SIR THOMAS ROBERT JOHN WARD Kt CIE MVO (1875-80)

He was born on 12 February 1863 and spent his entire life involved in civil engineering projects around the world, but principally irrigation projects in India and Thailand.

He entered the Punjab Irrigation Branch of India on 1883 and was involved in the Jumma Canal in 1888 and the Chenab Canal in 1890-1900. He was awarded his CIE (Companion of Order of Indian Empire) in 1906 and his MVO in 1911.

In 1912 he was the engineering officer for the selection of a site for the new capital of India – Delhi and the following year was the engineer for training River Jumna at Delhi.

His services were then lent to Siamese (Thailand) Government for the inauguration of irrigation works in the Valley of Menam Chao Phraya.

On returning to India he was appointed Chief Engineer and Secretary to the Punjab Government and in 1915 was a member of the Punjab Legislative Council. In 1917 became Inspector General of Irrigation for the whole of India.

In 1918 he produced a report on irrigation development in Iraq and for some reason received the thanks of the commander-in-chief of India for this work.

He became a member of the Council of the Institute of Civil Engineers (India) in 1919-20 and was knighted in 1920 and became the Institutes President in the same year.

Over the next couple of years he was involved in irrigation/damming projects in Brazil, Argentina and Iraq. In Iraq he was involved in projects in Diala Zone and in area between Baghdad and Hamrin Hills.

At some point he returned to England, as he died at Hatch End, Middlesex on 27 January 1944 at the age of 80.

In 1965 the "Sir Thomas Ward Memorial Prize" was instituted in 1965 by the Institute of Civil Engineers (India). It is awarded annually for the best paper published in the Electronics and Telecommunication Engineering Division Part of the Journal. The prize value is Rs 2000.00.

I have also found mention of Sir Thomas in a number of papers/letters :-

In a paper published in the last 10 years entitled "The Chao Phraya Delta: Historical Development, Dynamics and Challenges of Thailand's Rice Bowl" there is the following passage :

> During 1906 to 1913 ….. a long drought of three year duration struck the country causing severe damages to paddy fields along the lowlands of the Chao Phraya river. Farmers were suffering, the cost of living was very high, and thieves were abundant than ever. His Majesty … appointed one committee … to tackle the problem. The committee advised that there should be an urgent program to improve the irrigation works. They sought technical assistance from the British government who allowed **Sir Thomas Ward**, an irrigation expert, to come to study and plan the irrigation system for the country. After reviewing all the data, Sir Ward concluded in his report to the effect that, if Thailand was to be developed into an important rice producer of the world, there should be a technically correct way to build the irrigation infrastructures. Anyhow, at the initial stage, Sir Ward suggested that irrigation project should be carried out in conformity with the financial condition of the country and be compatible with the prepared target areas. It was also suggested that the lowlands of Chao Phraya river should be appropriately divided into seven areas according to the irrigation potentiality … Since the government had allotted 22,750,000 Bahts for irrigation works, Sir Thomas Ward also proposed five urgent subprojects : Suphan Canal, South Pasak, East Petchaburi, Lampang and Monton Payap Irrigation Projects as well as the irrigation infrastructures to divert water from the upper flatlands in Ayutthaya to

the seashores along both banks of the Chao Phraya River. The Pasak Irrigation Project was the first choice and became one of the biggest irrigation works of the country.

Gertrude Bell (a British writer, traveler, political analyst, and influential administrator in Arabia) wrote a series of letters that are available on the internet at http://www.gerty.ncl.ac.uk/letters/l1616.htm In a letter dated 27 February 1924 from Baghdad, she includes the following

> "*And then I had a perfectly horrible luncheon party in honour of the driest old desiccated stick I ever came across, Sir Thomas Ward, a consulting engineer of great distinction who has come out to examine the Habbaniyah development scheme on behalf of (his) English investors. He has one Gordon with him, almost but not quite as bad as he. And I had asked also Sabih Beg, and the Arab Concession promoter Dr Asfar, a cheerful rogue from Damascus [Dimashq (Esh Sham, Damas)]. After pulling the most laborious oar with Sir Thomas at lunch, I abandoned him altogether and chattered French (which Sir T. can't do) with Asfar and Sabih. I was glad when Sir T. went and what's more he shall not come back, not to this child.*"

Finally in a report published in April 2005 entitled "*Unraveling Bhakra: Assessing the Temple of Resurgent India - Report of a Study of the Bhakra Nangal Project*" (http://www.narmada.org/misc/Bhakra11.pdf) the following mention of Sir Thomas is made :-

> *Among the important projects proposed by Punjab were the Sutluj Valley Project (SVP), the Trimmu and the Thal, and of course, Bhakra. The idea of utilising the waters of the Sutluj below Harike was mooted as early as 1854, and in 1903, the First Irrigation Commission recommended a set of weirs on the Sutluj. This was the SVP.*
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> *The Sind Government had raised the dispute that Punjab's upstream diversions would affect it adversely. The SVP especially was seen as a major problem by Sind. Punjab, on the other hand argued that the Sukkur project would create rights in favour of Sind and these would jeopardize its own projects.*
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> *It may be inferred from various documents that Sind's arguments were acknowledged by the Government of India. The Government of India agreed that prima facie, Sind has a case; but also said that data on the flows of the Indus and tributaries was inadequate. In 1920, in what appeared to be an attempt at balancing the two sides, it said that SVP and Sukkur both could go ahead. It also called for proper measurements of the flows of the Indus rivers. In a note prepared on 10 Dec. 1920, Sir Thomas Ward, the then Inspector General of Irrigation*
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> > *"..urged the importance of a full investigation into the supplies of the Indus and its tributaries. 'Prima facie', he stated, 'it is logical to assume that the abstraction of water from the tributaries of the Indus must necessarily diminish the volume passing Sukkur, but it is quite possible that this diminution is to some extent compensated by the seepage back into the river.....Unfortunately, the data available are too meagre to permit of definite conclusions....."*
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> *However, Sir Thomas also said that the records as they exist had been examined and the Government of India was satisfied that the SVP could be taken up without prejudicing the irrigation at Sukkur. With this, the Government of India submitted the Sukkur Barrage Project for sanction to the Secretary of State in 1920, noting that :*
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> > *"The data available are insufficient to enable an accurate determination to be made of the effect on the discharge of Indus at Sukkur of the withdrawals proposed by the Sutluj Valley Projects...but... the shortage at Sukkur was not likely to be greater than could be surmounted by care and economy in distribution. 'We consider, therefore, that both the Sukkur and Sutluj Valley schemes can be safely constructed at the same time....'"*

However, this position only appeared to be a balanced one, as in the process, Sir Thomas also stated, what was of course a logical conclusion :

> *"It will obviously be necessary, once construction commences on the Sukkur scheme, for any future projects put forward by the Punjab to be very carefully examined in relation to the possible effects of further withdrawal from the tributaries of Indus upon the rights to irrigation from the Sukkur canals..."*