was arrested by a game scout for hunting without a license, under the newly instituted Fauna Proclamation Act of 1961. His reaction to this event is best described in his own words:

"Our lives depend mostly on meat, and the laws have kept us from eating. I believe that when God created man he provided wild animals to be the food of the Masarwa. The Bamangwato depend on their cattle to provide their food. The Kalanga depend on their crops. White people live on money, bread, and sugar. These are the traditional foods of these groups of people, so it can be seen that the law is against us, the Masarwa, because it has prevented us from eating. The people who made the law knew that they were depriving us of our food. Even if we raise cattle we cannot do it as well as the Bamangwato. We cannot raise crops like the Kalanga, and we cannot make money like the white people do. These are the ways of other people. The tradition that God gave us, the Masarwa, is to eat meat. Meat is our life. Small animals to us are not important; we eat kudu, duiker, steenbok, and birds every morning. What we really care about is big animals. These are our food; these are what we care about. Depriving us of meat is depriving us of life and of the tradition that God gave us."

After being released from jail in Francistown he went off to South Africa to work in the mines. When he returned nine months later he found his village abandoned and his wife and children gone. This was one man's experience of the 1960's drought in Botswana.

An historical perspective on drought in Botswana

Besides interview and oral history data obtained from local people in Botswana who have experienced droughts, a variety of information can be found in the accounts of early

raise
Nata R.

travellers, missionaries, and hunters. One of the earliest recorded droughts is that from 1845 to 1851 when David Livingstone was living among the Bakwena at Kolobeng, not far from Gaborone. His personal letters (Schapera, 1959, 1961), diaries (Schapera, 1960), and book (Livingstone, 1857) contain references to a number of events that occurred during this severe drought period. Rainmakers were called in, one of whom received permission to sever the body of a child who had died the previous year so that body parts could be used in rainmaking medicines. Men spent a great deal of their time out hunting, while the women and children gathered roots. In January 1849, Livingstone wrote that the famine was so acute that the people had survived the previous six months entirely on locusts (Schapera, 1959:17-20). The tribe was scattered, some of the people having gone to neighbouring tribes to seek food. Pressure on local resources was increased by the arrival of an immigrant group of Kaa who had been expelled by another tribe, the Ngwato, further north. As one might imagine, the drought had a definite effect on the popularity of Livingstone's mission. People had a tendency to blame Christian teachings, and criticism was heightened by the fact that the Kwena chief, Sechele, a renowned rainmaker, gave up his practices when he was baptized. When, after a series of disastrous years, Livingstone finally departed, the Kwena immediately moved to a place they hoped would be more auspicious. Sure enough, soon after Livingstone's departure, the drought broke.

Other historically recorded droughts of the 19th century included one in 1862 in Shoshong, the then Ngwato tribal capital, another in the same location in 1876/77, yet another in the Kweneng in 1879, and one occurring at the same time as an outbreak of rinderpest in 1896. During the 1876/77 drought part of the Ngwato population was reduced to eating grass in order to survive (Heburn, 1895). Heburn, the resident missionary, vied with the local rainmakers to see who would be the first to bring rain, and, unlike Livingstone, he was successful. Khama III, the Ngwato chief after 1875, did away with traditional rainmaking ceremonies and instead introduced a day of prayer for rain, something advocated by all mission churches working among the Tswana tribes. During the 1896 drought and rinderpest epidemic (known in Botswana as *boloiwane*), W.C. Willoughby, yet another missionary, visited a group of Pedi in the Tswapong Hills east of Palapye and found them hungry but managing to subsist on *mottlopo* (*Boscia albitrunca*) roots (Willoughby, quoted in Parsons, 1973:156-157). He also noted that the Sarwa were killing the Chief's livestock at a prodigious rate, a strategy that was particularly common in drought years. During a later drought period Khama estimated that he had lost 454 cattle at only four cattle posts (Khama to High Commissioner 28/3/1916, quoted in Parsons, 1972:16).

A series of droughts and economic depressions, caused in part by the heavy loss of livestock, characterized the early 20th century in Botswana. Indeed, conditions became so acute that Khama dropped his ban on Ngwato going to the mines, and in January 1904, one hundred and fifty men left Serowe on a single day, bound for South Africa (Parsons 1973:326). The Tswana economic system, as Neil Parsons (1973:328) puts it, was thrown into a downward cycle of rural impoverishment as a result of these disastrous years. By 1933, when the next drought occurred, people were unable to generate any income through the sale of their livestock because of an outbreak of foot-and-mouth disease; consequently, the numbers of people seeking alternative employment opportunities in South Africa increased tremendously. Other people turned to hunting, gathering, and procuring wild animal skins for trading purposes.

