Weathering Life's problems: Living standards and income inequality in 20th century Burkina Faso

Thomas Zuber

Introduction

In the African context, the worker-intellectual couple, which corresponds to the historical nexus infrastructure-superstructure, seems to be the privileged alliance to implement, and the most profitable in the short and medium term. However, the worker-peasant alliance, theoretically the ideal alliance, is very difficult to put in place, due to lack of contact between these two groups.¹

The historian, Joseph Ki-Zerbo, sounded the alarm about growing inequality between city and the countryside in 1960s Upper-Volta (present-day Burkina Faso). He was particularly concerned about the inability of two groups: urban workers and peasants to organize collective action in order to rectify the inequalities in the country. When Upper-Volta obtained its independence in 1960s, the sense of continued inequality was pressing: agronomists like René Dumont warned about the desolate situation of the peasant class, about 95% of the population.² Upper-Volta seemed to embody the stereotypical dual sector model: a limited waged "modern" sector and a vast peasant sector. This dichotomy elided the multiple strategies of rural households to sustain their livelihoods.

Unlike in other countries on the continent, this is a story about household strategies to avoid producing cash crops locally. The French colonial administration had envisioned Upper-Volta as a labor reservoir for Ivory Coast in the 1920s onwards.³ The history of forced labor practices, failed colonial agricultural schemes in and beyond Upper-Volta, placed Voltaic households and workers at the center of the West African circular migratory economy. When the colonial administration sought out people in French West Africa, they went to Upper-Volta: they conscripted men in WWI, incited families to move to agricultural schemes of the 1920s and 1930s in French Soudan, such as the Office du Niger. Upper-Volta was never meant to be a center for cash crop production, nor did Voltaic people approach cash crops as a means of economic success. Voltaic men moved to the Gold Coast in the 1930s in search of employment; they moved to Ivory Coast by the 1940s and 1950s similarly and built a network of remittances

¹ Joseph Ki-Zerbo, « Autogestion et socialisme » (1977) in Lazare Ki-Zerbo, *Joseph Ki-Zerbo*, p. 38;

², René Dumont, *Paysans Écrasés, Terres Massacrées : Équateur, Thaïlande, Inde, Bangladesh, Haute-Volta* (Paris : R. Laffont, c1978.), 210.

³ A. I. Asiwaju, "Control Through Coercion; A Study of the Indigenat Regime in French West African Administration, 1887-1946," *Journal of the Historical Society of Nigeria* 9, no. 3 (1978): 91–124.

that supported rural households, through circular migrations of a year or two on average. As we shall see some communities, such as Gaoua, fought to preserve cowryshells as the main form of currency, particularly in the context of overvaluation of the franc internationally.

This study focuses on measures of income inequality. The colonial administration compiled fairly thorough statistics on wage labor. Surveying rural households, who relied on subsistence production poses a real problem to the measure of rural incomes. This study relies on surveys conducted in the 1930s and 1950s to analyze the changes in urban/rural inequality in five regions: Bobo-Dioulasso, Diébougou/Gaoua, Ouagadougou, Koudougou, and Ouahigouya. These are the regions most studied by colonial administrations: these were the regions that exhibited one of two qualities: Koudougou, Ouahigouya and Ouagadougou had the highest population densities in French West Africa; Bobo-Dioulasso, Diébougou/Gaoua and Dédougou had extremely fertile soil, propitious for cultivation of peanuts, rice and cotton. Postcolonial analysts advanced this notion of an apparent "mismatch" between population and land. Georges Sanogoh, head of statistical services of independent Upper-Volta, argued that there was an mismatch between the demographic distribution in the country and regions' economic potential. In 1962, the statistical office of Upper-Volta noted that "demography does not correspond to the economic opportunities of the country, since the central Mossi plateau is not arable (predominance of sand and laterite) whereas the unpopulated regions of the south-east and south-west are very fertile." In response to the administrations drive for cash crops, households had markedly different strategies to accumulate income and to guarantee subsistence: migration, soldiers and then cash crops became the main sources of income in the region. Cash crop incomes constituted a small portion of total household incomes.

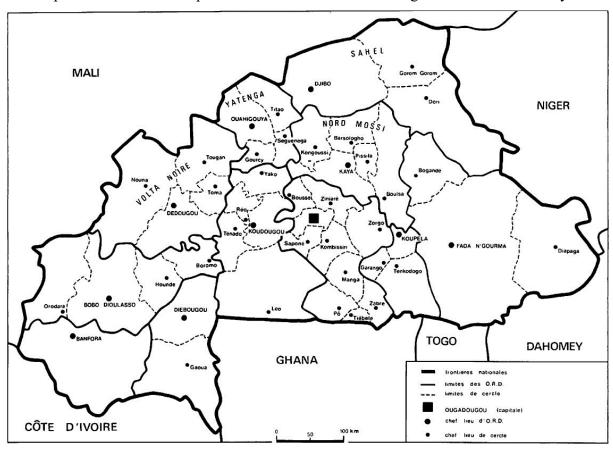
There are two salient aspects of Burkinabè demographic history. First, the uneven demographic distribution, between a very population dense and agricultural infertile center, and a population scarce and fertile land in the West; second, high emigration, that meant that up to 10-15% of the population lived abroad, specifically in Ivory Coast and Ghana. Policymakers focused on ways to channel family networks to "rectify" demographic imbalance and to coopt migrant remittances. Perhaps historians have been too optimistic about the emancipatory aspect of migration in Upper-Volta. Throughout the 20th century, politicians raised alarms about the ill treatment of Voltaic workers in Ivory Coast. But there is a consistent choice in most of the

⁴ BCEAO, Données actuelles de l'économie voltaïque, Etudes Economiques Ouest Africaines n°5 (Décembre 1962), p. 11

⁵ Victor Piché and Dennis Cordell, *Entre Le Mil et Le Franc: Un Siècle de Migrations Circulaires En Afrique de l'Ouest. Le Cas Du Burkina Faso* (Québec: Presses de l'Universite du Quebec, 2015).

south-west and west of Upper-Volta not to become cash crop centers: if we can talk about rural capitalists in Ghana or Ivory Coast; perhaps we can talk about rural anti-capitalist entrepreneurs in Upper-Volta.

Throughout the 20th century, colonial administrations and international agencies defined Upper-Volta through its poverty. Some older people seem to agree with the sense of simplicity of the past: "Life was simple in the past: there was only tô (the millet-based staple), none of this rice that makes you ill." From the 1930s to the 1960s, as real wages did increase for urban workers, the picture of living standards and inequality in rural areas was more ambiguous. Remittances and veteran pensions constituted a critical income stream for many households. The Sahelian drought of the late 1960s and early 1970s reinforced the need for outside sources of income and intensified the sense that colonial inequalities, particularly the important incomes of European and American expatriate workers continued to weigh on the Voltaic society.



Political Economy of Upper-Volta (1930s-1960s)

-

⁶ Interview, Asséto Ouédraogo (Ouagadougou, January 4, 2020)

In 1919, in recognition for the Mossi Mogho Naaba's (the king of Ouagadougou) support in mobilize African soldiers in World War I, the French administration created the Upper-Volta colony, encompassing the borders of the Mossi kingdoms.⁷ Between 1919 and 1932, colonial administrators envisioned the territory as a labor reservoir in the military and colonial labor projects.⁸ In Koudougou, the region where we have some of the best data for the 1930s, men each worked on average 8 days per year. Cordell and Gregory estimated that nearly 5 million days of work are extracted from the population of Koudougou, between 1917 and 1938. This context of intensified labor coercion formalized trends that led Voltaic men to migrate to the Gold Coast in search of work: they stayed a year or two, accumulating enough money to pay taxes back in their villages and to support their households.

