Towards a Political Economy of Statistics: A Study of Household Budget Surveys in the Gold Coast, 1945-1957

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1. Introduction

It is difficult to underestimate the importance of statistics for our understanding of the structure, performance and evolution of real economies: as noted by historian Adam Tooze 'Statistics define our knowledge of the economy'.[1] However in the case of postcolonial Africa severe problems of reliability, consistency and volatility place African statistics in the paradoxical position of being more likely to mislead than to enlighten.[2] Before 1960, the year which is usually taken as the most common departure point for estimating the economic performance of African states, the limited quantity and poor quality of statistical data is even more daunting. Although many scholars have kept using pre-independence data without too much regard for their quality,[3] very little is known about the conditions in which these statistics were produced. Based on previously unused British and Ghanaian sources, this paper represents an attempt to fill this gap through a reconstruction of the historical evolution of economic statistics[4] in Gold Coast (colonial Ghana), with particular focus on household budgets, between the end of the Second World War and the achievement of independence from Britain in 1957.

It has been acknowledged that the phase of decolonisation has had a long-lasting impact on the postcolonial structure and performance of African economies: institutions like the cocoa marketing board, introduced in this period, is still a pillar of Ghanaian economic policy today, and the alliance between government and urban masses at the expense of rural producers, pivotal in the political survival of most African states, was partly established in those years. Yet, as rightly lamented by Toyin Falola in his study of Nigerian colonial planning, historians have paid much attention to 'the more dramatic issues of constitution-making, political party formation, emergence of the first generation of leaders' and, more generally, have focused on 'the politics of decolonization'.[5] Although historical research on decolonization has become much more inclusive in recent years, dealing with issues as different as sexuality, sport and culture,[6] little has changed with reference to such 'unfashionable' topics as economic planning and statistics.

In contrast this work tries to integrate the production of economic statistics in the broader context of decolonization and state building in the Gold Coast: its departure point is the assumption that statistics are not necessarily the 'neutral reflection of social and economic reality'; rather they 'are produced by particular social actors in an effort to make sense of the complex and unmanageable reality that surrounds them'.[7] However, rather than understanding

[1] Tooze, Adam J. (2001) *Statistics and the German State, 1900-1945: The Making of Modern Economic Knowledge*, p. 1.

[2] For a detailed quantitative assessment of postcolonial African statistics' issues of reliability, accuracy and volatility, see Jerven, Morten (2010) 'The relativity of poverty and income: How reliable are African economic statistics?'. Another extensive critique of statistics in developing countries is Hill, Polly (1986) *Development Economics on Trial: The Anthropological Case for Prosecution*, chapter 3.

[3] A particular striking example is provided by an essay collected in the influential study on African economic growth edited by Paul, Collier, B.J. Ndulu et al. While admitting that 'Data limitations are severe before 1960' the authors present GDP data for Sub-Saharan Africa as a whole 'based on scaled-up estimates for Ghana and South Africa'. See Ndulu, B. J. and O' Connell, Stephen A. (2007) 'Policy Plus: African Growth Performance, 1960-2000', p. 16.

[4] 'Economic statistics' in this paper refers to statistical data collected by and for the state, and therefore does not include other sources of statistical information, such as firms.

[5] Falola, Toyin (1996) *Development Planning and Decolonization in Nigeria*, p. xx.

[6] For a broad overview of the scope and breadth of recent historical research on decolonization, see the articles collected in Le Sueur, James D. (2003, ed.) *The Decolonization Reader*.

[7] Tooze, Adam J. (2001), op. cit., p. 3.

the construction of statistical knowledge as a by-product of the aesthetics of high modernism,[8] or as part of a Foucauldian discourse as it is fashionable nowadays in development studies,[9] this paper looks more closely at the historical evolution of household budgets in order to historicise the role of the state in African economic development. It is hoped that such an exercise, besides being potentially valuable from the point of view of the intellectual history of statistics,[10] is useful in order to critically assess the cognitive capacity and constraints faced by African states in their attempt to satisfy their informational needs. In order to do so, it is necessary to scratch the 'modernist' surface and look more closely not only at the political motivations and constraints which led decolonising African states to see the world the way they saw it, but also at the institutional setting in which quantitative information was produced, the specific cognitive tools employed, and the practical problems faced by statisticians on the ground. A systematic analysis of all these elements provides the basis for a 'political economy of statistics': [11] an approach that does not take statistics at their face value, but tries instead to understand the implications of the political and economic context for their process of production, and their role in the task of state building.

It is argued that the 1940s and the 1950s envisaged both an expansion of the legitimate domain of systematic statistical enquiry, as well as the increasing diversification and sophistication of the statistical techniques employed in order to produce reliable knowledge. However, the collection of reliable statistics was never an easy task: the limited coercive capacity of the colonial state to extract the relevant information, the negligible number of trained statisticians on the ground and the peculiar problems raised by local economic and social institutions constrained to a large extent the state's capacity to obtain the information it needed in order to formulate and implement economic policies based on sound evidence.

The focus of this paper is on the evolution of household budgets in the 1950s: although their design and use in the context of late colonial Africa has largely been neglected, it is argued that the construction of household budget surveys was crucial for the task of state building. This has to be understood in light of the peculiarities of the process of state building in Africa where, in the face of scarcely populated areas and 'unforgiving physical conditions', 'pre-colonial, colonial and post-colonial leaders adopted remarkably similar strategies: gaining clear control over a core political area, defined as either the capital or the critical urban areas and those rural areas with critical economic assets (e.g., mines and plantations), and then ruling over outlying areas in a varied manner depending on the degree to which infrastructures could be developed'.[12] It is argued that household budget surveys emerged in the 1950s as the privileged statistical format to serve this version of state-building. Furthermore the construction of income-expenditure tables, which was common to all household budgets, not only mirrored the uneven will of the state to establish its presence over the territory through the choice of the specific survey areas, but provided the cognitive basis for assessing urban welfare *versus* measuring the degree of incorporation of rural areas into the state's networks of patronage.

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[8] Scott, James (1998) *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*.

[9] Ferguson, James (1994) *The Anti-Politics Machine: Development, Depoliticization and Bureaucratic Power in Lesotho*.

[10] In his influential history of statistics Theodore Porter wrote that 'geographical limitations are perhaps less forgivable than the temporal ones, and the history of colonialism, of international organizations and of centrally planned economies all provide extremely rich material for the history of quantification'. See Porter,Theodore M.(1995) *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*, p. xi.

[11] Jerven, Morten (2012) 'The Political Economy of Agricultural Statistics: Evidence from India, Nigeria and Malawi'.

[12] Herbst, Jeffrey (2000) *States and Power in Africa: Comparative Lessons in Authority and Control*, p. 252.

The paper is structured as follows. Section 2 presents the institutional context in which economic statistics were produced in the Gold Coast. Section 3, divided into 2 subsections, argues that the household budget surveys provided part of the conceptual apparatus upon which the link between rural production and urban consumption was institutionalised. Section 4 looks at the introduction of household budget surveys in the cocoa producing areas of Swedru and Ashanti, and claims that in this case the introduction of income-expenditure tables has to be understood as part of a broader attempt of the state to reform the institutional framework in which the production of cocoa took place. It is also argued that household budget surveys were used as a cognitive tool to reduce the state's uncertainty on agricultural production. Section 5 offers some concluding remarks.

2. The Institutional Context of the Gold Coast Economic Statistics

2.1 The Establishment of the Office of the Government Statistician

Regular collection of statistical data in Sub-Saharan Africa is as old as colonial rule itself: from the late nineteenth century British colonial administrators prepared yearly *Blue Books* containing information about the value and quantity of exports and imports, government revenues and expenditures, and the number of health and education facilities in the country. Starting in 1891, population censuses took place every ten years. In the first decades of the twentieth century the task of collecting more accurate statistics fell increasingly more on specific Government departments. For example in the case of the Gold Coast, the Department of Agriculture was reformed in 1928, with the institution of a section devoted to agricultural statistics.[13] While statistics collection took place at the level of single colonies, there was no systematic attempt to draw a big picture of the economic conditions and prospects of the Empire. According to Gerard L. M. Clauson, Assistant Under-Secretary of the Colonial Office,[14] it was the Great Depression to lead colonial administrators to think of the Colonial Empire as an economic unit, and to foster the improvement and the standardisation of statistical work in the colonies:

> I remember how, soon after Lord Swinton {…} became Secretary of the State for the Colonies, he sent for a few of us into his room and asked us one or two questions. The first was: "What are the most important products of the Colonial Empire?" Nobody could tell him, because nobody knew. We had our ideas, some of them wrong; {…} we knew what the principal products of the individual Dependencies were, but we had no idea of their relative importance to the Colonial Empire as a whole, because it had never been anybody's business to add up the figures and find out.[15]

If the Great Depression already provided a strong incentive to collect more and better statistics in the African colonies, the Second World War had an even greater impact on the importance attached to statistical knowledge in the African colonies. The colonial machinery was paying increasingly more attention to statistics: the formation of the Colonial Economic Advisory Council (C.E.A.C.) in 1943, in charge for providing recommendations to both colonial administrations and the Colonial Office on matters of economic and statistical policy aptly summarised the prevailing intellectual atmosphere. In a 1944 memorandum for example it was written:

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[13] Gold Coast (1930) *Report on the Department of Agriculture for the Year 1929-1930*, p. 10.

[14] Gerard Clauson was primarily a turcologist and scholar of Eastern languages. However within his career at the Colonial Office he played an important role in promoting statistical standardisation across the Empire, for example at the Imperial Economic Conference in Ottawa (1932). Bosworth, C.E. (1974) 'Sir Gerard Clauson (1891-1973)', p. 79.

[15] Clauson, Gerard L. M. (1937) ' "Some Uses of Statistics in Colonial Administration", pp. 3-4.

