

## FIGURES



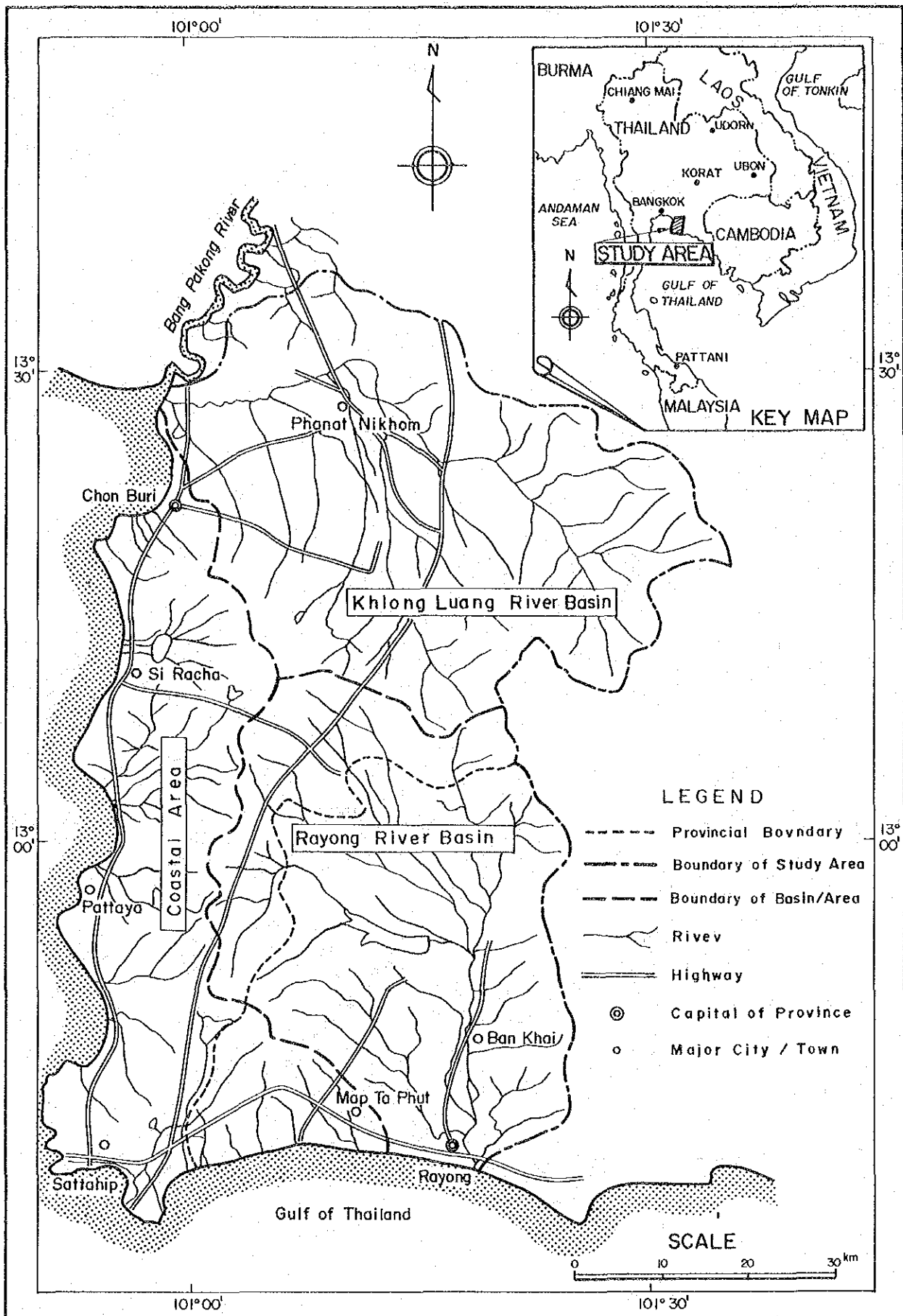


Fig. 1  
Location of Study Area

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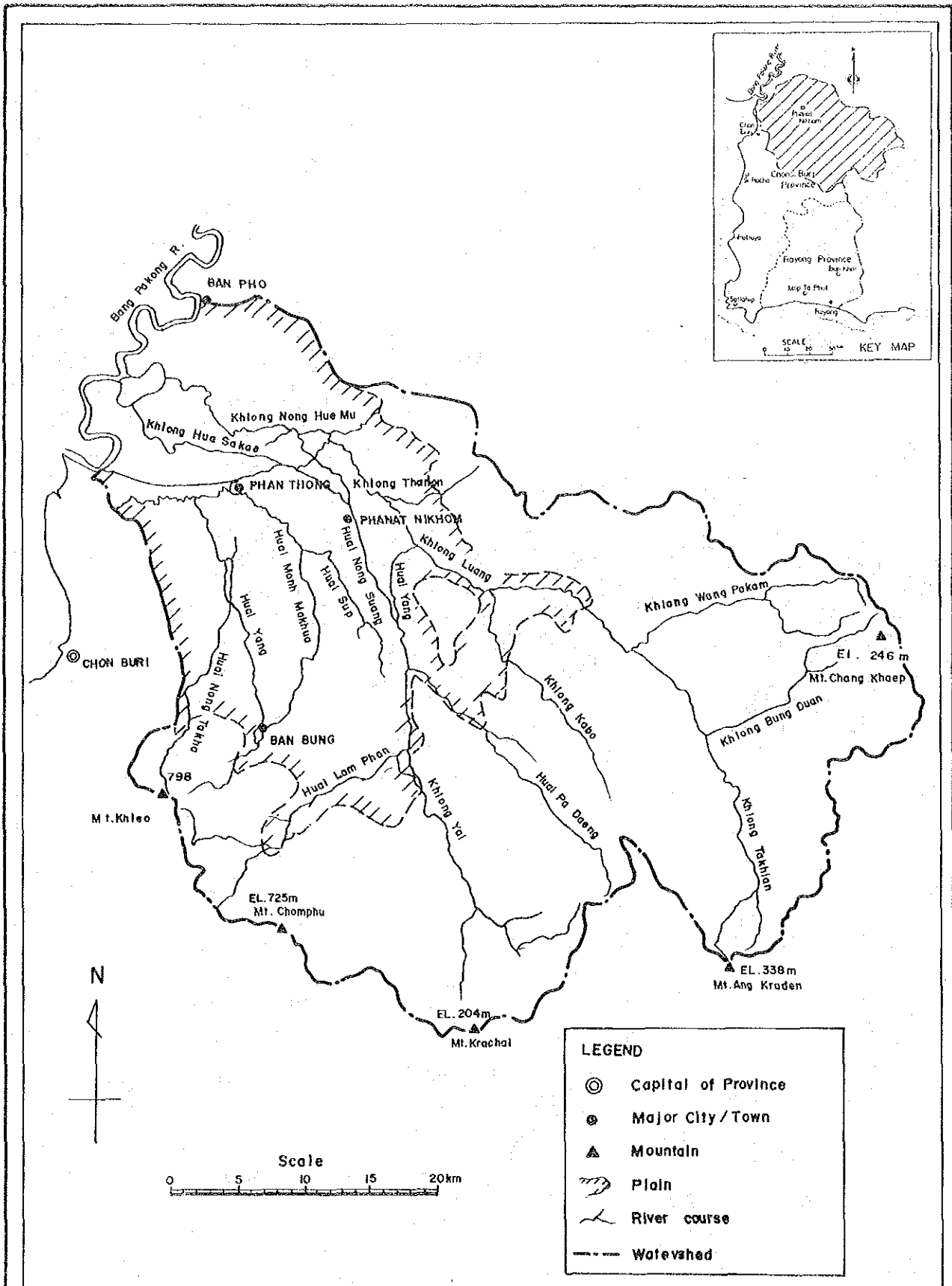