Drought responses of hunter-gatherers

It is clear from ethnohistorical and oral history information that droughts were a common phenomenon in Botswana; indeed, one might go so far as to say that they were a characteristic feature of the ecosystem. It is also clear that the peoples who occupy the

Kalahari and adjacent areas have developed a variety of strategies with which to cope with periodic shortages of rainfall and rainfall-dependent resources. At the same time, it should be noted that responses to drought vary, depending on the nature of the land-use practices employed by various populations. The majority of the Tswana and other Bantu-speaking tribes have a mixed economy, combining pastoralism and agriculture, which they supplement with a certain amount of hunting, gathering, and wage labour. There are also other groups of people, mainly in the Kalahari Desert, who depend almost entirely on the products of the bush. Drought will have different effects on these groups, and the balance of this paper will concern itself with some of those effects.

Hunters and gatherers tend to live in relatively small groups which are dispersed over the landscape. Well-adapted to arid conditions, these groups are highly mobile and tend to aggregate and disperse, depending on the availability of surface water or moisture-bearing plants. These patterns of aggregation and dispersal vary in the Kalahari. In Ngamiland, in north-western Botswana, there are permanent pans where people can stay during dry periods (Lee, 1965, 1972). In the central and eastern Kalahari, on the other hand, there is no surface water except after rains, so mobility varies according to the distribution of melons and roots (Silberbauer, 1965, 1972; Hitchcock, unpublished data). In the Kgalegadi District in south-western Botswana, water is obtained from sip-wells. It is sucked out of the ground through a straw, a process sometimes taking five to six hours to obtain a family's requirements for a single day (Axel Thoma, pers. comm.). There are seasonal differences in mobility patterns, too. Sarwa groups in the north-west tend to congregate in large groups around pans in the dry season and disperse into smaller groups during the wet season, while just the opposite pattern is seen in the Central Kalahari, where groups aggregate in the wet season and disperse in the dry season.

A large proportion of the diet of hunter-gatherer groups in the Kalahari is comprised of wild plant foods. Plants in the Kalahari are well-adapted to arid conditions, having small leaf surface ratios and large underground storage organs. Hunter-gatherers exploit these plants, collecting them either by hand or by digging sticks. Melons are an important source of moisture, but when these are finished people tend to utilize roots. There is some question about the relationship between wild plant foods in the Kalahari and drought conditions. Some Sarwa have told me that melons do better in dry years than they do in wet ones. Others say that melons are best after a good rainfall year. This difference might possibly be due to the role of fire in the Kalahari ecosystem. Sarwa use fire to burn off grass so that new growth will be generated to attract game; a side effect of this burning process is the reduction of tall grass and the encouragement of melon growth, which seems to be retarded by high grass (h. Vierich, E. Cashdan, and G. Silberbauer, pers. comm.; Hitchcock, unpublished data). Hunter-gatherers, then, employ a kind of environmental manipulation strategy to increase their subsistence security.

While mobility is one response to dry conditions, migration to new places is another. The Central Kalahari Game Reserve, when surveyed by Silberbauer in the late 1950's and early 1960's, contained about 3 000 people (Silberbauer, 1965). A recent survey by Mark Murray (1976) and Paul Sheller (1977) revealed a population of only about 1 500 in the Central Reserve. There has evidently been a pattern of outmigration from the Reserve for a number of years. Some groups have moved north-east to the Boteti River; others have gone west to the Ghanzi Farms; and still others have taken advantage of the drought relief boreholes in the Kweneng District to the south and in the Central District to the east, permanently settling there in order to have access to permanent water, milk, and the meat of cows which have died. When asked why they moved out of the Central Kalahari, more often than not the answer was that water was getting increasingly difficult to find. Sip-wells had dried up and rain waters were not staying in the pans as long as they had in the past. Epidemic diseases, too, must have played a role; the 1950/51 smallpox epidemic, for example, wiped out whole villages in the Kalahari.

Hunter-gatherer groups employ a number of social strategies which permit them to visit the territories of other groups. Marriage alliances are often formed over long distances; these ties are enforced by rules of who one can and cannot potentially have as a spouse. Fictive kinship systems exist which permit people to be incorporated into the social system and to be given a whole set of relatives, simply on the basis of a name-relationship. Visiting is common among different hunter-gatherer camps, especially in bad years. Since drought in most arid ecosystems is often highly localized, it pays to have relatives and friends in other places so that one can move there to have access to resources. Permission is sought for entrance into other groups' territories, but this permission is rarely, if ever, denied.