By 1932, in response to the financial crisis, the Upper-Volta colony was split up between French Soudan, Niger and Ivory Coast. The vast majority of the territory was attached to Ivory Coast. In Ivory Coast, the colonial administration envisioned this new extension of the colony as a labor reservoir that would help the Ivorian economy. Since many people had lost their jobs in the Depression, seasonal Voltaic workers could be "diverted" to Ivory Coast. By 1934, 7985 laborers were recruited in Ivory Coast for industry and plantation work (compared to 7155 in 1933). The drive to mobilize forced labor coincided with new attempts to initiate cash crop production. In Upper-Volta, this failed lamentably. As François Laniel, administrateur-adjoint des colonies in Koudougou, noted in his 1938 report for the Guernut Commission, "the rapid extension of cotton in the colony, without any precautions, was one of the causes of the famine of 1931."

The dual movement of work labor and military conscription intensified with the beginning of WWII. Requisitioning labor for Ivorian plantations throughout World War II continued throughout WWII, as up to 5% of the male population could be conscripted to work in Ivorian plantations. ¹² By the end of the war, the two categories played a critical importance to the economic life of the West and South-West of Upper-Volta. In 1947, after much lobbying from political elites, the French colonial government reconstituted the territory of Upper-

_

⁷ Myron Echenberg, *Colonial Conscripts* (1991)

⁸ Dennis D. Cordell, Joel W. Gregory, and Victor Piché, *Hoe and Wage: A Social History of a Circular Migration System in West Africa* (Boulder, Colo.: Westview Press, 1996); Raymond R. Gervais, "Contrôler, Compter, Comparer. La Production et La Gestion de l'information Démographique En Haute-Volta Avant 1960," *Histoire & Mesure* 13, no. 1/2 (1998): 59–76.

⁹ Ivory Coast, « Le Problème de la Main d'œuvre en Ivory Coast », Guernut 50, ANOM.

¹⁰ Territoire de la Ivory Coast « Rapport annuel sur la main d'œuvre (1934), Travailleurs recrutés par contrats – par cercles, » Guernut 50, ANOM

Mamadou Konaré, « Alimentation des indigènes 1.A. : Koudougou », Guernut 100, ANOM.

¹² Raymond R Gervais and Issiaka Mandé, "Comment Compter Les Sujets de l'Empire?," *Vingtième Siècle*. *Revue d'histoire*, no. 3 (2007): 63–74.

Volta.¹³ Ouagadougou regained its status as territorial capital, but Bobo-Dioulasso remained the economic center of the territory.

The post-war era was marked by three important dynamics. First, migration to Ivory Coast was well established for Voltaic workers. Second, Voltaic soldiers continued to represent about 20% of African soldiers in the French colonial army, at a time when French was embroiled in colonial wars in Indochina and Algeria. Finally, Voltaic elected officials in the French National Assembly focused on the quest to expand production and cash crops, like cotton and peanuts.

Whereas cotton and peanuts did not become central to the Voltaic economy in the 1950s and 1960s, this did not stop the administration of independent Upper-Volta to pursue this quest for cash crop production, when Upper-Volta obtained its independence in 1960. The association of cotton and peanuts with colonial coercion and the limited income that cotton provided explains why households avoided as much as possible the cash crop boom that their southern neighbors in Ghana or Ivory Coast had harnessed. As Kohler noted in his 1972 of migration from Upper-Volta, in Koudougou, « the income coming from the commercialisation of cotton does not cover taxes. [...] We will understand therefore why migration is not determined by the levels of cash crop agriculture in different regions., [...] which provide very low and irregular incomes to West Mossi cultivators, but also because they are controlled by elders and do not benefit the generation that is migrating." This sentence encapsulates several of the dynamics of inequality: the tension between cash crops and migration, as well as the generational control of resources.

Data

Before the 1950s, the colonial drive to produce censuses often led district commanders to generate extravagant numbers and manipulate data. Nominal censuses were rare until the 1950s, when the colonial administration legislated that people in the colonies should be enrolled in civil registries. Nevertheless, well until the 1970s, statisticians analyzing civil registry records suggested that they represented the expansion of state presence, rather than providing

¹³ Moussa Willy Bantenga (ed.), *La reconstitution de la Haute-Volta : actes du colloque international sur l'histoire du Burkina Faso* (Ouagadougou : Harmattan Burkina, 2010).

¹⁴ Echenberg (1991)

¹⁵ Jean-Marie Kohler, Les Migrations des Mosi de l'Ouest (ORSTOM, 1972), p. 35

¹⁶ Raymond R. Gervais, "Contrôler, Compter, Comparer. La Production et La Gestion de l'information Démographique En Haute-Volta Avant 1960," *Histoire & Mesure* 13, no. 1/2 (1998): 59–76.

¹⁷ Frederick Cooper, *Decolonization and African Society: The Labor Question in French and British Africa* (Cambridge [England]; Cambridge University Press, 1996).

an accurate view of demographic change. ¹⁸ Reports from colonial territories, in the National Archives of Senegal, the center of the Federal government of French West Africa, provide data on yearly production, prices and wage labor. These are statistics of the colonial state, which largely underestimated population and subsistence agriculture: while data on cotton and peanuts might be fairly accurate, the data on millet and sorghum production requires some adjustments. Tadei and Alfani, for instance, estimate that for Ivory Coast, about 30% of subsistence agriculture is missing in the Federal statistics. ¹⁹ The colonial statistics offices compiled data on population, production, commerce, territorial budgets, that have been invaluable for economic historians of colonial, on a federal level for French West Africa, published for 1939, 1948, 1951, 1954 and 1957. The *Annuaires Statistiques* synthesized data from the territorial statistical offices. They need to be read in parallel with the original sources, found in Dakar, particularly the 2G archives and the archives of the Inspection du Travail (Labor inspection services). In order to get a broader sense of agricultural production and series of wage labor, I compiled data from most of the 2G archives in the National Archives of Senegal pertaining to Upper-Volta from 1947 to 1959.

It is really in the late 1930s, with a change of government in France in 1936, with the arrival of the *Front Populaire*, that a more systematic collection of household budget and living standards data became a focus of the colonial administration.²⁰ The colonial administration and colonial statistical offices carried out two sets of household surveys that provide some sense of changes in income sources between the late 1930s and mid-1950s. Focusing on the micro-level changes in different communities helps use understand how families sought out sources of income, especially if they relied on colonial currency. The 1937/1938 Commission Guernut provides a snapshot of economic livelihood of certain households in the 1930s. While the records on Indochina are very rich, the information for A.O.F. is spotty at best. A few documents remained from Ivory Coast that provide helpful entry into nutrition and foodways in what was known as "Haute Ivory Coast."

By the 1950s, French research institutes became captivated with implementing new statistical tools, particularly sample surveying, in the colonies, as censuses had proven inept at

¹⁸ Ministre de la Fonction Publique, François Bouda, à Monsieur le Ministre des Affaires Economiques et du Plan (Service de la Statistique), 14 septembre 1960, 2794 VPI/DI Fichier 4 (Etat Civil 1961), File 36V138, ANBF

¹⁹ Federico Tadei and Guido Alfani, "Income Inequality in French West Africa: Building Social Tables for Pre-Independence Senegal and Ivory Coast," SSRN Scholarly Paper (Rochester, NY, November 11, 2019).

