2. Present Conditions in Ancient Sukhothai

Muang Kao Sukhothai (the ancient city of Sukhothai) is situated in Amphur Muang (Muang County), some 447 kilometres to the north of Bangkok and 12 kilometres to the west of the new town, in Sukhothai province. To the east, flat plains comprise 0.3-0.8 per cent of the total area of the Sukhothai Historical Park (40,000 rai). To the west are mountain slopes. The whole area of Sukhothai is dry with an average of no more than 1,027 millimetres of rainfall per year. The average temperature is 24-30°C.

Present state of the ancient sites

The rectangular-shaped city of Sukhothai is approximately 1,400 metres long and about 1,800 metres wide. The triple earthen walls are (at different intervals) 10-30 metres wide. Four main gates are centrally located on each side of the wall. Within and outside the city walls are a scattering of ancient sites. Wat Mahathat, the largest temple complex of the capital, stands in the centre of the town. Four large ancient ponds known as traphang - Traphang Ngern, Traphang Thong, Traphang Sra Sri and Traphang Trakuan - are located within the major temple complexes. These ponds are approximately 200 by 800 metres in size. The northern part of the city (outside the city walls) is approximately 900 by 900 metres in size and is surrounded by the Mae Chon Canal.

The most interesting feature of this northern area is Wat phra Phai Luang, a Khmer-style former Brahmin shrine. located on an island in the middle of a pond. Towards the east alongside the Mae Chon Canal are flat plains (approximately 750 by 1,350 metres in size) which are surrounded by earthen ramparts (4-6 metres high). To the west of the city are mountain ranges, including a large reservoir: water from this is channelled into the Sao Hor Canal and flows into the southern part of the city. At the foot of the hills and on the slopes are some ruins of temple bases. This whole area is known as Aranyik.

A hundred and twenty-six ancient sites comprising religious monuments, temples, ancient public facilities (e.g. stone toilets) and kiln sites are located within the historical park. Table 1 indicates the number of ancient structures in each of the aforementioned categories:

Table Type of ancient structures	Number '	Within city wall	North	South	East	West	On hill slopes
Temples	109	30	12	20	17	21	9
Public facilities	13	3	3	2	2	2	
Kiln sites		-	1	-		-	
Others	3	3	-				
TOTAL	126	36	16	22	19	23	10

Of these, fifty -two ancient sites within a radius of three kilometres have been cleared and restored (18 sites within the city walls and 34 outside). The project aims at preserving the present state of the monuments to prevent them from further decay. Because of limited funds, only prominent temples will be restored. Although Wat Mahathat, Wat Sri Choum and Wat Chetuphon have

been 'officially restored', there are still many additional details to be improved. Seventy-four sites inside and outside the city walls (which were registered by the Fine Arts Departments in 1953) still need to be cleaned and cleared, because they are now covered with jungle growth. Table 2 indicates the condition of ancient structures in the various locations.

Table 2 Condition of anceint structures	No.	Within city wall	North	South	East	West	On hill slopes
Restored	52	18	3	8	8	8	7 3
Not restored	74	18	13	15	10	15	

The monuments were built mostly of earthen and laterite bricks. Occasionally slate and a combination of brick and laterite was used. The exterior of the structures was usually made of stucco and it is surmised that the interior partitions were composed of mud. Some of the stucco work still remains on the exterior of religious buildings but, understandably, the interior mud walls have not been able to resist time. Though nature has, through the years, destroyed much of these centuries-old structures, 20th-century man has done more to speed up their destruction. Most destructive are the treasure-hunters who dig and delve into enclosed stupas and beneath temples and Buddha images to make money out of the these treasured reminders of the past. Sadly, no amount of restoration can fully redeem this destruction. Immediate attention must be given to these structures to preserve not only Thailand's but mankind's cultural heritage.

In the preservation of the archaeological structures, no attempts will be made to add parts that are no longer in existence. Sukhothai's dryness has helped to keep the monuments relatively free of microorganisms such as fungi and moss. However, this lack of water has not been as advantageous for growing plants and trees.

Sukhothai's landscape

Sukhothai's landscape is composed of hills, canals, ponds, wells and ancient archaeological sites which are scattered both within and outside the ancient city walls.

