Journal of British Studies (2025), **64**, e16, 1–22
doi:10.1017/jbr.2025.32

CAMBRIDGE UNIVERSITY PRESS

ORIGINAL MANUSCRIPT

"A Bold Experiment in the Technique of Administration": Nutrition Science and Development in the Gambia, 1946–50

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Abstract

Historians of colonial and postcolonial attempts to deal with undernutrition in Africa have generally argued that, after the Second World War, scientists and doctors "medicalized" hunger by emphasizing specific deficiencies that could be medically "cured" or alleviated through dietary supplements, thereby covering up the economic, social, and political causes of (post)colonial hunger. This article argues that this explanation obscures the persistence of a more holistic approach immediately after the Second World War, which rejected this narrow vision of hunger and, on the contrary, framed it as a very broad problem requiring interdisciplinary research and ambitious economic and social solutions. It focuses in particular on the work of British nutrition specialist B. S. Platt and his "experiment" in The Gambia that was meant to devise a replicable recipe to cure colonial malnutrition through mechanization and agricultural development. Like many other such colonial projects, the project ended in dismal failure, but it illustrates how malnutrition was understood at the end of the war as a broad economic and social problem. It also shows how this more holistic approach was tightly associated with the postwar project of colonial "development" and was predicated on an ambition to thoroughly re-engineer colonial landscapes and subjects.

For a fortnight in late 1952, the tiny colony of The Gambia became the world's malnutrition science hub. From 19 to 27 November, the coastal town of Fajara, a few miles away from the colony's capital, Bathurst, was home to the second nutrition conference of the Commission for Technical Cooperation in Africa (CCTA), a body gathering colonial scientists and medical officers from Britain, Belgium, France, and Portugal.[1] Also attending this inter-imperial conference as observers were representatives of leading international organizations such as the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). The conference gathered together some of the most prestigious malnutrition experts of the time: among those present were Hugh Trowell (Uganda), André Raoult (Sénégal), Marcel Autret and W. R. Aykroyd from the FAO, and J. F. Brock and R. C. Burgess from the WHO. In order to gather as many experts as possible and minimize travel time, the conference was immediately followed, from 28 November to 3 December, by a meeting of the joint FAO/WHO

[1] Colonial Office, *Malnutrition in African Mothers, Infants and Young Children: Report of the Second Inter-African Conference on Nutrition held under the auspices of the Commission for Technical Cooperation in Africa South of the Sahara (CCTA), 19–27 November 1952* (HMSO, 1954). On the CCTA, see Jessica Pearson-Patel, "Promoting Health, Protecting Empire: Inter-Colonial Medical Cooperation in Postwar Africa," *Monde(s)* 7, no. 1 (2015): 213–30.

Expert Committee on Nutrition, a smaller group that included only the most illustrious experts.[2] The focus during these meetings was almost exclusively on malnutrition among infants and their mothers and, more specifically, on the question of Kwashiorkor, a devastating condition widely believed to be caused by protein deficiency, and known for the characteristic swollen bellies of its young victims.[3]

In these conferences, various aspects of Kwashiorkor were covered but the emphasis was almost solely on medical questions. Discussions focused on the disease's various stages, clinical features, etiology, and prophylaxis, while agricultural questions were, on the whole, barely addressed. Even though it was emphasized that the best long-term policy was to promote "increased production and better utilization of the locally produced vegetable or animal protein foods," the practical solution generally contemplated was that of supplementary feeding with milk powder.[4] The conferences illustrate how, from the early 1950s onwards, the "protein gap" among infants became the core concern of malnutrition science until voices started to emerge in the 1970s that criticized the discipline's narrow focus on specific deficiencies at the expense of a broader approach emphasizing the sheer lack of food.[5]

The Gambia conferences were thus part of a rising movement in the 1950s that critics have castigated as the "medicalization" of malnutrition. Several recent works on the history of nutrition science in colonial Africa have emphasized how, in the 1950s, the foregrounding of specific nutrient deficiencies—which could be "cured" through medical interventions—contributed to obscure the links between malnutrition and poverty, and diverted attention away from the dispossession and disruption of African societies by colonial domination.[6] By emphasizing quality over quantity, nutrition scientists often downplayed the issue of food scarcity to focus instead on cultural traits as well as personal dietary decisions that they constructed as deeply flawed. Here malnutrition was primarily framed as a biomedical problem, isolated from its wider social, economic, and political contexts. Interventions by colonial powers and international organizations thus increasingly centered on providing dietary supplements to cure malnutrition, rather than addressing poverty and food scarcity.[7]

Malnutrition, however, was not always conceived of in this way. As several scholars have shown, malnutrition in the British Empire, and particularly in colonial Africa, was widely recognized in the late 1930s as a broad economic, social, and agricultural problem.[8] At the

[2] Joint FAO/WHO Expert Committee on Nutrition, *Third Report* (WHO, 1953).

[3] J. F. Brock and M. Autret, "Kwashiorkor in Africa," *Bulletin of the World Health Organization* 5 (1952): 1–71. On Kwashiorkor, see Jennifer Stanton, "Listening to the Ga: Cicely Williams' Discovery of Kwashiorkor on the Gold Coast," *Clio Medica* 61 (2001): 149–71; Jennifer Tappan, *The Riddle of Malnutrition: The Long Arc of Biomedical and Public Health Interventions in Uganda* (Ohio, 2017); John Nott, "'No One may Starve in the British Empire': Kwashiorkor, Protein and the Politics of Nutrition Between Britain and Africa," *Social History of Medicine* 34, no. 2 (2021): 553–76.

[4] Marcel Autret and R. C. Burgess, "Supplementary Feeding Programmes in Africa: The Example of the Belgian Congo," in Colonial Office, *Malnutrition in African Mothers, Infants and Young Children*, 331.

[5] D. S. McLaren, "The Great Protein Fiasco," *The Lancet*, 13 July 1974, 93–96.

[6] Tom Scott-Smith, *On an Empty Stomach: Two Hundred Years of Hunger Relief* (Cornell, 2020), 110; John Nott, "'How Little Progress'? A Political Economy of Postcolonial Nutrition," *Population and Development Review* 44, no. 4 (2018): 771–91; Nott, "'No One may Starve'."

[7] Scott-Smith, *On an Empty Stomach*, 121–36; Lisa Haushofer, *Wonder Foods, The Science and Commerce of Nutrition* (California, 2023), 147–78; Lola Wilhelm, "'One of the Most Urgent Problems to Solve': Malnutrition, Trans-Imperial Nutrition Science, and Nestlé's Medical Pursuits in Late Colonial Africa," *The Journal of Imperial and Commonwealth History* 48, no. 5 (2020): 914–33.

[8] Michael Worboys, "The Discovery of Colonial Malnutrition between the Wars," in *Imperial Medicine and Indigenous Societies*, ed. David Arnold (Manchester, 1988), 208–25; James Vernon, *Hunger: A Modern History* (Harvard, 2007), 106–17; Jonathan E. Robins, "'Food Comes First': The Development of Colonial Nutritional Policy in Ghana, 1900–1950," *Global Food History* 4, no. 2 (2018): 168–88.

level of discourse at least, the link between poverty and malnutrition was clearly acknowledged, which at times led scientists and colonial officials to highlight the detrimental health consequences of colonialism. Before the war, curing malnutrition was seen as requiring a vast and concerted effort in favor of agricultural development, in particular to restore some balance between cash crops and subsistence crops. It is, therefore, essential to disaggregate the various strands of colonial nutrition science, as in fact both diagnoses and prophylaxes varied considerably, depending on the time, location, and the institutional roles of the experts involved.[9] In particular, one may ask how it was that the broad understanding of malnutrition that emerged during the 1930s gave way to a much narrower approach. In the 1950s, efforts to address malnutrition indeed shifted primarily to medical responses, while agricultural development policies became increasingly centered on cash crops and disconnected from health concerns.

Yet, during and immediately after the war, many British scientists and officials explicitly rejected the "medicalized" approach to malnutrition. Far from advocating a retreat into minor deficiencies, micro-nutrients, and medicalization, they emphasized instead the agricultural, economic, and social dimensions of colonial hunger. The work of the man behind the two Fajara conferences—B. S. Platt, head of the new Department of Nutrition at the London School of Hygiene and Tropical Medicine—epitomizes this broad and expansive view of the issue. One of Platt's pet projects was the nutrition Field Working Party (FWP) in colonial Gambia,[10] explicitly planned as a wide and ambitious interdisciplinary experiment that blended nutritional surveys, agricultural development, and social engineering. Platt's Gambian project approached the problem of malnutrition through a variety of medical, agricultural, technological, economic, and social dimensions, which he hoped would provide a template for dealing with malnutrition throughout the British Empire.

This holistic approach to malnutrition played a pivotal role in shaping the discourse and practice of development during this period. While many scientists acknowledged the recent and acute deterioration of the health of African populations, this diagnosis was not intended as a critique of colonial domination. On the contrary, it was used to advocate for large-scale agricultural development and even social engineering initiatives. In other words, after the war the broad conceptualization of malnutrition was used to articulate a refurbished vision of imperialism and trusteeship, and to support ambitious plans to reform colonial societies from the ground up. Yet, Platt's ambitions were so expansive that, when faced with a combination of unforeseen challenges on the ground and mounting economic difficulties in the metropole, his project became so vague and amorphous that its objectives grew increasingly unclear, if not entirely hollow. In the end, the internal contradictions of the project led to its ultimate failure and help to explain the retreat of nutrition science into the medical realm, while agricultural development was increasingly reoriented toward economic rather than health-focused goals.

