

BRITISH EAST AFRICA: SOME ECONOMIC ASPECTS*

B RITISH East Africa consists of Kenya Colony and Protectorate; Uganda Protectorate; and Tanganyika, a trusteeship under the United Nations. The whole falls under the British Colonial Office as to general administration. Because of the differences in legal status, internal techniques of government are not precisely uniform. But each component has its British governor and its secretariat, and each, outside of the few larger towns and the relatively small areas reserved for Europeans, is divided into districts wherein a District Commissioner, rather like a small-scale king, is the responsible official. One of the major current efforts of the government is to devise ways of teaching the natives and of inducing them to participate in their affairs. But I shall say nothing about this. The area has a common currency, a common postal and telegraph service, and a common organization in charge of railways, waterways, and harbors. Under the High Commission, which consists of the three governors, it also has a series of research organizations and a central statistical office.

British East Africa is about as big as the combined area of Texas, Louisiana, Oklahoma, Arkansas, Kansas, and Nebraska—roughly 700,000 square miles. It is also about the same in dimensions North and South and East and West—some 800 miles wide at the widest and 400 at the narrowest, and some 1,300 miles long. Also the population is about the same as that of these states—some 18 million. But the 18 million in British East Africa do not speak a single lan-

* An address delivered before the Houston Philosophical Society at the Rice Institute on October 18, 1951.

guage. There are many dialects and many tribes of natives. English is merely the top-level language. Swahili or pigeon Swahili is the lingua franca so far as there is such a thing.

There are only about 55,000 whites, called Europeans, among the 18 million people of British East Africa; only about 170,000 Indians; only about 50,000 other non-natives like Arabs, Goans, and mixed-bloods. Over 98 percent of the population are native negroes, whether Bantu, Nilotes, Hamites, or primitives. Some of these are in a condition almost of savagery, and a great many not far removed from it. There is, however, no longer any cannibalism or inter-tribal warfare; no longer any murder or cattle raiding unpunished by English law. The whole region is internally pacified and under a rule of law and order. English law governs in the most important matters, but tribal law has its place, especially in the sphere of equity. The number of British troops which has to be stationed in the area is small, though I do not know the count and location. Most, I suppose, are along the Abyssinian border as precaution against raids from there.

British East Africa is a poor country—very much underdeveloped if one takes poverty to mean underdevelopment. The average per capita national income cannot have exceeded \$25–\$30 in 1949. Among 70 countries of the world for which we have data, only two, China and Indonesia, are estimated to have had average per capita incomes as low as this. Ours was \$1,453. Of course there are a few rich people, mostly Europeans and Indians, practically all of them town dwellers, with a few plantation owners or operators. The largest city, Nairobi in Kenya, has only 140,000 people of all races; there are probably no more than 25 towns with populations exceeding 5,000; and so at least 97 percent of the population is rural, living on farms or in

small villages and hamlets. Poverty is suggested by the facts that British East Africa in 1948 had only one telephone per 1,000 people (we had 137 back in 1935); only two motor vehicles per 1,000 people (we had 207 in 1935); and circulated only three pieces of mail per 1,000 people (we circulated 161 pieces in 1935).

Poverty is clearly visible on a typical farm. A round hut with wattle and mud walls, grass thatched, without a window; a beaten-earth floor; a fireplace of three stones and no chimney; a couple of clay or metal cooking pots. No bed and blanket, table, or chair; no lamp; no closet; no crockery or eating utensils beyond a spoon; many naked children; a man with one pair of shorts and a tattered shirt; a woman with a windabout cotton blanket for her dress and her sleeping clothes; a chopping knife or two and a heavy iron hoe; hardly anything more.