Fig. 2 Basin Map of Khlong Luang River Basin

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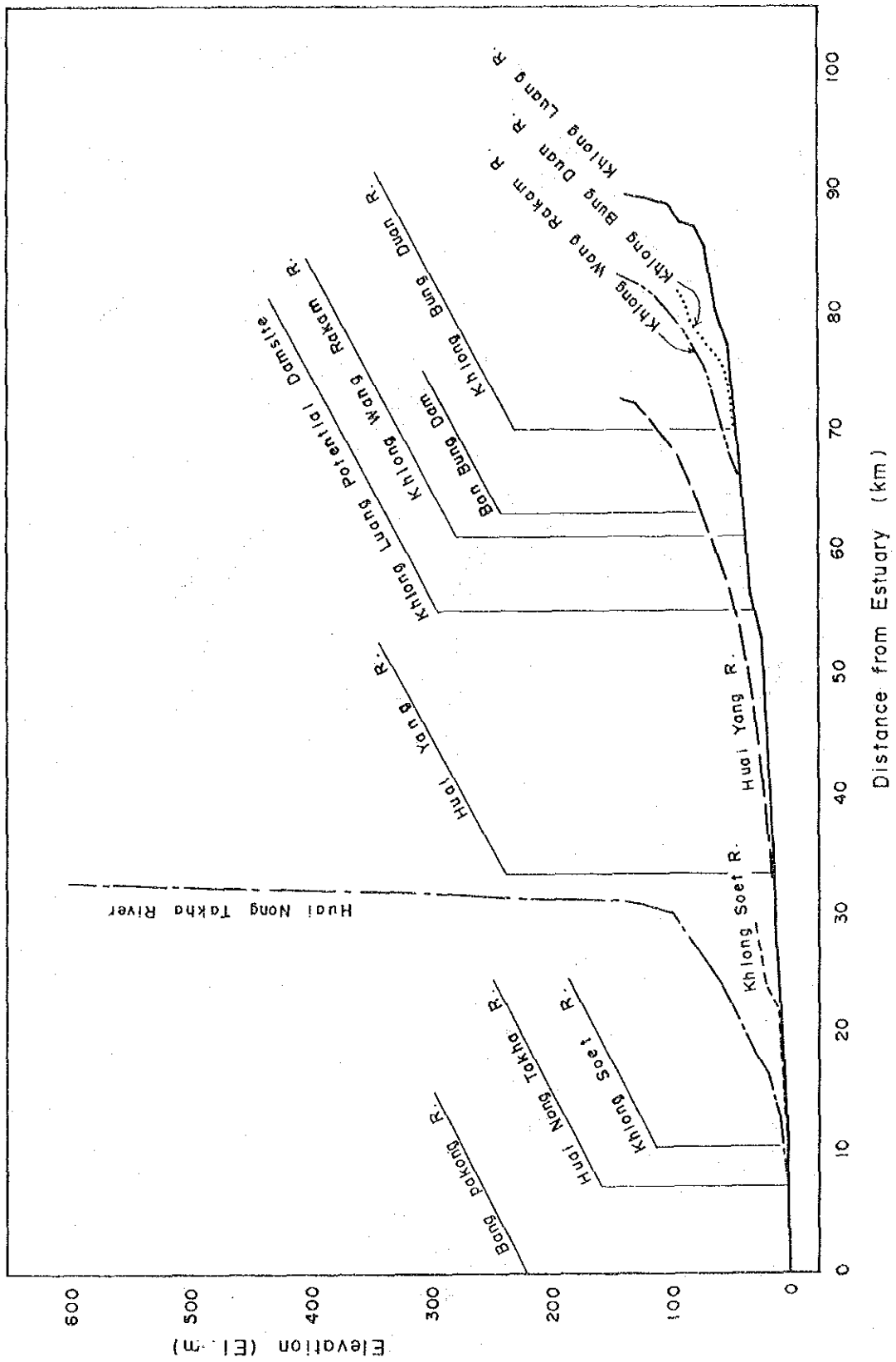