> Hardly any colonial government in the past has consciously planned the development of its territory. Law and administration have been the favourite sons, education and public health the not so favoured daughters. There has been no economic staff to look ahead and to direct; prosperity and depression have been gifts from God or Satan, unforeseen, if not as often uncomprehended. This approach to colonial administration belongs to an era that is passed.[16]

The more ambitious goals of late colonial policy required then required a much more extensive statistical knowledge of economic life than that was available. Leaving asides the pressure for more and better statistics coming from the colonial administrations and the experts of the C.E.A.C., the demand and the supply of more economic data in the postwar world was also a consequence of the creation of international organisations like the United Nations, the International Monetary Fund and the International Bank for Reconstruction and Development. These institutions contributed to the formalisation of a 'global epistemic space' in which knowledge about African economies could be packed, and travel more easily.[17] It was in this context that the most important change in the institutional landscape in which statistical knowledge was produced in Gold Coast took place: the establishment of the Office of the Government Statistician.

Although this was formally instituted in 1948, correspondence about the possibility of setting up a centralised statistical service dates back to 1943.[18] Initially there was some debate as to the appointment of a qualified statistician should have simply been in assistance to the work of the economic advisor of Gold Coast, or constitute the nucleus of a new institution completely devoted to statistical work. It was finally agreed that

> the object to be aimed at is a self-contained Statistical Office, not subordinated to any one Department, but serving and working with all Departments which require statistical information or interpretation in any form in the course of their duties. Such a pattern {…} leads to the avoidance of much duplication of effort, and to the more efficient and instructed collection and evaluation of statistical data.[19]

The copious correspondence surviving in the Ghanaian national archives on the establishment of the Government Statistician reveals the difficulties faced by the colonial administration. The selection of the right person was a lengthy process which excluded several candidates for reasons as different as their lack of specialist training in statistics, and old age.[20] After months of consultation and dialogue between the Gold Coast administration and the Secretary of State of the Colonies the post was finally allocated to A. B. Reisz, a Hungarian statistician who was employed as the Deputy Head of the statistics and economics branch of the Ministry of Civil Aviation. Endowed with 'the right academic qualifications', a 'strong personality', and 'accent and appearance Central European', Reisz was someone who thought 'in terms of a highly organised

[16] 'Some Aspects of the Flow of Capital into the British Colonies', p. 31, CEAC 4/7.
[17] About this see Speich, Daniel (2011) 'The use of global abstractions: national income accounting in the era of imperial decline'.
[18] See for example Telegram of the Governor to the Secretary of State, 1st November 1943, PRAAD RG 2/1/62/1.
[19] Telegram from the Secretary of State of the Colonies to the Office administering the Government of the Gold Coast, 24th January 1947, PRAAD RG 2/1/62 /51.
[20] The lack of proper training, in spite of much pratical experiences with social suryves, was the reason for the exclusion of a candidate named T. Young. Telegram of the Governor of the Gold Coast to the Secretary of State of the Colonies, 27th May 1946, PRAAD RG 2/1/62/48. Upon the basis of old age (at the time of the appointment he would have been 65 years old) instead was excluded a certain Mr. Dowden, who was employed in Britain as Senior Census Officer, February 1947 PRAAD RG/2/1/62/59.

department'.[21] In spite of the zeal with which the local administration was preparing for his arrival (by allocating a bungalow to Reisz' family, and purchasing office furniture and a car that could be used for fieldwork)[22] it is very likely that Reisz, described in one letter as someone who was often made impatient by his own high standards of efficiency,[23] remained disappointed following his arrival in the Gold Coast. Before the Office of the Government Statistician could begin its work Reisz made clear that it needed to employ two assistants to be employed for typing and clerical work, or at least borrow them from another government department.[24] What might appear as a reasonable (and perhaps trivial) request turned into a bureaucratic nightmare. The response of the Electrical Department, four days after Reisz's query was forwarded to the Government departments, was 'it is regretted that as the office staff of this Department is inadequate for our own requirements, we are unable to release any officer for these duties'.[25] Although the specific words used were slightly different in each case, similar responses came from the Director of Surveys, the Registrar of Co-operative Societies, the Superintendent of Broadcasting, the Public Relations Department, the Deputy Commissioner of Income Tax, the Chief Transport Officer, the Commissioner for Labour, of the Public Works Department, the Director of Agriculture, the Directors of Prisons, the Accountant General, the Commissioner of the Gold Coast Police, the Social Welfare and Housing Department, the Director of Audit, the Director of Education, the Controller of Customs and Excise, the Chief Conservator of Forest, and the Medical Services.[26] A typist (a certain Mrs Majorie R. Green) was finally appointed in July,[27] and the Office of the Government Statistician was finally ready to begin its work.[28]

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[21] Telegram from the Secretary of State of the Colonies to the Governor, 19th August 1947, PRAAD RG 2/1/62/ 68.

[22] See Letter of G. E. Sinclair to The Director of Public Works, Accra, 4th December 1947, PRAAD RG 2/1/62/85 and Letter of Letter of F. Leach to A.B. Reisz, 5th January 1948, PRAAD RG 2/1/62/ 93.

[23] Telegram of the Secretary of State to the Governor of the Gold Coast, 31st October 1947, PRAAD RG 2/1/62/77.

[24] S.C.S. PRAAD RG 2/1/62/97.

[25] Letter of the Chief Electrical Engineer to the Colonial Secretariat, Accra, 20th April 1948, PRAAD RG 2/1/62/106.

[26] Letter of the Director of Surveys to the Colonial Secretariat, 20th April 1948, PRAAD RG 2/1/62/105; letter of the Registrar of the Cooperative Societies to the Colonial Secretariat, 20th April 1948, PRAAD RG 2/1/62/106; letter of the Superintendent of Broadcasting to the Colonial Secretariat, 20th April 1948, PRAAD RG 2/1/62/108; letter of the Public Relations Office to the Colonial Secretariat, 20th April 1948, PRAAD RG 2/1/62/109; letter of the Deputy Commissioner of the Income Tax to the Colonial Secretariat, 20th Apirl 1948, PRAAD RG/2/1/62/110; letter of the Chief Transport Officer to the Colonial Secretariat, 20th April 1948, PRAAD RG 2/1/62/111; letter of the Commissioner of Labour to the Colonial Secretariat, 21st April 1948, PRAAD RG 2/1/62/113; letter of the Director of Public Works to the Colonial Secretariat, 21st April 1948, PRAAD RG 2/1/62/115; letter of the Director of Agriculture to the Colonial Secretariat, 21st April 1948, PRAAD RG 2/1/62/115; letter of the Director of Prisons to the Colonial Secretariat, 21st April 1948, PRAAD RG 2/1/62/116; letter of the Accountant General to the Colonial Secretariat, 22nd April 1948, PRAAD RG 2/1/62/117; letter of the Commissioner of the Gold Coast Police to the Colonial Secretariat, 22nd April 1948, PRAAD RG 2/1/62/118; letter of the Director of Social Welfare and Housing to the Colonial Secretariat, 23rd April 1948, PRAAD RG 2/1/62/119; letter of the Director of Audit to the Colonial Secretariat, 23rd April 1948, PRAAD RG 2/1/62/122; letter of the Director of Education to the Colonial Secretariat, 28th April 1948, PRAAD RG/2/1/62/125; letter of the Controller of Customs and Excise to the Colonial Secretariat, 30th April 1948, PRAAD RG 2/1/62/126; letter of the Chief Conservator of Forests to the Colonial Secretariat, 4th May 1948, PRAAD RG 2/1/62/ 127; letter of the Director of Medical Services to the Colonial Secretariat, 14th May 1948, PRAAD RG 2/1/62/129.

[27] Letter of the Government Statistician to the Colonial Secretary, 19th July 1948, PRAAD RG 2/1/62/134.

[28] A.B. Reisz would have stayed until 1952, when he left the post of Government Statistician in the Gold Coast to take up a position at the United Nations Economic Commission for Asia and the Far East. He was

Although this digression might appear largely irrelevant, it sheds light on a crucial feature of statistical offices in late colonial Africa: they were chronically understaffed, with obvious consequences on the quality of their work. What should be noted is that this problem was not only extended to clerks and other administrative staff; also the number of qualified statisticians in Africa was depressingly low.[29] In occasion of the 1951 Conference of Statisticians in Countries South of the Sahara, when representatives from the statistical offices of several African colonies gathered in Salisbury (Southern Rhodesia) to discuss their common problems (including the strength of statistical machineries in colonial territories) and perspectives, the situation, presented in table 1, looked very grim.

Country or Region	Date of Establishment Statistical Office	Number of Qualified Statisticians	Population (000)	Statisticians/Population	Area (000 sq. miles)	Statisticians/area (000 sq. miles)
Belgian Congo, Ruanda Urundi	1948	3	15,000	0.0002	926	0.00323
Central Africa	1927	14	6,000	0.0023	475	0.29473
East Africa	1943	11	18,000	0.0006	681	0.016152
Gold Coast	1948	8	4,000	0.002	79	0.10126
Nigeria	1947	9	24,000	0.000375	339	0.026548
Sierra Leone	1951	2	2,000	0.001	28	0.071428
Union of South Africa	1917	12	12,000	0.001	472	0.025423
French Cameroons	1945	1	3,000	0.0003	166	0.006024
French Equatorial Africa	1945	5	4,000	0.00125	969	0.0051599
French West Africa	1945	5	17,000	0.00029	1,816	0.0027533
Mozambique	1924	1	6,000	0.00016	298	0.0033557
Angola	1936	1	4,000	0.00025	481	0.002079
Total		72	115,000		6,730	
Average				0.0008104		0.0027174

Table 1: Statistical offices and statisticians in a sample of Sub-Saharan countries, 1951. Source: my calculations based on Conference of the Statisticians in Countries South of the Sahara, Salisbury (1951), p. 7, PRO CO 852/1078/2. Data on population and areas are taken from Hailey, Lord (1957) *An African Survey Revised 1956: A Study of the Problems Arising South of the Sahara,* p. 143. [30]

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replaced by K. M. Francis, formerly employed by the East African Meteorological Service and then Government Statistician of Sierra Leone (letter of W.D. Sweaney to E. Norton Jones, 9th September 1952, PRAAD RG 2/62/137).