Another method of establishing networks of alliances across broad regions is through trading. The Sarwa of Ngamiland, for example, have a system known as *hxaro* in which something is given to another person, thus incurring a debt; at some point in the future this gift is returned, although the exact nature of this gift may differ markedly from the original one (Wiessner, 1977). Sharing is all-important among hunter-gatherer groups, especially in unpredictable environments. Hunting success is not always equal among families in a group, so there are rigid rules of meat distribution. Borrowing and lending, too, are extremely common. These trade and sharing relationships are ways of reducing risk among hunter-gatherer populations.

It can be seen, then, that hunter-gatherer groups in the Kalahari possess a number of strategies which permit them to cope with periods of environmental stress. Marriage rules and band alliances help ensure access to other people's territories in time of need. Mobility helps to adjust population sizes to resource availability. In really bad years groups may migrate out of an area; some individuals, like the /aie Sarwa mentioned earlier, may even go to the mines. There has been a process over time of increasingly permanent settlement on sources of permanent water, particularly boreholes. It should be stressed that these kinds of adaptations are common in arid lands and merely intensified during drought periods. One of the characteristic features of hunter-gatherers in the Kalahari is their opportunism; drought periods provide them with the impetus to try out new lifeways. Admittedly, in really bad years, sharing and hospitality patterns may fall apart, but most of the time hunter-gatherer groups are able to share resources in such a way as to ensure their continued existence.

Drought responses of pastoralists and agriculturalists

In the past, the Tswana tribes occupying the fringes of the Kalahari had a mixed economy comprised mainly of pastoralism and agriculture. Their subsistence base was supplemented with a certain amount of hunting and gathering; later on, trading of game products became increasingly important, as did alternative labour sources such as the mines in South Africa. A primary response of Tswana pastoralists to drought periods is one already seen among hunter-gatherers: they become mobile, going with their herds in search of water and grazing. In really bad years they may fall back on village water sources, thus increasing grazing pressure in limited areas. Prior to the expansion of boreholes, herds were taken into the Kalahari only seasonally, to graze in areas near pans which held water. Gradually these pans were artificially deepened, with wells sunk in a number of them; thus, cattle and smallstock were permitted to stay out in the desert for longer and longer periods. When a drought occurs, however, these pans and wells often dry up. Livestock owners are then faced with a dilemma: should they try to keep their animals, even though some of them may die during the drought, or should they sell them? Cattle are a prestige item among the Tswana, and there is tremendous reluctance to part with them except under special circumstances, such as bride-price (*bogadi*) payments or wedding feasts. While it has been noted that keeping livestock in the face of deteriorating

environmental conditions is an irrational policy, there is another way of looking at this problem. If livestock owners can retain enough animals to have a fairly sizable breeding herd at the end of the drought, their chances of post-drought recovery will increase. In this sense, then, keeping their animals is a rational policy in the face of drought conditions.

Traditionally in drought periods, the rights of access to grazing districts (*dinaga*) in tribal areas were relaxed; such flexibility in social rules was an important mechanism for coping with stress. While cattle play an important role in the lives of many Tswana, the majority of their subsistence is derived from crops. Crop failures are common in Botswana, and chiefly regulations were instituted early on to ensure that people had sufficient food to tide them over bad years. The Tswana chiefs also had a number of rules which facilitated redistribution of resources. Every chief had a large field or fields (*masotla*), which were cultivated for him. These tribute fields had to be tilled and planted before work could begin on the fields of individual tribespeople. The products were stored by the chief in his own granaries, and the grain was used for tribal purposes, such as feeding destitutes or giving away in drought years.

Harvest tribute, known as *dikgafela*, was paid to the chief in years of plenty; this grain, too, was stored and used for tribal purposes. The chiefs also instituted a rule which forbade the sale of crops to traders, particularly sorghum, before it could be ascertained whether there would be food shortages that year (Schapera, 1943:19, 123, 203-204). People often had a tendency to sell part of their harvest in good years to generate extra income; later, when a drought hit, they were forced to buy back their grain at much-inflated prices. Traders were able to manipulate people by storing food for bad years and then raising the prices of that food. Such profiteering was recognized by the chiefs who introduced cultural regulations to try to minimize it. Other forms of tribute included *sehuba*, the breast of every large animal killed. Sometimes chiefs would give up their tribute in order to feed their people. This was done by Khama, for example, during the 1876/77 drought, when he gave the Ngwato the proceeds of the tribal hunts (*letscholo*) as well as his earnings from ostrich feathers and ivory (Hepburn, 1895).