Fig.3 Overall Longitudinal Profile of Khlong Luang River

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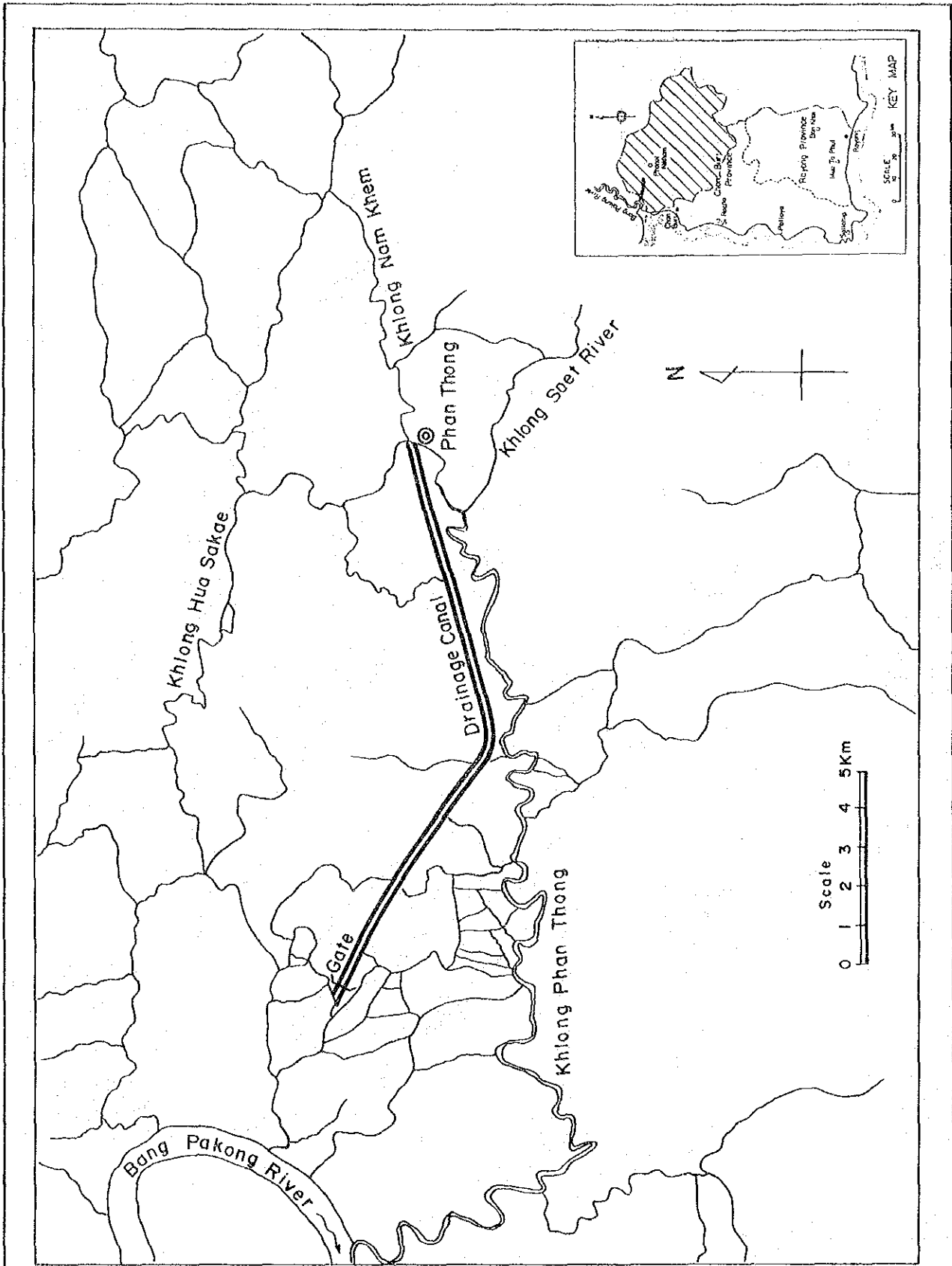