[29] Perhaps the story of Reisz could be used to discuss the historical roots of what Morten Jerven has observed during his fieldwork in today's African statistical offices. See Jerven, Morten (2013) *Poor Numbers: How African Development Statistics and What to Do About it*.

[30] The population figures reported by Hailey were those of the most recent population censuses available. These took place in 1951 (Belgian Congo), 1952 (Ruanda Urundi), between 1945 and 1951 in Central Africa (1945 Nyasaland, 1950 Northern Rhodesia, 1951 Southern Rhodesia), 1948 for East Africa (Kenya, Tanganyika, Uganda), 1948 (Gold Coast), 1952 (Nigeria), 1948 (Sierra Leone), 1951 (Union of South Africa), 1952 (French Cameroons), 1951 (French Equatorial Africa), 1951 (French West Africa), 1950 (Mozambique), 1950 (Angola).

Although admitting that 'these figures do not necessarily indicate the total administrative resources of the different territories since some offices are able to draw on outside services of a well developed administrative system', the Report stated that 'The table does, however, reveal the resources of *technical* personnel available for statistical planning'.[31]

The Gold Coast was certainly among the most advanced colonies in training qualified technical personnel: not only among the African colonies it had among the highest number of citizens studying in Britain for a degree in economics, statistics or mathematics,[32] but the institution of a Department of Economics and the teaching of statistics at the university level had already begun in 1948, as soon as the University College of the Gold Coast was established.[33] Yet, even keeping all this in mind, and accounting for the fact that it would be impossible to come up with an optimal number of statisticians over population and area, it emerges that the production of economic statistics in the late colonial era was the outcome of the action of a negligible number of people in charge for collecting information over scatterly populated, and usually vast, territories. How successful were these small elites of statisticians in filling their role as part of the state's *panopticon*?

2.2 Statistics as Public Good and Outcome of Human Action

From a political economy perspective the publication of official economic statistics can be considered a public good,[34] namely something which has the properties of non-rivalry and non-excludability in consumption. Given that private agents do not possess the means or the incentives to produce such goods, these are usually provided by the state. In the case of state produced economic statistics, the monopoly of the state over the creation, publication and dissemination of knowledge is made possible only through some mechanisms of coercion or legal enforcement. In the correspondence between the Gold Coast and the Secretary of State for the Colonies the most appropriate model for legislation about African statistics was identified in the Ordinance no. 22 of 1935, or the Statistics Ordinance, of the Government of Palestine.[35] The Ordinance identified three main tasks for the Government Statistician:

a) To collect, compile, abstract and publish statistical information relative to the commercial, industrial, social, economic and general activities and condition of the people;
b) To collaborate with all other departments of the Government in the compilation and publication of statistical records and administration according to the rules;
c) To take any census {…} as hereinafter provided.[36]

What should be noted is that the Ordinance firmly grounded the possibilities of the Government Statistician to successfully perform these tasks within the framework of coercion arising from the

[31] Conference of Statisticians of Countries in Africa South of the Sahara, Draft Report, Salisbury Southern Rhodesia 30th July -7th August 1951, p.7, PRO CO 852 1078/1.
[32] A comparative tables of African students enrolled in British universities for degrees relevant to the taking up of position in statistical offices is presented in Searle, W. F., E. J. Phillips and C. J. Martin (1950) 'Colonial Statistics: A Discussion before the Royal Statistical Society Held on March 22nd, 1950, Mr H. Campion, C.B., Vice-President, in the Chair', p. 278.
[33] For further discussion on the history of the University College of the Gold Coast, see Agbodeka, Francis (1998) (1998) *A History of the University of Ghana: Half a Century of Higher Education (1948-1998)*.
[34] Bowden, Roger (1989) *Statistical games and human affairs: the view from within*, p. 13.
[35] Palestine emerged as a model because it was considered, among the territories on which Britain exercised some control, the one with the best developed statistical services.
[36] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 3 (1), p. 1, PRAAD RG2/1/62/18.

state's monopoly over the enforcement of the law. On one hand this applied to all those working for the compilation of statistics, in the form of the following oath:

> I ……. solemnly swear that I will faithfully and honestly fulfil my duties as ……. in conformity with the requirements of the Statistics Ordinance 1935, and of all proclamations, orders-in-council, orders, rules and instructions issued in pursuance thereof, and that I will not, without due authority in that behalf, disclose or make known any matter or thing which comes to my knowledge by reason of my employment {…}.[37]

Those who subscribed to this oath and then were found guilty of violating it were 'liable to imprisonment for a period not exceeding three years'.[38] On the other hand the Statistics Ordinance prescribed a series of sanctions for any person who refused to answer 'to the best of his knowledge and belief, {…} all questions asked him by the Government Statistician'.[39] The charges amounted to £ 10 for those who obstructed the work of the statistical office,[40] £ 50 for all those who neglected or refused 'to answer any question lawfully addressed by the Government Statistician', plus £ 1 per day as long as the default continued after paying the first fee.[41] Finally, all those who committed any branch to the Ordinance for which 'no specific penalty {was} provided' were liable to 'a fee not exceeding twenty pounds'.[42] An even more explicit integration of the statistical apparatus in the coercive capacity of the state is evident also from the granting to the Government Statistician, or to any person nominated by him, of the right, at any working time, to 'enter any factory, mine, workshop or place where persons are employed, and {…} inspect part of it'.[43] It seems that many of the features of the 1935 Palestine Statistics Ordinance Act played indeed a role in shaping the official functioning of the government statistical office in the Gold Coast beyond the colonial period: it is striking to observe that Statistics Act passed by the independent government of Ghana on the 16th March 1961 is an almost exact reproduction of the 1935 Palestinian Ordinance.[44] However, in spite of the existence of a formal framework regulating the duties and the coercive powers of the Government Statistician, the collection of statistics on the ground was a very different matter, often involving complex and fragile alliances.

In order to better understand this, it is useful to think of statistics as the outcome of strategic human interaction. The Austrian economist Ludwig von Mises noted that statistics 'do not describe anything else than what happened at a definite instant of time in a definite geographical area as the outcome of the actions of a definite number of people'. Although Mises was referring to the

[37] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 12 (2), p. 3, PRAAD RG2/1/62/20.
[38] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 12 (3), p. 3, PRAAD RG2/1/62/20.
[39] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 15, p. 4, PRAAD RG2/1/62/21.
[40] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 16 (2), p. 4, PRAAD RG2/1/62/22.
[41] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 19, p. 5, PRAAD RG2/1/62/22.
[42] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 24, p. 5, PRAAD RG2/1/62/22.
[43] Government of Palestine – Statistics Ordinance. No. 22 of 1935 –An Ordinance to Provide for the creation of an office of statistics, 16 (1), p. 4, PRAAD RG2/1/62/21. (img 1901)
[44] The Parliament of the Republic of Ghana (1961) *The Thirty-Seventh Act of the Parliament of the Republic of Ghana Entitled the Statistics Act, 1961*.

impossibility of drawing general economic laws from statistical analysis,[45] rather than to the collection of statistics itself, the point that should be taken is simply that statistical data, rather than as something 'given',[46] can be understood as the outcome of an interaction between actors motivated by different goals. The econometrician Robert Bowden has gone as far as to construct a series of game theoretical models to represent the incentives and the strategies involved in the interaction that leads to the creation of statistical information: 'one can think of the statistician as a dominant player having to "defeat" his or her subjects in order to gain the information desired'.[47] Although the evidence provided in the remaining part of this section is largely anecdotal, and does not in any way aim at testing the formal models devised by Bowden, the archival record seems to support his interpretation of statistical information as the outcome of a complex, and sometimes difficult interaction between the statistician and the subjects of his counting and measurement activities. Indeed an inquiry into the way in which statistics were collected opens a window onto the legitimacy of the state, its coercive capacity, and its ability to establish alliances at the micro-level.

In the 1932, in the context of the preparation of a survey of economic activities of the cocoa producing village of Akokoaso, before the inquiry could begin a meeting with the Chiefs, the elders and the villagers had to be held to explain the reasons why such an inquiry was undertaken, and convince the villagers that the Government had no other goal than that of gathering knowledge about agricultural yields, labour costs, and other sociological data.[48] W. H. Beckett, the author of the survey, not only had to rely on the contacts established during his work in Akokoaso as District Agricultural Officer, but he felt the need to send two months before the beginning of the inquiry 'an African Overseer {…} to form contacts'.[49] This was by no means specific to the Gold Coast: in occasion of the Conference of African Statisticians in 1951 Mr Martin (statistician representative of East Africa) remarked that inquiries had to rely on a local chief, whose prestige could overcome the difficulties encountered by African clerks in obtaining information from the villagers.[50] Conversely, an unpublished survey of agriculture prepared by the Department of Cooperation in the Cape Coast Area reveals that some farmers in the remote village of Kruwa were happy to provide the information required in exchange for the promise of being admitted to a cooperative society that, in theory, should have guaranteed them a larger share of profit on the sale of cocoa.[51] In some cases the collection of information involved a more direct confrontation between the observer and the subjects of the survey. Peter Ady, an economist involved in the Colonial Economic Research Committee, with reference to her study of wages and living conditions in Accra during the Second World War wrote:

> The house-to-house visits which are involved in an investigation of this sort and the question which it is necessary to ask make the task of an investigator not at all enviable {…}. Pioneer work of this kind is always meets with abuse and misunderstanding and, in this, Accra has been no exception. In

[45] Von Mises, Ludwig (2006) *The Ultimate Foundations of Economic Science: An Essay on Method*, p. 57. It should be noted that Mises' argument was part of a radical critique of statistics as a tool capable to produce certain knowledge based on 'immutable' laws, and an attempt to promote a vision of economics as *praxeology* (study of human action) through a-priori Kantian deductivism. However all this goes well beyond the scope of this paper.

