VIETNAM



Source: esri

General

Vietnam - officially the Socialist Republic of Vietnam - is the easternmost country on the Indochina Peninsula in Southeast Asia. Vietnam is bordered by China in the North, Laos in the Northwest, Cambodia in the Southwest, Thailand across the Gulf of Thailand in the Southwest, and the Philippines, Malaysia and Indonesia across the South China Sea in the East and Southeast. The area of Vietnam is 33.1 Mha (million hectares) with, in 2022, a population of 98.2 million, or 3.0 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

Because of differences in latitude and the variety in topographical relief, the climate varies considerably from place to place. During the winter or dry season, extending roughly from November to April, the monsoon winds usually blow from the Northeast along the Chinese coast and across the Gulf of Tonkin, picking up considerable moisture. Consequently, the winter season in most parts of the country is dry by comparison with the rainy or summer season. The average annual temperature is generally higher in the plains than in the mountains, and higher in the South than in the North. Temperatures vary less in the southern plains around Ho Chi Minh City and the Mekong Delta, ranging between 21 and 28 °C over the course of the year (source: Wikipedia).

The combined length of Vietnam's land boundaries is 4,639 km, and its coastline is 3,444 km long. At its narrowest point in the central Quảng Bình Province, the country is as little as 50 km across, though it widens to around 600 km in the North. Vietnam's land is mostly hilly and densely forested, with level land covering no more than 20%. Mountains account for 40% of the country's land area, and tropical forests cover around 42%. The Red River Basin in the North stretches over an area of 130,000 km^2 and is marked by steep slopes. The Red River Delta, a flat, roughly triangular region covering 15,000 km^2, is smaller but more intensely developed and more densely populated than the Mekong River Delta in the South. Once an inlet of the Gulf of Tonkin, it has been filled in over the millennia by riverine alluvial deposits. The delta, covering about 40,000 km^2, is a low-level plain no more than 3 m+MSL (mean sea level) at any point. It is criss-crossed by a maze of rivers and canals, which carry so much sediment that the delta advances 60 to 80 m into the sea every year. Southern Vietnam is divided into coastal lowlands, the mountains of the Annamite Range, and extensive forests. Comprising five relatively flat plateaus, the highlands account for 16% of the country's arable land and 22% of its total forested land. The soil in much of the southern part of Vietnam is relatively low in nutrients as a result of intense cultivation (source: Wikipedia).

Several minor earthquakes have been recorded. The northern part of the country consists mostly of highlands and the Red River Delta. From North to South Vietnam, the country also has numerous islands, with Phú Quốc as the largest. The Ba Bể Lake and Mekong River are the largest lake and longest river in the country (source: Wikipedia).

In the winter time water levels in all rivers are low and salinity intrudes very far, up to 20 - 25 km from the coast (Vinh, 1997). Flooding usually originates in China. Inundation of inland caused by heavy rainfall usually occurs between July and September.

Devienne (2006) describes that the Red River is a dangerous river, with multiple, violent and relatively short-term floods. Most of the water that it carries along in flood periods does not come from rainfall on the delta itself, but from regions located upstream in the river basin. In Hanoi, the river reaches 2.5 m at its lowest water level, whereas when floods are strongest, it can rise up to 11.5 m or even 13 m. Throughout the delta, three types of land are encountered. They can be differentiated as a function of their relative altitude in relation to the level of water, i.e., in relation to the availability of water depending on the different seasons and on the risks of flooding. Before impoldering the lowlands were submerged in the rainy season by rainwater and, every other year, by the overflow of the water carried by the floods. In winter they were

marshy, and in a large part of the delta they could be flooded at high tide. The midlands were submerged in the summertime, by floods; whereas the were preserved from floods in the summer by the overflow of the floods in the mid- and lowlands.

Devienne (2006) further describes that although the delta was settled long ago, probably dating back to the first millennium BC, it was in the 11th century that the delta population tackled large-scale hydraulic projects. In the Red River delta, the Chinese introduced techniques (use of the plough and undoubtedly also the rice transplanting technique), as well as their political and administrative system relying on a body of paid and revocable civil servants, the mandarins. Mandarin bureaucracy organized the work of the peasants and collected a tribute tax, to conduct major hydraulic projects the scope and coordination of which required centralization. The projects were aimed progressively at safeguarding the land from salt water intrusions, at protecting the whole delta from floods in the Red River and its distributaries, then at favouring the drainage of land in the rainy season and finally irrigate the land in the dry season. Those projects were conducted in phases, by each of the major dynasties that came to power one after the other; they relied on the construction of canals, dikes, equipped with floodgates, and on gravitational drainage using, when possible, the ebb and flow of the tides.

From the 11th century, the first major projects consisted of constructing canals, i.e., deepening drains and compartment rivers, to favour the drainage of land, and especially constructing dikes making it possible to protect the coastal zones from intrusions of brackish water. Then, from the 13th century, the Vietnamese set about diking up the Red River and its main distributaries, the *Canal des Rapides* and the *Canal des Bambous*, to avoid flooding related to excessively high floods. The dike building was to last a long time. The dikes had to be continually reinforced, and the network supplemented: in the 18th century, the Day river, a Red River distributary, was in turn diked up. From then on, the Red River crossed the delta and was no longer involved in drainage or alluvial deposits: the evacuation of rainwater and flood tides had to be done via the numerous drains and compartment rivers as well as via their small tributaries that were gradually deepened. As from the end of the 19th century, the French colonial administration followed the bureaucracy already set up and pursued those works by mobilizing the peasant workforce and increasing its fiscal pressure. The dikes encircling the Red River and its distributaries were reinforced, the drainage of the western region was improved owing to the dam upstream on one of the Red River distributaries, the Phu Ly Canal, thus keeping the floods from spilling into the lowlands. Many drains were deepened to enhance land drainage. From the early 20th century, the colonial administration embarked on irrigation network projects, which were still fairly limited (they concerned 60,000 ha out of approximately 1.2 Mha. The gravitational irrigation was enabled by the construction of diversion canals upstream on the rivers. A pumping station in the upstream zone of the delta was installed, making it possible to raise the water of the Red River and irrigate the highlands (Devienne, 2006).

Horticultural crops and fruit trees are also grown on soils, which are generally considered as being less suitable for such crops, and where frequent flooding occurs. Small polders have been built with pump-lift drainage and irrigation by sprinkling. There is a liberal application of fertilizers, and if necessary, lime. Such areas are found in the vicinity of cities where a good market exists for such products making high investments justifiable (Ho Chi Minh City, My Tho and Can Tho) (Centre for Civil Engineering Research and Codes (CUR) and Ministry of Transport, Public Works and Water management, 1993).

Due to sedimentation in the downstream section the bed of the Red River has risen several metres above the level of the adjacent land (Centre for Civil Engineering Research and Codes (CUR) and Ministry of Transport, Public Works and Water management, 1993).

McElwee *et al*. (2016) describes that the Northern, Central, and Southern regions of Vietnam traditionally had divergent ways of coping with flood hazards. He states that the lack of information about and attention to flood risk and vulnerability in the Red River Delta, is likely due to the

misperception that the Red River Delta has sufficient infrastructure in the form of dams and dikes to prevent large-scale flooding. Here floods usually occur primarily after storms or extreme rainfall events, and the focus has been on infrastructure for flood prevention, including investments in reservoirs, river and sea dikes, and dredging. Other areas of Vietnam have seen much more research. In the Mekong Delta, slow-onset yearly floods have prompted an adaptation regime of *living with the floods*, while in Central Vietnam short slopes and high risk of flash floods have focused efforts on preparedness and disaster risk reduction projects.

Biggs (2011) describes about the Mekong Delta that, starting the late 1930s, rather than redesign the waterway system, the colonial government embarked upon a *Dutch dike strategy* for flood control that has had long-term consequences extending to the present day. Rather than figure out ways to drain water from agricultural areas, the government instead experimented with building encircling flood dikes or polders (*casiers*) that would at least protect lands inside.

Minderhoud (2019) describes in detail the present and future subsidence in the Vietnamese part of the Mekong Delta. The present rates can be up to ≈35 mm/year at the coastline. He describes and shows the various drivers of the subsidence (Figure 1).

