

Han ten Brummelhuis, *King of the Waters: Homan van der Heide and the origin of modern irrigation in Siam*. Chiang Mai, Silkworm Books, 2007, xvi+409 pp., Bt 695.

The core of this important work of scholarship is an account of the years spent in Siam by J. Homan van der Heide, the Dutch irrigation engineer who was engaged by the government in 1902 to survey Siam's needs and prospects and to draw up plans for irrigation in the lower Menam delta. This core, focused on irrigation, is preceded by three remarkable chapters in which Brummelhuis surveys the social, economic, and political background of "Old Siam". These chapters and, indeed, the entire book are the fruits of the author's years of research into both archival and secondary sources, especially recent works by Thai and other scholars. Along the way he provides us with valuable commentary on the historiography of Siam.

The title comes from an occasion in which King Chulalongkorn introduced van der Heide to a guest as "King of the Waters". In addition to a recognition of his eminence in irrigation, this may have been a sly allusion to the belief in seventeenth century Siam that the Dutch had no country of their own but lived on ships as landless buccaneers.

In Old Siam, Brummelhuis argues, there was no real irrigation in the modern sense, nor was there much need of it. Rice farmers grew just enough rice for their own needs, and to pay

the land tax. The klongs that were dug during this period were primarily for transportation, though farmers did draw water from them into their fields. But after about 1850, when trade increased dramatically (coincidentally with the Bowring Treaty, says Brummelhuis), the variation in rainfall and frequent crop failures aroused interest in irrigation. Crop failures reduced rice exports and led to unwelcome decreases in government revenues. After a valuable survey of the Chakri reforms made in the latter half of the nineteenth century, Brummelhuis says these reforms strengthened the central government and made it more capable of undertaking irrigation projects.

King Chulalongkorn, impressed with irrigation systems he had seen during his travels in Europe and Java, began in the 1890s to encourage a study of the situation in Siam. Prince Damrong and other ministers shared this interest, and it was decided to search for a Dutch irrigation expert – specifically a Dutch engineer in accord with Siam's policy of hiring foreign advisers from several different countries.

So it was that Homan van der Heide was hired. Brummelhuis describes his arrival in Bangkok in June 1902 and his energetic beginning. With the help of W.A. Graham, R.A. Gilpin and others, van der Heide studied existing data on water. He traveled extensively into the country, measured flows of rivers and streams, and calculated distances and elevations. He also talked with rice farmers and local officials. He visited

the Rangsit area, where the Siam Lands, Canals, and Irrigation Company (Borisat) had dug a system of *klong*, but he stated that this was not irrigation at all, just water distribution, and that it had several problems (the powerful Borisat was a private company controlled by high-ranking members of the elite). The company had been given the right to dig these *klong* in a large unpopulated area east of the Chao Phya River and to claim the land on either side of them to a distance of 40 *sen*. It made large profits from the sale of this land. Van der Heide later opposed the Borisat's plan to expand its operation into the west bank.

Soon after his arrival, van der Heide began sending reports on his activities and findings to the Minister of Agriculture, Chao Phya Thewet, who forwarded them to other ministers and to the king, who was impressed with his energy. On one of these early reports, King Chulalongkorn noted, "He is exceptionally industrious!", as indeed he was.

In December 1902, just six months after his arrival, van der Heide completed his 200-page "General Report on Irrigation and Drainage in the Lower Menam Delta", a remarkable achievement in such a short time. Brummelhuis summarizes the General Report, which lays out an ambitious plan to bring the great Chao Phya River under control and irrigate nearly all of the rice-growing area of the delta. It would require a large investment and ten years to complete.

The General Report was not limited to technical analysis of the irrigation

system; van der Heide also discussed at length the many economic and social benefits that would accompany irrigation. These went far beyond simply reducing the frequency of crop failure, and he used cost/benefit analysis to make the case that the project could be made to pay for itself. Government revenues would rise from increased taxes, water tolls and transport charges. He argued that the whole project should yield a net return to the government.

Much of the rest of this book is concerned, one way or another, with the debate over van der Heide's Great Scheme, or some smaller variation of it. Brummelhuis takes the reader through this debate, using his archival research to show the parts played by different participants. In the process he provides fascinating glimpses into the workings of the Siamese bureaucracy.

La Mahotière, a French engineer responsible for Bangkok's water supply, strongly opposed van der Heide's scheme, and wrote a long memo criticizing it. Van der Heide quickly wrote a fiery rebuttal. W.A. Graham, an English adviser to the the Ministry of Agriculture, strongly favored the Great Scheme. He praised van der Heide's use of economic analysis, and even suggested that the irrigation plan could also take care of Bangkok's need for a potable water supply and render unnecessary the railway to Uttaradit (because of improved water transportation). Brummelhuis notes that "there is not a single hint that Graham's staunch support for Homan van der Heide had any effect at all." The

financial adviser, Rivett-Carnac, flatly opposed any irrigation activity at all "for many years to come," a total reversal of his previous position. Meanwhile, Thewet equivocated, not knowing what to make of it all.