[46] 'Data' is the plural of 'datum', which means 'given' in Latin.

[47] Bowden, Roger J. (1989) *Statistical games and human affairs: the view from within*, p. 12.

[48] Beckett, W. H. {1944} (1979) *Akokoaso: A Survey of a Gold Coast Village*, p. 1.

[49] Ibid.

[50] Minutes of Conference of Statisticians of Countries South of the Sahara- Salisbury, Southern Rhodesia, 31st July- 7th August, p. 23. PRO CO 852/1078/1

[51] Department of Cooperation Western Area, Survey of Cape Coast District, Appendix II, p. 4, PRAAD RG 4/2/158/16. The farmers' hopes about the cooperative societies eventually vanished:

> fact {…} abuse has sometimes been violent, and the continuation of the queries has taken great personal courage.[52]

All this points out at the existence of a wide gap between the relatively educated elites in charge for statistical enquiries and the people object of the inquiry.[53] Furthermore, the atmosphere of distrust in which statisticians and interviewers collected statistical information was not simply limited to the relationship between them and the people who (or whose resources) were object of counting, but also invested the technologies of measurement, forcing in turn the observers to find alternatives to what they considered to be the 'best practice'. For example in occasion of the agricultural survey of the food producing region of South-East Abouawka in the early 1950s, 'compasses and chains were found to arouse suspicion of farmers'.[54] This led the statisticians to find an alternative way to measure the extension of the plots:

> The procedure was simply to pace along each side of a farm, observing the general shape at the same time, and then to plot the results on a grid using a scale of 50 yards to the inch {…}.From the grid the total farm area was read off in acres.[55]

Almost certainly the impossibility to use compasses and chains as tools for the measurement of the perimeter and extension of farms and plots, and the reliance on the observers' pace led to a reduction in the reliability of the statistical information collected. This section has taken a closer look at the conditions in which economic statistics were produced in late colonial Ghana, but very little has been said about the types and the aims of the statistics produced.

3. The Political Economy of Household Budget Surveys in the 1950s

The early years of the Office of the Government Statistician were characterised by a fervent activity: the production of economic statistics witnessed both an increase in its technical sophistication and an expansion in its domain of inquiry. A part of the work of the statistical office consisted in the creation of macroeconomic statistics. In 1952 what was expected to be a simple report on the conditions and the bottlenecks of the building industry, prepared by Dudley Seers and C.Y. Ross of the Oxford Institute of Statistics and published under the auspices of the Office of the Government Statistician, ended up pioneering the construction of national income accounts and social accounting matrixes for the Gold Coast economy.[56] The publication in 1953 of the first *Economic Survey of the Gold Coast*, resulting from the cooperation of the government statistical service with the Ministry of Finance included 'for the first time an estimate of the Gold Coast's balance of payments and capital investment'.[57] But the construction of macroeconomic statistics did not constitute the area to which the statistical service devoted most energies and work: beginning in 1952 the Office of the Government Statistician started

[52] Letter of Peter Ady to Secretariat of State of the Colonies, 6th March 1946. PRAAD RG 3/1/253/2.
[53] This was by no means exclusive to Africa. D'Onofrio for example has defined this feature 'remoteness', and has described it in the context of agricultural enquiries in Southern Italy in the early twentieth century. See D'Onofrio, Federico (2012) 'Making Variety Simple: Agricultural Economists in Southern Italy, 1906-1909'.
[54] Gold Coast – Office of the Government Statistician (1953) Agricultural Statistical Survey of
[55] Ibid.
[56] Seers, Dudley and Ross, C.Y. (1952) *Report on the Financial and Physical Problems of Development in the Gold Coast*.
[57] Gold Coast. Ministry of Finance (1953) *Economic Survey 1952*, foreword.

preparing a new series of Statistical and Economic Papers to make available the results of special inquiries and publish information 'of significance in relation to the general economic life of the Gold Coast'.[58] It is striking to note that the first seven papers, accounting for the whole period under consideration,[59] were *all* inquiries based on household budget surveys. Further details are provided in table 2:

Paper number	Date of publication	Location of survey area	Final sample (households)
1	1953	South-East Akim-Abuakwa	832
2	1953	Accra	570
3	1955	Akuse	163
4	1956	Sekondi-Takoradi	546
5	1956	Kumasi	560
6	1958	Odu-Swedru-Asankamene	1,080
7	1960	Ashanti	1,620

Table 2: Statistical and Economic Papers published by the Office of the Government Statistician, 1953-1960.
Source: Gold Coast Office of the Government Statistician and Ghana Office of the Government Statistician: various publications.

All the household budget surveys shared certain methodological and practical features. Firstly, they comprised two parts: 'first an enumeration of a fairly large proportion of the total population and second a detailed budget record over a period of one month covering a smaller sample of families drawn from those visited during the population enquiry'.[60] Secondly, the creation of the budget records consisted in the filling of tables listing the elements that were identified as the main sources of income and expenditure for the families selected in second part of the survey. Thirdly, the inquiries relied on the work of a large number of local enumerators and interviewers, with the exact number depending on the size of the survey area and the final sample selected. Yet, in spite of this common structure, there was a certain variety in the main problems addressed by the survey, in the specific entries included in the income-expenditure tables, and in the extent to which these were supplemented by other cognitive tools. The reasons why household budgets emerged as a privileged way of seeing for the decolonising state, and what accounted for the differences among the different surveys under examination is the theme of the next sections.

3.1. Household Surveys as the Cognitive Basis of Urban Bias

[58] Gold Coast –Office of the Government Statistician (1953) *Agricultural Statistical Survey of South-East Akim Abuakwa*, p. iii.
[59] Although the last two papers were published after independence the material was collected until 1957.
[60] Gold Coast – Office of the Government Statistician (1956) *Kumasi Survey of Population and Household Budgets, 1955*, p. 1.

It has often been argued that national economic policy in developing countries is characterised by what has been labelled 'urban bias':[61] a disposition of the governments to systematically favour, in the formulation and implementation of development policies, the well-being of urban interests over that of rural producers.[62] In post-colonial Africa the attempt to achieve this goal has taken different forms: currency overvaluation (making agricultural exports less competitive while enhancing the purchasing power of urban consumers), direct state intervention in depressing the prices of food agriculture through the formation of public purchasing agencies and price controls, and state spending in public goods such as health and education biased towards the urban areas.[63] While some recent historical work has pointed out that the implementation of these policies can be traced back, among other things, to the inheritance of a conceptual apparatus based on a rural-urban distinction developed by the colonial administrations,[64] the role of statistics in this process has been neglected. This section claims that the construction of household budgets in the Gold Coast can be read as a tool to institutionalise the conceptual divide between rural producers and urban consumers.

The construction of household budgets in urban areas can be placed within the broader context in which statistics were employed by the colonial administration to measure the impact of price controls and assess urban welfare during the Second World War. An early attempt was the 1942 *Report on the Enquiry into the Cost of Living in the Gold Coast*, prepared by officers of the Department of Labour, and recommending an increase in urban wages, [65] followed by a 1945 *Report on Wages and Standards of Living in Accra*. The latter, among other things, noted that 'the labourer in Government service earns on average ten shilling a month less than domestic servants, and very much less than the average earnings admitted by earners in trade'.[66] The discontent of urban consumers reached its climax in 1947, when the erosion of their purchasing power due to postwar inflation led to the so-called Accra riots. The riots in Accra, which shortly afterwards spread to other main urban areas of the country, abruptly accelerated the timing of decolonisation. Kwame Nkrumah, who had been jailed by the British for contributing to mobilise urban discontent, was the leader of the Convention People Party (C.P.P.), which won the 1951 election. The 1951 election *de facto* marked the end of colonial rule and the beginning of an hybrid phase in which Nkrumah served as leader of the Government business, before the country could achieve full independence from British rule in 1957. [67] The point that should be taken here is that Nkrumah knew all too well how crucial the support of urban constituencies was for the survival of his government.[68]

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[61] The classic work in this regard is Lipton, Michael (1977) 'Why Poor People Stay Poor: A Study of Urban Bias in World Development'.

[62] See Todaro, Michael P. and Smith, Stephen C. (2006) *Economic Development*, p . 831. For a comprehensive review of the urban bias debate see Jones, Gareth and Corbridge, Stuart (2010) 'The continuing debate about urban bias: the thesis, its critics, its influence, and its implications for poverty reduction strategies'.

[63] For a review of these issues in Sub-Saharan Africa see Bates, Robert (2005) *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies*, chapters 1-3.

[64] See for example Andersson, Jens A. (2002) 'Administrators' Knowledge and State Control in Colonial Zimbabwe: The Invention of the Rural-Urban Divide in Buhera District, 1912-1980'.

[65] Gold Coast (1942) *Report on the Enquiry into the Costs of Living in the Gold Coast Held in January 1942*

[66] Peter Ady 'The minimum wage earner' PRAAD ADM 5/3/52/15.

[67] This is an oversimplified, shortened version of the story. For extensive discussion on the politics of decolonisation in the Gold Coast the best departure point probably remains the classic Austin, Dennis (1970) *Politics in Ghana, 1946-1960*.

[68] The postcolonial history of Ghana presents a counterexample: the devaluation of the cedi in 1971 under Busia, making the food consumed in the towns more expensive, led to wide discontent, and eventually to the fall of the government and the seizure of power by the military. Bates, Robert (2005), op. cit., p. 31.

Thus it should not come as a surprise if a great deal of the statistical work conducted in the 1950s was constituted by attempts at measuring the welfare of urban communities.[69] The earliest of these attempts which involved the new Office of the Government Statistician was the survey on bread consumption in Accra, prepared in cooperation with the Medical Department in September 1950. The slim survey, amounting to little more than ten pages,[70] found that bread, cassava and corn were 'generally the food with the highest frequency of consumption'[71], that bread was being consumed at least once a day (although not excessively, to the point of becoming dangerous for the organism due to its low vitamin content), and that the main sources of bread supply were either local bakeries or itinerant market women: in no recorded case home baking served only household consumption.[72] Yet the statistical methodology of the survey left much to be desired: the sample of households interviewed by members of the Medical department was constituted by families that they already knew[73]. Furthermore much information that was deemed relevant, like the total number of people living in a house and patterns of consumption according to tribal group (as it was the common practice in colonial and postcolonial population censuses alike) was not collected.