²⁰ See Vincent Bonnecase, *La Pauvreté Au Sahel : Du Savoir Colonial à La Mesure Internationale* (Paris : Karthala, 2011).

providing useful information about rural households family structures.²¹ In the 1950s, the *Office de Recherche sur l'Alimentation et la Nutrition Africaine* (ORANA) carried out studies and surveys in three key regions of Upper-Volta: Gaoua, Bobo-Dioulasso and Ouahigouya. They were carried out in regions that struggled with high infant mortality and exhibited the potential for high agricultural yields. In 1963-64, Georges Sanogoh, and French demographers from the INSEE implemented a major household budget and nutritional survey on 1640 rural household in the 1960s, relying on two-stage sampling to acquire a sense of Voltaic household needs.²² The ORANA surveys as well as the 1963-64 budget surveys served as the basis for administrative understanding of household resource allocation well into the 1970s.

There is a relative "absence" of statistics for the 1960s and 1970s, what Serra has called an "uneven statistical topography." 23 Georges Sanogoh, a statistician, trained at the French Ecole Nationale des Statistiques et de l'Administration économique (ENSAE), coordinated many of the studies of the 1960s and 1970s as director of the Service de la Statistique et des études économiques (SNSEE), and Minister of Planification and Statistics in 1978.²⁴ In his 1975 thesis, he lamented that national statistical offices focused on national accounts and industrial statistics, rather than understanding living standards of rural households.²⁵ This reality was recognized in statistics journals throughout the 1960s and 1970s, as economist Michel Dumas noted in his article on the "decolonization of statistics" in Statéco: "Studies are not always conceived in regards to the needs of African economies. [...] In eight out of thirteen studies, prices are only analyzed through an index for European consumption in the capital."²⁶ Nevertheless, these studies, such as the ORANA studies from the 1950s and the studies carried out by the French National Institute of Statistics and Economic Studies (INSEE) in the 1960s provide invaluable, though imperfect, information. Fundamentally, the history of quantification and knowledge production help us understand how colonial rule affected the data produced and the interaction between colonized and colonizers. The colonial administration was particularly interested in certain forms of data, tied to production and labor.

_

²¹ Louise Barré, "Compter pour planifier : dénombrement de la population et « capitalisme d'État » en Ivory Coast (1954-1967)," *Politique africaine* 145, no. 1 (2017): 109–28 ; Bonnecase, 144–48.

²² SNSEE/INSEE. Enquête budget consommation 1963-64 (Ouagadougou, 1968), p. 18.

²³ Gerardo Serra, "An Uneven Statistical Topography: The Political Economy of Household Budget Surveys in Late Colonial Ghana, 1951-1957" 35, no. 1 (2014): 9–27.

²⁴ His promotion is mentioned in Marchés Tropicaux et Méditerranéens, n°1016, 1er mai 1965, p. 1043

²⁵ Georges Sanogoh, *Une décennie de planification voltaïque* (PhD Thesis, Université Paris 1, 1977).

²⁶ Michel Dumas, « Décoloniser les statistiques, » S.T.A.T.E.C.O. - Bulletin de liaison des Statisticiens et Economistes exerçant leurs activités en Afrique, n° 2, juillet 1972, p. 85

Researching Inequality

Inequality levels in 20th century Upper-Volta remained steady and increased somewhat during the 1950s and 1960s. This is coherent with the analysis of inequality in other countries, particularly in the colonial contexts. Studies of inequality on Africa emerge in the debates about the distributional effects of capitalism and globalization internationally. This research have tried to elucidate the policy choices or economic shocks that reduced or intensified income inequality.²⁷ In response the difficulties to ascertain income inequality levels in places with no comprehensive household surveys and consistent tax registers, social tables provide imperfect means of gauging degrees of inequality and often the only available method available. Scholars have produced social tables for several African countries.²⁸ Based on these studies, Bolt et al conclude that "colonial policies and settler presence had a large influence on relative levels of income inequality, while trends were primarily driven by processes of commercialization." In the late colonial period, income inequality rose, as "African economies were increasingly integrated in the global capitalist system of exchange."²⁹ Levels of inequality depended on capital intensity of export commodity-driven commercialization and the presence of settlers and salaried officials.

What most of these studies have shown is the importance of cash crop production in relatively wealthy colonies: Uganda, Botswana, Ivory Coast and Senegal. This was not the case for Upper-Volta. From the 1910s, circular migration became the means for households to survive: they sent one or two sons to work in the plantations in Ivory Coast or Ghana. When possible, households avoided cash crop production well into the 1960s: colonial administrators complained about the lack of interest for cotton, rice or peanuts. In a sense, household found ways of relying on migration and soldier income as a means of risk diversification.

-

²⁷ Thomas Piketty and Emmanuel Saez, "Inequality in the Long Run," *Science* 344, no. 6186 (2014): 838–43; Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913-1998," *The Quarterly Journal of Economics* 118, no. 1 (2003): 1–39; Branko Milanovic, "Towards an Explanation of Inequality in Premodern Societies: The Role of Colonies, Urbanization, and High Population Density," *The Economic History Review* 71, no. 4 (2018): 1029–47.

²⁸ Jutta Bolt et al., "Measuring historical income inequality in Africa: What can we learn from social tables?," *IDEAS Working Paper Series*, 2021, Prince Young Aboagye and Jutta Bolt, "Long-Term Trends in Income Inequality: Winners and Losers of Economic Change in Ghana, 1891–1960," *Explorations in Economic History* 82 (October 1, 2021): 101405, https://doi.org/10.1016/j.eeh.2021.101405; M. A. de Haas, "Reconstructing Income Inequality in a Colonial Cash Crop Economy: Five Social Tables for Uganda, 1925–1965," *European Review of Economic History* 26, no. 2 (April 30, 2022): 255–83, 0; Tadei and Alfani, "Income Inequality in French West Africa."

²⁹ Ewout Frankema, Michiel de Haas, and Marlous van Waijenburg, "Inequality Regimes in Africa from Pre-Colonial Times to the Present," *African Affairs* 122, no. 486 (January 1, 2023): 57–94.

Measuring Urban Wages in Ouagadougou and Bobo-Dioulasso

As Upper-Volta's two major urban centers, Bobo-Dioulasso and Ougadougou, attracted a small but important percentage of rural workers, who came to the city in search of wage work. The discrepancy between the minute wage labor base (about 25,000 workers in 1955) and the vast rural population constituted the basic organization of the Voltaic economy. This group of wage workers, with soldiers and veterans, composed a major political powerhouse, that decided elections and coordinated union activity.

The history of living standards starts with the data that is the most consistent, and in Upper-Volta, colonial administrations compiled data on urbanization rates, wage laborers and new populations moving into cities. The colonial administration collected data on wages, particularly after 1952, when the colonial administration implemented a Labor Code in the colonies. As nominal wages increased, they increased in a context of inflation in the post-war period, and economic growth, increasing nominal wages. The CFA franc was nevertheless overvalued, and pegged to the metropolitan franc, increasing prices in French West Africa relative to France. During the war and in the early post-war years, West African cities experienced inflation, that was only slightly balanced by increases in nominal wages for the poorest workers. 22

In order to gauge the changes in living standards of low-income urban workers, the method proposed by Robert Allen of "welfare ratio" provides insights. The assumption of the Allen basket is that a family at barebones level of consumption living had certain basic preferences, to meet physiological needs. Of course, as incomes surpass subsistence levels, the approach cannot encapsulate the changes in consumer preferences. The barebones subsistence basket provides a means of gauge real wages, and serves therefore as a deflator for subsistence-level incomes. The construction of the basket requires a staple (in this case millet) and foods for minimum number of calories, proteins and other nutrients. In this case, for comparability, the baskets used by Frankema and van Waijenburg provide the basis for the basket (see Table 1). One of the problems with the Allen barebones basket approach is its under-estimation of rent: data from the 1950s reveals that rental units for unskilled laborers, who were likely sending remaining money back to their home villages, accounted for 30 to 40% of an unskilled worker's