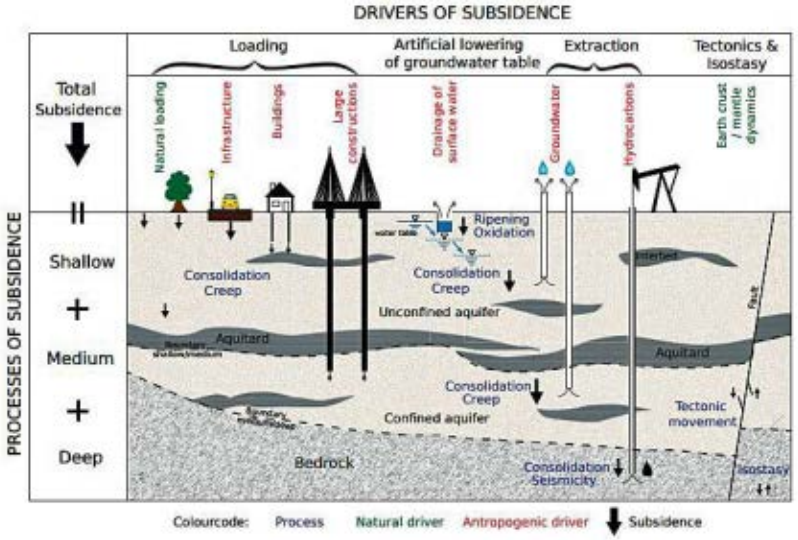


Figure 1. Main drivers and processes of subsidence in a deltaic system. Subsidence drivers and processes act at different depths and time intervals. Generally, subsidence processes in the shallow subsurface cause local subsidence, while deeper processes can affect much larger areas (Minderhoud, 2019)

Existing polders

The Group Polder Development (1982) mentions the following polder projects in the Mekong Delta (Figure 2):

- Cai San (60,000 ha);
- Quan Lo – Phung Hiêp (600,000 ha) near Bassac River;
- Tiêp – Nhut (34,000 ha);
- Ba Dong (110,000 ha) along the coast;
- South Kiên – Hoa (30,000 ha) along the coast;
- Ba – Tri (37,000 ha) along the coast;
- Go Cong (50,000 ha).

Ritzema *et al*. (2011) did research in the Trieu Dong and Phan Dong polders to improve water management in the Red River Delta.

Wikipedia mentions the Phuong Dong polder (790 ha).



Figure 2. Polder projects in the Mekong Delta (Group Polder Development, 1982)

Tessier (2011) shows a map of the dikes in the Red River Delta in 1905 that is derived from Gauthier (1930) (Figure 3). The Group Polder Development (1982) also shows a map of the dikes in the Red River Delta (Figure 4). This map is probably of a later date.

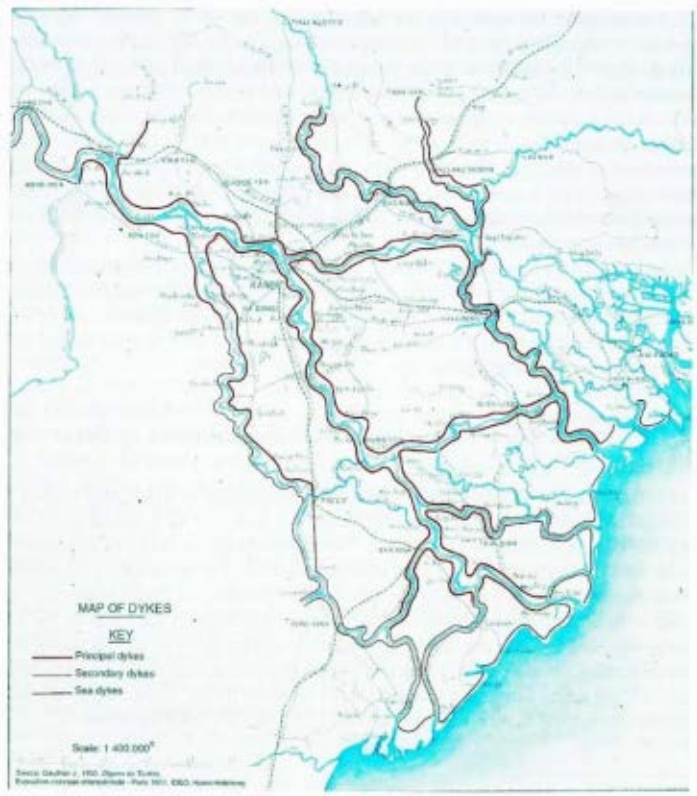


Figure 3. Dikes in the Red River Delta in 1905 (Tessier, 2011, after Gauthier, 1930)

General characteristics of the polders in Vietnam are shown in Table I. Table II shows the characteristics of the water management and flood protection systems of the existing polders.

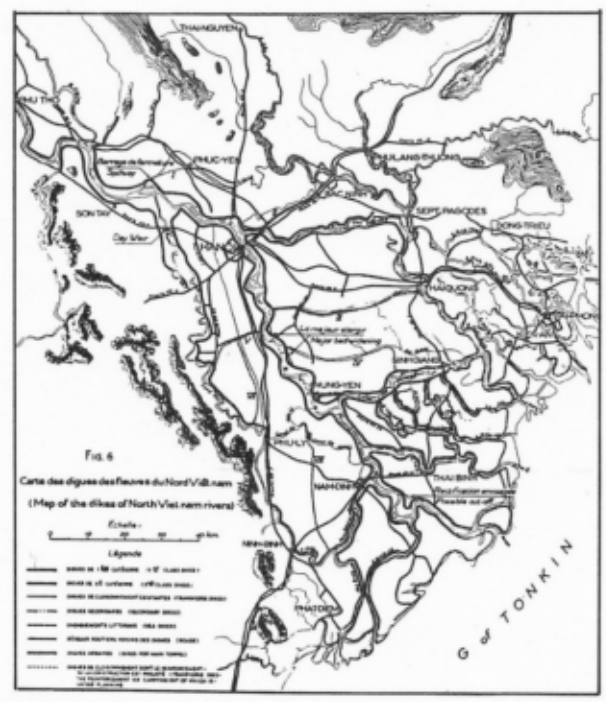


Figure 4. Polders in the Red River Delta (Group Polder Development, 1982)

Proposed polders

No proposed polders have been identified.

Water management and flood protection

Water management in the Red River Delta involves flood control, water supply and drainage. A dike system with a length 2,100 km and 500 sluices, irrigation and drainage has been constructed over the last centuries, especially since 1960. There are three typical types of drainage in this region (Vinh, 1997):

- by gravity in highly elevated land;
- by using tidal fluctuation, there are 15 schemes with a total drainage area of about 410,000 ha;
- by pumping, an area of about 400,000 ha is drained by pumping of various types and capacity of each unit, ranging from 1,000 m^3/hr to 30,000 m^3/hr.

Vinh Tran Si (1997) describes that the discharge capacity of the drainage systems in the Red River Delta is based on 4 l/s/ha, 35 mm/day, which he considers as too low.

As far as the soil in the Mekong Delta is concerned, several sources describe that the development of acid-sulphate soil (catclay) due to reclamation occurs at a large scale (Group Polder Development, 1982; Stamhuis, 1983). Stamhuis (1983) describes research in a pilot polder focussed on finding the best water management options for rice cultivation at potentially acid-sulphate soils.

Tran and Weger (2018) give a schematic presentation of the irrigation and drainage systems (Figure 5). They also show the existing low and high dike areas (situation 2014) in An Giang Province in the Mekong Delta (Figure 6).

As far as flood protection is concerned Van Alphen and Lodder (2006) describe that Vietnam applies safety levels based on chances of occurrence from 0.5% per year till 4% per year.

Pilarczyk and Nuoi (2005) state that because of the specific situation of the Mekong Delta it is neither economically justified nor environmentally sound to provide complete flood protection. The actual policy recommendations include:

- low embankments in the deeply flooded parts to protect against early floods;
- full embankments in shallow agricultural areas to protect against 10-year floods;
- no embankments on land that has potentially serious acid-sulphate problems.

