

# Professor C.R. Rao

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Professor C.R. Rao shaped the dramatic growth of mathematical statistics in the 20th century, refining and restructuring it from its somewhat ad hoc origins. The statistical test used extensively in econometrics, widely known as **Lagrange multiplier test**, was developed by Professor Rao in 1947.

## Academic Qualifications

- Rao received MA degree in mathematics with a first class and first rank from Andhra University (1941) and MA degree in statistics from Calcutta University (1943) with a first class, first rank and a record of marks unbeaten till now, and a gold medal.
- He started **working in the ISI** at Calcutta as a research scholar in 1943.
- He was invited to work on a project at the Museum of Anthropology and Archeology at Cambridge University, UK, which required the statistical methodology developed by P.C. Mahalanobis, the founder of ISI.
- Based on the work he did, he **earned his Ph.D. in 1948 from Cambridge University with R.A. Fisher, the father of modern statistics, as his thesis advisor.**

## Contribution to Development of Statistics

- As **Head and later Director of the Research and Training School at the ISI** for a period of over 40 years, Rao developed research and training programs and produced outstanding students.
- He also **directed the training programs at the International Statistical Educational Center** which led to the development of statistics in the South East Asian region.
- He was the **Chairman of a UN Committee**, which examined the demand for statistical personnel in Asian countries

and **recommended the establishment of an institute for statistical development in South East Asia.**

[The Statistical Institute for Asia and Pacific was established in Tokyo based on this recommendation].

- C.R. Rao played an important role, under the direction the doyen of Indian statistics, P.C. Mahalanobis, in **setting up state statistical bureaus in different states of India** and developing a network of statistical agencies at the district level for collection of data.
- He **founded the Indian Econometric Society**, which has been active in promoting quantitative studies in economics for planning purposes.
- During the 1960s, he served as **Chairman of the Committee on Statistics** of the Government of India. He also **chaired the Committee on Mathematics of the Atomic Energy Commission** and was a member of the Committee on Science and Technology.