In order to improve the knowledge available on these matters the Office of the Government Statistician started collecting data in a more systematic manner: out of five budget surveys published between 1953 and 1957, four were inquiries of living conditions in urban towns.[74] Leaving aside the somehow obvious choices of the capital Accra in 1953[75] and Kumasi, the second largest town in the country, in 1955,[76] the selection of the specific survey localities typically fell on what the government saw as the iconic representations of its attempts at modernising the economy. Akuse, for example, was selected because of its proximity to the Volta River, which was the theatre of the most ambitious development project undertaken in Ghana: the construction of a dam that could provide electricity for the whole country.[77] Sekondi-Takoradi instead was not only the capital of the Western Region, but also constituted one of the most developed infrastructural nodes of the country, hosting a port-harbour and representing a terminal point of the railway linking Accra and Kumasi.[78]

The statistical office was trying to identify the features of the 'typical' urban worker, whose income was not too high or too low, and would mostly derive from wage labour. The choice to focus on wage labourers was made under the assumption that the income of traders would follow more

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[69] It should be noted that attempts at measuring income and expenditures did not exhaust the range of statistical enquiries conducted in urban areas. In 1955, for example, the Ministry of Industries prepared a survey of industrial enterprises in Accra. 'Industrial enterprises' in this case was not confined to industrial plants, but included economic activities as different as laundries, mechanical repair shops, bakeries and shoe repair establishments. The survey itself simply consisted in a list of 'industrial enterprises' classified according to sector and the number of persons employed by each. Accra Survey, 27 June-30 July, PRAAD RG 7/1/359/1.

[70] The author has not found evidence that this survey was ever published or circulated, so references related to the survey are those of the archival folder in which a typewritten copy of it was found.

[71] Report on a Survey on Bread Consumption, p.3, PRAAD RG 4/1/124/6.

[72] Report on a Survey on Bread Consumption, pp.3-4, PRAAD RG 4/1/124/6-7.

[73] Although it was admitted that 'the use of a statistically random sample would be a great improvement' the choice of interviewing already known families was justified on the ground that a random sample would have led to a loss in accuracy.

[74] The choice of the rural location of South East Akim-Abuakwa for the first household budget survey is explained in the next section.

[75] Gold Coast. Office of the Government Statistician (1953b) *1953 Accra Survey of Household Budgets*.

[76] Gold Coast. Office of the Government Statistician (1956b) *Kumasi Survey of Population and Household Budgets, 1955*.

[77] Gold Coast. Office of the Government Statistician (1955) *1954 Akuse Survey of Household Budgets*, p. 1.

[78] Gold. Coast. Office of the Government Statistician (1956a) *Sekondi Takoradi Survey of Population and Household Budgets, 1955*.

closely price fluctuations, and therefore did not require a separate analysis. However it was soon discovered that this was not necessarily the best choice for all the survey areas, as the percentage of waged labour over the total samples differed widely across locations. Certainly the waged worker was representative in the cases of Accra and Sekondi-Takoradi, where the percentage of the total population earning their main income from wage labour amounted to 57% 'due to the employees of Government and commercial firms' and 69% arising from the port and railway activities respectively.[79] In Kumasi instead this choice did not seem appropriate since after 'examining the results of the population enquiry it was decided not to limit the budget sample to wage earning families as was done in Accra and Sekondi-Takoradi, as these formed only 34% of the total'.[80] In spite of these differences in sampling methods, the statistical office eventually managed to produce a comparative picture of income levels and of income percentages spent on different classes of goods. This information is reported in table 3.

		Accra 1953	Akuse 1954	Sekondi-Takoradi, 1955	Kumasi 1955
Number of families		570	163	546	570
Income	**Average earnings**	£16.80	£12.13	£11.10	£17.18
Expenditure group (%)	**Local food**	49.2	51.5	52.3	52.3
	Imported food	8.8	5.7	5.4	5
	Total food	58	57.2	57.7	57.3
	Clothing	12.1	17.3	14.8	13.8
	Drink and tobacco	6.1	6.6	5.1	4.2
	Fuel and light	4.7	4.6	6	6.2
	Services	5.8	5.9	4.9	5.8
	Rent and rates	5.4	2.2	6	7.5
	Durable goods	3.6	2.7	2.5	2.1
	Miscellaneous	4.3	3.5	3	3.1
	Total	100	100	100	100

Table 3: Comparative patterns of income and expenditures in urban areas.
Source: Gold Coast – Office of the Government Statistician (1956b) *Kumasi Survey of Population and Household Budgets, 1955*, pp. 11-12.

The household budgets prepared by the Office of the Government Statistician in the 1950s revealed that the typical urban worker, regardless of the fact that he derived his income from trade or

[79] Gold Coast – Office of the Government Statistician (1956) *Kumasi Survey of Population and Household Budgets, 1955*, p. 4.
[80] Gold Coast – Office of the Government Statistician (1956) op. cit., p. 7.

wage labourspent around 50% of his income on local food.[81] Figures like the ones presented in table 3, showing the high degree of dependency of the urban communities on local food represent one side of the story, but the role of household budget surveys in conceptualising the rural-urban divide can be fully understood only by accounting for the different use of household budget surveys in the rural areas.

3.2 Rural Food Producers, Urban Consumers and the Uneven Topography of Statistical Knowledge

Given what has been said below, it might appear surprising that one of the household surveys, and in fact the first of the Statistical and Economic Papers published by the Office of the Government Statistician took place in a rural area. However, it will be shown that this early interest of the statistical office in preparing rural household budgets for the South-East Akim-Abuakwa area did not reflect an attempt to draw inferences from income and expenditure data on the economic of the people living in the surveyed areas, as it was the case in the Accra, Akuse, Sekondi-Takoradi and Kumasi surveys.

Admittedly the main observational practice of the household budgets was the same across urban and rural areas: following the selection of the sample the interviewers visited daily the sample families for one month and reported the income and expenditures taking place in a table. Yet, there are two elements that should be noted. The first is the difference in the specific entries used to construct the conceptual grid in which incomes and expenditures for rural and urban workers were reported. For the South-East Akim-Abuakwa survey the expenditure table looked like the one below:

		Day 1	Day 2	Day 3	…	Day 31	Total
Food for home consumption	**Local**						
	Imported						
	Goods for resale						
	Clothing						
	Fuel and light						
	Household goods						
	Farm equipment						
	Casual labour						
	Transportation						
	Rents and remittances						
	Taxes and levies						
	Other						
	Total						

Table 4: Expenditure table used in the construction of budget records in the South-East Akim area. Source: Gold Coast. Office of the Government Statistician (1953) *Statistical and Agricultural Survey of the South-East Akim-Abuakwa, 1952-1953*, Appendix, p. 36.

[81] It is reported that the lower values observed for expenditures in Akuse where due to the fact that the survey was conducted shortly before Christmas, and therefore most families were saving money for the festive season.

This table stands in contrast with those employed in the urban surveys; with the exception of 'farm equipment', expenditure tables in urban surveys included all the entries presented in the one above, plus a wide variety of additional elements like haircuts, entertainment, laundry, shoe repairs, taxi fares, and even children's pocket money.[82] Certainly there were good reasons to start with different theoretical assumptions as to what accounted for incomes and expenditures in urban versus rural areas (for example wages vs. farm produce sold in the case of income, imported consumption goods vs. farm equipment in the case of expenditures) but, given that there is no evidence to support the claim that the templates used for budget recording were ever modified after *actual observation* had begun, it is possible that the introduction of household budgets at this stage reinforced the dualistic perception of a simple rural world, whose main task was the production of food, in contrast with the extensive, frequent and diversified monetary transactions characterising the economic life of urban towns.[83]

The second element that should be stressed is the different use of the data collected in the budget records: while in the cases of Accra, Akuse, Sekondi-Takoradi and Kumasi the analysis of the statistical office was focused on assessing in detail the patterns and the composition of income and expenditure in order to gain a better understanding of the welfare of urban workers, in the case of Akim-Abuakwa there is no explicit mention of this. That the main goal of the enquiry was not the assessment of the welfare of the population living in the survey area emerges quite clearly from the Government Statistician's justification for the choice of the survey location: it claimed that Akim-Abuakwa was selected because it constituted 'an important source of food supply for Accra and other towns'.[84] In fact, one of the main purposes of the Akim-Abuakwa enquiry became the measurement of the gap between the production and the local consumption of food crops such as cassava, maize, plantain, yam and palm fruit, plus other 'miscellaneous crops' like bananas and oranges.[85]. Although the relationship between production and consumption was very much dictated by the seasonality of the crops, overall it was found that in the survey period, covering between June 1952 and May 1953, the difference between production and consumption amounted to 15,000 tons of food crops.[86]

Besides the compilation of income- expenditure tables and the measurement of acreages and crop production, a further tool was employed in the last two months of the survey to improve the quality of agricultural statistics: the placement of road and lorry checks. This device was deemed useful for three different reasons. Firstly, it provided an occasion to re-think about the accuracy of the figures produced in the household survey. Secondly, it allowed to study crop movements over a wide area at a relatively cheap cost. Thirdly, and more importantly, according to the government statistician (no doubt also because of their low costs) road checks could provide a framework upon which general agricultural statistics could be built, by providing some criteria for demarcating the main supply areas, where further statistical work would have been necessary, from those in which subsistence production was higher, and therefore did not have a significant impact on the satisfaction of the demand for food of urban communities.[87] While showing wide differences between specific

