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ORR, John Boyd

British nutritional scientist and first Director-General of the Food and Agriculture Organization of the United Nations (FAO) 1945-1948

By **Amy L. Sayward** · Version 1 June 2021

Was born 23 September 1880 in Kilmaurs, Ayrshire, Scotland, United Kingdom and passed away 25 June 1971 in Brechin, Angus, Scotland. He was the son of Robert Clark Orr, house painter and quarry owner, and Annie Boyd. On 21 February 1915 he married Elizabeth Pearson Callum. They had two daughters and one son.

Orr was knighted in 1935 and elevated to Lord Boyd Orr of Brechin Mearns in 1949.

Biography

Orr was the middle of seven children. His father engaged in several professions, including shipping, house painting and quarry owner, and saw his finances often depleted. His mother, who had a master of arts degree from Edinburgh University, served as President of the Women's Rural Institute in Aberdeen and in other voluntary community roles. Orr went to the village school and, after winning a bursary at thirteen, was sent to Kilmarnock Academy twenty miles away, but returned to the village school, where he eventually taught as a 'pupil teacher' to earn some money. In 1899 he became a scholarship student at the University of Glasgow, earning his master of arts in 1902, where his weekend travels and teaching jobs showed him the poverty and malnutrition of many city residents. After a stint as a teacher (a condition of his scholarship) he turned to the sciences, receiving his bachelor of science in 1910, his bachelor of medicine and bachelor of surgery in 1912 and his doctor of medicine with honors in 1914. Finding that practicing medicine was not his calling either, he was attracted by the new problems in the field of metabolism and nutrition and accepted a two-year Carnegie research fellowship to continue his studies with pioneering nutritionist Edward Cathcart at

the University of Glasgow's Institute of Physiology, which included publishing several research papers. In April 1914 he was appointed to a new research position in animal nutrition by the Joint Committee of the North of Scotland College of Agriculture and the University of Aberdeen, which he eventually built into a pioneering nutrition research facility. However, military service forestalled the beginning of that work. He had served in the Glasgow University Officers' Training Corps, but at age 34 at the beginning of the First World War he accepted a commission in the special civilian branch of the Royal Army Medical Corps. After initial sanitary work in the temporary troop staging camps, he served as the medical officer attached to the First Battalion of the Sherwood Foresters in France, winning the Distinguished Service Order (from the Battle of Passchendaele, in which one of his younger brothers died) and Military Cross (from the Battle of the Somme) before shifting to the Royal Navy in 1918. After brief service at a naval hospital and on the *H.M.S. Furious*, the Admiralty assigned him to study the physical requirements of servicemen in the Royal Army in order to rationalize the division of food between the civilian and military parts of the British population. In 1915 Orr was married, with a daughter born in 1916, a second daughter in 1919 and a son in 1921.

In January 1919 Orr returned to Aberdeen, where he began building the facilities, staff (including post-graduate researchers from the Dominions and other countries) and reputation of what was soon called the Rowett Research Institute after its patron John Quiller Rowett. The Institute's research in the 1920s focused on the role of minerals in the nutrition of both farm animals and people and the value of cod-liver oil. As the Institute's reputation grew, so did its connections with others in the British Empire. Work with the Empire Marketing Board (established in 1925) connected Orr to Frank MacDougall of Australia, who went on to promote Orr's work in the League of Nations in the 1930s. In the 1920s Rowett and Orr did research on animal husbandry in Palestine, investigated nutritional problems among the African people of Kenya, consulted with the Australian government under Prime Minister Stanley Bruce on agricultural development and served as a United Kingdom (UK) delegate to the International Dairy Congress held in the United States (US). The Institute's reputation continued to spread through its journal *Nutrition Abstracts and Views* (published since 1931 in conjunction with a college of agriculture and medical school) and its new research into human nutrition. Orr's scientific work was recognized, he became a Fellow of the Royal Society in 1932 and was knighted in 1935. Rowett's research on milk consumption and the corresponding growth of schoolchildren in 1929, as well as Orr's public addresses on the need for a food policy based on health needs, helped to counter narratives about limiting production in order to raise prices while the Great Depression gripped much of the world. Orr then expanded this research to a dietary survey of 607 families in seven Scottish cities and towns before moving beyond Scotland to encompass the UK in his classic publication *Food, Health and Income: Report on a Survey of Adequacy of Diet in Relation to Income* (London 1936). Demonstrating that a diet sufficient for health was beyond the income of fifty per cent or more of the population of the British Isles required politicians standing for election to tackle the political aspects of this nutritional problem. Committees against malnutrition sprouted across the UK and international organizations began calling for similar nutritional studies. In 1935 Australia's Bruce proposed that the League of Nations examine how much food was needed to meet the basic nutritional needs revealed by earlier national and international surveys. Such a world food policy could be the lever for lifting the global economy out of depression, argued the resulting report *The Relation of Health, Agriculture and Economic Policy* (Geneva 1937), and this was the topic of a 1938 conference in Geneva attended by 22 countries.