There were other ways as well, by which people were supported in the tribal system. The existence of large extended families ensured that poorer relations were cared for by wealthier family members. The Tswana also have a tradition of hospitality which ensures that visitors never go hungry or find themselves lacking a place to stay. The *mafisa* system ensured a wider distribution of livestock among the population than might have otherwise occurred. This system entails lending cattle to people who herd them and use their milk and draught power, later being given a calf for their labour. It might be noted that *mafisa* is also useful to cattle owners who are able to spread their animals around, thus reducing the risks from drought, epidemics, or heavy predation.

Another way of dealing with drought was through the mobilization of group labour, to conduct communal hunts or to build dams, for example. The chiefs often called out the age-regiments (*mephato*) to carry out tasks which were in the interests of the tribe. This was done as recently as 1965 in Mochudi, where regiments were activated to clear the brush out of dam sites. Some chiefs even sent regiments to work in the mines to bring money home to the tribe.

That these traditional contingency mechanisms were recognized as being helpful in stress periods is underscored by the fact that the Bechuanaland Protectorate Administration instituted similar measures in the 1939-1941 period. Tribute fields were replaced by 'war lands' which were cultivated by the tribespeople in order to increase yields to pay for military efforts. A system of tribal granaries was begun in 1939, modelled after the *dikgafela* tribute system (Schapera 1970:30, 111-112). The Administration also followed the chiefs' lead and forbade the export of grain to ensure an adequate supply within the country. This is an important point in that it illustrates the fact that traditional

mechanisms of coping with drought can be integrated into development plans.

In all agricultural activities, whether choosing a field site, clearing an area, hoeing, or planting, the Tswana employ rational techniques. In an unpredictable environment, however, where chances of crop failure are high, it is not surprising that people have resorted to a more esoteric way of ensuring crop success. Rainmaking was an important function of the Tswana chiefs; indeed, their reputation was dependent, at least in part, on the abundance of rainfall during their chieftainship. When people began to grow impatient because of lack of rain, they approached the chief, beseeching him to bring rain (Schapera, 1971). Sometimes he was brought a black ox which was sacrificed. The chief also employed rain medicines to bring clouds and rainfall. In really severe drought periods, professional rainmakers (*baroka*) from outside might be brought in to assist in the ceremonies. Often these people were from well watered areas, one example being the Pedi from the Transvaal.

Seasonal taboos (*meila*) were observed to ensure adequate rainfall for crops. Occasionally lack of rain was attributed to sorcery performed by rivals for chiefly power or by members of other tribes. Evil charms known as *dibeela* might be found within the tribal territory, and these were always dealt with very carefully by tribal doctors. In really severe drought periods, ritual murder might be undertaken. There was a whole series of ceremonies especially designed for dealing with droughts, ranging from the sacrifice of a black ox on a former chief's grave, to the sacrifice of a child using parts of the body for medicine. These ceremonies incurred the wrath of the missionaries, who attempted to eradicate them. But, like the Protectorate Administration, they could often do little better than to substitute a new form of observance for an old one. An annual day of prayer for rain, *thapelo ya pula*, was established in place of the traditional rainmaking ceremony at the beginning of the cultivating season. The missionaries, however, were far from successful in eradicating these practices, since examples of rainmaking ceremonies were seen as recently as 1965 and 1973.

Some chiefs, not satisfied with traditional ceremonies, tried to institute new practices. Isang of the Kgatla, for example, when asked in 1926 to employ professional rainmakers because of a drought, chose instead to back a borehole drilling policy (Schapera, 1970: 40-41; 1971:10-11). A levy was instituted and a South African Government drilling company brought in to drill boreholes, seven of which were successful. After another drought, that of 1933, the Protectorate Administration followed suit, drilling a number of boreholes beginning in 1934. Another strategy, followed by Khama III of the Ngwato, was to set up a chiefly trading company (Parsons, 1975); this was done, at least in part, because Khama resented the profiteering of the European traders in his tribal territory.