The matter was referred to a distinguished special committee made up of the ministers most directly concerned: Princes Damrong (Interior), Thewawong (Foreign Affairs), Mahit (Finance), Narit (Local Government), and Chao Phya Thewet (Agriculture). A commoner, Chao Phya Thewet, was uncomfortable in that group.

Van der Heide took an active role in the protracted debate, and Brummelhuis makes it clear that his personality became an important factor. He was a very stubborn and determined man, but he also lacked tact and was ill-mannered by Siamese standards. These traits damaged his effectiveness.

Brummelhuis tells us that as decision time approached, "ubiquitous caution prevailed". Much was at stake: irrigation competed with railways, while foreign loans to finance irrigation might jeopardize Siam's independence (the French threat to the east was still alive in 1903). The huge project itself had risks. Was Siam capable of managing such a large project? It was well known that some early Dutch irrigation projects in Java had failed, and others had been studied for several years before being implemented. The Special Committee was charged with this decision, but above them always loomed the dominant figure of King Chulalongkorn himself.

The archival record shows that he read many of the various reports, letters, and memos, and often wrote candid comments on them. Brummelhuis cites several instances in which he cut through the tangle to clarify issues.

By the end of 1903 the decision was taken – NOT to proceed with the Great Scheme. Though bitterly disappointed, van der Heide responded by drawing up a succession of smaller schemes, pieces designed to be compatible with the Great Scheme, if it were ever to be revived. He also undertook some smaller projects, digging canals and installing locks, and thereby winning the confidence of rice farmers in several areas. They saw that what he did worked. He also succeeded in establishing a Royal Irrigation Department, of which he was the first director. Brummelhuis shows that van der Heide continued to have difficult, prickly relationships with the Siamese bureaucracy, especially the Ministry of Finance and the Treasury.

Finally, when he returned after having taken a year's leave, van der Heide realized that prospects for irrigation in Siam were bleak. None of his smaller schemes had ever been approved, and his budget was repeatedly cut. He resigned and left Bangkok in 1909, seven years after he arrived. He had spent the prime of his life in this failed effort. Brummelhuis says the failure haunted him to the end of his life. He blamed the British for it.

Brummelhuis equivocates about whether Siam made a mistake in not going ahead with the Great Scheme in

1903. But he suggests that the outcome might have been different with a different cast of characters. If, for example, van der Heide had been reporting to Prince Damrong, instead of the weak, timid Thewet, the outcome might have been different.

As it happened, an irrigation project similar to the Great Scheme was built in the 1950s with foreign loans and World Bank assistance. It was a great success.

As noted, this is not a biography of Homan van der Heide, but one could wish for a little more information about the man. We are not even told whether his family came to Bangkok. On the very last page there is a single mention of a wife, riding with him in a farm cart after World War II. Van der Heide had National Socialist sympathies in the 1930s and was arrested after the war. He died in an internment camp in 1945 at the age of 80.

Altogether, this is an impressive and valuable contribution to the economic and social history of Thailand.

There is an excellent index and many useful photographs and maps

James C. Ingram

Luigi Bressan and Michael Smithies, *Thai-Vatican Relations in the Twentieth Century*. Bangkok, Apostolic Nunciature, 2006, 178 pp., illus.

This volume arrives as the third of a trilogy involving the same authors, whose first two volumes were *Siam and the Vatican in the Seventeenth Century* (2001), and, by Luigi Bressan alone, *King Chulalongkorn and Pope Leo XIII* (1998). The present concluding volume of the trilogy was published in 2006, in the words of Michael Cardinal Michai Kitbunchu, Archbishop of Bangkok, “to celebrate the auspicious occasion of the 60th Anniversary of His Majesty’s Coronation”, that of Phra Bat Somdej Phra Paramindara Maha Bhumibol Adulyadej.

After the preface of Cardinal Michai Kitbunchu and acknowledgements, there follows an introduction covering the advent of Christianity in Thailand and early contacts with the Vatican. Then Chapter 1, ‘The First Decade’, covers the death of Pope Leo XIII in 1903, who in 1897 had received in audience King Chulalongkorn; the election of Pope Pius X in the same year; King Chulalongkorn’s letter of congratulations on his election; the death of King Chulalongkorn in 1910, and the accession of King Vajiravudh, who had earlier been part of King Chulalongkorn’s entourage visiting Pope Leo XIII in 1897; King Vajiravudh’s letter informing the Pope of the death of his father, and his own accession to the throne; and a letter from Pope Pius X expressing