Fig. 4 Phan Thong Drainage Canal

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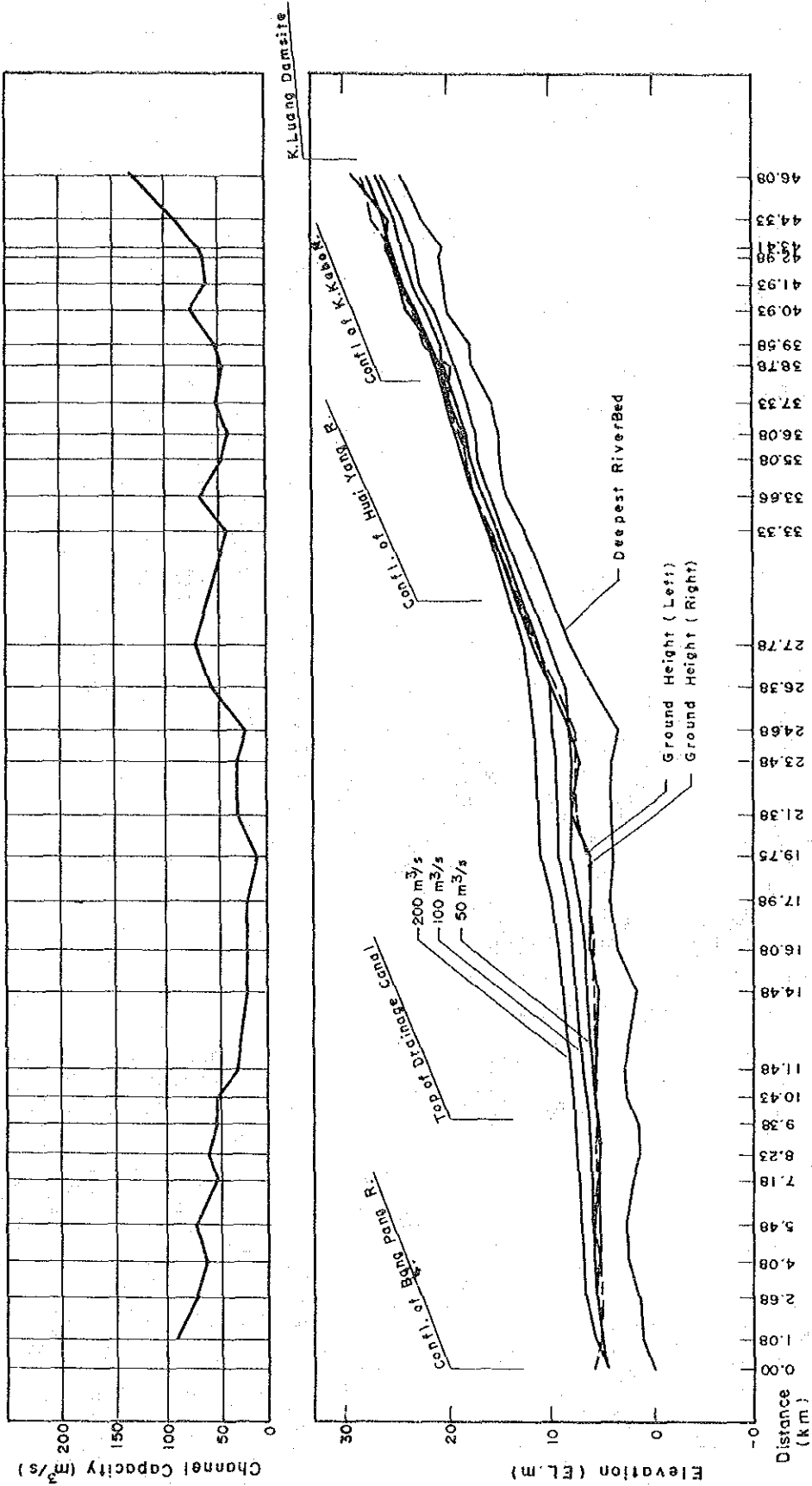