Conclusion

Responses to drought in Botswana are many and varied, ranging from mobility and reversion to hunting and gathering, to magico-religious ceremonies for inducing rainfall. While socioeconomic strategies may have been somewhat more effective in coping with drought than were ideological responses, it cannot be doubted that rainmaking ceremonies provided people with a sense of security which was sorely needed in drought periods. It must be emphasized, though, that these traditional drought responses cannot be viewed as separate from the political economy of southern Africa. An individual's decision to go to the mines, for example, is dictated by the quota system established by the mining companies. Cattle sales by traditional herders are dependent on a number of factors, including health restrictions of foreign countries, marketing quotas, and the degree of development of the marketing infrastructure. Outside relief schemes in drought periods were viewed in different ways by local chiefs. Khama opposed the giving away of food by the Bechuanaland Relief Fund in 1896 on the grounds that it was a threat to his tribe's

economic independence, while Bathoen of the Ngwaketse, on the other hand, requested outside help during the same period (Parsons, 1973, 1974).

A number of tribal customs were adopted by Government in attempting to cope with stress periods, especially during the early part of the Second World War. Chiefs, on the other hand, adopted outside innovations, one of them being borehole drilling. Some traditional drought responses, such as rainmaking ceremonies—especially those involving ritual murder—were vigorously opposed by missionaries and others. Other drought responses, such as *majako*, the selling of one's labour for a share of the agricultural crop produced, were far from effective during drought periods. But there is no doubt that many of the responses can now be viewed as rational and significant in terms of aiding in the adjustment of societies to drought conditions. Far from being quaint tribal customs, then, the traditional responses to drought in Botswana must instead be viewed as important mechanisms for alleviating social stress in an unpredictable environment.

ACKNOWLEDGEMENTS

Part of the research on which this paper is based was supported by a US National Science Foundation grant (SOC75-02253), and some of the data were gathered during the course of a consultancy for the Government of Botswana. I would like to thank the people with whom I worked for supplying me with the information used here, and also my colleagues who not only provided stimulating ideas but also did not fail to give me constructive criticism.

REFERENCES

- Hepburn, Rev J.D. (1895) *Twenty years in Khama's country and pioneering among the Batswana of Lake Ngami*. (London: Hodder and Stoughton).
- Lee, R.B. (1965) "Subsistence ecology of !Kung Bushmen." Unpublished Ph.D. dissertation, University of California, Berkeley.
- (1972) "The !Kung spatial organization: an ecological and historical perspective." *Hum. Ecol.* 1(2): 125-147.
- Livingstone, David (1857) *Missionary travels and researches in South Africa*. (London: Murray).
- Murray, M.L. (1976) "Present wildlife utilization in the Central Kalahari Game Reserve, Botswana: a report on the Central Kalahari Reserve reconnaissance survey." Report to the Department of Wildlife, National Parks, and Tourism, Republic of Botswana.
- Parsons, Q.N. (1972) *The word of Khama*. (Lusaka: National Educational Company of Zambia).
- (1973) "Khama III, the Bamangwato, and the British, with special reference to 1895-1923." Unpublished Ph.D. dissertation, University of Edinburgh.
- (1974) "The economic history of Khama's country in southern Africa." *Afr. Soc. Rev.* 18: 643-675.
- (1975) "Khama and Co.' and the Jouse trouble, 1910-1916." *J. Afr. Hist.* 16(3): 383-408.
- Schapera, Isaac (1943) *Native land tenure in the Bechuanaland Protectorate*. (Alice, South Africa: Lovedale Press).
- , ed. (1959) *David Livingstone, family letters 1841-1856*. (London: Chatto and Windus).
- (1960) *Livingstone's private journals, 1851-1853*. (London: Chatto and Windus).
- (1961) *Livingstone's missionary correspondence, 1841-1856*. (Berkeley: University of California Press).
- (1970) *Tribal Innovators: Tswana chiefs and social change 1795-1940*. (London: Athlone Press).
- (1971) *Rainmaking rites of Tswana tribes*. (Leyden: Afrika-Studiecentrum).
- Sheller, Paul (1977) *The people of the Central Kalahari Game Reserve: a report on the reconnaissance of the Reserve, July-September 1976*. Report to the Ministry of Local Government and Lands, Republic of Botswana.
- Sittherbauer, G.B. (1965) *Report to the Government of Bechuanaland on the Bushman survey*. (Gaborone: Government Printer).
- (1972) "The G/wi Bushmen." In *Hunters and Gatherers Today*, M.G. Bicchieri, ed. (New York: Holt, Rinehart, and Winston).
- Wissener, Pauline (1977) "Hxaro: A regional system of reciprocity for reducing risk among the !Kung San." Unpublished Ph.D. dissertation, University of Michigan.