Colonial malnutrition between the wars

The 1930s witnessed a growing interest in malnutrition among imperial scientists and officials, both in Britain and its colonies. In a context of mounting criticism of Britain's colonial record, nutrition emerged as the pivot of colonial "welfare" and was increasingly seen as requiring attention. Some of the most famous examples of this "discovery"

[9] Samuël Coghe, "Between Colonial Medicine and Global Health: Protein Malnutrition and UNICEF Milk in the Belgian Congo," *Medical History* 65, no. 4 (2021): 384–402.

[10] Veronica Berry, ed., *The Gambia Experiment, 1946–1950 and Other Papers* (Academy Books, 1998); Ann H. Kelly, "The Territory of Medical Research: Experimentation in Africa's Smallest State," in *Para-States and Medical Science Making African Global Health*, ed. P. Wenzel Geissler (Duke, 2015), 303–32.

of malnutrition in the interwar period included John Boyd Orr, then head of the Rowett Research Institute in Aberdeen, who conducted a nutritional survey in Kenya; Robert McCarrison who developed nutritional research in colonial India; and Audrey Richards who studied nutrition in Northern Rhodesia from an anthropological perspective.[11] These early forays into colonial nutrition were to take on a much broader ambit in the second half of the 1930s under the auspices of the Health Organization of the League of Nations, which in 1935 devised dietary requirements and initiated a range of nutritional studies.[12] While the work of the League focused predominantly on Europe, it called for the development of knowledge on nutrition in colonial empires as well. In Britain, this call was answered by the Colonial Office, which in April 1936 asked colonial governors to report on nutrition in the territories they governed. A "Committee on Nutrition in the Colonial Empire" was created a few months later and released an important report in 1939.[13]

In Britain, the problem of nutrition had achieved an increasingly high profile in the 1930s, in particular due to the pioneering work of John Boyd Orr who insisted upon a social reading of malnutrition and who also sat on the colonial nutrition committee. While interest in colonial malnutrition was initially more muted, it grew substantially in the second half of the 1930s. By the end of the decade, the problem was seen as even more critical in the colonies than in Britain or Europe, and as the overarching issue upon which the health and productivity of colonial populations depended. As Lord Hailey emphasized in his *African Survey* in 1938, "important as may be the influence of nutrition on health conditions in Europe, it does not exercise the same decisive effect on the factor of resistance as in Africa."[14]

Scientific discoveries during the interwar period had led malnutrition to be increasingly framed as a problem of specific deficiencies, whether of vitamins or minerals. The colonial nutrition committee, however, clearly did not favor this perspective, and the general view expressed in the report was that colonial nutritional problems were primarily caused by poverty and lack of food. While the report acknowledged the existence of specific deficiency diseases such as scurvy, pellagra, and beri-beri, it emphasized that the trees of clearly identifiable, specific deficiencies should not be mistaken for the forest of broader "deficiency states." As the report noted, "for every recorded case of a specific deficiency disease there are hundreds of cases of absence of full health due in part at least to malnutrition."[15] While the report used the term "malnutrition" rather than "undernutrition," the problem was primarily understood as due to food scarcity rather than simple nutrient imbalance. In both the final report and the individual reports on each colony, while terms like "undernutrition" and "undernourished" were rarely used, "malnutrition" was described as both a quantitative and qualitative problem. The report thus argued that the role of vitamins in health and disease had probably been exaggerated in recent years. It quoted F. G. Hopkins

[11] Worboys, "Discovery," 210; Cynthia Brantley, "Kikuyu-Maasai Nutrition and Colonial Science: The Orr and Gilks Study in Late 1920s Kenya Revisited," *The International Journal of African Historical Studies* 30, no. 1 (1997): 49–86; David Arnold, "The 'Discovery' of Malnutrition and Diet in Colonial India," *The Indian Economic and Social History Review* 31, no. 1 (1994): 1–16.

[12] Paul Weindling, "The Role of International Organizations in Setting Nutritional Standards in the 1920s and 1930s," in *The Science and Culture of Nutrition, 1840–1940*, ed. Harmke Kamminga and Andrew Cunningham (Rodopi, 1995), 319–32.

[13] Economic Advisory Council, *Nutrition in the Colonial Empire, First Report, Part I* (Cmd. 6050, 1939).

[14] Lord Hailey, *An African Survey: A Study of Problems arising in Africa South of the Sahara* (Oxford, 1938), 1114.

[15] Economic Advisory Council, *Nutrition in the Colonial Empire, I,* 36.

who, despite being one of the "discoverers" of vitamins, emphasized that "after all, quantity still counts. We cannot live on vitamins alone!"[16]

A related problem was the purported ignorance of consumers. In Britain, this was one of the key issues during the interwar period: were people malnourished because they were ignorant and made bad nutritional choices or simply because they were poor? The debate was by no means over by the late 1930s, and many explanations included a combination of the two, but overall the pendulum had swung towards the idea that the main reasons for malnutrition were poverty and lack of food.[17] Rationalizations of colonial malnutrition in the interwar period were not fundamentally different: native "ignorance" was often blamed but the predominant cause for malnutrition was "the low standard of living of many of [the empire's] inhabitants."[18]

This diagnosis meant that colonial authorities could not be entirely absolved from bearing part of the responsibility for malnutrition. The phenomenon was indeed widely acknowledged as having been made worse in recent years, in particular by the development of cash crops, which had undermined local populations' capacity for self-subsistence, while leaving them at the mercy of heavy fluctuations in world commodity prices.[19] The main point, however, was clearly not to point the finger at colonialism or argue for colonial retrenchment—far from it. Indeed, framing malnutrition as a problem of poverty was a powerful tool to justify more ambitious policies of development. Malnutrition would be conquered not simply through nutritional education or targeted additions to colonial diets such as the provision of milk, but thanks to an ambitious policy of agricultural and economic development to reform colonial lives and landscapes.

At the League of Nations in 1935, former Australian Prime Minister Stanley Bruce, Australian economist F. L. McDougall, as well as colonial public health experts Etienne Burnet and W. R. Aykroyd famously called for a "marriage of health and agriculture" in order to implement ambitious agricultural policies that would benefit both farmers and consumers. At the rhetorical level at least, this approach was also that of colonial authorities in Britain in the late 1930s.[20] In the face of growing criticism of the empire, malnutrition was decidedly a stain on Britain's imperial record. But it also provided a way out: the nutritional state of its colonial subjects was not simply a measurable index of the well-being of its populations; it was also an engine of development. It was hoped that agricultural development policies could raise the welfare of colonial populations while providing solutions to the whole Empire's economic problems through increased agricultural production.[21]

Yet, while colonial malnutrition was increasingly talked and written about, how it should be remedied in practice was far from straightforward. There was consensus, however, about

[16] Economic Advisory Council, *Nutrition in the Colonial Empire, I*, 22–23. The original quote is in F. G. Hopkins, "Science in Modern Life," *Nature*, 7 December 1935, 895.

[17] Madeleine Mayhew, "The 1930s Nutrition Controversy," *Journal of Contemporary History* 23, no. 3 (1988): 445–64; David Smith and Malcolm Nicolson, "Nutrition, Education, Ignorance and Income: A Twentieth-Century Debate," in *The Science and Culture of Nutrition, 1840–1940*, ed. Harmke Kamminga and Andrew Cunningham (Rodopi, 1995), 288–318.

[18] Economic Advisory Council, *Nutrition in the Colonial Empire Nutrition in the Colonial Empire, I*, 14. On the attempts to foster nutritional education in interwar colonial Africa, see Lacey Sparks, *Women and the Rise of Nutrition Science in Interwar Britain and British Africa* (Palgrave, 2023).

[19] Economic Advisory Council, *Nutrition in the Colonial Empire Nutrition in the Colonial Empire, I*, 46; Worboys, "Discovery," 218; Robins, "'Food Comes First'," 173.

[20] Joseph Morgan Hodge, *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism* (Ohio, 2007), 176.

[21] Colonial Office, *Nutrition in the Colonial Empire, I*, 12; Worboys, "Discovery," 216. For a recent overview of the historiography of colonial development, see Joseph Morgan Hodge, "Writing the History of Development (Part 1: The First Wave)," *Humanity Journal* 6, no. 3 (2015): 429–63 and Joseph Morgan Hodge, "Writing the History of Development (Part 2: Longer, Deeper, Wider)," *Humanity Journal* 7, no. 1 (2016): 125–74.

the need to acquire further knowledge and approach malnutrition from various disciplinary perspectives—biochemical, agronomic, and sociological. A first attempt at combining these different approaches to the problem was made in Nyasaland in 1938, with the attempt to develop an ambitious interdisciplinary nutritional survey of the colony.[22] The original impulse for the study had been provided by the anthropologist Audrey Richards in 1936. In 1938, however, the project was taken over by the Medical Research Council (MRC), and entrusted to B. S. Platt, a colonial doctor who had spent the previous six years in Shanghai studying malnutrition. Coming back from China in 1938, Platt had also played an important role in shaping the conclusions of the colonial nutrition committee, even though he was not formally part of it.[23] The Nyasaland survey was planned as a pilot operation, which would help refine survey methods and suggest lines of development that could be replicated elsewhere in the Empire. The ambitious plans for the Nyasaland project, however, collapsed because of a shortage of personnel induced by the war and did not even produce a published report. Beyond the immediate context of the war, in fact, the failure of the Nyasaland survey exposed a much deeper issue: how exactly could the different disciplinary approaches be integrated, and what actual policies might be derived from such research? There was, indeed, never any real coordination between the biochemical and the social parts of the survey. The survey's anthropologist Margaret Read considered Platt's plans impractical, while Platt thought that the sociological aspects of diet were largely irrelevant to development work. The nutritional survey should have served as a portent: a doomed attempt at quickly enforcing agricultural intensification projects.[24] Yet, while it did not provide any easy fix to the problem of colonial malnutrition, its failure did not mean that other ambitious plans for coupling nutrition and agricultural development work were dropped—quite the contrary. In fact, Platt emerged from the war as a leading authority on colonial malnutrition and moved to implement a new interdisciplinary program in The Gambia, advocating for a research and policy program in which health and agriculture were tightly associated.