With so few people living in towns, there is obviously very little manufacturing industry. British East Africa still imports all its cement, all its iron and steel and machinery, all its railway equipment and motor vehicles, bicycles, and paper; nearly all even of its cotton or woolen cloth and of its coal and petroleum and chemicals. There is no household industry even in textile making. Metal goods, machinery, and vehicles rank first in the import trade; textiles and clothing second; fuels and lubricants third. Together these three groups accounted for about three-quarters of the value of imports in 1949. The imports, so far as they do not represent inflow of foreign capital, were paid for by exports, chiefly of cotton lint and seed, sisal, and coffee. These three constituted nearly three-quarters of the value of total exports in 1949. After these, the export items ranking highest in value were hides and skins, diamonds, tea, gold, wattle extract, oilseeds and cake, pyrethrum, sodium

carbonate, and dried beans and peas. Hence the produce of plantations, farms, and mines pays for the imports of manufactured goods. The great bulk of the food supply is both produced and consumed within the region.

Excluding the few Europeans, who eat about as we do, and the few Indians, who eat about what is currently eaten in the rice-consuming parts of India, the natives tend to eat what they produce locally; and the food varies with climate and occupation. Native food production ranges from the output of fully settled agriculturists who have practically no livestock, through people who cultivate land but have considerable pasture and livestock, to people who do scarcely any cultivation but live as nomadic herdsmen. The food of the first group is some kind of mush, boiled or steamed, plus a stew made mainly of vegetables, including dried beans or peas, peanuts, cabbage or cauliflower or brussel sprouts, onions or leeks. There may be a piece of fish or meat in it occasionally. The mush is bland, the stew flavorful. Two meals are taken daily, at noon and in the evening, and they are not distinguishable as to constituents. Wherever the plantain, a type of banana, can be grown—mostly along the Equator, where there is no prolonged dry season and the total rain exceeds 50 inches a year—the basic mush is steamed plantain. Where the dry season is longer but not too long, the mush is made of ground and boiled corn meal or pounded whole corn. Where the dry season is still longer, or the wet season a brief one, finger millet is the basis of the mush. Sometimes cassava is the basis. The prevailing type of mush depends upon the prevailing amount and distribution of rainfall, which dictates what shall be produced.

The second group, having more livestock, has somewhat less mush and more stew—say several different side dishes

of stew. It has more milk and meat particularly. This group tends to practice shifting cultivation, clearing a piece of land and planting it for several years until the falling yield leads to abandonment and a new clearing.

The third group, the nomadic pastoralists, live mainly on milk and blood. They have little mush, since they are not producers of plantain or of grain. They are not very numerous—surely not a fifth of the total native agricultural population, and they tend to diminish. How numerous relatively the larger second and first groups may be is unknown. These disappearing pastoralists are only now beginning to learn to market live animals. It has been their tradition to regard cattle as wealth, not as income. With cattle they buy wives, polygamy being an accepted native institution.

In general, the native population lives only on the periphery of a money economy. Most items of native consumption, or at any rate the most valuable ones, are produced by the family for the family. There is of course some barter, some marketing for money, some purchase for money. Labor hired by Europeans or Indians is mostly paid in money, though food is often provided as part of the wages. Of all the currency in circulation in 1949, nearly a third was hard money (coin); natives have no way of keeping safe the paper notes, and they are said to prefer to bury the coin rather than to use banks, which few of them understand.

Regarded as a labor force, the native population is certainly an inefficient and generally unskilled one. As subsistence farmers, most of them do not yet understand, much less practice, the preservation of soil fertility through use even of the simplest crop rotations and fertilizers. They are not accustomed to combat soil erosion by terracing or contouring. About seed selection and insecticides they know next to nothing. Their cattle are runty, far from scientifically bred or