 30 Cooper, Decolonization and African Society : The Labor Question in French and British Africa.

³¹ See Tom Westland for Dakar: O. T. Westland, *Agriculture and industry in the process of economic growth and inequality in Senegal*, c. 1848-1979 (PhD Thesis, Cambridge, 2022)

³² Fanny Pigeaud and Ndongo Samba Sylla, L'arme invisible de la Françafrique: une histoire du franc CFA (La Découverte, 2018).

budget. The colonial labor inspection noted this dramatic increase from 3000 francs for a unit in 1952 to 9600 francs in 1957.³³

Table 1: Allen "subsistence" basket

Contents of subsistence basket	
Millet	222kg
Fish or beef	3kg
Shea oil	3 L
Sugar	2kg
Cloth	3 m
Soap	1.3 kg
Petrol	1.3 L
Charcoal	58kg
Candles	Additional 2.5%
Rent	Additional 5%

The data on real wages (Figure 1) reveals important differences between Ouagadougou and Bobo-Dioulasso. While data from Bobo-Dioulasso is more readily available in the 1930s and 1940s, it is likely that in both cities, unskilled urban workers experienced a decline real wages in the late 1930s and a stagnation during the war. This tracks with real wage trend in other parts of West Africa. Data from Frankema and van Waijenburg show a dip in real wages during the war in Accra or Lagos.³⁴ It is likely that the relatively high real wages in the 1930s overestimates who had access to these wages: the Depression left many people unemployed, but the few people who had wage work likely benefited somewhat from declining prices. Unskilled urban workers experienced a dramatic increase in their real wages throughout the mid-1950s. The post-war boom had the effects of increasing nominal wages, even as the consumers experienced inflation on food and fuel. The economic boom and the post-war context allowed unions to organize mass strikes to demand equal wages with metropolitan workers: in both the public and private sector, *manoeuvres* (unskilled urban workers) particularly experienced rapid increases in nominal wages.

³³ This tracks with work that Tom Westland has done for colonial Dakar.

³⁴ Ewout Frankema and Marlous van Waijenburg, "Structural Impediments to African Growth? New Evidence from Real Wages in British Africa, 1880-1965," *The Journal of Economic History* 72, no. 4 (2012): 895–926.

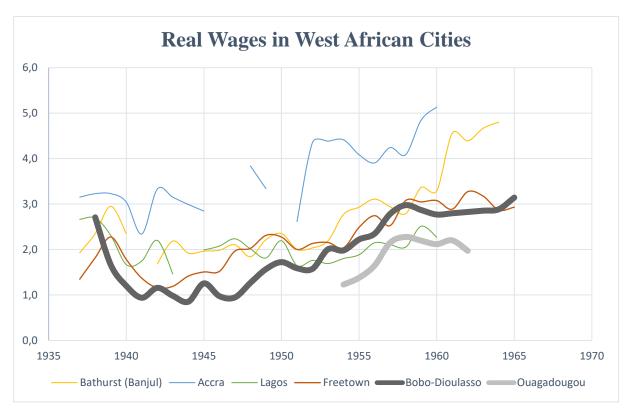
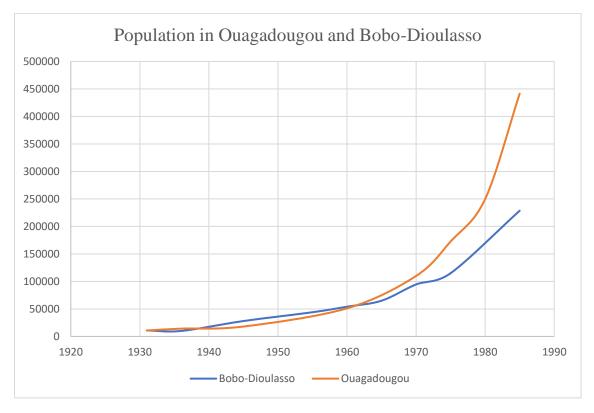


Figure 1: Real Wages in West African Cities (data on English colonial cities from Frankema and van Waijenburg)



This difference is marked by the shifts in relative importance of the cities to the colonial administration in the 1950s and to the colony's economy. Indeed, in the 1930s, Bobo-Dioulasso was the major administrative and economic center of the Upper-Volta colony, particularly

during the period of the dismantling of the Upper-Volta colony and up until 1954, when administrative offices moved to Ouagadougou. Between 1948 and 1954, 42% of wage workers worked in Bobo-Dioulasso, and 28% of wage workers worked in Ouagadougou. 88% of Europeans worked in either of the two cities, with 56% of European workers based in Bobo-Dioulasso. Indeed, from 1933, the railway extended to Bobo-Dioulasso, going to Abidjan: colonial businesses and administrations focused on Bobo-Dioulasso as a colonial center for agricultural projects of cotton and peanuts in the West of Upper-Volta. Due to this colonial interest in Bobo-Dioulasso, the city experienced a dramatic urban planning transformation. Historian Laurent Fourchard notes Bobo-Dioulasso became the focus of drastic hygienist and colonial planning projects in the 1930s. Ouagadougou was comparatively abandoned by the colonial administration: African merchants found opportunities to develop businesses and claim land in the city center, since they did not experience the same competition from European businesses as in Bobo-Dioulasso. ³⁵

By the 1930s, the labor conscriptions and the new centers of the colonial economy in Bobo-Dioulasso attracted new workers seeking out waged work. Colonial labor reports highlight, however, the seasonality of labor. in 1952, the Labor inspection board noted that in both 1951 and 1952, the labor market was saturated during the rainy season, whereas it was the opposite in the dry season. ³⁶ Unskilled laborers migrated to Ouagadougou or Bobo-Dioulasso in search of jobs in the seasons when their work was not in demand for harvest or sowing. Steadily, the number of unskilled workers increased in the 1950s, becoming a subject of concern for the colonial administration. Soldiers and recruited movements also followed the general movement of labor migration. Veterans gravitated to cities and provincial towns. Nevertheless, as we will see in the next section, veterans and soldiers played a critical role in villages.

The urban planning of Bobo-Dioulasso and its spatial segregation between European quarters and African quarters shed light on the system of economic exploitation of colonial rule. While the end of the colonial era was marked therefore with a growing real wages for unskilled workers, inequality between wage workers increased, particularly after the territorialization of the colonies in French West Africa. Many of the union leaders who had obtained labor agreements from the colonial administration tended to be upper-level wage workers, who saw their nominal wages increase more rapidly than unskilled laborers. Additionally, as Figure 2

_

³⁵ Laurent Fourchard, *De La Ville Coloniale à La Cour Africaine: Espaces, Pouvoirs et Sociétés à Ouagadougou et à Bobo-Dioulasso (Haute-Volta) Fin XIXè Siècle-1960* (Paris: L'Harmattan, 2002); Laurent Fourchard, "Propriétaires Et Commerçants Africains À Ouagadougou Et À Bobo-Dioulasso (Haute-Volta), Fin 19ème Siècle-1960; Propriétaires Et Commerçants Africains; Laurent Fourchard" 44, no. 3 (n.d.): 433–61.

³⁶ Haute-Volta, Inspection Territoriale du Travail, Rapport Annuel 1952, p. 20 ANS 2G52/44

signals, unsurprisingly, the dramatic wage difference between European workers and African workers drove the inequality in the 1940s.