Fig.5 Longitudinal Profile and Channel Capacity of Khlong Luang River

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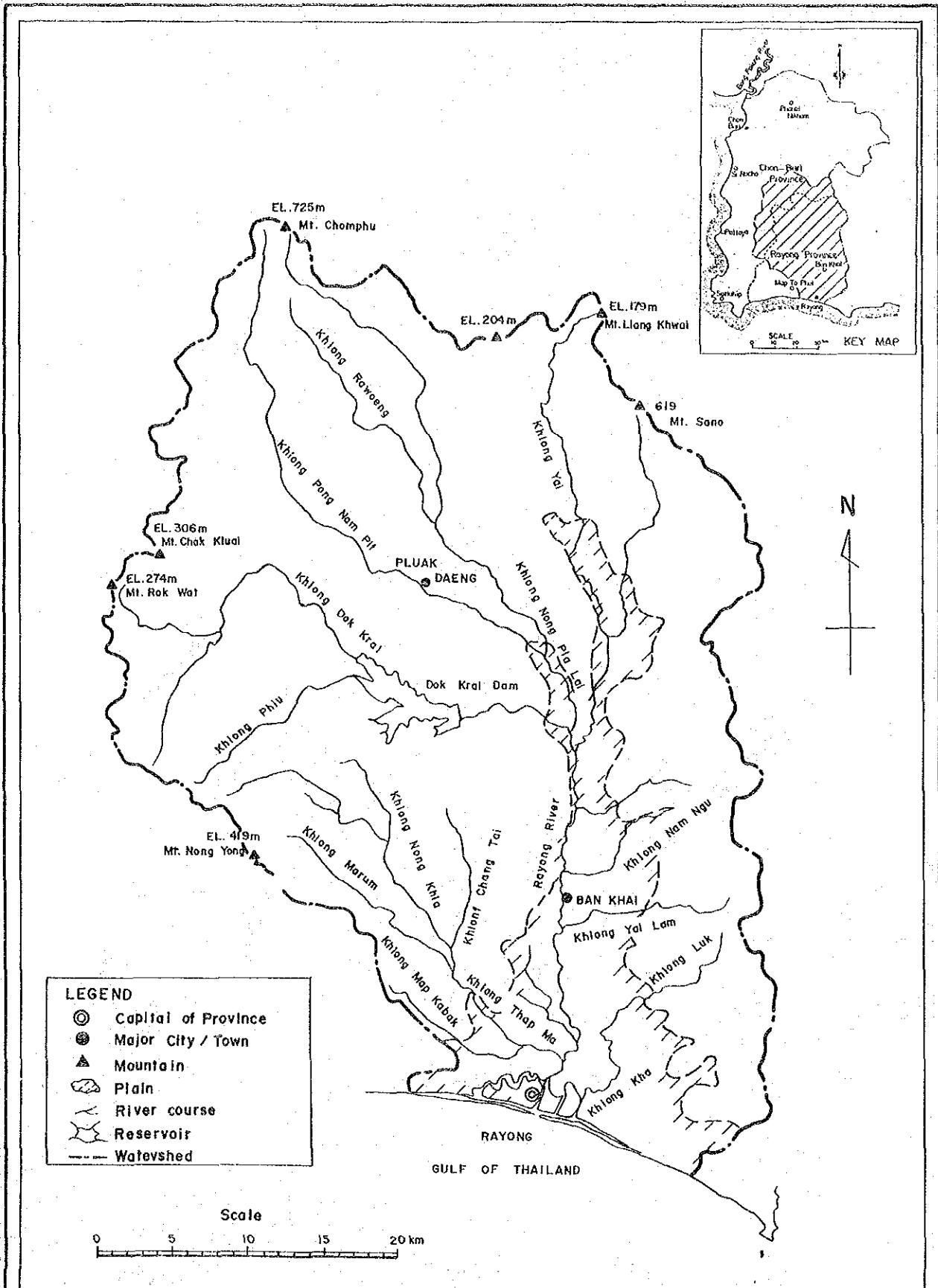