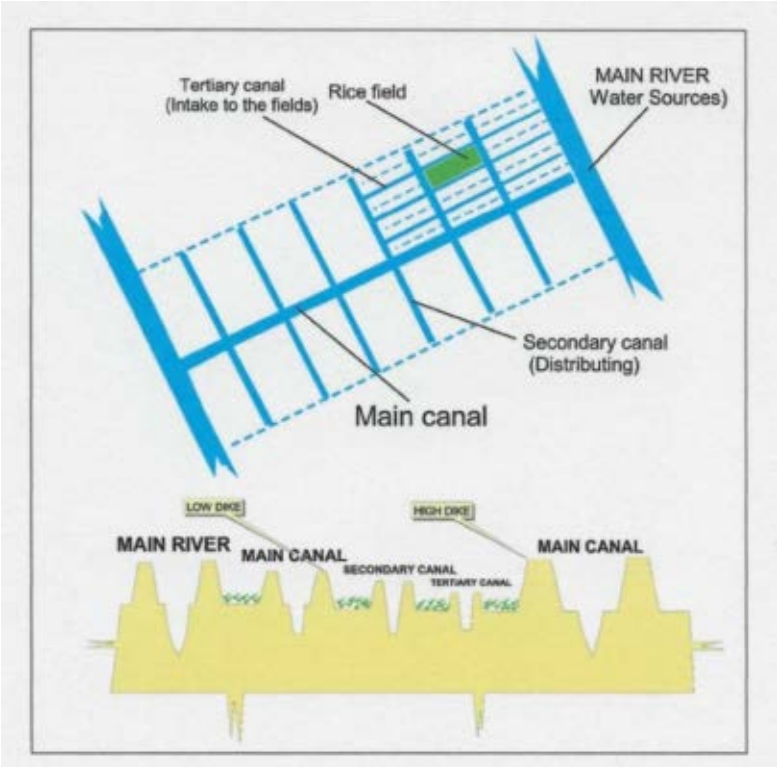


Figure 5. Schematic presentation of the irrigation and drainage systems in An Giang Province in the Mekong Delta (Tran and Weger, 2018)

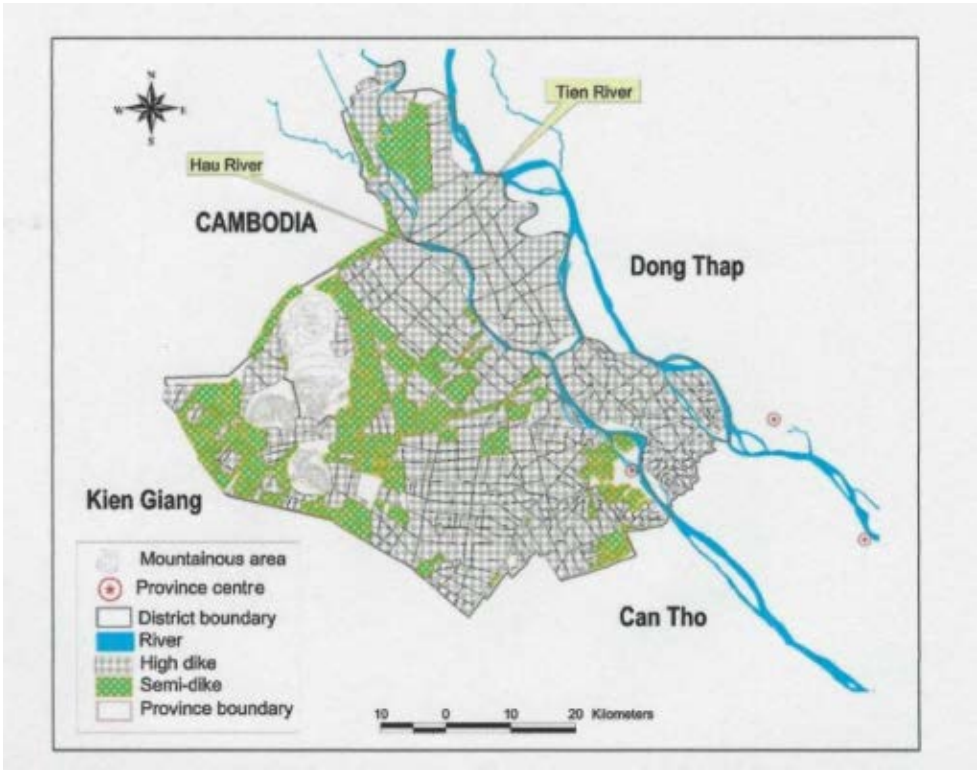


Figure 6. Low and high dike areas (situation 2014) in An Giang Province in the Mekong Delta (Tran and Weger, 2018)

Location of the polders in Vietnam as shown on the World polder map

The location of the polders in Vietnam is shown in Figure 7.



Figure 7. Location of the polders in Vietnam (source: esri – Batavialand)

The pictures by Prof. Adriaan Volker are shown in Table III. The pictures by Prof. Bart Schultz are shown in Table IV.

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- *Ecology and the Mekong Project;*
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Bart Schultz

Lelystad, February 2024

Table I. General characteristics of existing polders in Vietnam

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Red River Delta:							
• Phan Dong Polder		1,956	RLL	21º 13' N	106º 4' E	2 - 4	Agriculture
• Phuong Dong polder	1997	790	RLL	21º 03' N	106º 43' E	10	Rural area
• Polders with pumped drainage		400,000	RLL	20º 42' N	106º 30' E	2	Rural area
• Polders with tidal gravity drainage		410,000	RLL	21º 03' N	106º 30' E	2	Rural area
• Trieu Dong Polder		4,051	RLL	20º 38' N	106º 7' E	1.3 – 3.0	Mixed land use
Mekong Delta:							
• Ba Dong		110,000	RLL	9º 40' N	106º 33' E	2	Rural area
• Ba – Tri		37,000	RLL	10º 02' N	106º 36' E	-1	Rural area
• Bac Hung Hai Polder							
• Cai San		60,000	RLL	10º 19' N	105º 28' E	2	Rural area
• Go Cong		50,000	RLL	10º 22' N	106º 41' E	2	Rural area
• Quan Lo		600,000	RLL	9º 28' N	105º 30' E	0	Agriculture
• South Kiên – Hoa		30,000	RLL	9º 51' N	106º 37' E	-1	Agriculture
• Tiêp – Nhut		34,000	RLL	9º 28' N	106º 10' E	1	Agriculture
Total		1,737,797					

*) RLL = reclaimed low-lying land; LGS = land gained on the sea; DL = drained lake

Table II. Characteristics of the water management and flood protection system of existing polders in Vietnam

Name	Design criteria in chance of occurrence/year							
	Water management						Flood protection	
	Drainage					Irrigation	Rural	Urban
	Type	Design criterion	Percentage of open water	Discharge capacity				
				m^3/s	mm/day		%/year	%/year
Red River Delta:					35		0.5 – 4.0	
• Phan Dong Polder	RLL							
• Phuong Dong polder	RLL							
• Polders with pumped drainage	RLL							
• Polders with tidal gravity drainage	RLL							
• Trieu Dong Polder	RLL							
Mekong Delta:								
• Ba Dong	RLL							
• Ba – Tri	RLL							
• Bac Hung Hai Polder							0.5 – 4.0	
• Cai San	RLL							
• Go Cong	RLL							
• Quan Lo	RLL							
• South Kiên – Hoa	RLL							
• Tiêp – Nhut	RLL							

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker

			
A5 001/IX.5.1 Aerial picture Ngan Ro Dam	A5 002/IX.5.2 Ngan Ro Dam	A5 003/IX.5.3 Ngan Ro Dam	A5 004/IX.5.4 Ngan Ro Dam
			
A5 005/IX.5.5 Ngan Ro Dam	A5 006/IX.5.6 Ngan Ro Dam	A5 007/IX.5.7 Aerial picture Ngan Ro Dam	A5 008/IX.5.8 Prof. Adriaan Volker in polder area
			
A5 009/IX.5.9 Prof. Adriaan Volker in polder area	A5 010/IX.5.10 Prof. Adriaan Volker in polder area	A5 010A/IX.5.10A Prof. Adriaan Volker in polder area	A5 011/IX.5.11 Phung Hiep

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker

			
A5 012/IX.5.12 Phung Hiep	A5 013/IX.5.13 Phung Hiep	A5 1 023/A.5.1.23 Polder Saigon My Tho	C3 1 001/C.3.1.1 Coastal area, 1977
			
C3 1 002/C.3.1.2 Coastal area, 1977	C3 1 003/C.3.1.3 Coastal area, 1977	C3 1 004/C.3.1.4 Rubber plantation, 1977	C3 1 005/C.3.1.5 Presumably Mekong Delta, 1987
			
C3 1 006/C.3.1.6 Presumably Mekong Delta, 1987	C3 1 007/C.3.1.7 Presumably Mekong Delta, 1987	C3 1 008/C.3.1.8 Presumably Mekong Delta, 1987	C3 1 009/C.3.1.9 Presumably Mekong Delta, 1987

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 1 010/C.3.1.10 Presumably Mekong Delta, 1987	C3 1 011/C.3.1.11 Presumably Mekong Delta, 1987	C3 1 012/C.3.1.12 Presumably Mekong Delta, 1987	C3 1 013/C.3.1.13 Presumably Mekong Delta, 1987
			
C3 1 014/C.3.1.14 Presumably Mekong Delta, 1987	C3 1 015/C.3.1.15 Presumably Mekong Delta, 1987	C3 1 016/C.3.1.16 Presumably Mekong Delta, 1987	C3 1 017/C.3.1.17 Presumably Mekong Delta, 1987
			