Planning for postwar nutrition

While the resource requirements and shortage of personnel resulting from the war meant that colonial efforts to combat malnutrition were mostly put on hold, from 1943 onwards scientists were busy planning for an ambitious postwar policy. There were obvious differences in the various visions sketched at the time. Nevertheless, there was an overall consensus that malnutrition would be a critical issue in the postwar era. Addressing it was seen not only as a means of fending off accusations that imperial rule led to impoverishment, but also as a sound investment in the human and economic resources of the empire. There was broad agreement that dealing with malnutrition would require a much greater involvement of scientists coming from various disciplinary fields. With the help of increased metropolitan funding, these experts would have to implement ambitious schemes of development to enact sweeping changes in colonial agricultural and social structures. In short, colonial malnutrition was framed as a central problem of "native welfare" that required a broad, not purely medical, approach. As such, discussions about malnutrition served as an important backdrop against which the refurbished, welfare-oriented discourse of colonial development emerging in the early 1940s could be articulated.

During the Second World War, Britain experienced an unprecedented increase in state involvement in food-related matters. Experts and ministers extended government control

[22] Cynthia Brantley, *Feeding Families: African Realities and British Ideas of Nutrition and Development in Early Colonial Africa* (Heinemann, 2002).

[23] "Obituary: Professor B. S. Platt," *Nature* 223, 23 August 1969, 873–74; Joshua Nalibow Ruxin, "Hunger, Science and Politics: FAO, WHO, and Unicef Nutrition Policies, 1945–78" (PhD diss., UCL, 1996), 45.

[24] Brantley, *Feeding Families*, 130.

over food production, ancillary industries, transportation, imports, processing, distribution, and rationing. This so-called "scientific food policy," though often criticized and sometimes tragically harmful for the colonized, was largely regarded as a success in Britain, vindicating greater scientific and governmental intervention over food.[25] This policy inspired Platt and other nutrition specialists to imagine a program that would achieve a more complete wedding of agricultural and nutrition policies in the colonies as well. These ambitions resonated with a more global call to end malnutrition and make food a top priority of postwar reconstruction. In May 1943, delegates gathered at Hot Springs, Virginia, to lay the foundations of international postwar food policy. During the conference, malnutrition was framed not merely as a question of education or of individual health, but as a very broad economic and agricultural problem.[26] In Britain, the Hot Springs conference raised great hopes among nutrition specialists: as argued by Orr, who would become the first director of the FAO, this "epoch-making conference" made possible, at last, the emergence of a bold plan to end world hunger.[27] There seemed to be a growing consensus that addressing malnutrition would require comprehensive and coordinated strategies to better integrate health and agriculture, and probably nowhere more so than in the British Empire. As Orr argued, "Britain must play a great part, probably the leading part in applying the recommendations [of the Conference] on a world-wide scale." Since a "large proportion of the world's ill-nourished population" was to be found in its colonial empire, Britain had a duty to deal with the problem "in a way which will be an example to all nations holding rule over native populations."[28]

There was a growing sense that malnutrition would be one of the defining challenges of postwar colonial reconstruction, and that Britain's ability to address the problem would be a key yardstick to assess its legitimacy as an imperial power. A 1944 report to the Fabian Colonial Bureau, chaired at the time by Arthur Creech-Jones, who would become colonial secretary between 1946 and 1950, argued that the problem of colonial malnutrition was of "fundamental importance."[29] In line with the perspective that had surfaced in the late 1930s, the authors of the report argued that while "native ignorance" and "prejudices" undoubtedly contributed to malnutrition, the core of the problem lay elsewhere. Deficiencies in colonial diets, the report argued, were primarily caused by disruptions brought about by the colonial presence. The main culprit identified here was the development of cash crops, at the expense of subsistence agriculture, which had led colonial populations to rely too much on imported maize or ultra-processed rice and flour. But righting imperial wrongs, they argued, would involve more, not less, intervention. Malnutrition had to be tackled as a broad social and agricultural problem, and not simply as a medical one. The report emphasized that while the use "of concentrated supplements," such as yeast or vitamins, was justifiable to "meet immediate special needs," these interventions were no more than a "short-term expedient."[30] What was of paramount importance was to create conditions that would make it easier for colonial populations to have access to a "good mixed diet," through increased cultivation of food crops. Colonial "dietetic habits" would have to be entirely refurbished, and "prejudices" broken down, but the more important task was to "improve" and develop colonial agricultural systems.[31] Malnutrition

[25] E. M. Collingham, *The Taste of War: World War Two and the Battle for Food* (Allen Lane, 2011); Chris Otter, *Diet for a Large Planet: Industrial Britain, Food Systems, and World Ecology* (Chicago, 2020), 159–64.

[26] United Nations Conference on Food and Agriculture, *Final Act and Section Reports* (USGPO, 1943), 3.

[27] "The Hot Springs Conference," *Proceedings of the Nutrition Society* 2, no. 3–4 (1944): 163–76.

[28] John Boyd Orr, *Food and the People* (Pilot Press, 1943), 42.

[29] Fabian Society, *Hunger and Health in the Colonies. Report to the Fabian Colonial Bureau* (Fabian Publications, 1944), 19.

[30] Fabian Society, *Hunger and Health in the Colonies*, 14, 27.

[31] Fabian Society, *Hunger and Health in the Colonies*, 15.

could be conquered through a massive effort to develop colonial fisheries, to spread "modern" farming techniques, and to reorient local agriculture towards protein-heavy grains and increased animal production for milk, dairy, and meat.[32] This vision aligned closely with the refurbished vision of colonial development, as exemplified by the 1940 Colonial Development and Welfare Act, which framed native welfare and economic development as mutually reinforcing.[33] The attack on malnutrition would form the backbone of a new doctrine of trusteeship, where state and expert interventions would take center stage to promote economic development while shielding colonial subjects "from the supposed ravages of the market."[34]

In typical Fabian fashion, the report called for a significant "expansion in the agricultural and veterinary services, at present far too limited" to implement this ambitious and multifaceted approach.[35] While the Report praised the recent attention paid to colonial malnutrition, it lamented the scant practical actions that had been taken so far. In the final years of the war, there were, however, signs that the situation was improving, and the authors looked favorably upon the recent steps taken to coordinate scientific work on colonial malnutrition. There was, in fact, a lot of common ground between the Fabian expert-driven vision and that of Platt who, by the end of the war, was becoming a key figure in the institutionalization of colonial nutrition science. The Hot Springs conference, along with the relative success of the domestic food policy during the war, gave a strong impetus to the creation of new institutions to advance nutrition work across the empire. As part of these initiatives, Platt was appointed head of the new Human Nutrition Research Unit created by the MRC in February 1944, as well as of the newly created Department of Nutrition at the London School of Hygiene and Tropical Medicine.

In this position, which put him in command of unprecedented resources and institutional authority, Platt kept arguing for an integrated approach to malnutrition. According to him, the core problem was rather straightforward: malnutrition was primarily due to a lack of food, and the solution was therefore "an increase of food production."[36] Most other metropolitan and colonial nutrition specialists concurred. Hugh S. Stannus, a specialist in tropical medicine who had also worked on the Ministry of Health's wartime nutritional surveys, contended that "the rapid growth of knowledge about what have been called accessory food factors" had tended to encourage "too narrow a view of the problem of nutrition." "The march of the vitamins," Stannus argued, had "been attended by many casualties, and many derelict ideas lie by the roadside."[37] While it was recognized that specific deficiencies did occur in some parts of the Empire, these deficiencies were often combined so that the main problem was the overall lack of food.[38] During the winter of 1944–45, Platt made a two-month tour of the West Indies, his first visit to a colonial territory since Nyasaland. There he found a multiplicity of conditions associated with specific deficiencies of protein, calcium, or B vitamins. But he also determined, importantly, that these deficiencies were most often found in combination. As he saw it, it was very difficult to establish clear causal

[32] Michael Cowen and Robert Shenton, "The Origin and Course of Fabian Colonialism in Africa," *Journal of Historical Sociology* 4, no. 2 (1991): 143–74; Paul Kelemen, "Planning for Africa: The British Labour Party's Colonial Development Policy, 1920–1964," *Journal of Agrarian Change* 7, no. 1 (2007): 76–98.

[33] Hodge, *Triumph*, 179–206.

[34] Cowen and Shenton, "Origin and Course," 155.

[35] Fabian Society, *Hunger and Health in the Colonies*, 12.