fed for meat or milk. The herdsmen do not even make hay to carry stock through the dry season. The level of literacy is very low, as must be expected in any poor country; the great mass of the adults can neither read nor write, and many cannot count. Not knowing their own ages, they are not helpful in a census giving age groups. There is only one collegiate institution in the whole country, very few secondary schools, and not enough elementary schools, and teachers, to accommodate more than a small fraction of the children of school age. Employees in homes and hotels, in mines and on plantations and railways, have to be taught the simplest operations. Plowing a straight furrow or setting a pole vertically seems either not to matter to most, or to be a new idea which must be learned. Sustained hard work for eight hours a day five days a week through the year is a scheme of life which very few have experienced. It is difficult for the European or Indian employer to build up a resident labor force, for the bulk of the natives like to work for a few months and then return to their farms and families. The labor is costly because it is so inefficient. Wages are naturally very low; in Uganda and parts of Tanganyika, an ordinary unskilled laborer, say for harvesting coffee or cotton, can be hired for 20 shillings—\$3.00—a month, though it must be remembered that for such pay he does not work a full half a day, may hold two jobs, may work overtime for more wages.

There is much talk among employers and officials about the inefficiency of African labor. It commonly takes the form of assertion that "the African" is incapable of developing efficiency: that his commonly observed lack of skill and application represents inherent deficiency of capacity. Psychologists tell me, and I believe them, that no scientific proof of this exists. Beyond question one encounters individuals who *have* acquired skill, efficiency, and application, though they are

few relative to the mass. The question is, whether that proportion is growing. I think it is. It is more accurate to regard the present labor force as underdeveloped than as incapable of development.

Like the labor force, the natural resources are underdeveloped. Or so they appear to be, so far as one can judge on the basis of information about mineral deposits and soil quality which itself is decidedly sketchy. A great deal of unoccupied land looks to be suited to agricultural production; it certainly provides grazing for a vast amount of game. Perhaps appearances are deceiving; certainly the British were mistaken about the prospects for their groundnut scheme at one of the three locations, Kongwa. A great deal of what is now occupied could be better cultivated; there are known but untouched coal deposits thought to be susceptible of development; quite a little hydroelectric power could be harnessed; quite a bit of irrigation provided; known mineral deposits, of diamonds, copper, limestone, tin, iron ore, phosphate rock, at least, now modestly exploited, could be exploited further—if capital could be had and costs held to a competitive level. One cannot expect lumbering to become an important industry, however. There are few large stands of good timber. Most of the area consists either of open park-like woodland with short trees grading to brush, although some highland areas, mostly above 5,000 feet, are grassy plains, some of them fertile. Nairobi stands in one of these regions. Then there are other grassy steppes, less fertile and well watered, and hotter, at lower elevations. Unless it be in the northeastern part of Kenya, there are no deserts. That is the only part of the country where the average rainfall is less than 20 inches, and even there it is not as low as 10 inches.

Elsewhere the region has generally over 25 inches of an-

nual rainfall, with more than 50 inches in a rather large fraction of it. Uganda, and the parts of Kenya and Tanganyika nearest Lake Victoria, are the best-watered regions, partly because here the rainfall is not only ample but is fairly evenly distributed, with two low seasonal peaks and no protracted dry season. Farther north and east, and southeast down as far as the coastal stretches, the rainfall diminishes. Also it becomes less well distributed through the year, so that, the temperature always being high, the dry season is long. The terms winter and summer are practically meaningless at this equatorial latitude; natives probably do not even recognize the concepts as phenomena of temperature. What they experience are wet and dry seasons, not warm and cold. The crops grow, of course, only in the wet season. There are two main drainage basins—toward Lakes Victoria and Tanganyika and Nyasa on the west, and thence north to the Mediterranean through the Nile and south through the Zambezi to the Indian Ocean; and, on the east, toward the Indian Ocean by way of streams which are not navigable. The big lakes are the only inland waterways. These lakes support quite a native fishing industry, a crude one but providing excellent eating fish, the Tilapia. This very separation of drainage basins implies a chain of highlands; in fact, no little fraction of the whole area is above 5,000 feet in elevation; Lake Victoria itself is at 3,700 feet; and a very large proportion of the region is above 3,000 feet. Elevation makes the climate more tolerable for living than otherwise it would be. If one likes warm but not hot days, cool but not cold nights, rainfall dependable both by the month and by the day, the west shore of Lake Victoria is to be recommended.

