# Architect of Modern Temples– Dr K L Rao

The first Indian Prime Minister Jawaharlal Nehru described the dams as modern temples of the country. Kanuri Lakshman Rao (popularly known as K L Rao) was the architect of many such temples and is called the Father of India's water management and agriculture. Nagarjuna Sagar, Bhakra, Farakka are some of the many dams designed and developed by him. At a time when there was very less area with irrigation facilities, his vision and work has helped to increase the area under cultivation which led to an increase in food production apart from providing employment to millions of farmers and he is still remembered by many across the country as a saviour from starvation.

Dr K L Rao was born in a middle class family on 6 th June 1902 in Kankipadu village near Vijayawada in Krishna district, Andhra Pradesh. His Father was working as a village attorney. He lost his father when he was 9 years old. Also he lost vision in one eye due to injury during childhood days while playing at school. Though he lost his father and vision, he never lost confidence and was recognized as a very brilliant student right from his childhood.

K L Rao studied intermediate at Presidency College, Madras. He took his B.E degree from Madras University and he was the first student to obtain Master's Degree in Engineering. He worked as a Professor in Rangoon in Burma. Later he finished his PhD in 1939 from Birmingham University in United Kingdom. He worked as assistant professor in UK for sometime and wrote a book called "Structural Engineering and Reinforced Concrete".

After returning to India in 1946, he worked as a design engineer for the Madras government. He held the post of director in Vidyut Commission, New Delhi in the year 1950. He was promoted as chief engineer in the year 1954 at that time he was also a member of Central Ware Housing Corporation and continued to be its member even after his retirement during 1957-62. He worked as president of Irrigation and Central Board in the year 1960. He also worked as the president of All India Engineers Association in 1958-59 and 1959-1960.

K L Rao believed that building irrigation infrastructure is very important for the country's development particularly in the context of growing population. To feed the growing population India needs to invest on increasing the area under cultivation by providing irrigation facilities. With this belief K L Rao designed and developed many irrigation and hydro electric projects. World's longest earth dam (masonary), Nagarjuna Sagar dam on river Krishna in Nalgonda district of AP is a feather in his cap. It irrigates over 10 lakhs acres of land. He could have constructed the dam with concrete instead of masonry. But he designed an earthen dam as he wanted a design which was not only simple but also humane. He thought that besides the abundant availability of stone, there was abject poverty and therefore he felt the urgent need to provide employment to unskilled workers. When the dam construction was going on there were hundred thousand people moving up and down the scaffolding carrying stone which was described by many as an unforgettable spectacle of human endeavor, perhaps paralleled only by the Pyramids and the Great Wall. He also designed a project to interlink all the rivers in the country. In the first four Five Year Plans, K L Rao designed projects like Lower Bhavani, Malaam Puja, Kosi, Heera Khud, Chambal, Farahkha, Srisalam and Thungabhadra along with Nagarjuna Sagar. For the prevention of floods in Ganga and Brahmaputra basin he motivated the construction of projects like Gandhinagar, Jawahar Sagar, Rana Pratap Sagar. In additions to all these great works, the thermal power station that was built at Vijayawada in Andhra Pradesh is considered as his another greatest achievement. Rao's irrigation projects not only helped many farmers with improved irrigation but also helped to increase the food production in the country as more land was brought into cultivation. With his vast experience on water related issues, K L Rao wrote a book called 'India's Water Wealth' which is considered as a resource book for the people working in water sector in India.

K L Rao, apart from designing projects for people, also involved very actively in designing policies for people. He entered into politics with a vision to serve the people directly and was elected as a member of parliament from Vijayawada constituency for the first time in 1961. The people in the constituency elected him as their leader three times afterwards from the same constituency. On 20 July, 1963, Rao was sworn in as a minister for Irrigation and Electricity in the union government. Under his regime as Union minister for Water Resources, Rao designed many irrigation and hydro-electric projects. During his tenure he established Rural Electrification Corporation. Rao worked as Union Minister in Jawahar Lal Nehru, Lal Bahadur Sastry and Indira Gandhi's cabinet.

For his services to the Nation Dr K L Rao obtained many awards. He got "Padma Bhushan" in the year 1963 for his contribution in the areas of irrigation and power from the President of India. He was awarded doctorate in science by Andhra University in 1960 and in engineering by Roorkee University in 1968. Jawaharlal Nehru Technological University also honoured him with doctorate. The Andhra Pradesh State Government has named an irrigation project at Pulichintala after him as K L Rao Sagar Project.

A visionary engineer Dr K L Rao breathed his last on 18 th May 1986. Dr K L Rao's contribution to water sector in the country is immemorial. His vision and efforts together put the country as one of the largest food producers in the world. The dams and projects designed by him not only helped the farmers in getting employment but also feeding millions of people across the country.

\*Information till Dec-2009





## PadmaBhushan Sri Kanuri Lakshmana Rao (K.L.Rao)

Kanuri Lakshmana Rao, B.E., Ph.D. (born 15 July 1902 - died 18 May 1986) was an Indian engineer and a Padma Bhushan awardee.

In 1963, Rao was awarded the Padma Bhushan for his contribution in the spheres of irrigation and power. He had been president of the Central Board of Irrigation and Power and of the All India Engineers Association in 1958-59 and 1959-1960.[1] He was awarded a doctorate in science by Andhra University in 1960. He was also awarded doctorate by the Roorkee University in engineering in 1968.

## Personal life and education

Rao was born in a middle class former family in Kankipadu, Krishna district, Andhra Pradesh. His father was a village attorney. He lost his father when he was nine years old. He lost vision in one eye due to injury during childhood days while playing at school. He studied Intermediate (+2) at Presidency College, Madras. He took his B.E. degree from Madras University and he was the first student from Madras University to obtain a Master's Degree in engineering. Later he took his Ph.D. in 1939 from the University of Birmingham in the United Kingdom.

## **Engineering career**

He worked as a Professor in Rangoon and Burma. After completing PHD he worked as Assistant Professor in the United Kingdom. He wrote a book called Structural Engineering



and Reinforced Concrete. After returning to India, he worked as a design engineer for the Madras government. He held the post of Director (Designs) in Vidyut Commission-New Delhi in 1950. He was promoted as chief engineer in 1954.

"He wrote autobiography titled The Cusecs Candidate."

#### **Political career**

He was elected as a member of parliament from Vijayawada constituency for the first time in 1961. He was elected as member of parliament three times from the Vijayawada constituency. On 20 July 1963, Rao was sworn in as a minister for Irrigation and Electricity in the union government. Under his regime as union minister for water resources, Rao designed many irrigation and hydro-electric projects. The world's longest masonry dam on River Krishna in Nalgonda District, Andhra Pradesh is to his credit. Rao worked as union minister in Jawahar Lal Nehru, Lal Bahadur Sastry and Indira Gandhi's cabinet.

#### Recognition

In 2006, the Pulichintala project, at Bellamkonda of Guntur district, has been named as K. L. Rao Sagar project.