[36] B. S. Platt, "The Nutritional Status of the Indigenous Peoples of the Colonies," in *Report of The Royal Society Empire Scientific Conference, June–July 1946*, 2 vols. (Royal Society, 1948), 1: 587–600.

[37] H. S. Stannus, "Malnutrition in Colonial Territories," *Proceedings of the Nutrition Society* 5, no. 1–2 (1946): 18–28, at 22.

[38] B. S. Platt, "Colonial Nutrition and its Problems," *Transactions of the Royal Society of Tropical Medicine and Hygiene* 40, no. 4 (March 1947): 381–88.

links between the shortage of a specific nutrient and a particular condition.[39] Short-term measures could be implemented to alleviate some of the worst effects of specific deficiencies, but these could not be easily circumscribed as discrete pathologies and isolated from the broader problem of a shortage of food. So, while Platt came back from the West Indies arguing in favor of the distribution of skimmed milk powder and yeast among malnourished populations, he saw this only as a short-term palliative, to be complemented by a much more ambitious "long-term programme" aimed at overhauling colonial foodways and agricultural systems.[40] Only through a "programme of increased production" could "optimal physiological efficiency" be secured. Nutrition could not, Platt adamantly claimed, be isolated from the wider agricultural and economic context in which it occurred: "a balanced diet must be worked out in relation to a balanced agriculture and in terms of a balanced trade."[41]

The ambitious vision for integrating health and agriculture was, if anything, reinforced during the war and Platt argued that combating malnutrition could only succeed by setting up a broad "combined operation."[42] Although the Nyasaland experiment had offered a warning that interdisciplinarity often looked better on paper than in its actual implementation, this vision endured and was supported by a wide range of scientists.[43] Others concurred with Platt that malnutrition was "not a question only of diet" but had endless social, agricultural, and ecological ramifications. Solving the problem would have to involve "the ethnologist, the economist, the agriculturalist, the parasitologist, the administrator and the educationalist, in addition to the biochemist."[44] Dietary surveys, for one, entailed many thorny issues, and meant that studies required detailed knowledge of the customs and social organization of the populations surveyed.[45] And since the alleviation of malnutrition was seen as depending first and foremost on agricultural transformations, nutritional research could not be separated from work in agricultural research and development. At the other end of the development spectrum, it was argued, agriculturalists needed to take into account the work of nutritionists in order to articulate their development projects around the physiological needs of the local populations.

Interdisciplinary research was required because of the endless scientific ramifications of the problem, but also due to the depth and magnitude of the changes contemplated in colonial agricultural systems. A key concern of colonial authorities and scientists was to find ways to devise developmental formulas that could be accepted by local populations. This point was most forcefully mobilized by anthropologists who had been closely involved in nutritional investigations since the late 1920s. As Audrey Richards and Raymond Firth argued, the "schemes of development" advocated by nutrition scientists required the adoption of new technologies and would involve considerable disruptions in land tenure or labor regimes, and anthropologists were uniquely placed to facilitate the cooperation of colonial populations.[46] Raymond Firth had, in fact, been a member of the Colonial Nutrition Research Committee before the war and, in 1945, went on a three-month trip to West Africa, arguing upon his return that the area's medical and social problems called for a great development of research, wedding biochemical, anthropological, and economic

[39] B. S. Platt, *Nutrition in the British West Indies* (HMSO, 1946), Colonial no. 195.
[40] Haushofer, *Wonder Foods*, 172–74; Platt, *Nutrition in the British West Indies*, 12.
[41] Platt, *Nutrition in the British West Indies*, 10.
[42] B. S. Platt, "The Colonial Nutrition Problem," *Proceedings of the Nutrition Society* 5, no. 1–2 (1946): 2–15, at 11.
[43] Brantley, *Feeding Families*, 130.
[44] Stannus, "Malnutrition in Colonial Territories," 23.
[45] Platt, "The Colonial Nutrition Problem," 12.
[46] Audrey Richards, "Sociological Factors," *Proceedings of the Nutrition Society* 5, no. 1–2 (1946): 28–34, quote from Raymond Firth 36–38.

approaches.[47] To be sure, this call was motivated by the desire of anthropologists to have a seat at the table of postwar imperial development.[48] But this precisely underscores how malnutrition had become a focal issue onto which various disciplines could project their relevance in the immense task of imperial reconstruction after the war. Described as both a symptom and a cause for what was seen as economic backwardness, malnutrition provided support for the articulation of a new, more benevolent imperial vision, in which welfare and prosperity could be reconciled.[49]

A laboratory bench

For this ambitious program to be successfully implemented, there was a need for leadership and coordination. According to Platt, the priority was to gather data on colonial malnutrition in order to devise a set of practical solutions. He believed that this could be achieved through the survey of a small area or village, followed by experiments to improve agricultural productivity and standards of living, which could then be replicated throughout the Empire.[50] In Platt's perspective, the problem—and potential solutions—were presented as broadly similar across colonies. Indeed, one of the advantages for metropolitan experts like Platt in framing malnutrition as primarily due to poverty, rather than focusing on specific deficiencies, was that it provided a universalizing framework, which was undoubtedly an advantage when applying for state funds. Like many other postwar development projects, the Gambian experiment was not an end in itself, but a means of devising a development formula that could then be applied elsewhere.[51]

Following the rising wave of interest in colonial malnutrition, nutritionists and nutrition councils and committees had been appointed throughout the Empire in the late 1930s, but they were understaffed and their work was generally considered unsatisfactory.[52] While imperial and international organizations elevated the question of nutrition as a central aspect of the world's postwar reconstruction, on the ground, the initial spurt of enthusiasm was gradually subsiding and the Empire-wide campaign against malnutrition was plagued by discouragement and resignations. Many of these resignations were due to the fact that nutrition officers were almost all women, whose wages were heavily reduced when they got married and thus they often preferred to resign. But there was also a deeper underlying problem. Mrs Ellis, the nutrition officer for Nigeria, for instance, resigned because her "ardour had been damped," by "failure to enlist interest and support" from the colony's government. There was also dissatisfaction with the lack of coordination from the metropolis. Many colonial nutritionists attempted nutritional surveys but received no clear directions as to how these ought to be conducted.[53] It was felt that the creation of a central unit in London could provide nutrition officers with guidelines and coordinate efforts against malnutrition. This central unit would have to be associated to at least one colonial field research station. Work conducted there would build upon the lessons of the Nyasaland survey and

[47] Raymond Firth, "Social Problems and Research in British West Africa," *Africa: Journal of the International African Institute* 17, no. 2 (1947): 77–92.

[48] On anthropology and postwar colonial development, see Freddy Foks, *Participant Observers: Anthropology, Colonial Development and the Reinvention of Society in Britain* (California, 2023), 130–51.

[49] Hodge, *Triumph*, 207–53.

[50] Platt, "The Colonial Nutrition Problem," 11–12.

[51] Nick Cullather, *The Hungry World: America's Cold War Battle against Poverty in Asia* (Harvard, 2010), 5.

[52] Lord Faringdon, "East and West Africa: Housing Problems," 19 July 1944, Parliamentary Debates, Lords, 5th ser., vol. 132, col. 1007.

[53] Platt, "Nutritional Status," 601–07; M. W. Grant, "Report on the Work of the Nutritionists Trained at the Human Nutrition Research Unit for Work in Various Colonies," 6 January 1948, GB 0809 Nutrition/04/01/10/02, The London School of Hygiene and Tropical Medicine Archives (hereafter LSHTM).

promote interdisciplinary research, but shift the focus away from the surveying aspect towards the applied dimension. Having initially considered Trinidad for the location of this Field Working Party (FWP), Platt eventually settled on The Gambia, which he considered ideally suited to the task.[54]

The Gambia, a tiny colony populated by less than 300,000 people, had, as claimed by a former governor, suddenly "been brought into the limelight."[55] In January 1943, US President Franklin D. Roosevelt, on his way to the Casablanca conference, had paid a short visit to The Gambia and been deeply shocked by the poverty he had witnessed there. He mentioned the problem to Churchill when they met in Morocco and then repeatedly took the Gambian case as an example of what was wrong with European colonies in Africa.[56] The Gambia had suddenly become the poster child of African poverty at a time when the legitimacy of the British Empire was increasingly under attack. As a Labour peer asked in the House of Lords, "why are such miserable medical conditions allowed to prevail" among the people of West Africa, who were, he reminded his audience, an "advertisement for the British Empire (and) shall stand as a justification of our right to be the heads of that Empire"?[57] The colony, in fact, was seen as offering a small and amenable version of all the problems in tropical Africa. The Gambia's economy had been heavily transformed by the growth of groundnuts, a cash crop to which farmers devoted considerable land and labor resources. This made the country heavily dependent upon food imports and the population suffered from a variety of conditions associated with malnutrition.