Figure 2: Gini coefficients wage workers

The relative boom of the 1950s took an downturn after 1962. The price index developed by the BCEAO (the Voltaic statistical office) highlighted two very different post-independence trends: Europeans, whose numbers increased in the 1960s through the work with international organizations and technical assistance, experienced a relatively low inflation. One of their main complaints was that their employers (no longer colonial state but the French embassy) did not pay for drivers in Ouagadougou. While this demands more research, it is likely that in the 1960s and 1970s European and American wages in Ouagadougou experienced rapid increase in ways no African wage worker experienced, reinforcing rather than limiting wage inequality. The main difference, however, was that unlike in the colonial era, most of these wages were paid by foreign state or companies, rather than the territorial budget. This nuances some of the estimates about inequality which do not necessarily take into account European and American expatriate wages in analyzing inequality in postcolonial societies.

At independence, in 1960, Bobo-Dioulasso and Ouagadougou experienced two different trends for low-income African workers: while living standards of unskilled urban workers stabilized at a relatively high level in Bobo-Dioulasso, they declined in Ouagadougou. African consumption in Ouagadougou experienced a dramatic increase between 1958 and 1963: The price index on household consumption in Ouagadougou rose to 157.2 in 1963 from a 100 base in 1958. A 1963-64 household budget survey carried out by the Voltaic Statistics Bureau noted

a deterioration of the economic situation, which had led the government freezing hires in the public sector and increasing civil servant taxes by 10%.³⁷ Urban families experienced increases in cost of living in the 1960s.. Increases in the price of clothing and house maintenance underpinned these increases (Figure 10).³⁸ Laborers (*manoeuvres*) and domestic workers, who accounted for nearly a quarter of the salaried workers in Bobo-Dioulasso, felt the brunt of inflation the most.³⁹ Households adjusted their expenses, by reducing food consumption and expenses for community events.⁴⁰ Repeatedly in surveys, the postcolonial administrations sought out household savings as a means to solidify tax bases and to stimulate consumption. The writers of the 1963-64 survey lamented however that "if savings exist, they are not owned by households."

Burkinabè economist Pascal Zagré concluded in the 1990s: "monetary transactions in the Voltaic economy took place through the exterior sectors and money circulated predominantly in the urban centers." Indeed, urban workers proved critical to sustaining the livelihood of rural households. Civil servants, wage workers and soldiers often kept a house in their communities: they sent home money, but they also called upon relatives to maintain their fields. It was typical in 1950s Ouagadougou for a civil servant to have a field in the village and outside of the city (what is now Zone 1, a very urbanized part of town in the 2020s). 42

Inequality in Rural Areas: the creation of an East / West Divide

Since the majority of the Voltaic population was rural, colonial surveys reveal a shift in the ways colonial administrations approached colonial rule and knowledge production on people in the colonies. The predominantly Mossi regions, with high population density, were regions of interest for labor, and statistics largely focused on "populations," as a generic whole. Village leaders called up whoever was in the town to be counted, leading to significant undercounting of adult men, who feared they would conscripted into the army or required to perform the *prestation*, the labor tax.⁴³ After WWII, in the wake of mass mobilization and strikes in West Africa and political mobilization for independence, the new imperial project focused on limited wage increases and family allowances for wage workers. In rural areas,

³⁷ SNSEE/INSEE. Enquête budget consommation 1963-64 (Ouagadougou, 1968), p. 75.

³⁸ BCEAO, Données actuelles de l'économie voltaïque, Etudes Economiques Ouest Africaines n°5 (Décembre 1962)

³⁹ SNSEE/INSEE. Enquête budget consommation 1963-64 (Ouagadougou, 1968),, p. 75

⁴⁰ SNSEE/INSEE. Enquête budget consommation 1963-64 (Ouagadougou, 1968),, p. 73

⁴¹ Pascal Zagré, Les Politiques Économiques Du Burkina Faso : Une Tradition d'ajustement Structurel (Paris : Karthala, 1994), 51.

⁴² Interview, Jean-Baptiste Kibora (Ouagadougou, January 27, 2020)

⁴³ Marlous van Waijenburg, "Financing the African Colonial State: The Revenue Imperative and Forced Labor," *The Journal of Economic History* 78, no. 1 (March 2018): 40–80.

social reformers and colonial administrators centered malnutrition and infertility, partly driven by a goal to build a worker base. The shifts in surveying techniques and regions between 1938 and 1955 reveal broader economic concerns of colonial services: in the 1930s, administrators focused on labor; by the 1950s, the concern was on production locally.

While of the data produced by the colonial administration focused on aggregate numbers in the colonial territory as a whole, two exceptions are the surveys from 1938 and 1955. The data on expenditures from the 1938 and 1955 surveys provide some sense of the changes in rural households' consumption patterns. In a sense, focusing on inequality allowed colonial administrations to avoid the analysis of inequality between colonized and colonizers. They aimed to show the inherent inequalities in the societies that they colonized, rather than the effects of the colonial economy on the inequality Nevertheless, these sources provide initial view of the inequality in rural communities, that transcend the lumping of all rural workers in one agricultural or "traditional" sector. The surveys from 1938, 1955 and 1964 reveal how households changed their income sources and avoided cash crop production of cotton and peanuts, but relied overwhelmingly on remittances from workers abroad and soldiers.

In response to the requests by the French National assembly, colonial administrators and, particularly, African teachers and clerks (many of whom were from Senegal) compiled data on the relative wealth of rural households in 1937-1938, for the Commission Guernut. Each of the 1938 surveys present about 10-20 households in the district. The surveys aimed at presenting "archetypal" households, or "concessions" (family compounds, where three to five couples and their children and relatives would live), that followed a questionnaire sent by the Ministry of the Colonies. Non-agricultural household are overwhelmingly represented. The households surveyed are often haphazard: they appear to be acquaintances or people whom administrators decided represented the different "wealthy", "average" and "poor" households in their district. Households of chiefs and liberal professions are overwhelmingly represented. Unfortunately, cash crops appear alongside food sales in the survey.

Most of the surveys were carried out in population dense areas, predominantly communities in Koudougou, Tenkodogo or Dédougou. This may signal administrators interest in mobilizing labor for production. In Koudougou, Konaré made a note of the Yamba family in the village of Godé. Konaré highlighted that this was an average in a "poor" region: the family was composed of 15 men, 8 women and 5 children.⁴⁴ The household was among the wealthiest in the community. 7% of income came from the sale of agricultural products, largely tomatoes,

_

⁴⁴ Mamadou Konaré, "Enquête 1C sur l'alimentation des indigènes » (Race : Mossi) Cercle de Koudougou, Guernut 100, ANOM.

yams and millet, 24.2% came from cattle sales, 3% from outside employment or remittances. The Yamba family is typical of the families represented in the surveys for Koudougou. Wealthier families had more cattle and were able to sell cattle in times of need. Additionally, apart from the households of tailors or Dioula merchants, households did not receive large portions of their income from remittances or exchanges.

Nevertheless, the surveys reveal interesting differences across districts. In Koudougou, wealthiest households' sales of cattle accounted for 24.2 to 36.6% of total income (see Figure 3). In contrast, data from Dédougou revealed how critical agricultural sales were as an income source for the poorest: this likely encapsulates sales of millet and sorghum in the dry season, when most households sold millet to pay back debts from the previous year. Nevertheless, colonial administrators had envisioned Dédougou as a center for cotton cultivation, and some of this income is likely coming from cotton sales.