C3 1 018/C.3.1.18 Presumably Mekong Delta, 1987	C3 1 019/C.3.1.19 Presumably Mekong Delta, 1987	C3 1 020/C.3.1.20 Presumably Mekong Delta, 1987	C3 1 021/C.3.1.21 Presumably Mekong Delta, 1987

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 1 022/C.3.1.22 Presumably Mekong Delta, 1987	C3 1 023/C.3.1.23 Presumably Mekong Delta, 1987	C3 1 024/C.3.1.24 Presumably Mekong Delta, 1987	C3 1 025/C.3.1.25 Presumably Mekong Delta, 1987
			
C3 1 026/C.3.1.26 Presumably Mekong Delta, 1987	C3 1 027/C.3.1.27 Presumably Mekong Delta, 1987	C3 1 028/C3.1.28 Presumably area of the Red River	C3 1 029/C3.1.29 Presumably area of the Red River
			
C3 1 030/C3.1.30 Presumably area of the Red River	C3 1 031/C3.1.31 Presumably area of the Red River	C3 1 032/C3.1.32 Excavation for open drain, presumably in the area of the Red River	C3 1 033/C3.1.33 Jetty, presumably in the area of the Red River

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 1 034/C3.1.34 Road in the area of the Red River	C3 1 035/C3.1.35 Railway bridge over the Red River	C3 1 036/C3.1.36 Dike along the Red River with a tempel and a staff gauge	C3 1 037/C3.1.37 Dike along the Red River
			
C3 1 038/C3.1.38 Dike along the Red River	C3 1 039/C3.1.39 Dike along the Red River	C3 1 040/C3.1.40 Dike along the Red River with a staff gauge	C3 2 041/C3.2.41 Dike along the Red River with a staff gauge
			
C3 2 042/C.3.2.42 Vegetable cultivation in the area of the Red River	C3 2 043/C.3.2.43 Dike with probably a seepage spot in the area of the Red River	C3 2 044/C.3.2.44 Vegetable cultivation in the area of the Red River	C3 2 045/C.3.2.45 Pumping station in the area of the Red River

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 2 046/C.3.2.46 Pumping station in the area of the Red River	C3 2 047/C.3.2.47 Irrigation canal in the area of the Red River	C3 2 048/C.3.2.48 Red River near Hanoi with in the background the railway bridge	C3 2 049/C.3.2.49 Canal between dikes, presumably in the area of the Red River
			
C3 2 050/C.3.2.50 Canal between dikes, presumably in the area of the Red River	C3 2 051/C.3.2.51 Canal between dikes, presumably in the area of the Red River	C3 2 052/C.3.2.52 Barrage of the Day River	C3 2 053/C.3.2.53 Detail of the barrage of the Day River
			
C3 2 054/C.3.2.54 Supply canal to the barrage of the Day River	C3 2 055/C.3.2.55 Vegetable cultivation, presumably in the area of the Red River	C3 2 056/C.3.2.56 Vegetable cultivation, presumably in the area of the Red River	C3 2 057/C.3.2.57 Vegetable cultivation, presumably in the area of the Red River

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 2 058/C.3.2.58 Building and sluice, presumably area of the Red River	C3 2 059/C.3.2.59 Pumping station, presumably in the area of the Red River	C3 2 060/C.3.2.60 Construction of a culvert, presumably in the area of the Red River	C3 2 061/C.3.2.61 Landscape, presumably are of the Red River
			
C3 2 062/C.3.2.62 Canal, presumably in the area of the Red River	C3 2 063/C.3.2.63 Canal, presumably in the area of the Red River	C3 2 064/C.3.2.64 Canal, presumably in the area of the Red River	C3 2 065/C.3.2.65 Pumping station, presumably in the area of the Red River
			
C3 2 066/C.3.2.66 Landscape, presumably in the area of the Red River	C3 2 067/C.3.2.67 Construction of a culvert, presumably in the area of the Red River	C3 2 068/C.3.2.68 Traditional sailing boat	C3 2 069/C.3.2.69 Distribution structure in irrigationcanal, presumably in the area of the Red River

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 2 070/C.3.2.70 Coastal area	C3 2 071/C.3.2.71 Bay	C3 2 072/C.3.2.72 Bridge under construction, presumably in the area of the Red River	C3 2 073/C.3.2.73 River, presumably in the area of the Red River
			
C3 2 074/C.3.2.74 Aerial picture, presumably of a part of the area of the Red River	C3 2 075/C.3.2.75 Farmer with buffalo, presumably in the area of the Red River	C3 2 076/C.3.2.76 Distribution structure in an irrigation canal, presumably in the area of the Red River	C3 2 077/C.3.2.77 Irrigation canal, presumably in the area of the Red River
			
C3 2 078/C.3.2.78 Coastal area	C3 2 079/C.3.2.79 Weir and bridge in an irrigation canal	C3 2 080/C.3.2.80 Aerial picture, presumably of a part of the area of the Red River	C3 3 001/C.3.3.1 Aerial picture, presumably in the area of the Red River

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 3 002/C.3.3.2 Canal, presumably in the area of the Red River	C3 3 003/C.3.3.3 Canal, presumably in the area of the Red River	C3 3 004/C.3.3.4 Canal, presumably in the area of the Red River	C3 3 005/C.3.3.5 Canal, presumably in the area of the Red River
			
C3 3 006/C.3.3.6 Water pond, presumably in the area of the Red River	C3 3 007/C.3.3.7 Canal and road, presumably in the area of the Red River	C3 3 008/C.3.3.8 Probably Halong Bay	C3 3 002/C.3.3.2 Pumping station, presumably in the area of the Red River
			
C3 3 010/C.3.3.10 Coastal area	C3 3 011/C.3.3.11 Dredger, presumably in the Mekong Delta	C3 3 012/C.3.3.12 River, presumably in the Mekong Delta	C3 3 013/C.3.3.13 River, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 3 014/C.3.3.14 River, presumably in the Mekong Delta	C3 3 015/C.3.3.15 Vegetable cultivation and rice, presumably in the Mekong Delta	C3 3 016/C.3.3.16 Vegetable cultivation and rice, presumably in the Mekong Delta	C3 3 017/C.3.3.17 River, presumably in the Mekong Delta
			
C3 3 018/C.3.3.18 River, presumably in the Mekong Delta	C3 3 019/C.3.3.19 River, presumably in the Mekong Delta	C3 3 020/C.3.3.20 River, presumably in the Mekong Delta	C3 3 021/C.3.3.21 River, presumably in the Mekong Delta
			
C3 3 022/C.3.3.22 River, presumably in the Mekong Delta	C3 3 023/C.3.3.23 River, presumably in the Mekong Delta	C3 3 024/C.3.3.24 River, presumably in the Mekong Delta	C3 3 025/C.3.3.25 Bananas and rice, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 3 026/C.3.3.26 Bananas and maize or tobacco, presumably in the Mekong Delta	C3 3 027/C.3.3.27 Maize or tobacco, presumably in the Mekong Delta	C3 3 028/C.3.3.28 Rice, presumably in the Mekong Delta	C3 3 029/C.3.3.29 Bananas and rice, presumably in the Mekong Delta
			
C3 3 030/C.3.3.30 River, presumably in the Mekong Delta	C3 3 031/C.3.3.31 River, presumably in the Mekong Delta	C3 3 032/C.3.3.32 Rice and maize or tobacco, presumably in the Mekong Delta	C3 3 033/C.3.3.33 Canal bank, presumably in the Mekong Delta
			
C3 3 034/C.3.3.34 Fish pass and salt pans, presumably in the Mekong Delta	C3 3 035/C.3.3.35 Construction of a discharge sluice, presumably in the Mekong Delta	C3 3 036/C.3.3.36 Dike and fish pass, presumably in the Mekong Delta	C3 3 037/C.3.3.37 Discharge sluice, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 3 038/C.3.3.38 Discharge sluice, presumably in the Mekong Delta	C3 3 039/C.3.3.39 Discharge sluice, presumably in the Mekong Delta	C3 3 040/C.3.3.40 Dike and fish pass, presumably in the Mekong Delta	C3 4 041/C.3.4.41 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 042/C.3.4.42 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 043/C.3.4.43 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 044/C.3.4.44 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 045/C.3.4.45 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 046/C.3.4.46 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 047/C.3.4.47 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 048/C.3.4.48 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 049/C.3.4.49 Aerial picture coastal area, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