Once an outpost of the slave trade, Bathurst (now Banjul), located at the Gambia River's mouth had been turned by the British into a trading post following abolition and the end of the Napoleonic wars. The economy of the region had been sharply transformed when groundnut cultivation was introduced along the Gambia River in the early 1830s. The presence of the river made it relatively easy to move groundnuts to the Atlantic, and cultivation increased rapidly: by the end of the nineteenth century, the country was exporting 30,000 tons of groundnuts each year.[58] Groundnut exports kept on increasing in the twentieth century, and by the early 1930s, The Gambia was, despite its tiny dimensions, the sixth largest producer of groundnuts in the world. Following the Great Depression, the sharp drop in the price of agricultural commodities, and of oil crops in particular, was devastating for Gambian cultivators, and made it painfully clear how vulnerable they were to fluctuations in world prices.[59]

The Gambia's increasing reliance upon groundnuts compounded the colony's pressing food shortages in several ways. Land and labor were increasingly allocated to groundnut cultivation, to the detriment of food crops. The importance of the groundnut trade also meant that food consumption was poorer in quality, since the crops first sacrificed to groundnuts were millet and sorghum, leading to a less varied diet in which rice (both cultivated and imported) made for an ever-larger share of the population's fare. Food shortages were particularly acute during the "hungry season," due to the very high seasonality of rain patterns, marked by a long dry season and a short wet one that lasted from June to

[54] Platt, *Nutrition in the British West Indies*, 13; The National Archives (hereafter TNA): CO 859/115/5, "Minutes of Informal Meeting of Gambia Nutrition Committee," 18 May 1945.

[55] Thomas Southorn, "The Gambia, Earliest British Settlement in West Africa," *Journal of the Royal Society of Arts* (1943): 530–31.

[56] Donald Wright, "That Hell Hole of Yours," *American Heritage* 46, no. 6 (1995): 47–53.

[57] Lord Ammon, debate on "West Africa," House of Lords, 1 August 1944, Parliamentary Debates, Lords, 5th ser., vol. 133, col. 33.

[58] Donald R. Wright, "The Foundations of Modern Gambia: British Rule, 1816–1965," in *State and Society in the Gambia since Independence*, ed. Abdoulaye Saine, Ebrima Ceesay and Ebrima Sall (Africa World Press, 2013), 5.

[59] Kenneth Swindell and Alieu Jeng, *Migrants, Credit and Climate: The Gambian Groundnut Trade, 1834–1934* (Brill, 2006).

mid-October, during which food reserves from the preceding year's harvest were almost exhausted. As many agricultural and nutritional experts argued, these food problems were avoidable and had been greatly compounded in recent years by the colony's increased integration in the world economy. For R. A. Webb, a member of the Department of Agriculture of The Gambia, the subsistence levels of the Gambian population had markedly declined since the early 1930s: "some twenty years ago some areas did not experience a hungry season, a feature which is now becoming more regular in its occurrence and of longer duration."[60]

In July 1946, a pair of scientists visited The Gambia to assess its suitability as the future site for the contemplated FWP: Dr William Berry, a colonial medical officer who had been a member of the Nyasaland survey, and Hugh Bunting, a South African soil scientist who later became the chief scientific officer of the groundnuts scheme in Tanganyika. The two scientists, who represented respectively medical and agricultural expertise, were charged by the Colonial Medical Research Committee with examining various sites for the project's implementation.[61] They duly reported two months later and recommended that the FWP be set up in a small village called Genieri situated around 200 kilometers upstream on the south bank of the river Gambia. In Genieri, as in many other places bordering the river, groundnuts were cultivated on savannah soil in the uplands above the village and intercropped with millet, while rice was grown in seasonally flooded lowlands. Early millet and upland rice were grown and harvested in early August to shorten the hungry season, while late millet and swamp rice were harvested later and were supposed to feed the village until the next year's harvest. When rain began in late May, rice was planted in the uplands and transplanted a month later into the swamps. This period was thus marked by the highest intensity of labor, and thus of energy requirements, alongside the lowest amount of food available.[62]

While the problems encountered by Genieri and Gambian farmers were the product of a complex interplay between environmental, economic, and social factors, the local specificity of the situation was downplayed by Platt and the scheme's planners who claimed that the village typified the problems of colonial malnutrition in general. The particularly small size of the territory, the very strong seasonality of its rain regimes, and the extent to which it had become dominated by one cash-crop meant that The Gambia was often seen as the "tropics in miniature" and a particularly suitable laboratory for research into colonial problems.[63] The relative political quiescence of the colony also made it an appealing site for a vast and ambitious agricultural and social experiment. If British scientists conceived of Africa as a "living laboratory," then The Gambia was their laboratory bench, a purportedly controlled yet representative environment, which could provide insights into solving the world's nutrition problem.[64] As R. A. Webb, a soil scientist in The Gambia's Department of Agriculture put it: "the present situation which confronts The Gambia is a replica in miniature of the situation confronting the whole world."[65]

Platt, in particular, was in no doubt that the FWP was "more than a Gambian project," and represented only the first step in a much wider endeavor. Genieri farmers were thus guinea pigs for an experiment with Empire-wide implications. This was how Platt presented

[60] R. A. Webb, "A Discussion on Present Trends in Agriculture in Gambia with Suggestions for Research to Assist Further Development," August 1950, GB 0809 Nutrition/04/01/06/01, LSHTM.

[61] W. T. C. Berry and A. H. Bunting, "Suggestions for a Field Working Party in Gambia Protectorate," September 1946, GB 0809 Nutrition/04/01/03/01, LSHTM.

[62] Margaret Haswell, *The Nature of Poverty: A Case-History of the First Quarter-Century after World War II* (Macmillan, 1975), 59.

[63] Kelly, "The Territory of Medical Research," 306.

[64] Helen Tilley, *Africa as a Living Laboratory: Empire, Development and the Problem of Scientific Knowledge, 1870–1950* (Chicago, 2011); Haswell, *The Nature of Poverty*, 91.

[65] Webb, "A Discussion on Present Trends."

the scheme to the Colonial Office, which bankrolled it with funds made available through the 1940 Colonial Development and Welfare Act. As Platt argued, "the results of investigation made in this territory should lead to the improvement of the nutrition of Colonial peoples generally."[66] The Colonial Office, indeed, insisted that for the scheme to be funded, it had to provide replicable data: the FWP had "to lay a pattern which can be copied [..] throughout West Africa."[67] This was also how the project was presented to international organizations. At the 1948 FAO nutrition conference, "the work of the Field Working Party, though at present confined to a small area of a small territory in Africa," it was claimed, "may show one of the possible ways by which the wealth and status of rural villages may be improved though improved nutrition, in other tropical areas."[68] In fact, initially the Gambian experiment followed to the letter the vision of the newly created FAO and Platt explicitly presented his plan as following "the lines laid down" at the founding FAO Conference, held in Quebec in October 1945.[69] During this meeting, which Platt attended, and where John Boyd Orr was elected as the organization's director-general, it was indeed emphasized that the best method for tackling malnutrition was to choose small communities living "in typical areas" and to conduct "comprehensive surveys of health conditions and of natural resources." This survey work should then be followed "by planned efforts" geared at "the intensive development of human and natural resources" in order to improve the standard of living of the selected communities. These "experimental areas" were then meant to provide both "training grounds" for nutrition specialists, as well as "working models" meant to be emulated elsewhere and implemented "on a wider scale."[70]

A "human experiment"

The plan was not intended to be merely replicable; it was meant to be broad and ambitious as well. The health of Genieri's inhabitants, which stood as a metonym for the colonial nutrition problem, would be tackled by an integrated approach that extended beyond simple medical and agricultural interventions. For its proponents, the project represented a form of social engineering. As the plan unfolded, nutrition and even health increasingly appeared as a pretext for a much broader design—one focused not simply on improving health or boosting agricultural productivity, but on social and psychological objectives, leading the governor of The Gambia to describe the initiative as "a bold experiment in the technique of administration."[71]

The first visit paid by Berry and Bunting to The Gambia had convinced them that while specific nutritional deficiencies (rickets in particular) existed, these were "mild in character" and the key problem lay elsewhere. As they saw it, this was primarily one "of total fuel value," and so Berry and Platt increasingly used the terms "under-nourishment" and "undernutrition" to distinguish this condition from "mal-nourishment."[72] The solution called for an expansive approach, touching "on almost every aspect of community life."[73]

[66] "Colony of the Gambia—Minutes of a Meeting, 24 January 1947," GB 0809 Nutrition/04/02/03, LSHTM.

[67] "Letter from H. A. Harding to B. S. Platt," 28 November 1947, GB 0809 Nutrition/04/01/03/17, LSHTM.

[68] Dean Smith, "Brief Statement Concerning the Nutrition Field Working Party, Gambia," FAO Nutrition Conference, Montevideo, Uruguay, July 1948, GB 0809 Nutrition/04/01/06/02, LSHTM.

[69] Platt, *Nutrition in the British West Indies*, 2.

[70] "Report of Commission A to the Conference," *Report of the Conference of FAO, Quebec, 1945*, https://www.fao.org/3/x5584E/x5584e06.htm.

[71] TNA: CO 859/231/1, Percy Wyn-Harris, Governor of the Gambia, to James Griffiths, Secretary of State for the Colonies, 19 May 1950.

[72] Berry and Bunting, "Suggestions for a Field Working Party."

[73] "Notes by Dr. Platt for Future of the Applied Nutrition Unit, February 1946," GB 0809 Nutrition/04/01/10/05, LSHTM.

The FWP was supposed to provide information on the natural resources of the country, methods of cultivation and food processing, the labor costs of various crops, and even broader questions such as the community's "capacity for change and development."[74] In order to implement this ambitious project, the plan was to hire a medical officer, an agronomist, a nutritionist, an animal husbandman, a food technologist, a costings assistant, an anthropologist, and numerous African assistants. These plans, however, had to be severely revised as the FWP was plagued by a wave of resignations, and in the end only three European officers remained in Genieri. But these difficulties lay ahead, and the initial plans for The Gambia's FWP were highly ambitious.