Despite relying on subsistence agriculture and sales, families still had to pay for certain produce, particularly because of the seasonality of the agricultural cycle. Data on expenditures, revealed that clothing, food and taxes constituted the major forms of expenditure across income levels. The head tax, a non-progressive tax that was fixed for all Voltaic people, constituted a particularly high burden for the poorest. This relative importance of taxation in expenditure varied in regions: in the Tenkodogo/Ouagadougou region, taxation constituted about 10% of expenditures no matter the income level. This was due to the fact that higher income households were the largest. Household size varied tremendously in Koupéla or Boussancé, from 6 people to 96.

What is noteworthy, however, is that remittance and wage incomes play relatively little role in Koudougou but are quite important in Dédougou, where migration was more important. Still, throughout the interwar period, Upper-Volta became a major center of recruitment for the colonial armies. Like migrants leaving for Ivory Coast or Ghana, the new soldiers continued their ties with their villages through remittances and gifts. Very often, relatives ensured their land was maintained and served as intermediaries for marriages. In her 1938 report, French journalist Denise Savineau notes, for example, that the soldiers (*tirailleurs sénégalais*) faced a particular problem with regards to households approaches to colonial currencies. One man, in Gaoua, sent remittances to his future parents-in-law for three years, while serving in France. When he returned home, he discovered his wife had died and had had a son. When he asked to take the son, the parents-in-law refused, because the remittances were not sent in the appropriate bridewealth. When soldiers sent remittances, very often families were not able to collect that

amount of money.⁴⁵ Even as men abroad and tirailleurs sent money home, households did not have the information on collecting remittances or found that the franc CFA was too tied to the head tax to be a legitimate currency and form exchange.

The 1930s surveys revealed that in the dismantling of Upper-Volta, administrators sought to understand what forms of income could incite households to produce more cash crops. Mamadou Konaré noted in his report that Koudougou would be a "perfect location for cotton production." Yet, households found other means of sustaining their livelihoods, often ignoring the colonial drive to produce. They were attracted to wage labor and cash crop production away from their communities (such Ivory Coast), in ways that they would not reproduce in their communities afterwards.

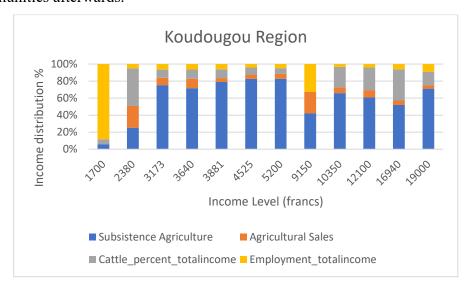
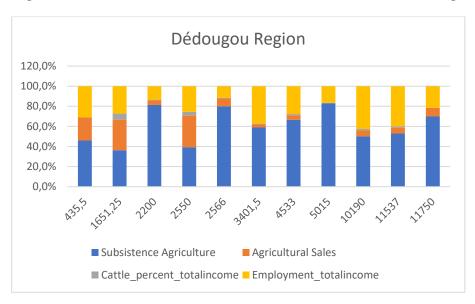


Figure 3: Mamadou Konaré (1938) – Income distribution (Koudougou/Dédougou)



⁴⁵ Denise Savineau, La femme et la famille en Afrique Occidentale Française (1938)

_

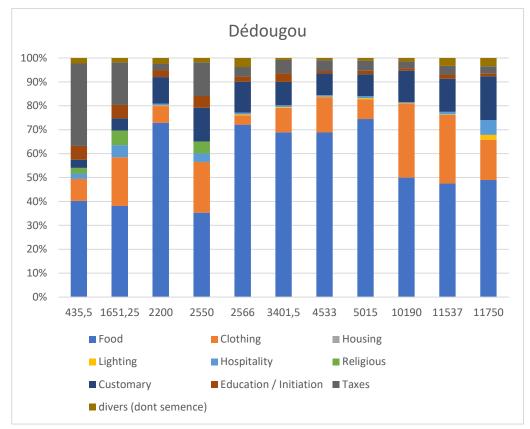


Figure 4: Expenditure distribution across Incomes (1938)

By the 1950s, surveying was no longer the sole purview of the administration. Food and Agriculture Organization of the United Nations had incented European empires to collect data on malnutrition and livings standards of colonized people. In France, nutritionists like André Raoult sought to project a view that the French colonial project was transparent to international organization, in collecting data on malnutrition in region of particular concern. At the Institute of Nutrition (ORANA), Raoult developed a controlled-trial to evaluate what supplements would improve child malnutrition: Upper-Volta became the center for such interventions. The collection of data proceeded differently from the haphazard colonial syntheses of the 1930s. Nutritionists were mostly interested in malnutrition and infant mortality. The ORANA coordinated four monographies of village in three regions: Ouahigouya, Bobo-Dioulasso: the "monographies" aimed to be comprehensive pictures of rural communities. They surveyed all resident community members, sought out infants under 5 years old.

This move away from the majority Mossi regions of Upper-Volta is interesting, since it signals a decision by the administration to focus predominantly on the south-west and the west, as centers of possible agricultural production. Yet, even in these places, like Ouahigouya, anthropologists reported that the economic life of farmers was dominated by the quest for colonial currencies to pay taxation (of around 590 francs per adult). Households faced a

particular problem of the cyclicality of millet and sorghum markets. Most households had to sell millet immediately after the harvest, to pay back debts. At this time, millet prices were very low. Then, during the dry season (starting February), when taxes were due, they would also have to buy millet again, as prices increased. Part of the drive of the ORANA nutritionists was to increase food production in the West and South-West, in light of the failures to implement cash crop production. In Bobo-Dioulasso, nutritionists focused on rice production as a means of increasing food.

The ORANA surveys highlight the importance of remittances and military pensions in these communities. They also suggest a transformation of many households in the economic boom of the 1950s. These sources of income transformed the economy of Borodougou, one of the ORANA villages. The village was generally wealthier than other villages in the studies. Nine households had a member who received military pensions; nine families had a member who was currently in active duty, in Indochina and Algeria, in particular. The presence of these new social status had transformed the community households households in Borodougou.⁴⁷ Villagers had a total of thirty bicycles, electric lamps (Table 4). Migrants and veterans established rice and cotton fields. 48 In the other communities, wealth was largely concentrated among families of veterans and soldiers. There were ten veterans in Sinarosso, receiving trimesterly pensions (Table 3).⁴⁹ The survey in Issigui, outside of Ouahigouya in the North, highlighted that cotton was a main form of income for nine families, many of whom had relatives in the military.⁵⁰ Data on expenditure reveal consistency in the 1950s: clothing and taxation constituted major forms of expenditure, as well as food. Due to their proximity to Bobo-Dioulasso, families followed the five-day rotating markets that often ended in the city of Bobo-Dioulasso. As the survey in Borodougou noted: 10 families resold 3 large tomatoes at 5 times the price in the city.

In the region of Gaoua, the ORANA implemented a survey that contrasted with the apparent comprehensive *monographies* in the region of Bobo-Dioulasso, the sampling strategy relied on randomly selecting certain villages and performing rotating surveys on family budgets and nutrition in different family every month.⁵¹ What the distribution of the household surveys in Gaoua reveal was more egalitarian than Issigui or the rural communities in Bobo-Dioulasso.