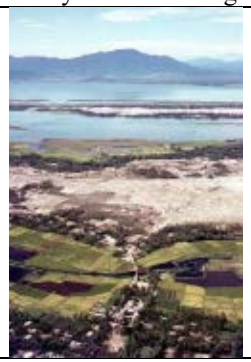
			
C3 4 050/C.3.4.50 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 051/C.3.4.51 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 052/C.3.4.52 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 053/C.3.4.53 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 054/C.3.4.54 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 055/C.3.4.55 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 056/C.3.4.56 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 057/C.3.4.57 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 058/C.3.4.58 Aerial picture of discharge sluice, presumably in the Mekong Delta	C3 4 059/C.3.4.59 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 060/C.3.4.60 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 061/C.3.4.61 Aerial picture coastal area, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 4 062/C.3.4.62 Aerial picture of a coast dam, presumably in the Mekong Delta	C3 4 063/C.3.4.63 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 064/C.3.4.64 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 065/C.3.4.65 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 066/C.3.4.66 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 067/C.3.4.67 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 068/C.3.4.68 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 069/C.3.4.69 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 070/C.3.4.70 Large overhaul, presumably in the Mekong Delta	C3 4 071/C.3.4.71 Landscape, presumably in the Mekong Delta	C3 4 072/C.3.4.72 Aerial picture of a discharge sluice, presumably in the Mekong Delta	C3 4 073/C.3.4.73 Aerial picture of a discharge sluice, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

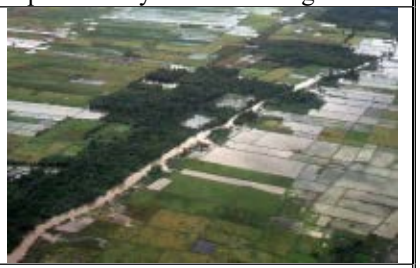
			
C3 4 074/C.3.4.74 Aerial picture of a coast dam, presumably in the Mekong Delta	C3 4 075/C.3.4.75 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 076/C.3.4.76 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 077/C.3.4.77 Aerial picture coastal area, presumably in the Mekong Delta
			
C3 4 078/C.3.4.78 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 079/C.3.4.79 Aerial picture coastal area, presumably in the Mekong Delta	C3 4 080/C.3.4.80 Canal, presumably in the Mekong Delta	C3 5 001/C.3.5.1 Canal and pumping station, presumably in the Mekong Delta
			
C3 5 002/C.3.5.2 Canal, presumably in the Mekong Delta	C3 5 003/C.3.5.3 Canal and pumping station, presumably in the Mekong Delta	C3 5 004/C.3.5.4 River, presumably in the Mekong Delta	C3 5 005/C.3.5.5 Aerial picture, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 5 006/C.3.5.6 Aerial picture, presumably in the Mekong Delta	C3 5 007/C.3.5.7 Aerial picture, presumably in the Mekong Delta	C3 5 008/C.3.5.8 Rice field with inlet for irrigation water	C3 5 009/C.3.5.9 Aerial picture, presumably in the Mekong Delta
			
C3 5 010/C.3.5.10 Aerial picture, presumably in the Mekong Delta	C3 5 011/C.3.5.11 Aerial picture, presumably in the Mekong Delta	C3 5 012/C.3.5.12 Aerial picture, presumably in the Mekong Delta	C3 5 013/C.3.5.13 Aerial picture, presumably in the Mekong Delta
			
C3 5 014/C.3.5.14 Aerial picture, presumably in the Mekong Delta	C3 5 015/C.3.5.15 Aerial picture, presumably in the Mekong Delta	C3 5 016/C.3.5.16 Aerial picture, presumably in the Mekong Delta	C3 5 017/C.3.5.17 Aerial picture, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 5 018/C.3.5.18 Aerial picture, presumably in the Mekong Delta	C3 5 019/C.3.5.19 Aerial picture, presumably in the Mekong Delta	C3 5 020/C.3.5.20 Rice field with inlet for irrigation water	C3 5 021/C.3.5.21 Aerial picture, presumably in the Mekong Delta
			
C3 5 022/C.3.5.22 Aerial picture, presumably in the Mekong Delta	C3 5 023/C.3.5.23 Aerial picture, presumably in the Mekong Delta	C3 5 024/C.3.5.24 Aerial picture, presumably in the Mekong Delta	C3 5 025/C.3.5.25 Aerial picture, presumably in the Mekong Delta
			
C3 5 026/C.3.5.26 Aerial picture, presumably in the Mekong Delta	C3 5 027/C.3.5.27 Aerial picture, presumably in the Mekong Delta	C3 5 028/C.3.5.28 Aerial picture, presumably in the Mekong Delta	C3 5 029/C.3.5.29 Aerial picture, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 5 030/C.3.5.30 Aerial picture, presumably in the Mekong Delta	C3 5 031/C.3.5.31 Aerial picture, presumably in the Mekong Delta	C3 5 032/C.3.5.32 Rice field with inlet for irrigation water	C3 5 033/C.3.5.33 Aerial picture, presumably in the Mekong Delta
			
C3 5 034/C.3.5.34 Aerial picture, presumably in the Mekong Delta	C3 5 035/C.3.5.35 Aerial picture, presumably in the Mekong Delta	C3 5 036/C.3.5.36 Aerial picture, presumably in the Mekong Delta	C3 5 037/C.3.5.37 Aerial picture, presumably in the Mekong Delta
			
C3 5 038/C.3.5.38 Aerial picture, presumably in the Mekong Delta	C3 5 039/C.3.5.39 Aerial picture, presumably in the Mekong Delta	C3 5 040/C.3.5.40 Aerial picture, presumably in the Mekong Delta	C3 6 001/C.3.6.1 Aerial picture, presumably in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
C3 6 002/C.3.6.2 Inlet of irrigation water	C3 6 003/C.3.6.3 Canal with weir	C3 6 004/C.3.6.4 Weir in canal	C3 6 005/C.3.6.5 Rice field
			
C3 6 006/C.3.6.6 Rice field	D6 1 001/D.6.1.1 Aerial picture rice fields, presumably Mekong Delta	D6 1 002/D.6.1.2 River or canal, presumably Mekong Delta	D6 1 003/D.6.1.3 Construction of a hydraulic structure, presumably Mekong Delta
			
D6 1 004/D.6.1.4 Construction of a hydraulic structure, presumably Mekong Delta	D6 1 005/D.6.1.5 Aerial picture of the construction of a hydraulic structure, presumably Mekong Delta	D6 1 006/D.6.1.6 Aerial picture lowland area, presumably Mekong Delta	D6 1 007/D.6.1.7 Aerial picture lowland area, presumably Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 1 008/D.6.1.8 Aerial picture lowland area, presumably Mekong Delta	D6 1 009/D.6.1.9 Weir in water course, presumably Mekong Delta	D6 1 010/D.6.1.10 Aerial picture lowland area, presumably Mekong Delta	D6 1 011/D.6.1.11 Aerial picture of buildings, presumably Mekong Delta
			
D6 1 012/D.6.1.12 Aerial picture of buildings, presumably Mekong Delta	D6 1 013/D.6.1.13 Aerial picture lowland area, presumably Mekong Delta	D6 1 014/D.6.1.14 Aerial picture lowland area, presumably Mekong Delta	D6 1 015/D.6.1.15 Aerial picture lowland area, presumably Mekong Delta
			
D6 1 016/D.6.1.16 Aerial picture lowland area, presumably Mekong Delta	D6 1 017/D.6.1.17 Aerial picture lowland area, presumably Mekong Delta	D6 1 018/D.6.1.18 Aerial picture lowland area, presumably Mekong Delta	D6 1 019/D.6.1.19 Aerial picture lowland area, presumably Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

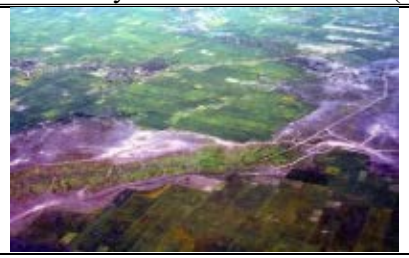
			
D6 1 020/D.6.1.20 Aerial picture lowland area, presumably Mekong Delta	D6 1 021/D.6.1.21 Aerial picture lowland area, presumably Mekong Delta	D6 1 022/D.6.1.22 Aerial picture lowland area, presumably Mekong Delta	D6 1 023/D.6.1.23 Aerial picture lowland area, presumably Mekong Delta
			
D6 1 024/D.6.1.24 Aerial picture lowland area, presumably Mekong Delta	D6 1 025/D.6.1.25 Rice fields, presumably Mekong Delta	D6 1 026/D.6.1.26 Saigon – MyTho, probably test field	D6 1 027/D.6.1.27 Aerial picture Kế Sách, Mekong Delta
			