The diagnosis of insufficient food production and temporary labor shortages called for a wide development project to increase "the producing capacity of the peasant" through the introduction "of modern agricultural systems."[75] The FWP's initial aim was to introduce mechanization in the cultivation of rice in the river swamps. As seen before, the most important constraint identified by colonial administrators was the highly seasonal distribution of labor. The plan was therefore to use tractors during the first stages of land preparation, ploughing and planting to break the wet season labor bottleneck, so that villagers could have more time for hand weeding and rice cultivation. These plans for introducing tractors coalesced with a general enthusiasm for mechanization. Also involved in the inception of the Gambian project was A. J. Wakefield, who had been inspector general of agriculture in the West Indies when Platt had visited there. He was now in charge of planning the infamous Tanganyika groundnuts scheme, which would turn out to be a colossal failure of colonial development. Upon his return from Tanganyika, Wakefield participated in the first meetings devoted to the Gambian project and was adamant that this should be a "courageous experiment in mechanisation." Not everyone shared his enthusiasm and some at the Colonial Office expressed concerns about the overly ambitious nature of the scheme, arguing that it was premature to set up a development plan before surveys and experimentations had even started. But these objections were overruled since the point was not simply to devise the best technical methods adapted to Genieri, but to develop general rules for the transformation of village communities throughout the empire. According to Platt and Wakefield, this required that the project "should be on a sufficiently extensive scale and sufficiently wide in scope to give adequate data and costings for application of the experimental work to a community."[76] Gradual and cautious approaches, it was felt, were incompatible with the need to create a project that could be put on display and would provide a replicable development formula.

The Gambian experiment, in fact, was no more a purely agricultural project than it was a purely medical one. Berry, who became responsible for the implementation of the plan on the ground, argued that "it should be made clear from the start that though we work under the name of Nutrition, that is in a sense a pretext for a fuller field of activity."[77] Reviewing the first few months of the project, he explained that "our problem is not the technical one of working out the best machines and fertilisers, etc., to use." Both Platt and Berry saw the FWP "as a social rather than agricultural or nutritional experiment." The most important point of the project was to draw lessons on how modern agricultural techniques could be best grafted onto a village community, and study how far, and through which methods, it was possible to "[modernize] the African and his society so as to fit him into Modern

[74] TNA: CO 859/231/1, "Nutrition Field Working Party in the Gambia," undated.

[75] Nutrition Field Working Party Gambia, "Preliminary Report of Medical Investigations, 1947–50," GB 0809 Nutrition/04/01/04/01, LSHTM.

[76] "Colonial Medical Research Committee Nutrition Sub-Committee," 25 September 1946, GB 0809 Nutrition/04/02, LSHTM.

[77] "Personal Note from Dr Berry to Dr Platt on His Views on Nutrition Working Parties," undated [1946?], GB 0809 Nutrition/04/06, LSHTM.

farming:" The Gambian project was not "an agricultural demonstration plot," but "a human experiment."[78] Edward Mellanby, secretary of the MRC (which also supervised the plan), described the project as a "big social experiment."[79] "Every activity of village life," it was hoped, would be experimented upon "with the aim of producing an improved, if not model village society, a model which could, with modification, be applied elsewhere in Africa."[80] Undernutrition was thus conceived of as a total social problem and, as such, was said to require a deep form of social engineering to create new colonial subjects and communities.

While, as seen before, nutritional problems had often been blamed on the paramount importance of cash crops, Platt and Berry were concerned with another issue that they deemed even more important: "the apathy of the rural African."[81] Berry expanded on this point in a note that combined a superficial rebuke of the British imperial record with heavily racist stereotypes. Before colonial conquest, he explained, the "primitive people" of Africa had been periodically forced by famine and war to overcome their natural "apathy," but colonial paternalism had allegedly put an end to this. He seemed to lament the fact that as wars had been eradicated thanks to the British presence, and as the management of famines and epidemics was now the responsibility of the colonial conqueror, "we have as it were taken a race which used to live in a world of black-and-white stimuli and put it in a world of varying tones of grey." According to Berry, vitamins and even tractors could only go some way towards solving the problem; what was truly needed was to "plant the barb of ambition under each man's skin."[82] The ultimate aim of the experiment, then, was not simply to identify specific nutritional problems or experiment with a particular agricultural technique. It was also to throw light upon the question of the "effective incentives for this type of community."[83] Berry explained that to overcome the alleged "native apathy," it would be necessary to "tickle the native fancy" by making available new consumer goods to instill a "lust for money" and encourage African populations to "work harder."[84] The aim of this experiment, then, was not so much to provide vitamins or even to develop the land but to guide and accelerate "village evolution."[85]

This vision was central to the much broader goals of development, which in the period after the Second World War expanded far beyond the original Chamberlainite focus on "developing the estates," and meant that the object of development was no longer simply the colonial landscapes but the colonized themselves. The point of "development" was to "develop the African."[86] As several scholars have shown, nutrition science played an important role in this process of making colonized subjects into "developmental subjects."[87] Development thus necessitated technocratic forms of "calculability" so as to assess progress.[88] Nutrition science was one powerful and seemingly scientific way of

[78] "Progress Report, Nutrition Field Working Party, Gambia," 1 March 1947–31 August 1947, GB 0809 Nutrition/04/01/04/03, LSHTM.

[79] "Colony of the Gambia," 24 January 1947, GB 0809 Nutrition/04/02/03, LSHTM.

[80] TNA: CO 859/231/1, Harris to Griffiths, 19 May 1950.

[81] TNA: CO 859/231/1, "Informal Notes prepared for Visitors to NWFP Genieri," September 1950.

[82] "Personal Note from Dr Berry to Dr Platt," [1946?], LSHTM.

[83] TNA: CO 859/231/1, Gambia Field Working Party, Committee of Management, 3 July 1950.

[84] "Personal Note from Dr Berry to Dr Platt," [1946?], LSHTM.

[85] Platt, "The Colonial Nutrition Problem," 13.

[86] Viscount Trenchard, debate on "West Africa," House of Lords, 1 August 1944, Parliamentary Debates, Lords, 5th ser., vol. 133, col. 53; Jeff D. Grischow, "Late Colonial Development in British West Africa: The Gonja Development Project in the Northern Territories of the Gold Coast, 1948–57," *Canadian Journal of African Studies* 35, no. 2 (2001): 282–312.

[87] Sherene Seikaly, *Men of Capital: Scarcity and Economy in Mandate Palestine* (Stanford, 2016), 79; Cullather, *Hungry World*, 41–42.

[88] Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (California, 2009), 80–119.

making the bodies of developmental subjects legible and computable. In Genieri, the villagers were thus regularly weighed, their consumption of food broken down into so many nutritional categories, and their physical activity closely monitored to compute the energy expenditure involved in various agricultural and domestic tasks.[89]

The health of the villagers thus shifted from being an end in itself to becoming a measurable index of development. It quickly became obvious, in fact, that the health of the villagers was not itself a priority for the FWP. In the first year, a dispensary was created in Genieri, but it was not viewed as an element to improve the general health of the population. Rather, it was seen as a "way in" to gain "the confidence of the people." Once this confidence had been won, the dispensary closed in 1949.[90] The health benefits derived by the villagers from the presence of the FWP were, in fact, far from straightforward. Surveys conducted in Genieri showed that the majority of villagers gained weight following the onset of the experiment, thanks to the distribution of rice to the villagers working on the FWP's sites. This was not without drawbacks, however. The extra rice made available to the villagers meant that the share of millet and sorghum, sources of B vitamins, declined at the expense of highly milled imported rice, which was more filling but also poorer in vitamins. The medical surveys conducted in the village made it plain that, while the inhabitants were, on the whole, gaining weight, there were also increasing signs, throughout the village, of symptoms of vitamin B deficiencies.[91]

Things fall apart

Not only did maintaining the health of the villagers tend to fall by the wayside, but even the project's goal of producing more food tended to recede. Indeed, the nutritional dimension of the project increasingly appeared as a pretext for technical, agricultural, and economic development. The initial project had been predicated on the introduction of mechanization to boost the production of rice. Tractors were borrowed from a nearby experimental station, and various trials of crops and fertilizers started in early 1947. These schemes encountered significant difficulties from the outset, the most important of which was that tractors proved to be totally impractical in the swamps. After only one season of experimenting with rice, Berry and Platt decided in August 1947 to switch the emphasis from the production of rice for local consumption to that of groundnuts for export.[92] This shift represented an abrupt and complete turnabout on the discourse on colonial nutrition, which had been dominated over the past ten years by the importance of redressing the balance between cash crops and food crops.

An important factor in this decision was related to timing, and the need to come up with quick results for display and replication. The initial seed fund was only for a three year period, which meant that there was no time to waste: Platt and Berry needed the large-scale mechanization project to work immediately. The grandiose claims made about the project, touted as a way to cure malnutrition throughout the Empire, also meant that it started to attract nutrition specialists from other colonies. The FWP quickly faced "a great deal of pressure."[93] Since the initial rice scheme was deemed too complicated to produce immediate and visible results that could be displayed to the colonial medical establishment,

[89] R. H. Fox, "A Study of the Energy Expenditure of Africans Engaged in Various Rural Activities, with Special Reference to Some Environmental and Physiological Factors which may Influence the Efficiency of their Work" (PhD diss., University of London, 1953).