Fig.6 Basin Map of Rayong River Basin

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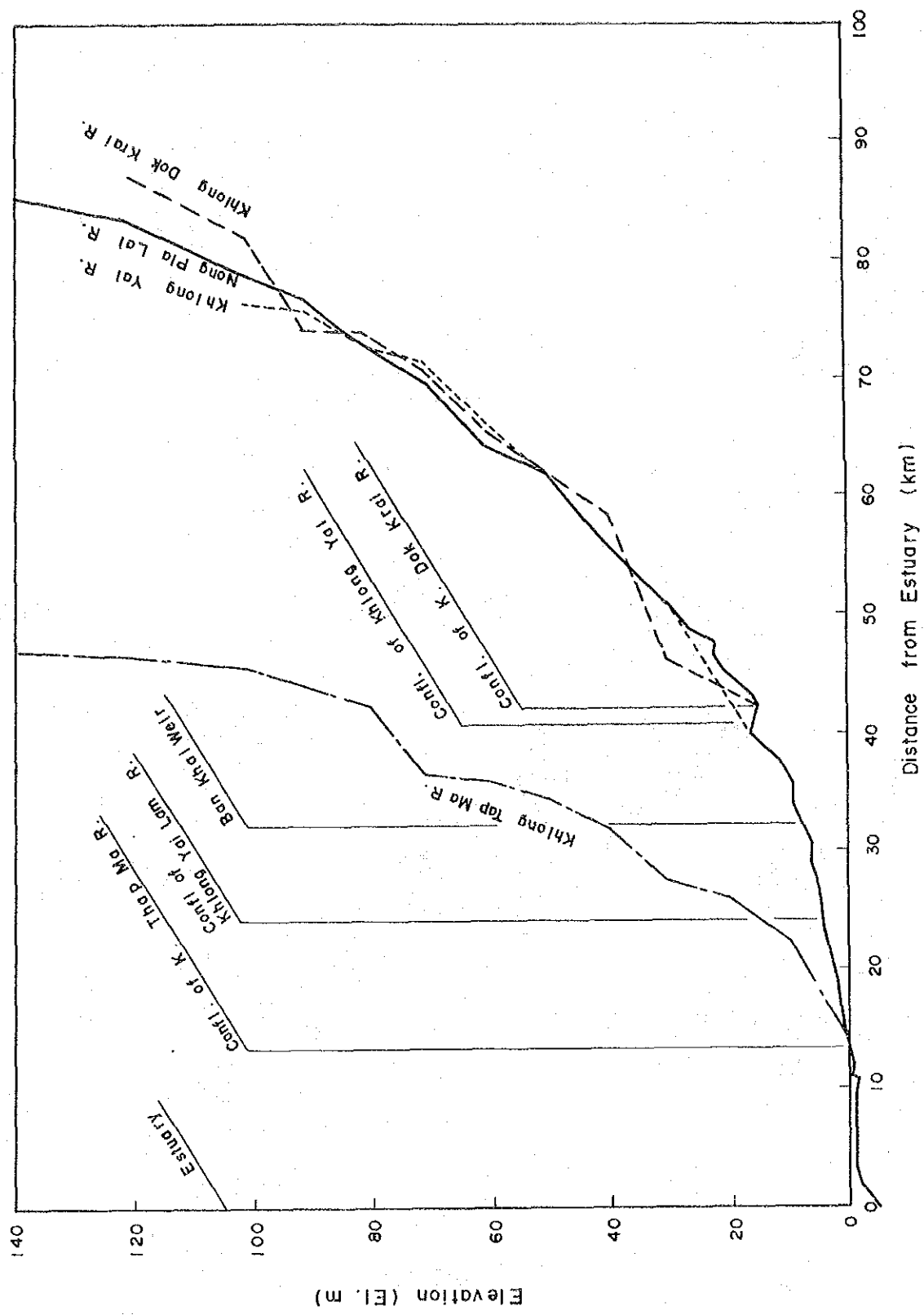