The temples located within the city walls were considered to be the most important in the kingdom. Some of the major temples in this division are Wat Sra Sri, Wat Chanasongkram, Wat Traphang Ngern, Sarn Ta Pa Daeng, Wat Mai and Wat Mahathat, the kingdoms's most important Buddhist centre. Integral parts of temple-complex designs were the large ancient ponds (traphang). The hills to the west provide a picturesque backgorund.

The group of temples in the north (outside the city walls) was second in importance in the Sukhothai kingdom. The major temples in this area are Wat Phra Phai Luang, Wat Sri Choum and Wat Om Rob. The ceramic kilns are also located in this area.

The ancient sites to the east of the city walls will present the most numerous problems as the area is quite densely populated. The road to the east of the walls is cluttered with a conglomera-

tion of houses, shops, a sawmill and rice mills, which are interspersed arbitrarily between the ancient sites. As most of the inhabitants either possess land title deeds or have settlers' rights it will be difficult to relocate them. The major temples in this area are Wat Chang Lom, Wat Traphang Thong Lang, Wat Ya Kron and Wat Chedi Soong.

To the south of the city walls, the hills to the south and west provide a lovely backdrop for such temples as Wat Chetuphon, Wat Khon Laeng, Wat Ton Chan, Wat Sri Phichitkittikalayaram, Wat Viharn Thong, Wat Prong Men and Wat Moom Lanka.

The major temples in the west (outside the city walls, in the plains) are mostly interspersed between sugar-cane plantations. These include such temples as Wat Mangkorn, Wat Phra Yeun, Wat Teuk and Hor Tewalai-Kasetphimarn.

From the ancient sites in the west, on the slopes of the hills, one can view the whole of Sukhothai city. The prominent temples here include Wat Saphan Hin, Wat Phrabat Noi, Wat Chedi Ngam, Wat Tham Heeb, Wat Aranyik and Wat Chang Rob.

The visual obstructions in this ancient city consist of unsightly jungle growth, a number of poorly constructed houses and shops, sawmills, rice mills and untidy electricity poles. The souvenir shops by the national monument for Ramkamhaeng situated across from Wat Mahathat will have to be relocated. The earthen city walls and their surrounding moats are mostly covered by layers of earth and forest vegetation, making it impossible to see the whole wall structure from a distance.

The ancient ponds which are scattered all around the ancient sites provided the main source of water supply

for the ancient as well as the present inhabitants. There are various types of ponds: (a) small ponds that contain a sufficient supply of water only at certain times of the year (312); (b) small ponds that contain water only at certain times of the year (36); (c) mediumsized ponds that contain a sufficient supply of water throughout the year (61); (d) medium-sized ponds that contain water only at certian times of the year (2); (e) large ponds (traphang) that contain a sufficient supply of water throughout the year (10); and (f) large ponds that contain water only at certian times of the year (425).

Park facilities will include signposts, pathways and park benches. Signposts will enable the visitors to identify places. At present there is no uniformity in the paint, size or lettering of signposts. Also, if visitors are to enjoy the historical park to the fullest extent, park benches are a necessity. At the moment there are not enough benches to accommodate visitors.

The project is based mainly on the stone inscription of 1292 written by King Ramkamhaeng, which mentions the main religious structures, houses, fields, ponds, wells, reservoirs and orchards of mango, areca nut, betel nut, tamarind, jackfruit and coconut.

Procedures for maintaining the historical park involve:

Cutting grass in an area of 1,520 rai. Because of the irregularity of the ground, electric lawn-mowers often break down and their repair slows down the work as there are not enough lawn-mowers anyway. In places where the mowers cannot reach, cutting must be done manually.

Maintaining cleanliness in the ancient sites and along the roads. More workers should be employed for this

purpose.

Guarding the ancient sites. At the moment there are not enough men to keep a 24-hour watch over the sites.

After a thorough survey of the sites, the following objectives were set: A detailed master plan should be drawn up to co-ordinate all specialized work departments.

Each ancient site should be surveyed for its historical significance, present condition and size.

Several houses within the vicinity of the ancient city should be relocated. Any new houses should be made of a material that will blend with the atmosphere of the ancient city.

Souvenir and food stalls set up for sightseers should be located well away from the ancient sites so as not to destroy the historic view.

Those highways and roads which cut across ancient sites should be rerouted.