⁴⁶ Françoise Héritier and Michel Izard, *Les Mossi du Yatenga*, *étude de la vie économique et sociale* (1959)., p. 90

⁴⁷ ORANA, Etude Monographique de Village (2) Borodougou (1955), p. 18, Box 1H95 (163), ANS

⁴⁸ ORANA, Etude Monographique de Village (2) Borodougou (1955), p. 18, Box 1H95 (163), ANS

⁴⁹ ORANA, Etude Monographique de Village (3) Issigui (1955) Box 1H95 (163), ANS

⁵⁰ Françoise Héritier and Michel Izard, *Les Mossi du Yatenga*, *étude de la vie économique et sociale* ([Antony: 1959).

⁵¹ ANS, 1H92, Jacques Royer, chef de la Mission d'Enquête Sociologique à Monsieur le Gouverneur DESCHAMPS, « Mise en place de l'enquête de Bongouanou, » Bouaké, 28 janvier 1955 (n° 46/MES) p. 2

Wealthier families controlled granaries but by looking simply at monetized income, it appears inequality between households was mostly driven by remittances and monetary transfers from civil servants. Additionally, surveyers highlighted the limited network of currency exchange in Gaoua: the 1955 survey on household income highlighted the fact that 70% to 80% of expenditures took place through cowryshells, with a stable conversion rate of 4 cowryshells to a 1 francs. In Gaoua, when needed, households relied on remittances, mostly to pay taxes, but continued to rely on cowryshells and avoid cash crops unless it was directly needed.

Table 2: Profession of Household Members Sending Monetary Transfers

	SINAROSSO	BORODOUGOU	KOKOROUE (33 households)
Manœuvres (Daily Laborers)			10
Soldiers (Indochina)	7	9	1
Veterans	10	9	
Chef du village			1
Carpenter in Bobo-Dioulasso			1
Merchant	1		
Migrant in Ivory Coast	2		

Table 3: Total Assets in the ORANA villages (Bobo-Dioulasso)

		Sinarosso	Borodougou	Kokoroue			
		# of assets					
Lighting	electric lamps	0	7				
	shea butter lamps	68	150	121			
	petrolium lamps	40	87	48			
Bicycles		15	30	14			
Tables		0	14	0			
Mortar		NA	67	67			
Pestle		NA	67	94			
Plates		NA	325	391			

This shift between the population dense areas and the agricultural fertile regions revealed a West/Center divided at independence. Postcolonial administrations continued to try to "rectify" the imbalance between the populous Mossi region and the agricultural West. This regional focus entrenched a West/Center divide. For instance, Georges Sanogoh, head of statistical services of independent Upper-Volta implemented a survey in 1963-64, collecting nutritional and budget data on 1640 rural households. The survey highlighted stark differences between regions. It also revealed a significant difference between Mossi and Western family expenditures. It revealed how much more important reselling of agricultural products, including cash crops, mattered to in an average family in the Central Mossi region, whereas the West remained far behind in production, despite its high agricultural potential.

By the 1960s, therefore, cash crops mattered to households' income but their access was also largely controlled by elders or people who had wage incomes. In the 1960s, economic anthropologists routinely collected household budget data from one family. While this information is hardly generalizable, Suzanne Lallemand household budget of Bamtenga, in Ouahigouya district, reveals how household heads mobilized family labor to cultivate cotton fields. Additionally, cotton in Ouahigouya created a strict division of labor that potentially intensified gendered division of labor. The women of the compound spun cotton, whereas men cultivated and wove the spun cotton. In some select households, therefore, cotton did allow for income generation, but was usually possible in compounds with large families. Independence slowed down in a sense the avoidance of cash crop production, but reinforced generational divides.

Table 4: Household Budget in Bamtenga (Yatenga)⁵²

Item	CFA francs	Individuals
Cotton of head of unit	19,500	Chef, Umaru, Karim
Cotton from personal fields	13,225	Rapuyimdu, Isaka, Yakuba
Peanuts cultivation	2 ,375	Hado, Agiratu, Kumyamba
Professional sales	34,000	Sheep, excisor
Spinning cotton	3,200	Kumyamba, Hado, Agiratu
Weaving	5,000	Umaru, Rapuyimdu, Isaka, Ykuba
Miscellaneous	2,000	Agiratu, Sarata, Naaba, Sombe, Umaru
Cattle sales	7,400	Umarau, Karim, Safieta, Kadisa
Gifts from migrants	4,050	To Naaba, and three wives
Sum brought back from Ivory Coast	20,000	
TOTAL	110,750	4,815 FCFA/person (23 family members)

_

⁵² Suzanne Lallemand, *Une Famille Mossi, Recherches Voltaïques* (Paris : C.N.R.S., 1977), 81.

The lure of cash crops: Incomes in rural areas and Gini coefficients

These new forms of income presented new forms of inequality. Extending the analysis of rural incomes to district-level data can help provide preliminary estimates for the degrees of income inequality within districts. In order to do this, the social table approach helps simplify the analysis of social classes in rural areas. This approach has its pitfalls, it provides estimates of average incomes in each group, and does not answer questions about the degrees of income inequality within groups. Based on these surveys and the production data from the West African-wide colonial statistics, *Annuaires Statistiques*, it is possible to reconstruct measures of income and inequality in rural Upper-Volta, by dividing rural households into five "selfemployed" classes.⁵³ First, I estimate total monetary income from three sources (cash crops income, foodstuff income, cattle incomes) per district, based on prices and production data in the Annuaires Statistiques. Second, I allocate a share of each of these four income sources to each of the five self-employed classes. This allocation of resources is based on surveys, which provide data on acreages and household size. Table 6 shows the information on Gaoua available in the surveys, which includes data from 132 households, on foodstuff hectare. They also give us a sense of the population distribution in each class. Third, I divide total income of each class over the number of households in that class.

Table 5: Income distribution by class from Gaoua (1954)

									Cattle
				Income					
	Household	Population		per year	II4	Foodstuff		Goats and	
	(n = 132)	(n = 1043)	Size	in CFA	Hectares	Hectares	Hectares	Sheep	8
Elite	6	66	11	30000 +	9	6	3	18.5	
									7.5
Upper-tier				20000-					
smallholders	9	82	9	29999	7	5	2	8	
									3
M: 4 4:				10000					
Mid-tier smallholders	31	249	8	10000- 19999	5,5	4	1,5	10	
	31	247	0	-////	3,3		1,3		1.5
Mid-tier low				5000-					
smallholders	44	352	8	9999	4,5	3	0,5	7.5	

22

⁵³ I follow the approaches used by de Haas for Uganda and Tadei and Alfani for Senegal and Ivory Coast: Haas, "Reconstructing Income Inequality in a Colonial Cash Crop Economy"; Tadei and Alfani, "Income Inequality in French West Africa."

									0
Low-tier				under					
smallholders	42	294	7	5000	2	2	0	6.5	

This approach does not provide information on military pensions and migrant remittances to rural household survival strategies. In 1968, the Voltaic Statistical office estimated that about 6.5% of household incomes came from either of these two sources of revenues. 2,190 millions francs came from the French Treasury in payment of veteran pensions; 2,580 million francs came from Voltaic workers abroad. According to Piché and Cordell, remittances constituted 3.3% of GDP in 1968 and 3.5% of receiving households' income. ⁵⁴ In fact, Kohler estimated in 1972, that 62% of taxes were paid through money sent home by migrants. ⁵⁵ Financial transfers mattered to community well-being. Migrants sent money home to support relatives, to pay for bride price, to buy assets of cattle, to build houses. ⁵⁶ Studying the Soninke diaspora of the Senegal River Valley, Manchuelle has argued that remittances were crucial "to invest for productive returns," particularly in real estate and housing. ⁵⁷ Remittances continue to be a major source of income for many rural Burkinabè households and have significant influence on households' ability to care for dependents. ⁵⁸

In order to account for migrant remittances, Kohler's estimates for the 1960s are invaluable. He shows that for the regions of Koudougou, migrants sent about 7,350 francs CFA to their households in Koudougou in the 1950s and 1960s.⁵⁹ Since Koudougou experienced average migration compared to other districts, it is possible to assume that the distribution from Koudougou is paralleled in other district. 70% of migrations from Upper-Volta to Ivory Coast lasted less than two years: shorter migration allowed for more immediate savings per year: for one to two year stays in Ivory Coast, workers could save up to 32,500 francs CFA yearly.⁶⁰ It is therefore likely that migrants in Ivory Coast sent more important remittances when they came from wealthier households, partly in repayment of loans or support at the beginning of their migration. Additionally, military salaries and pensions are somewhat difficult to ascertain: in

-

⁵⁴ Piché and Cordell, *Entre Le Mil et Le Franc: Un Siècle de Migrations Circulaires En Afrique de l'Ouest. Le Cas Du Burkina Faso*.