With the outbreak of the Second World War in 1939, Orr guided British Minister of Food Frederick Woolton to promote home agricultural production and to develop a national food policy based on nutritional needs. These measures prioritized imports of orange juice and cod-liver oil for children and expectant mothers, leading to a reduction in infant mortality. Orr's son was killed in active service in 1942. This prompted him to write *Fighting for What? To 'Billy Boy' and All the Other Boys Killed in the War* (London 1942), which laid out a vision of the type of postwar world that could be deserving of the millions of lives lost in the war. During the years 1942-1945 Orr served as the first President of the Nutrition Society, traveled to the US to advocate for a world food policy based on human needs

and, in 1945, was elected as an independent Member of Parliament for the Scottish Universities. As the war ended, Orr turned to the difficult work of securing peace and crafting a legacy for the millions who had died. He retired as the long-time Director of the Rowett Research Institute in October 1945 and was elected President of the National Peace Council. He also served as President of the World Union of Peace Organisations and the World Movement for Federal Government. Orr saw his service to the Food and Agriculture Organization of the United Nations (FAO) in a similar vein, as global peace work. Although Orr had not been invited by his government to attend the organizational conference of the FAO at Hot Springs in May-June 1943 and was only an unofficial observer at the first FAO conference, which began in Quebec, Canada on 16 October 1945, his counterparts could imagine no better person to head the new, expansive organization that had 'freedom from want' as its mission. Orr was clear about the obstacles to meeting such a goal in his informal address to the Quebec conference, but he also recognized its potential and therefore decried the plans that would fashion the FAO as an international department of agriculture or a new International Institute of Agriculture, saying: 'The people are crying out for bread and we are going to give them statistics' (Orr 1966: 10). Instead, he wanted to build an action-oriented agency that could provide loans to promote agricultural development in developing areas, which in turn would help farmers make a better living and give the people of the world the food they needed at prices they could afford. The conference elected him as the first FAO Director-General for a two-year term ending 31 December 1947.

As Orr built a strong staff and scrapped the proposals for agricultural research projects that had emerged from the Quebec conference, he focused on the dire postwar agricultural situation. The wartime devastation coupled with global population growth, followed by a particularly harsh winter of 1945-1946 and demobilization of Allied food production, threatened much of the postwar world with hunger, malnutrition, disease and premature death. Orr led the charge to remobilize agricultural production, with the FAO hosting the international Special Meeting on Urgent Food Problems in Washington DC in May 1946, which publicized the challenges and led to the creation of the International Emergency Food Council (under FAO management). With the crisis averted and attention focused on the FAO, Orr turned to long-term solutions to the problem of agricultural supply and demand that had long plagued farmers and food consumers: how to avoid significant price fluctuations that bankrupted farmers in times of surplus and starved consumers in times of scarcity. The FAO's revised appraisal of the world food situation clearly revealed to member governments that the end of the war simply marked the beginning of a new and ongoing food crisis, as population growth swelled the number of people who lacked affordable food sufficient for health. Orr called for a global system of buffer stocks of key agricultural commodities managed by the FAO, which he saw as a natural expansion of the international cooperation that had helped the Allies win the war and the national rationing systems that had shown that health could be improved through nutritional intervention. The proposed World Food Board, by purchasing excess crops in years of plenty and releasing these foodstuffs in years of deficit, would smooth international prices for these commodities to the benefit of both producers and consumers by supporting prices for farmers in times of plenty and by keeping food affordable for consumers when harvests were down. This system of buffer stocks (by buying products in times of glut and selling them in times of scarcity) would also generate some income for the Board, which Orr proposed be recycled to provide loans to developing countries so that they could expand and improve their own agricultural production, with the ultimate goal of self-sufficiency and full nutrition for all citizens. Opposition came from both the US, the world's leading food exporter, and the UK, the world's leading food importer, who benefitted from the existing system. Ultimately the World Food Board proposals died despite considerable positive press coverage and international meetings in Copenhagen, Denmark in September 1946 and in Washington DC in May 1947. Anglo-American delegates declared that such commodity regulation would be better governed through the more comprehensive International Trade Organization, which never came to fruition, in part because of disputes about agricultural trade.