Fig. 7 Overall Longitudinal Profile of Rayong River

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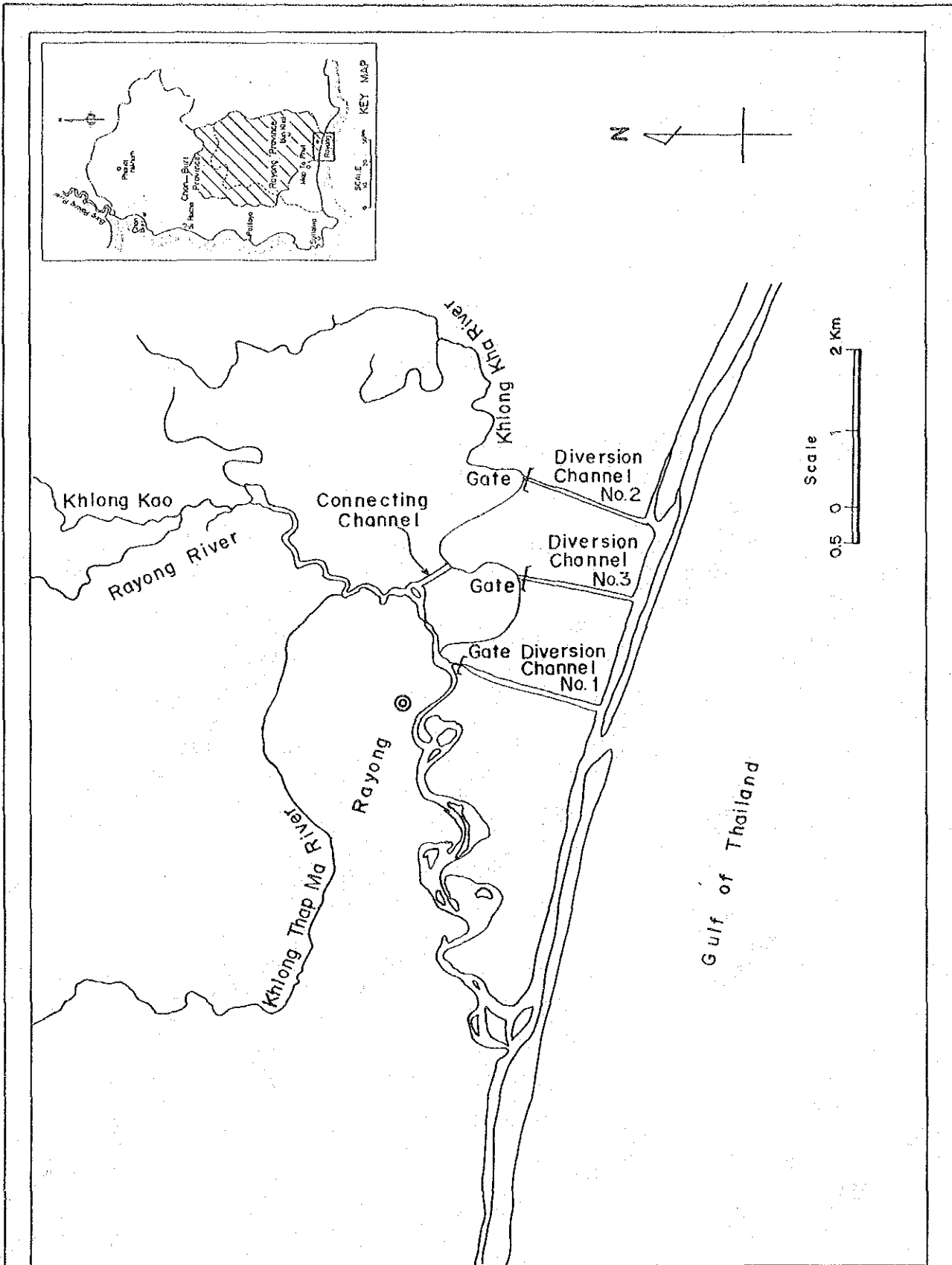


Fig. 8 Rivermouth of the Rayong River

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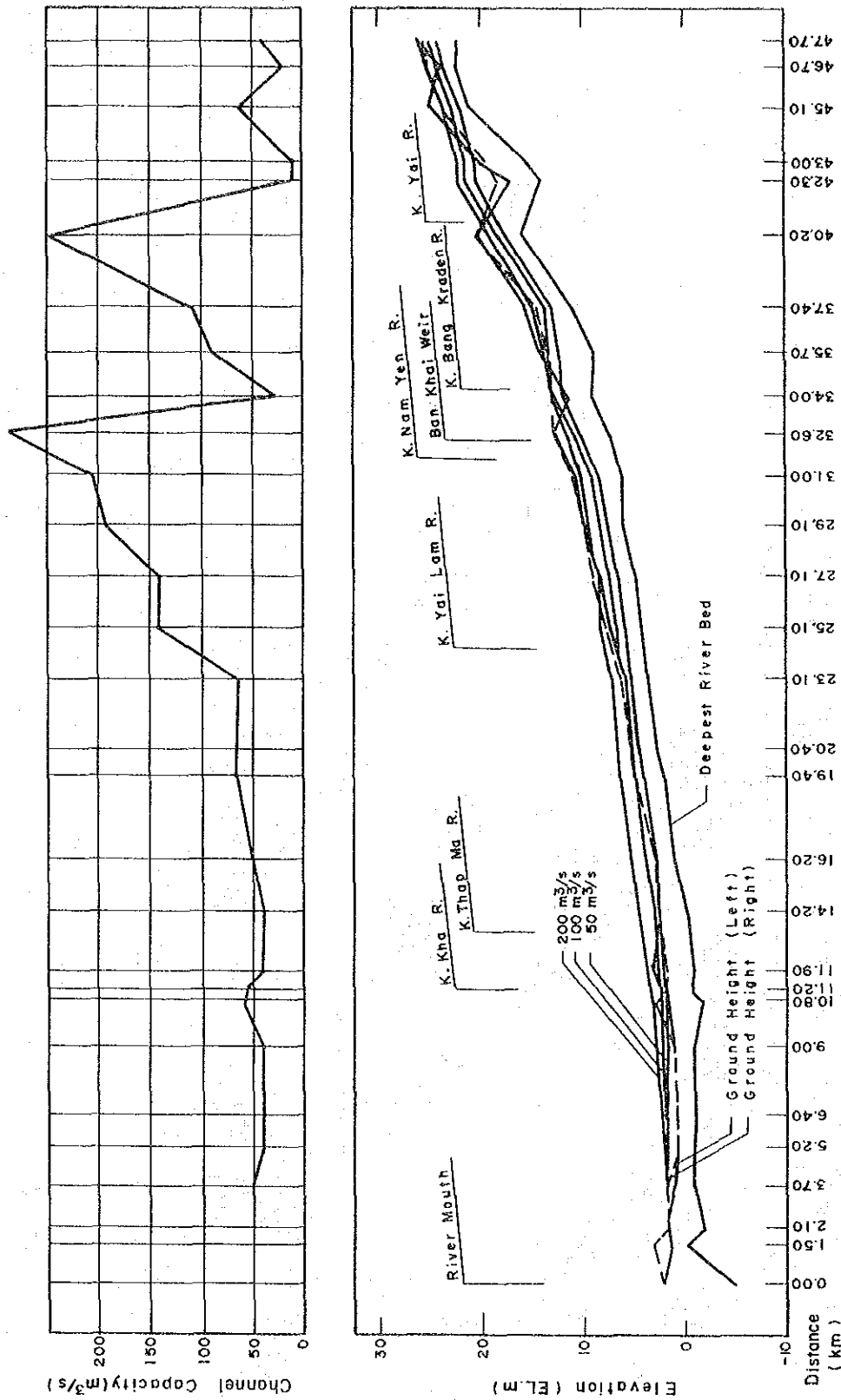


