

## OBITUARY



SIR FRANK DIXEY  
(1892-1982)

Sir Frank Dixey, who died at his home in Sussex, England on 1st November 1982 in his 91st year, was an Honorary Member of the Geological Society of India. He was distinguished in many fields of geology and will be remembered for his contributions to African geomorphology and major tectonics and to groundwater problems particularly in arid conditions. As Director of the Overseas Geological Surveys of Gt. Britain during the years immediately following the second world war he was influential in initiating and expanding geological mapping and mineral prospecting in many countries of the Commonwealth.

Dixey was born in Bristol in 1892 and graduated from the University College of Cardiff in South Wales in 1914. After military service throughout the first world war he was appointed in 1918 to undertake single-handed a mineral survey of Sierra Leone in West Africa. At that time the only maps available were sketches made by District Officers and roads were scarce; little was known of the country away from the coast. Dixey produced the first geological map of the country and in the three years he spent there he published six papers apart from his official reports. In a paper read before the Royal Geographical Society in London in November 1921 on the physiography of Sierra Leone, he first showed his interest in erosion surfaces and their significance in the geological history of the continent. This lifetime interest gave rise to many papers describing his pioneer work in this field, stimulating other workers in Africa. Thirty-seven years later he described erosion surfaces of the island of Madagascar, correlating them with those of mainland Africa.

In 1921 he was transferred to Nyasaland (now Malawi) as Government Geologist (later Director of Geological Survey), remaining there until 1939. Again,

he was for seven years the only official geologist. He published the first descriptions of coal deposits of Karroo age in northern Malawi, and of a suite of intrusive rocks which became known later as carbonatites. He described bauxite deposits on the summit of the then almost inaccessible Mlanje Plateau. He discovered Dinosaur beds near the shores of Lake Nyasa which established a Jurassic age for sediments in the major rift valley system which forms an important part of the country. Dixey became intensely interested in the great rift valleys of East Africa, and from his work in Malawi was the first to show that this major structure predated the Tertiary, and indeed was intimately related to erosion surfaces from Jurassic times onwards. In due course he recognized the relationship of the early structures to the break-up of Gondwanaland and he drew attention to the coincidence in many places of rift faulting with Precambrian trends.

Dixey's official duties led him to the study of village water supplies and his concentration on groundwater problems led to the publication in 1931 of his *Practical Handbook of Water Supply*. This work resulted in his transfer in 1939 to Northern Rhodesia (now Zambia) to set up and direct a new Department of Water Development. In the following years he also spent periods of temporary secondment to advise on rural and other water development in Kenya, Tanganyika (Tanzania), the Sudan and Eritrea. As opportunity permitted, he used these travels to continue his study of erosion surfaces and allied phenomena.

In 1944 Dixey returned to West Africa as Director of the Geological Survey of Nigeria, where also he was immersed in water supply problems involving the planning of a major bore-hole programme, whilst he was in course of building up an expanding department.

The second main phase of his career began with his recall to London in 1947 to become Adviser to the British Colonial Office and to establish a new organisation in London to assist the, then, dependent territories in developing their mineral resources. Under Dixey's direction the staff of the various geological surveys, largely then British, increased four-fold; specialist branches in London provided assistance in geochemistry, geophysics, air-photo interpretation and isotopic age determination, as well as general advice on mineral beneficiation and mineral marketing. Dixey's interest in the more academic aspects of geology ensured that he obtained the interest and support of the universities, and that many problems of African geology in particular would attract the best young graduates. A new journal, *Colonial Geology* (later *Overseas Geology and Mineral Resources*) provided a forum for presentation of results and discussions not possible in official publications. During these years Dixey travelled extensively to visit Commonwealth geological departments and represented Britain and dependent territories at many international scientific conferences.

Following his retirement from official duties in 1959, Dixey continued an active professional career until 1971. He served as an adviser to British, Commonwealth and United Nations organisations. In 1964 he attended the International Geological Congress meeting in India and was, with his wife, among the delegates who were marooned in Kashmir by unseasonable snow. In 1965 he returned to India on the invitation of Prof. West of Saugar University, Madhya Pradesh. Under the auspices of the British Council he spent some weeks giving lectures and holding informal discussions mainly on geomorphology. He attended and read papers to the Indian Science Congress at Chandigarh and subsequently visited universities at Roorkee, Hyderabad, Bangalore and Madras to lecture and hold seminars. Through-

out his tour, accompanied by his wife, he was received with acclaim and much hospitality.

From 1966 to 1971, Dixey was Consultant Hydrologist to the Government of Cyprus. In the course of a number of visits when he was engaged in developing a new water supply for Famagusta, he investigated the water resources of the Kyrenia Range, studying the geology in some detail, not hesitating to carry out field-work at the age of seventy-five. In 1965 he was one of the founders of the *Journal of Hydrology*, and acted as its editor for fourteen years seeing 31 volumes through the press. Throughout his long career he published some 150 papers on a wide range of subjects in geology and geography.

Dixey received many honours for his scientific work. He was Draper Medalist and Honorary Member of the Geological Society of South Africa; Murchison Medallist of the Geological Society of London; Corresponding Member of the Geological Society of Belgium and Honorary Fellow of the Institution of Mining and Metallurgy. In 1959 he was elected a Fellow of the Royal Society. Recognition of his public services came to him when he was appointed O.B.E. in 1929, C.M.G. in 1949 and K.C.M.G. in 1972.

His first wife (Helen Golding) who frequently accompanied him on his long field trips in the early days in Sierra Leone and Malawi died in 1961; his only daughter also died shortly afterwards. He found renewed happiness, however, in his second marriage to Cecily Hepworth in 1962 who also shared his travels and who survives him.

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J. W. PALLISTER

LADY CECILY writes :

'I cannot tell you how often Frank and I talked about our period in India in 1965-66. It was a truly wonderful experience and the kind welcome we received everywhere we went remained in Frank's memory for the remainder of his life and will in mine also. How I should like to put the clock back and live it all again . . . . . ' (-Ed)

## ANNOUNCEMENT

### SEMINAR ON 'AMPHIBOLITES: THEIR MINERALOGY, PETROLOGY, GENESIS AND GEODYNAMIC SIGNIFICANCE'

The seminar is being organised at M. S. University of Baroda between 28th November and 1st December, 1983 with a view to bring together all workers from various disciplines who are interested in the study of Amphibolites. The main objective of the Seminar is to provide a common platform of Mineralogists, Petrologists, Geochemists etc., to present their recent studies on the various aspects of the Amphibolites. Geoscientists who are interested in participating in this seminar are requested to contact Prof. S. S. Merh, F.N.A., (Director of the Seminar), Department of Geology, Faculty of Science, M. S. University of Baroda, Baroda-390 002.