D6 1 028/D.6.1.28 Aerial picture Kế Sách, Mekong Delta	D6 1 029/D.6.1.29 River near Kế Sách, Mekong Delta, July 1974	D6 1 030/D.6.1.30 Landscape near Kế Sách, Mekong Delta, July 1974	D6 1 031/D.6.1.31 Boat at a river in lowland area, February 1974

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 1 032/D.6.1.32 River with bank protection, February 1974	D6 1 033/D.6.1.33 Reservoir dam with spillway, February 1974	D6 1 034/D.6.1.34 River with terrasses landscape, February 1974	D6 1 035/D.6.1.35 Agriculture in hilly landscape, February 1974
			
D6 2 001/D.6.2.1 Aerial picture lowland area	D6 2 002/D.6.2.2 Aerial picture lowland area	D6 2 003/D.6.2.3 Aerial picture lowland area	D6 2 004/D.6.2.4 Aerial picture lowland area
			
D6 2 005/D.6.2.5 Aerial picture lowland area	D6 2 006/D.6.2.6 Aerial picture lowland area	D6 2 007/D.6.2.7 Aerial picture lowland area	D6 2 008/D.6.2.8 Aerial picture lowland area

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

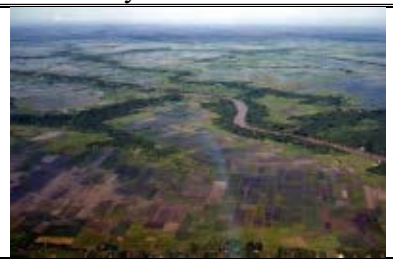
			
D6 2 009/D.6.2.9 Aerial picture lowland area	D6 2 010/D.6.2.10 River, July 1974	D6 2 011/D.6.2.11 Aerial picture lowland area, July 1974	D6 2 012/D.6.2.12 River, July 1974
			
D6 2 013/D.6.2.13 River, July 1974	D6 2 014/D.6.2.14 River, July 1974	D6 2 015/D.6.2.15 Landscape lowland area, July 1974	D6 2 016/D.6.2.16 Landscape lowland area, July 1974
			
D6 2 017/D.6.2.17 Landscape lowland area, July 1974	D6 2 018/D.6.2.18 Boat at a river, July 1974	D6 2 019/D.6.2.19 Aerial picture lowland area, July 1974	D6 2 020/D.6.2.20 Aerial picture lowland area, July 1974

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

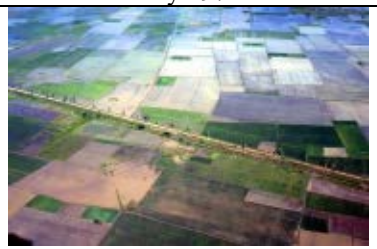
			
D6 2 021/D.6.2.21 Aerial picture lowland area, July 1974	D6 2 022/D.6.2.22 Houses along a river, July 1974	D6 2 023/D.6.2.23 Aerial picture lowland area, July 1974	D6 2 024/D.6.2.24 Aerial picture lowland area, July 1974
			
D6 2 025/D.6.2.25 Aerial picture lowland area, July 1974	D6 2 026/D.6.2.26 Aerial picture lowland area, July 1974	D6 2 027/D.6.2.27 Lowland area, July 1974	D6 2 028/D.6.2.28 Ferry over the river, July 1974
			
D6 2 029/D.6.2.29 Ferry over the river, July 1974	D6 2 030/D.6.2.30 Aerial picture lowland area, July 1974	D6 2 031/D.6.2.31 Aerial picture lowland area, July 1974	D6 2 032/D.6.2.32 Transplanting of rice, October 1977

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 2 033/D.6.2.33 Pumping station, October 1977	D6 2 034/D.6.2.34 Rice fields in lowland area, October 1977	D6 2 035/D.6.2.35 Traditional boat at and houses along the river, October 1983	D6 3 001/D.6.3.1 Activities at the river, 1970
			
D6 3 002/D.6.3.2 River, 1970	D6 3 003/D.6.3.3 Boat with reet, 1970	D6 3 004/D.6.3.4 River, 1970	D6 3 005/D.6.3.5 River, 1970
			
D6 3 006/D.6.3.6 Bank protection, 1970	D6 3 007/D.6.3.7 Boats at the river, 1970	D6 3 008/D.6.3.8 Rice fields, 1970	D6 3 009/D.6.3.9 Landscape lowland area, 1970

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 3 010/D.6.3.10 Houses along the river, 1970	D6 3 011/D.6.3.11 Delivery presumably of the harvest	D6 3 012/D.6.3.12 Traditional boat at the river	D6 3 013D.6.3.13 River bank
			
D6 3 014/D.6.3.14 Boat at the river	D6 3 015/D.6.3.15 House along the river	D6 3 016/D.6.3.16 House along the river	D6 3 017/D.6.3.17 House along the river
			
D6 3 018/D.6.3.18 Warehouse along the river	D6 3 019/D.6.3.19 Delivery presumably of the harvest	D6 3 020/D.6.3.20 Vegetable cultivation in lowland area	D6 3 021/D.6.3.21 Vegetable cultivation in lowland area

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 3 022/D.6.3.22 Vegetable cultivation in lowland area	D6 3 023/D.6.3.23 House along the river	D6 3 024/D.6.3.24 House along the river	D6 3 025/D.6.3.25 River bank
			
D6 3 026/D.6.3.26 House along the river	D6 3 027/D.6.3.27 Canal in lowland area	D6 3 028/D.6.3.28 Landscape in lowland area	D6 3 029/D.6.3.29 Canal in lowland area
			
D6 3 030/D.6.3.30 Boat	D6 3 031/D.6.3.31 Transport, presumably of the rice harvest	D6 3 032/D.6.3.32 Transport with a small boat	D6 3 033/D.6.3.33 Transport, presumably of the rice harvest, with a small boat

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 3 034/D.6.3.34 Reet transport at the river	D6 3 035/D.6.3.35 Small boat at a wide river	D6 3 036/D.6.3.36 Small boat at a wide river	D6 4 001/D.6.4.1 Houses along the river
			
D6 4 002/D.6.4.2 Houses along the river	D6 4 003/D.6.4.3 Houses along the river	D6 4 004/D.6.4.4 Houses along the river	D6 4 005/D.6.4.5 Boat at a river
			
D6 4 006/D.6.4.6 Boat at a river	D6 4 007/D.6.4.7 Entering in a boat	D6 4 008/D.6.4.8 Long small boat	D6 4 009/D.6.4.9 Newly excavated canal with probably acid sulphate clay at the bank

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 4 010/D.6.4.10 Discharge sluice	D6 4 011/D.6.4.11 Canal in lowland area	D6 4 012/D.6.4.12 Canal in lowland area	D6 4 013/D.6.4.13 Canal in lowland area
			
D6 4 014/D.6.4.14 Ferry at the river	D6 4 015/D.6.4.15 Landscape in lowland area	D6 4 016/D.6.4.16 Landscape in lowland area	D6 4 017/D.6.4.17 Bank with vegetation
			
D6 4 018/D.6.4.18 Traditional boat	D6 5 001/D.6.5.1 Boats at the river bank of the Mekong River, February 1966	D6 5 002/D.6.5.2 Boat at the Mekong River seen from the ferry, February 1966	D6 5 003/D.6.5.3 Probably a reservoir dam, February 1966

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 5 004/D.6.5.4 Access to the ferry, February 1966	D6 5 005/D.6.5.5 River or canal in lowland area, February 1966	D6 5 006/D.6.5.6 Probably discharge sluice, February 1966	D6 5 007/D.6.5.7 Canal in lowland area, May 1983
			
D6 5 008/D.6.5.8 Soldier in the field, May 1983	D6 5 009/D.6.5.9 Presumably female farmer in the field, May 1983	D6 5 010/D.6.5.10 House at an artificial mount, May 1983	D6 5 011/D.6.5.11 House at an artificial mount, May 1983
			
D6 5 012/D.6.5.12 Dike along rice field, May 1983	D6 5 013/D.6.5.13 House near rice field, May 1983	D6 5 014/D.6.5.14 House along a road, May 1983	D6 5 015/D.6.5.15 Transport with a small boat, May 1983

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 5 016/D.6.5.16 Transport with a small boat, May 1983	D6 5 017/D.6.5.17 Transport with a small boat, May 1983	D6 5 018/D.6.5.18 Transport with a small boat, May 1983	D6 5 019/D.6.5.19 Map of the lower part of the Mekong River Basin
			