The climate involves hazards to economic development of various sorts. Not only does the rain fall in large total volume; it falls in lumps often of cloudburst proportions. It is

difficult to build and to maintain railroads, roads, and bridges. Unsurfaced roads readily passable in dry weather become impassable bogs after heavy rains, and washouts are then common. Soils erode easily when cultivated, especially on the sharper slopes; and much of the terrain is of that sort. It so happens, too, that water in many places sinks far underground rather quickly. Hence during the long dry season in many parts, surface water disappears and wells must be deep, over 100 feet, thus beyond the range of crude native digging. This hampers settlement and is a hazard to animal husbandry. Also, the annual rainfall seems to be highly variable in the less well-watered regions, so that local crop failure, and famine, has to be faced now and then. The warm climate favors insects, and therefore birds which devour crops, and many types of plant diseases. The termite is nearly everywhere, a foe to wood, a builder of six-foot mounds. Because of it, railway ties need to be of metal and so do telegraph poles, and fields are not easily plowed. The tse-tse fly is widespread although it has not penetrated everywhere. The sleeping sickness conveyed by it is a menace to cattle—hence to farm draft power—and a danger to man. Malaria is rampant, ticks very common. All told, along with unsanitary conditions generally, there are high human death rates among the native population, notably the very young, and among the most valuable domestic animals, the cattle and the horses.

Whether or not because climate, and terrain too, make difficulties for transportation, the system is meagerly developed. Two steamships, built abroad but assembled locally after the parts were hauled in 700 miles by rail, regularly ply the circuit of Lake Victoria. They are quite inadequate even for present traffic. Of railroads there are only two connecting the inland lakes and the Indian Ocean: one north-

westward from Mombasa across Kenya through Nairobi and thence to Kampala in Uganda on the northwest shore of Lake Victoria, branching to Kisumu on the northeast shore. It has a few rather short feeders. The other cross-country one goes westward from Dar-es-Salaam in Tanganyika to Kigoma on Lake Tanganyika. It has a long branch going northward to Lake Victoria. Then there is another railway, not cross-country; it moves inland northwesterly from Tanga to Moshi at the foot of Mount Kilimanjaro, and has a connection with the Mombasa-Nairobi line. Some new bits have been built probing westward in Uganda, and from the coast of southern Tanganyika inland to one of the groundnut-scheme locations, Nachingwea. But a huge fraction of the territory lies more than 50 miles from any railway. There is no access by rail to the Atlantic Ocean, or to the Mediterranean. If the coal deposits in southwestern Tanganyika are good, I suppose that some 350 miles of railway will have to be built to tap it at all, to say nothing of more miles to distribute it. All railways are narrow-gauge, and all have more traffic than they can handle expeditiously.

There may be as many as 500 miles of hard-surfaced, all-weather road in the whole vast region, counting the paved streets in towns. The rest are dirt: in Uganda, a good dirt which packs hard and sheds or percolates water; elsewhere, sand or loam or clay very bad in the wet season. Great numbers of peasant farmers do not live within five miles of a road. With nothing but their heads or backs for carrying produce to market—if the local market is near enough to a railroad to send any produce out—the incentive to produce beyond family subsistence cannot be strong. But the incentive to buy a bicycle appears to be substantial.

So much for the picture. It may appear dismal. But it is not a picture of a dense and hard-working and reasonably

skilled population pressing against confines of meager natural resources already well exploited. There is, I think, much scope for economic expansion with development of both human and natural resources simultaneously. This is happening now. A great dam is being built across the Nile where it leaves Lake Victoria, at Jinga; it will provide electric power for northern Uganda. Some of the power will be used in a huge cement plant now nearing completion, near Tororo at the Kenya-Uganda border. It is contemplated to build, at that site, a huge steel works using local iron ore, and a phosphate-fertilizer factory. A railroad stretching westward across Uganda, opening up new territory and facilitating copper mining, is approved in principle. Another railway extension is committed in southeastern Tanganyika, and further extension so as to touch the coal deposits and span the continent is being considered with aid of American ECA funds. There are some four million dollars of ECA funds now available for road-building. Several other hydroelectric works are under serious consideration. Coal deposits, not only in southwestern Tanganyika but in Kenya, are being closely examined. Building activity in the cities is proceeding at a great rate, visible to anybody. Cotton spinning and weaving has made a successful start and is expanding.