[82] See for example Gold Coast. Office of the Government Statistician (1953b) op. cit., op. cit. 'Miscellaneous expenditures', pp. 46-47.
[83] Perhaps the extreme simplicity of the income and expenditure tables used in the 1953 survey had also something to do with the relative inexperience of the Government statistician: it should not be forgotten that the survey of the South-East Akim Abuakwa area was the first household budget published.
[84] Gold Coast. Office of the Government Statistician (1953a) *Agricultural Statistical Survey of South-East Akim-Abuakwa*, p. 2.
[85] Gold Coast. Office of the Government Statistician (1953a) op. cit., p.8.
[86] Gold Coast. Office of the Government Statistician (1953a), op. cit., p. 10.
[87] Gold Coast. Office of the Government Statistician (1953a), op. cit., p. 25.

locations, the use of road checks confirmed the overall significance of the Akim-Abuawka area as a net exporter of food:

	Food entering(tons)		**Food leaving(tons)**			
	April	May	April	May		
Odumase	2,256	1,748	43	57		
Asafo	217	196	13	_		
Kukua	678	561	565	565		
Adwajiri (Krabo)	4	9	874	952		
Adwajiri	144	165	3,701	3,148		
Total	**3,299**	**2,679**	**5196**	**4722**	**April**	**May**
			Net Exports		**1,897**	**2,043**

Table 5: Result of road checks in the South-East Akim area.
Source: Gold Coast. Office of the Government Statistician (1953a) ***Statistical Agricultural Survey of South-East Akim-Abuakwa*****, p. 22.**

Michael Lipton, the author of the classic study on urban bias in developing countries, wrote with reference to India:

> The small amount and persistently unsatisfactory composition of agricultural outlay suggests that the planners are somewhat remote from the nature and needs of village India, and rely on big aggregates rather than on local studies. {…} The suggested explanation is *urban bias* in the Indian system of economic reward, political power, education and intellectual preferences.[88]

This examination of the Akim-Abuakwa area suggests a partly different interpretation: the urban bias characterising policy-making in developing countries does not necessarily (and did certainly not in the period preceding the wide-scale adoption of macroeconomic modelling and sectoral planning) lead the planners to 'see' rural realities through the lens of 'big aggregates'. Instead, the use of local surveys could institutionalise the role of rural areas as food producers for the urban areas: the report plainly acknowledged that 'the main agricultural problem in the Gold Coast at the present time is the supply of foodstuff to growing urban communities'.[89] The assessment and satisfaction of urban needs was politically so important as to determine the way in which the planners thought about how to improve agricultural statistics:

> The Eastern part of the colony, covering an area of about 10,000 square miles includes the largest urban communities in the Gold Coast and is the principal region affected by development activity at the present time. It is therefore here that agricultural statistics are most urgently required.[90]

The case of Akim-Abuakwa suggests that in a context such as the Gold Coast in the 1950s, where the administrative, technical and financial resources to conduct large scale statistical work were either missing or extremely scarce, the investment required in the production of reliable information was very much constrained by the relevance attached by those in power to different areas of the country. This had as a consequence the formation of a

[88] Lipton, Michael (1968) 'Strategy for Agriculture: Urban Bias and Rural Planning', p. 84.
[89] Gold Coast. Office of the Government Statistician (1953a), op. cit., p.
[90] Gold Coast. Office of the Government Statistician (1953a), p. 26.

very uneven topography of statistical knowledge. A graphic, if extremely crude, illustration of this is provided the map below, showing all the areas which were included in statistical surveying under the direction of the government statistician up to 1960 (map 1).

Map 1: Map of surveyed areas in Ghana up to 1960.

Source: Ghana. Central Bureau of Statistics (1961) ***Field Survey Work in the Ghana Statistics Office*****, p. v.**

It can be easily seen that the northern part of the country was left virtually untouched by the institution of the Government Statistician. The only systematic economic survey of the Northern Territories of which the author is aware preceded the election of Nkrumah's government, and was prepared in 1950 by John Raeburn, professor of agricultural economics at the London School of Economics and member of the Colonial Economic Research Committee[91]. However the picture emerging was one of underdevelopment and backwardness with limited prospects of change:

> Disease and slave raiding have resulted in the depopulation of large areas of land which are reported to be fertile, while elsewhere increases of population have led to misuse of land. {…}
> Production of crops, livestock and forest products is limited in all areas by long dry season.{…} All areas are subject to risks of poor crops due to insufficient or ill-timed rainfall during the wet season.{…}
> So far no mineral deposits of considerable economic value have been reported. {…} It is unlikely that supplies of underground oil exist. {…}
> Production and incomes are not only low: they are also unstable.[92]

It should be mentioned that Raeburn qualified his findings with caution, and invited the Government to undertake more statistical work through soil and agricultural surveys and household budgets in order to gain a more accurate picture of the resources and development prospects of the region.[93] But from the evidence available (or rather from the lack of it) it does not seem that these recommendations were ever taken too seriously: the northern part of the country, which according to the 1960 population census hosted around 1,282,164 people[94] (accounting for almost 20% of the total population) was left in the 1950s to its underdevelopment, hidden by a cloud of statistical neglect.[95] The uneven topography of household budget surveys prepared by the statistical office closely reflected and mirrored the will of the state to extend its power over different parts of its territory.

4. The Struggle over Cocoa: Household Budget Surveys in Swedru and Ashanti

Following the completion of the household budget surveys in the urban areas, the statistical office turned once again to the rural world with the publication of the *Survey of Population and Budgets of the Cocoa Producing Families in the Oda-Swedru-Amankese Area, 1955-1956*, and the *Survey of the Cocoa Producing Families in Ashanti, 1956-1957*. As it is clear from the title, unlike the food farming communities described in the Akim Abuakwa survey, the object of inquiry in these cases was the cocoa producer. At the beginning of the Swedru survey it is stated that

[91] John Raeburn was the British agricultural economist who designed the food policy for Britain during WWII.
[92] Raeburn, John R. (1951?) *Report on a Preliminary Economic Survey of the Northern Territories of the Gold Coast*. Quotes are from pages iii,2, 3 and 7 respectively.
[93] Raeburn, John (1951?), op. cit., p. iii, p. 6.
[94] Reported in Austin, Dennis (1970) *Politics in Ghana, 1946-1960*, p. xv.
[95] A recent historical assessment largely confirms Raeburn's view: 'This area has a history of chronic malnutrition and enduring poverty, even if it has not suffered massive famine mortality'. Destombe, Jerome (1999) 'Nutrition and Economic Destitution in Northern Ghana 1930-1957. A Historical Perspective on Nutritional Economics', p. 4.

> Persons living in the urban areas were the first groups studied {…} On completion of these surveys it was apparent that economic information about cocoa producers was a more urgent requirement than an extension of the urban investigations and attention was shifted to the rural areas.[96]

What accounted for the urgency to introduce household budgets in Swedru and Ashanti was firmly grounded in the political and economic importance of cocoa for the Gold Coast. The economic importance of cocoa for the Ghanaian economy is impossible to underestimate, as reflected by an old Ashanti ditty, which says:

> If you want to send your children to school, it is cocoa,
> If you want to build your house, it is cocoa,
> If you want to marry, it is cocoa,
> If you want to buy cloth, it is cocoa,
> If you want to buy a lorry, it is cocoa,
> Whatever you want to do in this world,
> It is with cocoa money that you do it.[97]

A similar message was expressed, although in a technocratic language and with reference to the whole country, by the Ministry of Finance:

> The significance of cocoa production to the Gold Coast economy requires no underlining, since cocoa makes up about two-thirds of the value of the export trade. Even this figures {sic.} does not emphasise sufficiently the dependence of the country on the cocoa crop. Not only is the cocoa industry by far the largest single direct source of income, but other sections of the economy such as transport and distributive services, depend directly or indirectly on its prosperity, and it provides a large part of the public revenue.[98]

The main issue at stake can possibly emerge from a combined reading of the Ashanti ditty *and* the quote from the Ministry of Finance: the cocoa money that could have contributed to the development of Ashanti was being taken away and redistributed by the government for the economic development of 'the nation'. Initially this took place through the operation of the Cocoa Marketing Board. The Cocoa Marketing Board was officially established by the colonial government in 1947, with the aims of acquiring foreign exchange and stabilising the income of the farmers.[99] The Cocoa Marketing Board acted in a regime of monopsony, being granted by law the task of purchasing the total of the cocoa produced by the farmers, and selling it on the world market. However the Cocoa Marketing Board paid the farmers a price that was inferior to the one prevailing in the world market, thus cumulating large surpluses that were being used to finance government's expenditures. [100]

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[96] Ghana. Office of the Government Statistician (1958), *Survey of Population and Budgets of Cocoa Producing Families in the Oda-Swedru-Asamankese Area, 1955-1956,* p. 1.

[97] Quoted in Young, Crawford, et. al. (1982) *Cooperatives and Development: Agricultural Politics in Ghana and Uganda*, p. 162.

[98] Gold Coast. Ministry of Finance (1953) *Economic Survey of the Gold Coast*, p. 15.

[99] However the issues that led to the institution of the Cocoa Marketing Board can be traced back to the consequences of the Great Depression, the cocoa hold ups of 1937-1938, and wartime measures on cocoa production and exports. For further discussion on the constitution of the Cocoa Marketing Board see Meredith, David (1988) 'The Colonial Office, British Business Interests and the Reform of Cocoa Marketing in West Africa, 1937-1945' and Alence, Rod (2001) 'Colonial Government, Social Conflict and State's Involvement in Africa's Open Economies: the Origins of the Ghana Cocoa Marketing Board, 1939-46'.

[100] A precise presentation of the allocation of the marketing boards' surplus can be found in Hawkings, E. K. (1958) 'Marketing Boards and Economic Development in Nigeria and Ghana'.

