In January 1899, an Anglo-Egyptian agreement restored Egyptian rule in Sudan but as part of a condominium, or joint authority, exercised by Britain and Egypt. The agreement designated territory south of the twenty-second parallel as the Anglo-Egyptian Sudan. Although it emphasized Egypt's indebtedness to Britain for its participation in the reconquest, the agreement failed to clarify the juridical relationship between the two condominium powers in Sudan or to provide a legal basis for continued British presence in the south. Britain assumed responsibility for governing the territory on behalf of the khedive.

Article II of the agreement specified that "the supreme military and civil command in Sudan shall be vested in one officer, termed the Governor-General of Sudan. He shall be appointed by Khedival Decree on the recommendation of Her Britannic Majesty's Government and shall be removed only by Khedival Decree with the consent of Her Britannic Majesty's Government." The British governor general, who was a military officer, reported to the Foreign Office through its resident agent in Cairo. In practice, however, he exercised extraordinary powers and directed the condominium government from Khartoum as if it were a colonial administration. Sir Reginald Wingate succeeded Kitchener as governor general in 1899. In each province, two inspectors and several district commissioners aided the British governor (mudir). Initially, nearly all administrative personnel were British army officers attached to the Egyptian army. In 1901, however, civilian administrators started arriving in Sudan from Britain and formed the nucleus of the Sudan Political Service. Egyptians filled middle-level posts while Sudanese gradually acquired lower-level positions.

In the condominium's early years, the governor general and provincial governors exercised great latitude in governing Sudan. After 1910, however, an executive council, whose approval was required for all legislation and for budgetary matters, assisted the governor general. The governor general presided over this council, which included the inspector general; the civil, legal, and financial secretaries; and two to four other British officials appointed by the governor general. The executive council retained legislative authority until 1948.

After restoring order and the government's authority, the British dedicated themselves to creating a modern government in the condominium. Jurists adopted penal and criminal procedural codes similar to those in force in British India. Commissions established land tenure rules and adjusted claims in dispute because of grants made by successive governments. Taxes on land remained the basic form of taxation, the amount assessed depending on the type of irrigation, the number of date palms, and the size of herds; however, the rate of taxation was fixed for the first time in Sudan's history. The 1902 Code of Civil Procedure continued the Ottoman separation of civil law and sharia, but it also created guidelines for the operation of sharia courts as an autonomous judicial division under a chief qadi appointed by the governor general. Religious judges and other sharia court officials were invariably Egyptian.
There was little resistance to the condominium. Breaches of the peace usually took the form of intertribal warfare, banditry, or revolts of short duration. For example, Mahdist uprisings occurred in February 1900, in 1902-3, in 1904, and in 1908. In 1916 Abd Allah al-Suwayni, who claimed to be the Prophet Isā, launched an unsuccessful jihad.

The problem of the condominium's undefined borders was a greater concern. A 1902 treaty with Ethiopia fixed the southeastern boundary with Sudan. Seven years later, an AngloBelgian treaty determined the status of the Lado Enclave in the south establishing a border with the Belgian Congo (present-day Zaire). The western boundary proved more difficult to resolve. Darfur was the only province formerly under Egyptian control that was not soon recovered under the condominium. When the Mahdiyah disintegrated, Sultan Ali Dinar reclaimed Darfur's throne, which had been lost to the Egyptians in 1874 and held the throne under Ottoman suzerainty, with British approval on condition that he pay annual tribute to the khedive. When World War I broke out, Ali Dinar proclaimed his loyalty to the Ottoman Empire and responded to the Porte's call for a jihad against the Allies. Britain, which had declared a protectorate over Egypt in 1914, sent a small force against Ali Dinar, who died in subsequent fighting. In 1916 the British annexed Darfur to Sudan and terminated the Fur sultanate.

During the condominium period, economic development occurred only in the Nile Valley's settled areas. In the first two decades of condominium rule, the British extended telegraph and rail lines to link key points in northern Sudan but services did not reach more remote areas. Port Sudan opened in 1906, replacing Sawakin as the country's principal outlet to the sea. In 1911 the Sudanese government and the private Sudan Plantations Syndicate launched the Gezira Scheme (Gezira is also seen as Jazirah) to provide a source of high-quality cotton for Britain's textile industry. An irrigation dam near Sannar, completed in 1925, brought a much larger area in Al Jazirah under cultivation. Planters sent cotton by rail from Sannar to Port Sudan for shipment abroad. The Gezira Scheme made cotton the mainstay of the country's economy and turned the region into Sudan's most densely populated area.

In 1922 Britain renounced the protectorate and approved Egypt's declaration of independence. However, the 1923 Egyptian constitution made no claim to Egyptian sovereignty over Sudan. Subsequent negotiations in London between the British and the new Egyptian government foundered on the Sudan question. Nationalists who were inflamed by the failure of the talks rioted in Egypt and Sudan, where a minority supported union with Egypt. In November 1924, Sir Lee Stack, governor general of Sudan and sirdar, was assassinated in Cairo. Britain ordered all Egyptian troops, civil servants, and public employees withdrawn from Sudan. In 1925 Khartoum formed the 4,500-man Sudan Defence Force (SDF) under Sudanese officers to replace Egyptian units.

Sudan was relatively quiet in the late 1920s and 1930s. During this period, the colonial government favored indirect rule, which allowed the British to govern through indigenous leaders. In Sudan, the traditional leaders were the shaykhs—of villages, tribes, and districts—in the north and tribal chiefs in the south. The number of Sudanese recognizing them and the degree of authority they held varied considerably. The British first delegated judicial powers to shaykhs.
to enable them to settle local disputes and then gradually allowed the shaykhs to administer local
governments under the supervision of British district commissioners.

The mainstream of political development, however, occurred among local leaders and among
Khartoum's educated elite. In their view, indirect rule prevented the country's unification,
exacerbated tribalism in the north, and served in the south to buttress a less-advanced society
against Arab influence. Indirect rule also implied government decentralization, which alarmed
the educated elite who had careers in the central administration and envisioned an eventual
transfer of power from British colonial authorities to their class. Although nationalists and the
Khatmiyyah opposed indirect rule, the Ansar, many of whom enjoyed positions of local
authority, supported the concept.