Also one sees natives who have learned to be capable mechanics, foremen in construction and on plantations; owners and managers of small repair shops, tailoring establishments, and retail stores; clerks and policemen and soldiers in the government services; teachers and nurses. That labor efficiency can rise is indicated by the statement that within five years a cotton-weaving mill changed the labor requirement from one loom to three laborers to two looms to one laborer: a great advance, but still far from European or American labor efficiency.

In the sphere of native agriculture, which is so dominant that it must improve if economic advancement is to become generalized, progress is to be seen. The production of native cash crops, notably cotton and coffee, has made a good start; and minor cash crops such as sisal, wattle bark, corn, and garden vegetables, have come in. These developments are of course close to the railways and the towns; they are not generalized. One sees here and there that natives who five years ago could not use a plow have now learned to harness their oxen to it; that some have learned the rudiments of systematic preparation and use of compost; that others have accepted a simple crop rotation, two years of crop and one of grass; that others have learned to terrace or contour their farms against erosion. The nomadic herdsmen have begun to learn the use of money, and to recognize the advantages of selling cattle in good condition rather than in poor condition or not selling at all. Joint efforts of government and of natives are resulting in more and more small dams and drilled wells, thus spreading the range of land occupancy. Schools are being built, sometimes even with the aid of volunteered native funds; teachers, nurses, midwives, are being trained. Science has given the clue to freeing land of tse-tse fly at costs not too burdensome in some places, and some substantial clearings are in process. There can be no question that economic expansion is occurring, per capita national income and general level of consumption tending to rise.

The problem of sustaining or increasing the present pace of advancement is too complex for me, perhaps for anybody, to solve. I carried away the conviction that development of the system of transportation is a crying need. It is not neglected now. But it may well deserve a larger degree of priority over industrial ventures, general education, agricultural or technical education, medical and sanitary services, par-

ticipation of natives in government. All must proceed together; the problem is one of proper emphasis, not of exclusion or inclusion. But from an economic point of view greater productivity of labor is the essential thing, and I think that adequate transport is basic to it. People and produce must be moved about much more widely and more cheaply. I can think of no better way to stimulate native or non-native production of cash crops for food or for export, or to stimulate mining by reducing marketing costs and opening up labor supplies, or to facilitate similarly production and trade in manufactured goods, or to make attractive the investment of foreign capital in the region. There may be questions about how much rail and how much hard-surfaced road; about governmental or private investment or how to combine them; about immediate profitableness. It will be a pity if discussion of those questions should slacken the pace of actual construction of communications. Without a rapid pace in that field, I do not see how the general pace can be other than pretty slow.

The pace of economic advancement depends considerably upon governmental policies and decisions, not only of the railway and harbor monopoly and of the departments of public works. It makes a difference to the speed of land settlement and mining ventures by Europeans whether leases—ownership in fee simple is out of the question—are granted rapidly or slowly and for long or short terms; government must decide. It makes a difference to investors whether policy is to move slowly, rapidly, or not at all in the direction of political independence, presumably with native political control, of the whole area. It makes a difference whether policy is to preserve native institutions and cultures or to Europeanize them. At the moment a particular policy of general self-sufficiency in foodstuffs for East Africa, justi-

fiable at present on grounds of strategy, uncertainty of international trade movements, and the inadequacy of internal transport and storage, is being translated into district and even individual-farm self-sufficiency in food. So translated, it tends to restrain economic development. No doubt policies in these directions, and others too, will shift with changing circumstances internally and externally. But how they will shift, and with what effects upon economic development, remains to be said by someone who has greater powers than mine for probing the future.

MERRILL KELLEY BENNETT