Areas that should be relocated are (a) sawnills and rice mills; (b) the Ramkamhaeng National Monument (modern); (c) newly erected temples to the south of Wat Chetuphon and Wat Mahathat; (d) souvenir shops; and (e) public utilities such as electricity poles. A survey of the soil structure was undertaken at 100 cm to 120 cm beneath the ground. Seven test pits (dug within a radius of 7,539 rai wihin and outside the city walls) revealed that 1,796 rai of land were well suited for farming while another 709 rai were arable but contained about 10-26 per cent of brick and ceramic parts and this will partially impede farming.

In all, there are no major obstructions to growing trees and crops. A total of 2,520 rai of land can be used for this purpose.

Present land use

So far there have not been any specific government regulations concerning the use of land within the historical park. The inhabitants who live both within and outside the city walls are mostly farmers and cattle-herders. Conservation forests and farming areas lie outside the city walls. Most of the inhabitants who have settler's rights live in the area to the east of the city.

Scattered all around the city both within and outside the city walls are 126 ancient sites, and interspersed among the historical structures are villages made up of houses grouped together in clusters and individual houses scattered aribitrarily around the city. The villages are located within the city walls east of the city. Baan Neu, the most densely populated village, located to the north of the Charotvithithong Highway, and Bann Tai, located south of the highway, consist of two-storey tin-roofed wooden houses. At another location on the dust road off the highway is a cluster of one-storey houses that have been built in very disorderly fashion. The individual houses, of which there are about 450, are scattered all around the city in no particular unit both within and outside the city walls. A survey revealed that many of the houses in this category are situated either right on top of or very close to the archaeological sites. Because they are so scattered, it will be difficult to round up all the people and relocate them in specific areas.

Industry in the old city of Sukhothai is centred mainly round agriculture. Two relatively large mills-a rice mill, located beside Wat Chang Lom, and a sawmill beside the Charotvithithong Highway-destroy the view of the ancient sites. Trucks hauling logs to and

from the sawmill exert constant pressure on the adjacent historical area and consequently speed up their destruction. About thirteen smaller mills of both varieties are located in several other villages.

The farming areas of Sukhothai city are situated in the north, south and west of the old city (outside the ancient walls). paddy-fields make up the major part of the agricultural area; second to this are sugar-cane plantations.

The institutional area is located in the centre of Sukhothai city and comprises newly erected temples, schools, a museum (Fine Arts Department Division included), government buildings such as the health centre and a police station.

As regards traffic areas, apart from strengthening and re-routing existing roads, consideration will be given to parking facilities. The asphalt-paved Charotvithithong Highway, 2.95 kilometres long and 7 metres wide is still in good condition though it will have to be re-routed, since one part of it cuts across the ancient pond at the Wat Sra Sri complex, a major temple in Sukhothai times. A meandering dirt road 4 metres wide and about 40 kilometres long connects the ancient sites. Dusty in the dry season and soggy in the rainy season, these roads cannot survive for long. The only ancient sites that have not been connected by roads are situated on the hill slopes.

More than 50 per cent of the surveyed area consists of conservation forests which cover the hill slopes to the west of the ancient city. Practically every inch of disused land and land containing water has been used for growing; even the area of the moats which surround the city walls has been used for rice cultivation. In some of

these areas, however. cultivation is no longer permitted.

Table 3. Present land use

Land division	A	геа	Percentage of	
	Rai	Km ²	70 km² area	
Ancient site area	2200	3.52	5.03	
Housing area	1155	1.85	2.64	
Commercial area	84	0.14	0.19	
Industrial area	28	0.04	0.06	
Agricultural area	13956	22.33	31.9	
Institutional area	68	0.11	0.16	
Roads	175	0.28	0.4	
Conservation forests	26057	41.69	59.56	
Disused land	27	0.04	0.06	

Within the historical park area of 43,750 rai (70 km²), an area of 6,000 rai is privately owned; that is, the occupants have been issued land title deeds. Another 7,000 rai located to the north and west of the old city have been used by settlers for farming. Although the rest of the land is under the direct control of the Fine Arts Department, all the hilly areas have been designated as conservation forests and are under the control of the Forestry Department.

Table 4. Land ownership

Land ownership description	Area	Percentage of	
• • • • • • • • • • • • • • • • • • • •	Rai	Km ²	70 km² area
Area that has been issued settlers' rights	5957.00	9.53	13.60
Area that has been issued land title deeds	18.09	0.03	0.05
Government-owned lands	37774.91	60.44	86.35