Orr was disappointed and convinced that national governments were unwilling to move toward a positive global food policy, so he focused his remaining time in office on addressing transnational

and national challenges to rebuilding postwar agriculture and food production. He toured postwar Europe (Austria, Italy and Poland), where he observed the challenges of hunger viscerally during the winter of 1946, and FAO technical missions were dispatched to both Greece and Poland under Orr. In early 1947 he traveled through Latin America (Argentina, Brazil, Chile, Cuba, Peru and Uruguay). He also negotiated the move of the FAO headquarters from Washington DC, where people of color were refused service in the building's cafeteria (under the city's prevailing racial segregation policies), to Rome, Italy, the home of the International Institute of Agriculture (created in 1905). In September 1947 his term was extended until a new Director-General could be found. He helped organize and attended the February 1948 Cairo conference, whose representatives called for international efforts to eliminate rinderpest and to control locusts. On 14 April 1948 a Special Session of the FAO Conference elected American Norris Dodd as Director-General. Dodd had represented his country in the Copenhagen and Washington DC meetings that had ultimately rejected the World Food Board proposals. Orr left the FAO on 26 April and Dodd started on 7 June.

Despite what Orr saw as a grave failure to move the world toward peace and plenty during his brief tenure at the FAO, in 1949 the Nobel Peace Prize recognized Orr's work on behalf of the world's hungry. Accepting the prize as a representative of the movement for peace through international cooperation, he donated the 10,000 British pounds prize money to organizations advancing that agenda. That same year he was named Lord Boyd Orr of Brechin Mearns. In addition to the honors, Orr devoted himself to the work of crafting world peace through service and leadership in the World Union of Peace Organisations, the World Academy of Art and Science, the National Peace Council and the World Movement for Federal Government. The end of his FAO duties commenced a period of world travel meant to promote peace and increase international understanding as the Cold War heated up. In 1949 he surveyed and made recommendations on Indian agriculture before traveling to Pakistan to do the same. A return trip to Pakistan in 1952 was combined with attendance and a speech at the World Peace Conference in Japan, which ended with a visit to Hiroshima. Orr also weighed in on the early malaria eradication programs in Cyprus and Sardinia that were the basis of the later World Health Organization Malaria Eradication Program. He led the British delegation to a 1952 Economic Conference in Moscow, which sought to regularize trade between the Soviet Union, China and the West, which led to his long-term connection with the British Council for International Trade. Relations made in Moscow led to a 1956 trip to, and book about, China, seeking to dispel negative prevailing stereotypes and to highlight advances in health, agriculture, education and infrastructure. In 1966 Orr published his memoirs and in 1971 he died at his home in Scotland.

Orr's short term as the first FAO Director-General highlighted the divergent visions for the organization, which had been evident at its foundational conferences. On the one hand (the vision espoused by Orr) were those who advocated for an organization that would actively promote changes in global agriculture in order to aid farmers and a hungry world population. This view was manifest in later FAO initiatives such as its early development work (undertaken by Dodd) and its later Freedom From Hunger Campaign (the brainchild of Binay Ranjan Sen, the fourth FAO Director-General). Even the idea of 'buffer stocks' of agricultural commodities, which animated FAO discourse for decades, was the direct result of Orr's proposal for a World Food Board. But powerful forces, especially the US, supported a very different vision of the FAO being something akin to an international version of its US Department of Agriculture (which had and has a much larger staff and budget than its international counterpart), compiling statistics, providing technical assistance to farmers and following directives from its government. Throughout the FAO's history it is evident that the US preferred to use its agricultural surpluses as a key tool in its Cold War diplomacy around the globe. The US therefore consistently weakened and undermined a more ambitious FAO agenda as well as fracturing the FAO and its original mission among a set of international food agencies, all operating in Rome: the FAO, the World Food Programme (set up in 1961), the World Food Council (established in 1974, operations suspended in 1993) and the International Fund for Agricultural Development (created in 1977). Orr's son-in-law David Lubbock, a prisoner of war during the Second

World War, became co-author of much of Orr's postwar work and published retrospectives on Orr's career in 1992 and 2015.

Archives

- J.B. Orr Papers are in the National Library of Scotland, Edinburgh, Accession 6545
 - furthermore Record Group 1.0 and Microfilm 253 in Food and Agriculture Organization Archives, Rome, Italy, see www.fao.org/library/fao-archives/about-the-archives/en
 - Foreign Office Records, lot 371, file 45647 and Treasury Files, lot 236, file 92 in National Archives in Kew, England
 - Record Group 59 (Department of State Central Files), Decimal File 1945-49, 501.SA (Food and Agriculture Organization matters) in US National Archives, College Park, Maryland
 - Rowett Institute of Nutrition and Health papers, University of Aberdeen Special Collections, ref. no. MSU 1451
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