[90] TNA: CO 859/231/1, Nutrition Field Working Party, "Note by Margaret Haswell," December 1949.

[91] "Preliminary Report of Medical Investigations, 1947–50," LSHTM.

[92] "Nutrition Sub-Committee of the Colonial Medical Research Committee," 21 August 1947, GB 0809 Nutrition/04/01/03/13, LSHTM.

[93] TNA: CO 859/231/1, Gambia FWP Committee of Management, 23 January 1950.

to the British government, and to international organizations it was dropped only a few months after its inception.

Another factor for the switch from rice to groundnuts was related to gendered labor regimes in the region. Rice growing in Genieri and throughout The Gambia was a task overwhelmingly performed by women. This was largely the result of the introduction of groundnuts, which had created a pattern of spatial segregation and a strongly gendered division of labor.[94] By the mid-twentieth century, the uplands were overwhelmingly farmed by men, who cultivated groundnuts there, intercropped with millet and sorghum. Rice cultivation in the lowlands, on the other hand, was a task performed almost entirely by women. Yet agricultural officers in The Gambia lamented the fact that "women are more conservative than men and less accessible to ideas put forward by a male European officer." "More individualistic" women "interesting themselves only in their own or their family's patch of ground" were thus not deemed the best targets for agricultural development. Since village cooperation was judged an essential feature of the project, it was felt that men would be more easily swayed by mechanized agricultural development.[95]

The sharp rise in the price of groundnuts also made the switch from rice to groundnuts appear as a more lucrative venture at a time when Britain was beset with problems of rationing and food shortages, and facing a severe currency crisis. The reorientation of the Gambian scheme was in fact part of a broader shift in development policy, which placed renewed emphasis on developing colonial exports to meet the nation's food and dollar shortages.[96] The change of plans occurred almost at the same time as the decision by the newly established Colonial Development Corporation to set up its ill-fated poultry farm in The Gambia. Launched in early 1948, the plan aimed to create a large-scale poultry farm from scratch, producing 20 million eggs and 1,000,000 pounds of chicken annually. These products were meant almost entirely for export to Britain, in an attempt to provide cheap eggs and chicken to British consumers, while addressing poultry feed shortages.[97] Although the poultry farm was not directly related to Platt's scheme, these projects and reorientations were part of a broader inflection in development policy and discourse, in which the economies of Britain and its African colonies were increasingly presented, as Chancellor of Exchequer Stafford Cripps put it in November 1947, as so "closely interlocked" as to form a single economic bloc. This meant, according to Cripps, that Africa represented "a great potential for new strength and vigour" for the British and Western European economies, but also that African colonies would automatically benefit from revived British prosperity.[98] In practice, this often meant prioritizing British needs over colonial ones, but the switch could at least be dressed up as a win-win situation.[99]

Despite the switch from rice to groundnuts, the FWP's leaders clung to the claim that their project was primarily driven by the interests and welfare of Genieri villagers. Berry and Platt maintained that the scheme's new orientation did not fundamentally alter the

[94] Judith Carney, "Converting the Wetlands, Engendering the Environment: The Intersection of Gender with Agrarian Change in the Gambia," *Economic Geography* 69, no. 4 (1993): 329–48.

[95] TNA: CO 859/115/5, "Farming Problems," July 1945, 18. On gendered views of development see, for example, Barbara Bush, "Motherhood, Morality, and Social Order: Gender and Development Discourse and Practice in Late Colonial Africa," in *Developing Africa: Concepts and Practices in Twentieth-Century Colonialism*, ed. Joseph M. Hodge, Gerald Hödl and Martina Kopf (Manchester, 2014), 270–92.

[96] Webb Jr., "Ecological and Economic Change," 552; Hodge, *Triumph*, 248.

[97] Michael Havinden and David Meredith, *Colonialism and Development: Britain and its Tropical Colonies, 1850–1960* (Routledge, 1993), 292.

[98] Stafford Cripps, November 1947 quoted in John Kent, "Bevin's Imperialism and the Idea of Euro-Africa, 1945–49," in *British Foreign Policy, 1945–56*, ed. Michael Dockrill and John W. Young (Macmillan, 1989), 58–59.

[99] Nadja Durbach, *Many Mouths: The Politics of Food in Britain from the Workhouse to the Welfare State* (Cambridge, 2020), 219–23.

nature of their experiment, since it would still contribute to The Gambia's economic development and to instilling a sense of entrepreneurship among local farmers. Gambian villagers might not be able to produce more rice, but they would have more cash to pay for extra food and access to healthcare and social services.[100] While discourse on colonial malnutrition, before and during the war, had emphasized the drawbacks of dependence on cash crops, it had never, in fact, been Platt's ambition to promote a decrease in groundnuts, but simply to redress the balance by developing the production of food crops. Criticisms of cash crops had been toned down in the scheme's leaders rhetoric and partly replaced by an emphasis on the purported failings of African peasants. The psychological and social objectives of the scheme were becoming increasingly central, and they could accommodate the swift policy reversal rather easily. The project was so broad and amorphous that it was flexible enough to accommodate reversals in strategies without appearing unduly contradictory. Since malnutrition was believed to be primarily due to poverty, any measure seen as contributing to raising the villagers' income was viewed as a way to cure the disease. Framing malnutrition as a problem of poverty and lack of food could lead to a condemnation of cash crops and integration into world trade. But it turned out that in a different context, marked by food shortages in Britain and rising commodity prices abroad, it could equally be used to legitimize going all-in for this.

This rhetorical gymnastics could not, however, conceal the mounting difficulties encountered by the FWP on the ground. For one, data collection on the diet and activities of the villagers, was beset with inconsistencies, omissions and errors. Margaret Grant, Platt's research assistant in London, lamented that most of the nutrition data collected was "not worth the paper they were written on."[101] More broadly, it gradually dawned upon the team's members and coordinating institutions that the interdisciplinary program had probably been overly ambitious. Since the whole operation was set up as a social experiment, rather than a technical or medical one, the original plan was to have a sociologist and an economist as full members of the team. The aim of appointing a sociologist was not to study the traditions and customs of the village but rather to help assuage concerns about its "unpredictable future" and to mitigate any negative "reactions to 'newfangled' methods and gear."[102] In April 1948, Kenneth Little, a student of Raymond Firth at the London School of Economics, visited Genieri to advise on how sociology could be included in the activities of the FWP, but he was rather dubious. Genieri, he argued, could not be a considered a "social laboratory" because of the intensive nature of the experiment, which interfered greatly with the "'normal' processes of village life." The experiment, he thought, was probably of use for "technical" but not for "sociological purposes," and argued that the aims of the FWP clearly needed some clarifying. In the end, no sociologist was appointed to work in Genieri.[103]

Even at the technical and agricultural level, ambitions were quickly scaled down. Berry's project, in August 1947, was to cultivate 600 acres of groundnuts, but when Wakefield visited the village a few months later, he strongly advised against such an unrealistic plan.[104] Yet, even with a reduced acreage, the plan was a disastrous failure. The use of tractors proved to be entirely unprofitable, as yields were disappointing and the benefits were vastly outweighed by the costs of mechanization.[105] Experiments with fertilizers were no more heartening, and trials showed that 80 percent of the chemicals applied were

[100] W. T. C. Berry, *Before the Wind of Change* (Halesworth, 1984), 97.
[101] M. W. Grant, "Genieri Food Consumption Surveys," 19 August 1950, GB 0809 Nutrition/04/01/05/09, LSHTM.
[102] "Progress Report," 1 March 1947–31 August 1947, LSHTM.
[103] Kenneth Little, "Report on a Visit to the Gambia," April 1948, GB 0809 Nutrition/04/01/08/01, LSHTM.
[104] TNA: CO 537/2594, "Statement by W. T. C. Berry," 24 April 1948.
[105] Haswell, *The Nature of Poverty*, 68.

almost entirely leached away. The end result was that the groundnuts grown by traditional methods produced higher yields than those farmed using tractors and fertilizers.[106]

Faced with these difficulties, the members of the FWP were "uneasy," and the mood among the team became acrimonious. Personal animosities soon became acute, in particular between Berry and the agricultural officer, Margaret Haswell. The problems were not merely personal, however, and revolved around the nature of the project. While Platt argued that it should continue and be accompanied by a precise economic assessment of costs and profits, Berry expressed doubts about the benefits of persisting with large-scale mechanization. In his own account, as well as in the collection of archival documents assembled by his wife Veronica, Berry is cast as the voice of caution arguing for gradual experimentation against Platt's grandiose and unrealistic schemes.[107] Berry indeed thought that the experiment should proceed gradually so as not to break "down the structure of native society." Yet he was not opposed to groundnuts cultivation, nor to the introduction of mechanization. In fact, he strongly supported both, and his motivation to engineer new colonial subjects was no less ambitious. His warnings may in fact be interpreted as representing a defense of what had been the original aim of the project, which he had planned as a human experiment and which he saw as being threatened by the will to transform the scheme into a mere technological and economic experiment. Platt eventually decided to let Berry go, which also led the FWP's nutritionist, Miss Richardson, to resign in solidarity. Beyond the personal animosities, the disagreements between the various members of the project exposed the contradictions of the overly ambitious scheme, which led to its rapid collapse.