Before 1951, the year of his election, Nkrumah and the CPP had managed to mobilise rural discontent by claiming that with their victory the surpluses cumulated through the Cocoa Marketing Board would have given back to the farmers.[101] Soon it became obvious that this would have not happened: 'big cocoa producers turned against the CPP as early as 1952, when it became clear that the state would have used the cocoa marketing board as a mechanism of state accumulation, rather than returning Ghana's cocoa surpluses to the farmers'.[102] As a consequence the cocoa producers in the Ashanti region, where one quarter of the Gold Coast population lived and where more than 50% of the estimated cocoa acreages were located, mounted in opposition. The most evident expression of this was the formation, in 1954, of the National Liberation Movement (NLM hereafter), calling for the secession of Ashanti from the rest of the Gold Coast. A propaganda leaflet of the same year stated: 'Ashanti produces more cocoa than the colony. IS THERE ANY COCOA IN THE NORTHERN TERITORRIES {sic.}? NO! Why should Government tax cocoa farmers to develop the country in which Ashantis suffer most?'[103] That the opposition to the central government did not depend on a specific price conjuncture, but it was directed against the redistributive principles embodied in its policies is shown by the fact that 'crystallisation of the anti-CPP opposition {…} occurred when Ghanaian cocoa producers incomes were stable (1951-1954) during which time the flow of state patronage to the rural areas increased'.[104]

4.1 Measuring Income and Credit: State Penetration in the Cocoa Producing Areas

As convincingly argued by Catherine Boone, in order to cope with this heated political situation 'the regime of Kwame Nkrumah sought to establish centralised control over a state apparatus that reached deep into localities, governing the cocoa belt intensively through a dense network of official institutions that insinuated state power into the micro-level dynamics of local political economies'.[105] The strategies adopted by the government were extremely varied, and included the formation of agricultural cooperatives, systematic attempts to incorporate the chiefs into the CPP (and try to de-stool those who refused), the institution of new monopsonistic agencies (the Cocoa Purchasing Company in 1951) and the provision of credit. This attempt of the government to appropriate the wealth of the cocoa producing areas and integrate the farmers in a more extensive network of state institutions had two important consequences for the way in which the statistical office designed the surveys of Swedru and Ashanti.

The first was a more sophisticated and complete way of conceptualising income. As reported by a postcolonial analysis of the field surveys prepared by the statistical office in the 1950s, the household budgets in cocoa producing areas differed from those conducted in urban areas in one important aspect:

> In the other family budget surveys, income data was recorded mainly as a check of the expenditure information and was not a primary concern of the investigation. The principal object was to provide the basis for retail prices indexes and, for this, expenditure classes were the most satisfactory method of analysing the results.[106]

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[101] On the role of the C.P.P. in mobilising rural discontent see Danquah, Francis K. (1994) 'Rural Discontent and Decolonisation in Ghana, 1945-1951'.
[102] Ibid. However, the National Liberation Movement was defeated in the 1956 election by Nkrumah's CPP.
[103] Quoted in Allman, Jean Marie (1990) 'The Youngmen and the Porcupine: Class, Nationalism and Asante's Struggle for Self-Determination, 1954-1957', p. 266.
[104] Boone, Catherine (1995) 'Rural Interests and the Making of African States', p. 29.
[105] Boone, Catherine (1995) op. cit., p. 7.
[106] Ghana. Central Bureau of Statistics (1961), op. cit., p. 79.

In the case of the cocoa producing areas instead, much attention was paid to a careful assessment of farmers' income. The surveys of the Swedru area marked the introduction of a much more sophisticated system to report and classify rural incomes. This was based on several distinct entities: gross cocoa income (equal to the value of the cocoa sold) gross farming income (equal to the gross cocoa income plus the income deriving from the sale of other farm products), total gross farming income (equal to the gross farming income plus incomes deriving from other sources such as wage labour, rent from property and petty trading). The sum of these three entries, plus cocoa grants and other remittances received, amounted to the total of receipts. The net farming income was the difference between gross farming income and farming costs, while the net income was the difference between the gross earned income and total costs. Finally, the overall budget was the result of subtracting the total payments from the total receipts. The conceptual apparatus used to report rural incomes is shown in table 6.

			GROSS COCOA INCOME				
ITEM			under 1,000	1,000-1,499	…	**TOTAL (shillings)**	**No. of families**
	Sales of farm produce	1.Cocoa					
		2.Foodstuffs					
		3. Livestock					
	4. Gross farming income (A)						
	5.	Petty trading					
	6.	Work on own account					
	7.	Rent from property					
	8.	Wage incomes					
	9. Total gross earned income (B)						
	10.	Cocoa grants					
	11.	Sales of property					
	12.	New loans					
	13.	Repayment of loans given					
	14.	Other remittances received					
RECEIPTS	**15. TOTAL RECEIPTS (C)**						
	16.	Share payment to caretakers					
	17.	Payment to labourers					
	18.	Other cocoa harvesting costs					
	19. Farming Costs (D)						
	20.	Trading purchase for resale					
	21.	Costs of materials for crafts					
	22. Total costs (E)						
	23.	Domestic expenditure					
	24.	Loan repayments					
	25.	Loans given					
	26.	Payments on property purchased					
	27.	Other payments					
PAYMENTS	**28.Total payments (F)**						
NET FARMING INCOME (A-D)							
TOTAL NET EARNED INCOME (B-E)							
OVERALL BALANCE ON BUDGET (C-F)							
No. of families							

Table 6: Receipts and payments table for surveys conducted in cocoa producing areas.

Source: Ghana. Office of the Government Statistician (1960) ***Survey of Cocoa Producing Families in Ashanti, 1956-1957*****, p. 54.**

The second important element of innovation that should be noted is the inclusion, in the calculation of receipts and payments, of credit and debit positions: this, which was not considered in any of the surveys considered so far, has to be understood against the background of the crucial importance attached to the provision of credit by the government in order to gain the political support of cocoa farmers.

Admittedly the indebtedness of the Ashanti cocoa farmers was, already in the 1920s, a concern of the British colonial administration, principally because they feared that the repayment of onerous loans would have a negative impact on the quality of cocoa, resulting in a loss of market share.[107] But Nkrumah's CPP acted in a more intensive fashion, not only by expanding the amount of formal credit available to the small farmers, but by setting up a series of institutions (most notably the Cocoa Purchasing Board in 1951) that could extend the state's reach in the countryside, and replace other sources of credit like European brokers and 'informal' institutions. The household budget surveys then became in the cocoa producing areas a tool to quantify the farmers' dependence on the state in contrast with other sources of credit, and perhaps more generally their degree of integration in the network of state sponsored institutions. This was made possible by decomposing the loans taken and given according to the source, as it is shown in table 7.

			Net earned income				**Total (shillings)**
			Under 1,000	1,000-1,499	…	15,000 & over	
New loans	**Type of loan**	Pledged farms					
		Advance on crop					
		Other					
		Total					
	Source of loan	Cocoa Purchasing Co.					
		Co-operatives					
		Firms and brokers					
		Other					
		Total					
Loans repayments	**Type of loan**	Pledged farms					
		Advance on crop					
		Other					
		Total					
	Source of loan	Cocoa Purchasing Co.					
		Co-operatives					
		Firms and brokers					
		Other					
		Total					
No. of families							

Table 7: Average amount of new loans and loan repayments per budget family in each earned income class, classified according to type of loan and loan source.

Source: Ghana. Office of the Government Statistician (1960) ***Survey of Cocoa Producing Families in Ashanti, 1956-1957,*** **p. 72.**

[107] Austin, Gareth (2009) *Labour, Land and Capital in Ghana: From Slavery to Free Labour in Asante, 1807-1956*, p.300. For an extensive discussion of the history of the making of the Ashanti cocoa economy, see Austin's book, especially chapters 7 and 15.

The table presented above shows the distribution of new loans and loans repayments in relation to different income classes; an additional set of tables included in the surveys show the sources and types of loans according to alternative classifications, such as survey areas and the distribution of loans over time. The performance of the CPP government in extending its control over the countryside was mixed. From a merely political point of view it could be considered a success: the National Liberation Movement, which was literally competing with the central government in providing credit to the farmers,[108] lost the 1956 election. However, the fate of most of the loans made to farmers by the Cocoa Purchasing Corporation was not to be repaid.[109] Furthermore, both the Ashanti survey and later studies confirm that the state had not succeeded in eradicating the presence of alternative sources of credit. Shortly after independence the amount of loans provided by the Cocoa Purchasing Corporation in Ahafo, a region that was part of Ashanti, amounted to almost 7%: more than 85% was still provided by local farmers and relatives.[110] The Swedru and Ashanti surveys then represented not only the cognitive locus where the possibility to measure more precisely the state's influence on the economic life of the cocoa farmers was established, but also provided a clear indication that the CPP government had not managed to fully bring to the countryside the structural transformation it had envisaged for it.

4.2 Household Budget Surveys and Cocoa Production Figures

Part of the importance of household budget surveys in cocoa producing areas relied in the fact that, they could be used to check the quality of available statistics on cocoa production.[111] In order to better understand the latter aspect, it is necessary to inquiry a bit more in detail into the quality of the available statistics at the time in which the surveys were conducted.