D6 5 020/D.6.5.20 Vertical gate, October 1987	D6 5 021/D.6.5.21 Aerial picture Mekong Delta	D6 5 022/D.6.5.22 Aerial picture Mekong Delta	D6 5 023/D.6.5.23 Aerial picture Mekong Delta
			
D6 5 024/D.6.5.24 Aerial picture Mekong Delta	D6 5 025/D.6.5.25 Aerial picture Mekong Delta	D6 5 026/D.6.5.26 Aerial picture Mekong Delta	D6 5 027/D.6.5.27 Aerial picture Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
D6 5 028/D.6.5.28 Aerial picture Mekong Delta	D6 5 029/D.6.5.29 Aerial picture Mekong Delta	D6 5 030/D.6.5.30 Aerial picture Mekong Delta	D6 5 031/D.6.5.31 Aerial picture Mekong Delta
			
A1 000/D1.I.0 Prof. Adriaan Volker during a reception, June 1974	A1 001/D1.I.1 Probably the Mekong River near Ho Chi Minh City, June 1974	A1 002/D1.I.2 Probably the Mekong River near Ho Chi Minh City, June 1974	A1 003/D1.I.3 Probably the Mekong River near Ho Chi Minh City, June 1974
			
A1 004/D1.I.4 Probably the Mekong River near Ho Chi Minh City, June 1974	A1 005/D1.I.5 Probably the Mekong River near Ho Chi Minh City, June 1974	A1 006/D1.I.6 Bank erosion, presumably in a branch of the Mekong River near Ho Chi Minh City, June 1974	A1 007/D1.I.7 Provisional protection against bank erosion, presumably in a branch of the Mekong River near Ho Chi Minh City, June 1974

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A1 008/D1.I.8 Bank erosion, presumably in a branch of the Mekong River near Ho Chi Minh City, June 1974	A1 009/D1.I.9 Bank erosion, presumably in a branch of the Mekong River near Ho Chi Minh City, June 1974	A1 010/D1.I.10 Cap Saint Jacques/Vung Trau, Mekong Delta, June 1974	A1 011/D1.I.11 Cap Saint Jacques/Vung Trau, Mekong Delta, June 1974
			
A1 012/D1.I.12 Cap Saint Jacques/Vung Trau, Mekong Delta, June 1974	A1 013/D1.I.13 Cap Saint Jacques/Vung Trau, Mekong Delta, June 1974	A1 014/D1.I.14 Cap Saint Jacques/Vung Trau, Mekong Delta, June 1974	A1 015/D1.I.15 Cap Saint Jacques/Vung Trau, Mekong Delta, June 1974
			
A1 016/D1.I.16 Prof. Adriaan Volker with Vietnamese counterparts at Hué, June 1974	A1 017/D1.I.17 Prof. Adriaan Volker with Vietnamese counterparts at Hué, June 1974	A1 018/D1.I.18 Coastal area presumably near Hue, June 1974	A1 019/D1.I.19 Coastal area presumably near Hue, June 1974

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A1 020/D1.I.20 Coastal area presumably near Hue, June 1974	A1 021/D1.I.21 Coastal area presumably near Hue, June 1974	A1 022/D1.I.22 Coastal area presumably near Hue, June 1974	A1 023/D1.I.23 Coastal area presumably near Hue, June 1974
			
A1 024/D1.I.24 Coastal area presumably near Hue, June 1974	A1 025/D1.I.25 Coastal area presumably near Hue, June 1974	A1 026/D1.I.26 Coastal area presumably near Hue, June 1974	A1 027/D1.I.27 Coastal area presumably near Hue, June 1974
			
A1 028/D1.I.28 Coastal area presumably near Hue, June 1974	A1 029/D1.I.29 Coastal area presumably near Hue, June 1974	A1 030/D1.I.30 Discharge sluice under construction, June 1974	A1 031/D1.I.31 Discharge sluice and dike under construction, June 1974

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A1 032/D1.I.32 Dike under construction, June 1974	A1 033/D1.I.33 A colleague of Prof. Adriaan Volker in front of an Amerikan army helicopter, June 1974	A1 034/D1.I.34 Coastal area, June 1974	A1 035/D1.I.35 Prof. Adriaan Volker poses in a coastal area, June 1974
			
A1 036/D1.I.36 Coastal area, June 1974	A1 037/D1.I.37 Coastal area, June 1974	A1 038/D1.I.38 Coastal area, June 1974	A1 039/ D1.I.39 Prof. Adriaan Volker poses in front of Dalat-Palace, June 1974
			
A1 040/D1.I.40 Puddling of a rice field near Ho Chi Minh City – Tai-Ninh, 29 June 1974	A4 001/D1.IV.1 Canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 002/D1.IV.2 Rice field, probably in the Red River Delta, 1981	A4 003/D1.IV.3 Sluice with vertical gates in a canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A4 004/D1.IV.4 Pumping station in a canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 005/D1.IV.5 Sluice with vertical gates in a canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 006/D1.IV.6 Sluice with vertical gates in a canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 007/D1.IV.7 Name of a pumping station in a canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981
			
A4 008/D1.IV.8 Name of possibly another pumping station in a canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 009/D1.IV.9 Canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 010/D1.IV.10 Canal in the Red River Delta that is possibly suitable for irrigation, as well as for drainage, 1981	A4 011/D1.IV.11 Lowland, probably in the Red River Delta, 1981

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A4 012/D1.IV.12 Construction of a culvert in a lowland area, probably in the Red River Delta, 1981	A4 013/D1.IV.13 Irrigation canal in a lowland area, probably in the Red River Delta, 1981	A4 014/D1.IV.14 Construction of a culvert in a lowland area, probably in the Red River Delta. Through the culvert probably drainage water has to be discharged under the irrigation canal, 1981	A4 015/D1.IV.15 Excavation for the construction of a culvert in a lowland area, probably in the Red River Delta. Through the culvert probably drainage water has to be discharged under the irrigation canal, 1981
			
A4 016/D1.IV.16 Lowland, probably in the Red River Delta, 1981	A4 017/D1.IV.17 Discharge sluice, probably in the Red River Delta, 1981	A4 018/D1.IV.18 Pumping station for the supply of irrigation water in a lowland area, probably in the Red River Delta, 1981	A7 001/D1.VII.1 Traditional boat in lowland area in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A7 002/D1.VII.2 River or canal in lowland area in the Mekong Delta	A7 003/D1.VII.3 House along the water in lowland area in the Mekong Delta	A7 004/D1.VII.4 Children in a village along a water course in the Mekong Delta	A7 005/D1.VII.5 Jetty in a lowland area in the Mekong Delta
			
A7 006/D1.VII.6 Probably a canal in a lowland area	A7 007/D1.VII.7 Soldiers at a boat at a jetty in the Mekong Delta	A7 008/D1.VII.8 Interest of the local population in the Mekong Delta	A7 009/D1.VII.9 Interest of the local population in the Mekong Delta
			
A7 010/D1.VII.10 Cho Thuan Hoa in the Mekong Delta	A7 011/D1.VII.11 Boats at a branch of the Mekong River in the delta	A7 012/D1.VII.12 Bank protection along a branch of the Mekong River in the delta	A7 013/D1.VII.13 Landscape in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A7 014/D1.VII.14 Fruit trees at a ground pile in the Mekong Delta	A7 015/D1.VII.15 Drain in the Mekong Delta	A7 016/D1.VII.16 Track and drain along banana trees a ridges with rice in between	A7 017/D1.VII.17 Ho Chi Minh City (Saigon) from the air, 26 June 1974
			
A7 018/D1.VII.18 Aerial picture of a canal and river branches in the Mekong Delta, 26 June 1974	A7 025/D1.VII.25 Co Cong sea dike	A7 026/D1.VII.26 Visit to the Co Cong sea dike	A7 027/D1.VII.27 Co Cong sea dike in the landscape
			
A7 028/D1.VII.28 Co Cong sea dike in the landscape	A7 029/D1.VII.29 House in landscape near Hoa Lac in the Mekong Delta	A7 030/D1.VII.30 Water course near Hoa Lac in the Mekong Delta	A7 031/D1.VII.31 Water course in a lowland area with rice fields

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A7 032/D1.VII.32 Lowland area with rice fields	A7 033/D1.VII.33 Lowland area with rice fields	A7 034/D1.VII.34 Road in lowland area	A7 035/D1.VII.35 Probably an irrigation canal in lowland area
			