⁵⁵ J.M. Kohler, « Activités agricoles et changements sociaux dans l'Ouest mossi (Haute-Volta », (ORSTOM, 1972)

⁵⁶ Claudette Savonnet-Guyot, *Etat et Sociétés Au Burkina : Essai Sur Le Politique Africain* (Paris: Karthala, c1986), 41–42.

⁵⁷ François Manchuelle, *Willing Migrants: Soninke Labor Diasporas*, *1848-1960* (Athens: Ohio University Press, 1997).

⁵⁸ Olivier Bargain and Delphine Boutin, "Remittances and Child Labour in Africa: Evidence from Burkina Faso," 2014.

⁵⁹ Kohler, Les migrations des Mossi de l'ouest (ORSTOM) p. 67

⁶⁰ Kohler, 1972, p. 41

1948, salary scales varied substantially. Myron Echenberg notes that the top monthly salary for an African sergeant was 1,593 francs, compared to 150 francs base salary for an army private.⁶¹ These were fairly modest salaries, compared to unskilled workers in Bobo-Dioulasso, who made about 880 francs per month. It is likely that soldiers were making slightly more than *manoeuvres* in the post-war period, which would allow for remittances or support of a few thousands francs CFA to rural households.

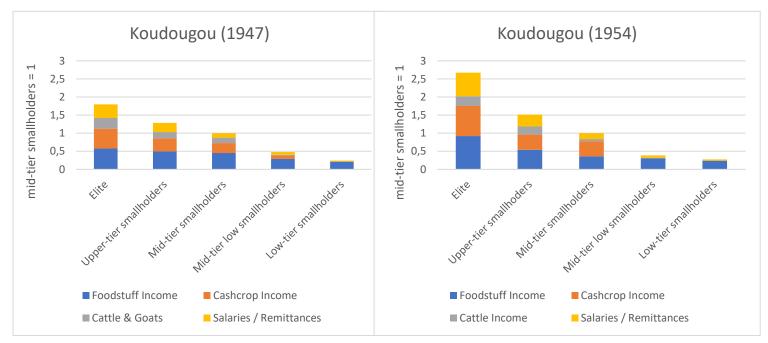


Figure 5: Income distribution in Koudougou (1947 and 1954)

Based on these estimates, it is possible to compare measures of rural inequality between districts and to provide preliminary estimates of inequality through Gini coefficients, particularly in the late colonial period. Using mid-tier smallholders as the basis for comparison, one observes a growing percentage of income coming from cash crops among the wealthiest between 1947 and 1954 (Figure 3). Koudougou was an exception, since cotton production intensified in the region during the 1950s, and households appear to have accumulate enough income to pay taxes to not send as many relatives abroad to send back money. In Koudougou, this graph shows that individuals who controlled resources, such as the access to migrant remittances and soldier pensions could expand their cultivation of cash crops, such as cotton

⁶¹ Myron J. Echenberg, *Colonial Conscripts*: The "Tirailleurs Sénégalais" in French West Africa, 1857-1960, 1 vols., Social History of Africa (Portsmouth (N.H.): Heineman, 1991).

and peanuts. It is likely that investments in cash crops are also linked to investments by soldiers and migrants in their communities, though in different ways. It is likely that more migrants reduced inequality in region of outmigration, as migrants were evenly distributed across income levels. It is also possible that the presence of soldiers reinforced income inequality, with more concentration of income among soldiers, veterans and their families. Koudougou is an outlier, however. Other districts present a decline in cash crop incomes as a portion of total household incomes, migrant remittances and soldiers pensions account for a growing portion of the total income.

From these social tables, an analysis of Gini indexes reveals that inequality oscillated throughout the colonial period: in Koudougou, it shifted from 0,36 in 1938 to 0,27 in 1947 with the effects of the post-war boom and the effects of limited colonial development investments. By the mid-1950s, the economic boom had allowed certain households to invest in cash crops, while others had actively sought to avoid cash crops and relied on other forms of income. The inequality presented in these figures must also take into account the intra-household inequalities: wealthier households tended to be larger. Additionally, larger households could rely on more family labor.

In a sense, this approach allows us to support some conclusions from other studies: income inequality in rural areas seems to have stagnated or increased in the late colonial period. In Koudougou, this increase is likely tied to cash crop production in certain select households. In other regions, the avoidance of producing cotton and peanuts meant that households diversified their income streams, relying predominantly on soldier pensions and migrant remittances.

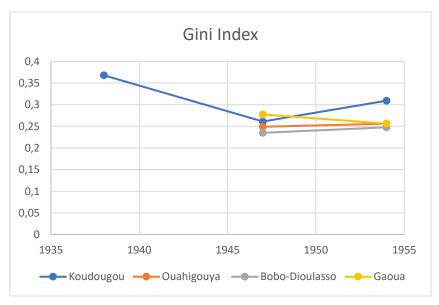


Figure 6: Gini Coefficients by District

Conclusions

Forced labor practices, failed colonial agricultural schemes in and beyond Upper-Volta, placed Voltaic households and workers at the center of new income accumulation strategies, that actively sought to avoid cash crop production. Upper-Volta was never meant to be a center for cash crop production, nor did Voltaic people approach cash crops as a means of economic possibilities. The colonial state had invested few to no inputs to production, leaving farmers to fend for themselves. In this context, South-west and Western households had resisted cash crop production, largely due to the haphazard and brutal implementation of colonial agricultural policies. By the late 1950s, however, certain households had started developing small farms for cotton and peanut production, intensifying inequality in the regions where these cash crops were produced. Cotton stagnated until the late 1960s, and really became a main export of Upper-Volta in the 1980s. Before then, cattle exports served as the main economic basis of Upper-Volta..

From 1969, a drought slowly devastated Sahelian agriculture and herding: millet and sorghum production experienced more than 20% reduction between 1969 and 1972, which led Upper-Volta to import 60,000 tons of grains in 1972/73 and 100,000 tons in 1973/74. Additionally, between 25 to 30% of cattle died during this time period in the North. The lack of rain reduced cotton production in the South and South-west (around Gaoua, Bobo-Dioulasso), the second most important export after cattle (27,000 tons or 25% below the 1969/70 record). Indeed, Upper-Volta slowly became a major center of cotton production regionally. The effects of the 1969-73 drought as well as the Sankarist project of stimulating local agricultural production transformed farmers' relationship to the crops. Nevertheless, the story of the mid-20th century Upper-Volta is one of migration and avoidance of cash crop production, in context of colonial exploitation.

-

⁶² Banque Internationale pour la Reconstruction et le Développement, *Situation économique et perspectives de développement de la Haute-Volta* (July 1975), p. 10-11