The conference of statisticians in countries south of the Sahara, which met in Salisbury in 1951, agreed on a programme declaring that 'a minimum service of agricultural statistics should provide information on:

1. Acreage figure of crops.
2. Output figures of crops, with yield per acre as a by-product.
3. Number of trees and their products.
4. Number of livestock.
5. Output of animal product.
6. Crop forecasts.
7. Movement of crops.
8. Prices to the producer and market prices
9. Particular and value of total agricultural output
10. Numbers dependent on agricultural employment and earnings.[112]

Yet the actual condition of African production statistics diverged dramatically from this ideal picture: the statisticians gathered at the Salisbury conference agreed that 'as regards crop statistics,

[108] Boone, Catherine (2003) op. cit., p. 168.
[109] Boone, Catherine (2003), op. cit, p.
[110] Austin, Gareth (2009) op. cit., p. 389.
[111] It should be noted that similarly the household budget survey in the Akim-Abuakwa area was used to produce figures on the production of food crops.
[112] Conference of Statisticians of Countries in Africa South of the Sahara (Draft Report), Salisbury (Southern Rhodesia) 30th July-7th August, 1951, p.17, PRO CO 852/1078/2.

most countries are still grappling with the elementary problem of providing a suitable system of collecting regular statistics of acreage and output'.[113] Even if the Gold Coast compared favourably in terms of statistical coverage with many other colonies represented at the conference, in the first Economic and Statistical Survey the Ministry of Finance candidly admitted that 'the coverage of statistics on agricultural activities does not at the present permit a detailed comparison between production in 1952 and 1951'.[114] Besides the administrative problems that made the collection of any kind of statistical information in Sub-Saharan Africa particularly difficult, such as shortage of trained staff, those in charge for the collection of data on agricultural production were facing additional obstacles. Some of them had to do with the botanic features of tropical crops. Counting cassava for example, in spite of its crucial importance as a staple food in the West African diet, was made extremely difficult by the lack of a regular time or season for harvesting (which made the time of an appropriate survey difficult to choose). Furthermore, being a tuber, it was hidden in the ground.[115] Other problems arose from the outcome of the interaction of natural factors with indigenous institutions: among these the conference of African statisticians identified the irregularity of the plots, the subsistence basis of agriculture, and the communal ownership of the land.[116] Another element which stirred much debate, and showed how little African states knew about their agriculture was the issue of mixed cropping. In the late 1940s the Food and Agriculture Organisation of the United Nations attempted to provide a solution to the problem (what came to be known among colonial statisticians as 'the F.A.O. method), recommending that 'if two or more crops are grown together on the same area but conditions are such that normal growth and distance between plants are not appreciably affected, then the total area should be recorded against each crop'.[117] However the statisticians agreed that this method was not suitable in African conditions, and that a detailed inquiry on the different methods of agricultural sampling used throughout the world, possibly leading to the formulation of a different method, had to be published 'if the needs of territories south of the Sahara have to be met'.[118] From all these elements it can be inferred that in the 1950s African states were still very much struggling to obtain accurate agricultural production figures, and their data gathering activities took place in a context dominated by uncertainty.

Certainly the statistical information existing in the Gold Coast about cocoa, even preceding the introduction of household budgets, was much more accurate than that available for food crops: a report on the reorganisation of the statistical office after independence admitted that 'So far, no general statistical information is available about agriculture in Ghana except in the case of crops which are mainly exported'.[119] But where did the knowledge about cocoa production come from? Still in the 1960s the *exact* number of acreages under cocoa was unknown.[120] On the other hand, as it was already argued in the rural survey of the food exporting region of Akim-Abuakwa, the irregular shape of the farms and the practice of mixed cropping made the estimate of acreages a very costly exercise, and it was therefore recommended to focus on production figures.[121] Although most of the

[113] Conference of Statisticians of Countries in Africa South of the Sahara (Draft Report), Salisbury (Southern Rhodesia) 30th July-7th August, 1951, p.18, PRO CO 852/1078/2.
[114] Gold Coast. Ministry of Finance (1953), op. cit., p. 17.
[115] Hill, Polly (1986) op. cit., p. 82.
[116] Conference of Statisticians of Countries in Africa South of the Sahara (Draft Report), Salisbury (Southern Rhodesia) 30th July-7th August, 1951, pp.18-21, PRO CO 852/1078/2.
[117] 'Statistics of mixed crops', p. 1, PRO CO 852/1078/3.
[118] Conference of Statisticians of Countries in Africa South of the Sahara (Draft Report), Salisbury (Southern Rhodesia) 30th July-7th August, 1951, pp.19-20, PRO CO 852/1078/2
[119] Ghana (1960) *Report on Committee on Creation of the Central Bureau of Statistics*, p. 21.
[120] For further discussion on this point see Killick, Tony (1966) 'Cocoa'.
[121] Note that the choice to focus on production figures without paying too much attention to acreages makes at least theoretically impossible to gain accurate information about yields.

problems identified by the conference of African statisticians still applied to cash crops, the existence of marketing board purchasing what was assumed to be the totality of the crop produced provided significant help. Of course, this worked only under the assumption that the Cocoa Marketing Board was actually able to locate and purchase 100% of the cocoa produced in the country.[122]

However, given the relatively weak cognitive capabilities of the colonial state this was by no means obvious: part of the importance attached to the introduction of household budgets in the cocoa producing areas relied exactly in the fact that they provided an opportunity to check the figures constructed by the Cocoa Marketing Board. This was made possible by comparing the marketing agency figures with those arising from the household budget surveys through the application of the following formula:

Average declared cocoa production per budget family (loads) * total number of cocoa owning families * total districts/ sample districts = total cocoa production survey area

In the case of Ashanti the formula (74.5 * 13,957 * 940/240) produced a result of 4,072,540 loads (or 109,000 tons). This number, according to the statistical office, compared 'quite closely with the Cocoa Marketing Board purchasing figures of 132, 416 tons for the survey period'.[123] This was certainly good news, but it conflicted with the previous estimate that 40% of the smaller farmers (which in Ashanti represented the norm rather than the exception) underreported their production.[124] Ex post this was imputed to different possible reasons:

> From this it would appear that any under-recording which occurred during the preliminary enumeration was confined to families others than those owning established cocoa. It is possible that enumerators, knowing the inquiry to be mainly concerned with cocoa producers, were not so careful in enumerating other types of households, but it is also possible that families living in hamlets not listed in the 1948 census records were omitted. This problem would have not arisen if maps showing enumeration area boundaries had been available for the survey.[125]

In other cases instead the gap between the estimate of cocoa production obtained through the survey and the figures of the Cocoa Marketing Board was higher. The application of the same formula to the Swedru area (35.3 * 8,201 * 225/90) produced a figure of 724,000 loads (or 19,400 tons), while the purchase of the Cocoa Marketing Board amounted to 32,000 tons. Since the survey region could have produced so much cocoa only if productivity was 30% higher than elsewhere, it was likely that the cocoa purchased in Swedru by the marketing board included crop produced in other regions and bought on its way to the ports.[126] This seemed a reasonable assumption but, given the lack of precise data on acreage, or more extensive crop movement statistics, it could not be conclusively tested.[127] Yet, in spite of all these limitations, the introduction of household budgets in the cocoa producing areas constituted both a tool to measure the degree of state penetration in the rural areas, by allowing to calculate a proxy and of double-checking postcolonial planners to see them as an extremely appealing and useful tool in calculating agricultural production.

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[122] For a review of the scope of the crops statistics produced by West African marketing boards, see Bauer, Peter T. (1954) 'Statistics of Statutory Marketing in West Africa'

[123] Ghana. Office of the Government Statistician (1960) *Survey of the Cocoa Producing Families in Ashanti, 1956-1957*, p. 10.

[124] Ghana. Office of the Government Statistician (1960), op. cit., p. 9.

[125] Ghana. Central Bureau of Statistics (1961) *Field Survey Work in the Ghana Statistics Office*, p. 33.

[126] Ghana. Office of the Government Statistician (1958), op. cit., p. 17.

[127] A crop movement survey, including both vehicle and lorry checks was then in fact organised between 1957 and 1958. Ghana. Central Bureau of Statistics (1961), op. cit., p. 59.

5. Conclusion

A few years after independence Ghana turned to socialism: this shift envisaged a much more pervasive role of the state in economic life, and pushed even further the importance attached to economic planning and the collection of accurate statistics in designing and implementing economic policy. In spite of the change in ideological discourse, the construction of household budget surveys in the 1950s provided a formidable laboratory for the postcolonial state. The Central Bureau of Statistics (this is how the Office of the Government Statistician was renamed in 1961) came to the conclusion that household budget surveys, although more costly than other forms of statistical inquiries because of the large number of people who needed to be trained and employed, represented a successful tool in penetrating the countryside and gaining information on agricultural production statistics, on which African states largely depended but about which so little they knew.[128] The organisational framework on which the specific enquiries of the 1950s relied had to be made permanent and extended in order to cover the whole country, thus becoming an important part of the cognitive apparatus of what was increasingly assuming some of the features associated to totalitarian regimes attempting to collect more detailed information about 'the private sector of the economy'. [129]

It is hoped that this paper has provided two contributions. Firstly, it has offered an historical account of some of the problems faced by the late colonial state in gathering accurate statistical knowledge. Colonial statistics should be understood for what they actually were: the outcome of a process dominated by conceptual uncertainty, as well as intimidating financial and administrative constraints. While an explicit acknowledgement of this certainly calls for more caution in the use of these data for quantifying the past performance of African economies, it has been suggested that the production of statistical evidence itself should become object of inquiries in the field of political economy. Secondly, this paper has identified in household budget surveys the main tool of seeing for the decolonising state. Following the journey of income-expenditure tables from Akim-Abuakwa to the main cities, to the cocoa producing areas of Swedru and Ashanti, it has been argued that an inquiry into the construction of household budget surveys not only reflects the uneven topography of political power in the Gold Coast, but it opens a window on the legitimacy of the state, its ultimate aims and its capacity to identify and establish alliances with key constituencies.

Historians of statistics have introduced the notion of 'co-construction of state and statistics': it is indeed possible to identify constellations linking forms of political governance to modes of statistical thinking.[130] It is now time for economic historians and political economists to take this insight seriously, and incorporate the production and dissemination of statistical knowledge into their narratives. As argued a long time ago by Friedrich von Hayek, the problem faced by policy-makers is not simply one of allocation of scarce resources; it is rather 'a problem of the utilization of knowledge not given to anyone in its totality'.[131] An historical inquiry into the collection of statistics represents a possible departure point to assess the cognitive limits of African states, and the basis upon which it could be possible to build a more balanced assessment of their performance.

[128] Ghana. Central Bureau of Statistics (1961) op. cit., p. 35.
[129] Ghana. Central Bureau of Statistics (1961) op. cit., p. 36.
[130] An example of this is Desrosieres, Alain (2003) 'Managing the economy'.
[131] Hayek, Friedrich A. (1945) 'The Use of Knowledge in Society', p. 520.

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