A7 036/D1.VII.36 Trashrack before the inlet of probably an irrigation pumping station	A7 037/D1.VII.37 Trashrack before the inlet of probably an irrigation pumping station	A7 038/D1.VII.38 Traditional boat at a river branch in the Mekong Delta	A7 039/D1.VII.39 Group picture. Prof. Adriaan Volker at the left side
			
A7 040/D1.VII.40 Aerial picture of Ham Luong in the Mekong Delta at the mouth one of the river branches	A7 041/D1.VII.41 Aerial picture of Ham Luong in the Mekong Delta	A7 042/D1.VII.42 Aerial picture of Ham Luong in the Mekong Delta at the mouth one of the river branches	A7 043/D1.VII.43 Aerial picture van Quan Huong My in the Mekong Delta at the mouth one of the river branches

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A7 044/D1.VII.44 Aerial picture of My Tho in the Mekong Delta	A7 045/D1.VII.45 Aerial picture of My Tho in the Mekong Delta	A7 046/D1.VII.46 Aerial picture of Can Tho in the Mekong Delta, 7 October 1971	A7 047/D1.VII.47 Canal near Phung Hiep in the Mekong Delta
			
A7 048/D1.VII.48 Landscape near Phung Hiep in the Mekong Delta	A7 049/D1.VII.49 Water courses near Phung Hiep in the Mekong Delta	A7 050/D1.VII.50 Water buffalo in the Mekong Delta	A7 051/D1.VII.51 Aerial picture My Thanh in the Mekong Delta
			
A7 052/D1.VII.52 Bridge in the Mekong Delta	A7 053/D1.VII.53 Aerial picture of Gia Rai in the Mekong Delta	A7 054/D1.VII.54 Aerial picture of Gia Rai in the Mekong Delta	A7 055/D1.VII.55 Aerial picture of landscape near Gia Rai in the Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A7 056/D1.VII.56 Aerial picture of Vi Thanh in the Mekong Delta	A7 057/D1.VII.57 Aerial picture of Vi Thanh in the Mekong Delta	A7 058/D1.VII.58 Aerial picture of Vi Thanh in the Mekong Delta	A7 059/D1.VII.59 Aerial picture of Nui Sap in the Mekong Delta
			
A7 060/D1.VII.60 Aerial picture of Long Xuyen in the Mekong Delta	A7 061/D1.VII.61 Aerial picture of Long Xuyen in the Mekong Delta	A7 062/D1.VII.62 Aerial picture of Long Xuyen in the Mekong Delta	A7 063/D1.VII.63 Aerial picture of Chau Thanh in the Mekong Delta
			
A7 064/D1.VII.64 Aerial picture of Bassac in the Mekong Delta	A7 065/D1.VII.65 Aerial picture of Chau Doc in the Mekong Delta	A7 066/D1.VII.66 Aerial picture of dredging activities in Pleine des Joncs, Mekong Delta	A7 067/D1.VII.67 Aerial picture of Pleine des Joncs, Mekong Delta

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A7 068/D1.VII.68 Aerial picture of Pleine des Joncs, Mekong Delta	A7 069/D1.VII.69 Aerial picture area near Sadec, Mekong Delta	A7 070/D1.VII.70 Aerial picture area near Sadec, Mekong Delta	A7 071/D1.VII.71 Prof. Adriaan Volker in a meeting
			
A7 072/D1.VII.72 Prof. Adriaan Volker in a meeting	A7 073/D1.VII.73 Prof. Adriaan Volker relaxes	A7 074/D1.VII.74 Group picture, Prof. Adriaan Volker in the middle	A7 075/D1.VII.75 Prof. Adriaan Volker in a meeting, 7 November 1972
			
A7 076/D1.VII.76 Explanation in a meeting. Various maps at the wall	A8 001/D1.VIII.1 Rice field in lowland area	A8 002/D1.VIII.2 Rice field in lowland area	A8 003/D1.VIII.3 Rice field in lowland area

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A8 004/D1.VIII.4 Rice field in lowland area	A8 005/D1.VIII.5 Rice field in lowland area	A8 006/D1.VIII.6 Village and jetties along a river	A8 007/D1.VIII.7 Traditional boat at a river
			
A8 008/D1.VIII.8 Traditional transport at a river	A8 009/D1.VIII.9 Group picture, Prof. Adriaan Volker in the middle	A8 010/D1.VIII.10 Watertransport of reet	A8 011/D1.VIII.11 Newly excavated drain in lowland area
			
A8 012/D1.VIII.12 Newly excavated drain in lowland area	A8 013/D1.VIII.13 Newly excavated drain in lowland area	A8 014/D1.VIII.14 Name plate in lowland area	A8 015/D1.VIII.15 Traditional water transport

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A8 016/D1.VIII.16 Traditional water transport	A8 017/D1.VIII.17 Movable vertical gate	A8 018/D1.VIII.18 Traditional water transport	A8 019/D1.VIII.19 Pumping station
			
A8 020/D1.VIII.20 Pumping station	A8 021/D1.VIII.21 Traditional water transport	A8 022/D1.VIII.22 Traditional water transport	A8 023/D1.VIII.23 Group picture, Prof. Adriaan Volker in the middle
			
A8 024/D1.VIII.24 Prof. Adriaan Volker (left) and Bob Rangeley (middle) in a meeting	A8 025/D1.VIII.25 Prof. Adriaan Volker (right) in a meeting	A8 026/D1.VIII.26 Group picture, Prof. Adriaan Volker in the middle	A8 027/D1.VIII.27 Rice fields in Lowland area

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A8 028/D1.VIII.28 Group picture, Prof. Adriaan Volker second of left	A8 029/D1.VIII.29 Group picture, Prof. Adriaan Volker second of left	A8 030/D1.VIII.30 Canal in lowland area	A8 031/D1.VIII.31 Canal in lowland area
			
A8 032/D1.VIII.32 Canal in lowland area	A8 033/D1.VIII.33 Canal in lowland area	A8 034/D1.VIII.34 Canal in lowland area	A8 035/D1.VIII.35 Canal and houses in lowland area
			
A8 036/D1.VIII.36 Canal in lowland area	A8 037/D1.VIII.37 Canal and road in lowland area	A8 038/D1.VIII.38 Canal and road in lowland area	A8 039/D1.VIII.39 Canal and road in lowland area

Table III. Pictures of polders and lowlands in Vietnam by Prof. Adriaan Volker (continued)

			
A8 040/D1.VIII.40 Canal and houses in lowland area	A8 041/D1.VIII.41 Road with trees in lowland area	A8 042/D1.VIII.42 Group picture, Prof. Adriaan Volker left	A8 043/D1.VIII.43 Canal and houses in lowland area
			
A8 044/D1.VIII.44 Canal and houses in lowland area			

Table IV. Pictures of polders and lowlands in Vietnam by Prof. Bart Schultz

			
D6 12 039/XII-39 Weir in a irrigation canal in the Mekong Delta, 23 - 31/10 1998	D6 12 040/XII-40 Weir in a irrigation canal in the Mekong Delta, 23 - 31/10 1998	D6 12 041/XII-41 Landscape with rice field in the Mekong Delta, 23 - 31/10 1998	D6 12 042/XII-42 Landscape with rice field in the Mekong Delta, 23 - 31/10 1998
			
D6 12 043/XII-43 Landscape with rice field in the Mekong Delta, 23 - 31/10 1998	D6 12 044/XII-44 Landscape with rice field in the Mekong Delta, 23 - 31/10 1998	D6 12 045/XII-45 Landscape with rice field in the Mekong Delta, 23 - 31/10 1998	D6 12 046/XII-46 Nipah palms in the Mekong Delta. These palms grow in the transition zone from fresh to saline water, 23 - 31/10 1998
			
D6 12 047/XII-47 Nipah palms in the Mekong Delta. These palms grow in the transition zone from fresh to saline water, 23 - 31/10 1998	D6 12 048/XII-48 Landscape in the area of the Red River, 23 - 31/10 1998	D6 12 049/XII-49 Dike in the area of the Red River, 23 - 31/10 1998	D6 12 050/XII-50 Dike in the area of the Red River, 23 - 31/10 1998

Table IV. Pictures of polders and lowlands in Vietnam by Prof. Bart Schultz (continued)

			
D7 13 001/XIII-1 Dike in the area of the Red River near the inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998	D7 13 002/XIII-2 Dike in the area of the Red River near the inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998	D7 13 003/XIII-3 Inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998	D7 13 004/XIII-4 Inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998
			
D7 13 005/XIII-5 Inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998	D7 13 006/XIII-6 Inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998	D7 13 007/XIII-7 Inlet sluice of the Day River. This is a bypass that can be activated during high discharges in the Red River when Hanoi is at risk, 23 - 31/10 1998	