Unravelling and aftermath

The European side of the team was by then composed of only three members and the Colonial Office started to express its deep dissatisfaction with the whole scheme. They were no longer sure that the scheme was worth the "large sum of Colonial Development and Welfare money sunk in this enterprise."[108] Berry's departure did not, in fact, solve any problem. The main issue was whether the orientation of the scheme ought to be decided in Genieri, Bathurst, or London. A Committee of Management was appointed in London in June 1949 but, if anything, it made matters worse: "remote control from London" was indeed proving more and more "unsatisfactory" and "impracticable."[109] The larger problem was the unclear nature of what the experiment was really attempting to do: "the real concept of what we want to do," The Gambia's governor argued, "has been lost in a mass of suggestion and counter-suggestions, many of them valuable, which have successfully fogged the issue."[110] Haswell complained of the lack of "control and support from above," and she and the team's technician also resigned in early 1950.[111] By then, the project was widely viewed to be at an "unhappy impasse": agricultural results were disappointing, the original aim of improving nutrition through increased supplies of home-grown grains had been dropped, the problem of the hungry season had not been solved, and signs of malnutrition were in fact on the rise.[112]

It probably did not help that the failings of the scheme were being laid bare at the same time as those of the Tanganyika Groundnuts Scheme and the Gambia Poultry Farm, which

[106] TNA: CO 859/231/1, "Professor Platt's Informal Notes on the NFWP," 4 September 1950.
[107] Berry, *Before the Wind of Change*, 81–111; Veronica Berry, *The Gambia Experiment*, 11.
[108] TNA: CO 537/2594, Letter from the Colonial Office to Andrew Wright, Governor of the Gambia, 13 April 1948.
[109] TNA: CO 859/231/1, "Report of the Visiting Party to Genieri," 1950.
[110] TNA: CO 859/231/1, Harris to Griffiths, 19 May 1950.
[111] TNA: CO 859/231/1, "Note by Margaret Haswell," December 1949.
[112] TNA: CO 859/231/1, FWP Committee of Management, 21 March 1950.

was beset with problems, including the inability to grow enough foodstuffs and an outbreak of typhoid fever. While the poultry farm and the FWP were largely unrelated, the former in particular drew fierce criticisms from the Conservatives and in the press, and was used for a broader indictment of the Labour government's "Socialist empire-building."[113]

In light of the rather dismal results of the FWP, the idea of a project wedding research and development, nutrition and agriculture was quickly dropped. A visiting party composed of representatives of the Colonial Office, the LSHTM, and the Colonial Medical Research Council was sent to Genieri in September 1950 to assess the situation. They advocated that attempts to introduce fertilizers and mechanical implements should be "kept to a minimum" and introduced very gradually. More importantly, they argued that the overly expansive objectives assigned to the scheme should be abandoned and that the project should be geared towards agricultural development rather than nutrition research.[114] In the end, the FWP was terminated in late 1950, and its infrastructure handed over to The Gambia's administration, who maintained it as a purely agricultural operation until the late 1950s. Any hopes of broad social engineering or that the scheme could yield "results of practical application elsewhere" these were no longer considered realistic.[115]

In some ways, however, Genieri did not cease to be a microcosm for wider (post)-colonial problems. Margaret Haswell, who resigned from the FWP in 1950, nonetheless returned to the village at regular intervals to pursue her investigations of the impact of agricultural modernization upon the health of the villagers. Having joined the Oxford Agricultural Economics Research Institute, where she pioneered new approaches to development economics, she returned to Genieri in 1962, 1973, and 1979 to conduct surveys in the village.[116] In the early 1960s, the picture she drew was mixed but somewhat encouraging, as agricultural productivity had increased since the 1950s. This was not because of tractors or fertilizer use, which had been abandoned, but because of small causeways built to facilitate access to the swamps, leading to a fairly large increase in swamp rice cultivation.[117] Infant mortality, however, remained very high, and the food problems faced by Genieri's farmers had not abated. While villagers benefited, on average, from increased sources of income, these were in fact very unevenly distributed and food production per head had actually declined since the early 1950s. Increased groundnut cultivation meant that less food (millets in particular) was grown, and farmers were even less insulated than before from fluctuations in world prices. As groundnut prices dropped in the 1950s, cultivators were caught in a vicious circle of indebtedness, as much of the food imported was bought on credit. Reviewing the situation in 1963, two years before The Gambia's independence, Haswell also warned of the ill-effects resulting from the "social breakdown" of compounds into nuclear families, which led to labor shortages. By the mid-1970s, she was even more critical of the situation in the village, where life was marked by rising inequalities and spiraling indebtedness. Haswell argued that the various colonial and postcolonial projects to intensify farming in Genieri and entrench it more deeply within the global economy had left the poorer villagers with "crippling" amounts of debt, had thrown even greater burdens upon women who were by then almost solely responsible for food production, while the health and educational benefits were negligible at best.[118] She would keep returning to this

[113] *Financial Times*, 17 April 1950, 4.

[114] TNA: CO 859/231/1, "Report of the Visiting Party to Genieri," October 1950.

[115] TNA: CO 859/231/1, Harris to Griffiths, 19 May 1950.

[116] Frances Stewart and Valpy Fitzgerald, "Development Economics at Oxford, 1950–2020," in *The Palgrave Companion to Oxford Economics*, ed. Robert A. Cord (London, 2021), 29–73.

[117] Margaret Haswell, *Economics of Agriculture in a Savannah Village* (London, 1953); Margaret Haswell, *The Changing Pattern of Economic Activity in a Gambia Village* (London, 1963).

[118] Margaret Haswell, "Longitudinal Analysis of Agricultural Change: A Study of Social and Economic Decline," *Civilisations* 27, no. 3/4 (1977): 261–74, at 272.

example as a striking illustration of the effects of the "misguided growth path" advocated by "neo-development planners and their pre-cast programmes," which "enslaved" farmers "in a perpetual round of debt."[119] Her village studies illustrated the need for a development economics founded upon a longitudinal, multifactorial, and "holistic" analysis of rural change.[120] Genieri thus persisted as a "microcosm" and a symbol of the effects of postwar modernization programs, although not, one suspects, in the way Platt had hoped.

As he saw the Gambian experiment unravel, Platt complained that he had "been taken to task for concerning myself with agricultural matters" but he remained rather unrepentant about "the importance of the need for a combined effort on the part of all concerned with the many aspects of welfare and development."[121] Despite the dismal failure of the FWP, he was not entirely finished with The Gambia, although he retreated to the somewhat safer ground of medicine. After organizing the two conferences in 1952, Platt managed to secure funding for an MRC laboratory in Fajara, which remains to this day a leading center in tropical medicine, but one focused primarily on research rather than on applied development.[122] He also continued to head the MRC's Human Nutrition Research Unit until the late 1960s, but tended to focus on experimental science, rather than attempting to fuse nutrition research and agricultural development. Like most scientists in the field, he came to focus on infant malnutrition and the question of Kwashiorkor in particular, experimentally observing the impacts of what he preferred to call "protein-calorie deficiency" on animals and patients.[123]

The pivot of Platt and others towards a more strictly medical framework, while organizations such as the FAO adopted a more technical approach to agricultural development, may be seen as an attempt to return to a simpler approach after the overly expansive one taken during and immediately after the Second World War had clearly reached an impasse.[124] The interdisciplinary character of Platt's Gambian project was, in the end, an administrative nightmare. Its overly ambitious nature also meant that at some point what the experiment was really attempting to do became unclear. More importantly, Platt's attempt to devise ready-made one-size-fits-all solutions to solve malnutrition throughout the empire led him to neglect the local specificities (social, agricultural, and ecological) of the community and landscape he was trying to "improve."

Yet, the failure of this particular project should not lead us to discard the significance of this event and, more broadly, of postwar discourse linking malnutrition and imperial development. Nutrition scientists like Platt explicitly argued against the "medicalization" of hunger in order to put forward an ambitious program to thoroughly reform colonial landscapes and subjects. As the case of The Gambia shows, not only did the aim to remake colonial foodways continue after the Second World War, it became more ambitious. Reforming food cultures was no longer simply an aim; it became a means to create new landscapes and subjects altogether. As the reorientation of the project from rice to groundnuts illustrates, this vision also led to a neglect of the root causes of malnutrition. This was not because the connections between malnutrition, poverty, and the legacy of colonialism were ignored or papered over. On the contrary, Platt's approach rested on the

[119] Haswell, *The Nature of Poverty*, 136, 210.

[120] Stewart and Fitzgerald, "Development Economics at Oxford," 36–37.

[121] TNA: CO 859/231/1, "Informal Notes prepared for Visitors to NWFP Genieri," Gambia September 1950.

[122] Kelly, "The Territory of Medical Research," 315.

[123] B. S. Platt, "Infant-Feeding Practices: Breast Feeding and the Prevention of Infant Malnutrition," *Proceedings of the Nutrition Society* 13, no. 2 (1954): 94–105.

[124] Amalia Ribi Forclaz, "From Reconstruction to Development: The Early Years of the Food and Agriculture Organization (FAO) and the Conceptualization of Rural Welfare, 1945–1955," *The International History Review* 41, no. 2 (2019): 351–71.

belief that addressing malnutrition required a vast project to engineer new colonial subjects to purportedly improve their "living standards," even if this might increase their dependence upon cash crops and, in the end, further undermine their food security.

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Cite this article: Arnaud Page, "'A Bold Experiment in the Technique of Administration': Nutrition Science and Development in the Gambia, 1946–50," *Journal of British Studies* 64 (2025): e16. https://doi.org/10.1017/jbr.2025.32