Fig. 9 Longitudinal Profile and Channel Capacity of Rayong River

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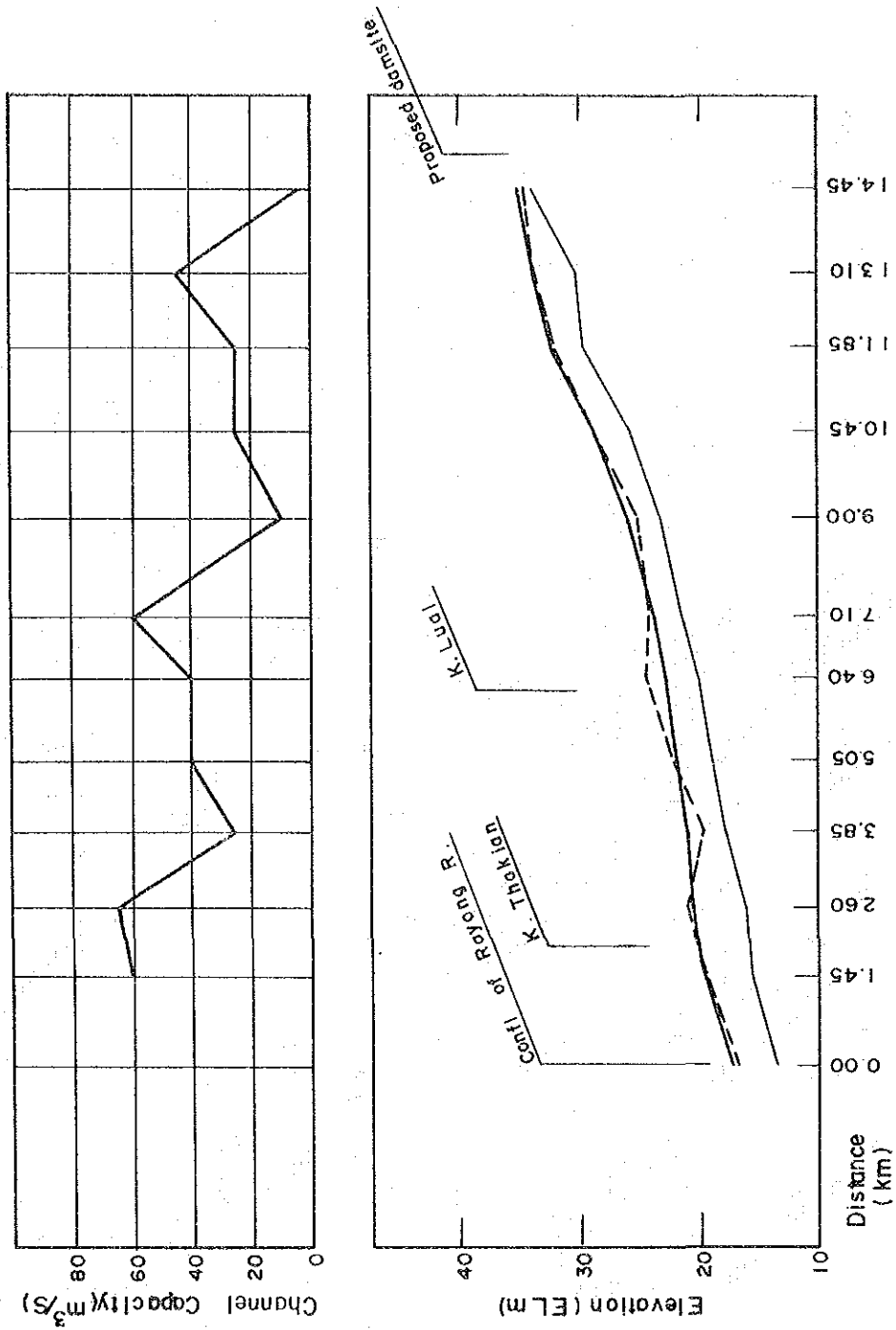


Fig. 10 Longitudinal Profile and Channel Capacity of Khlong Yai River

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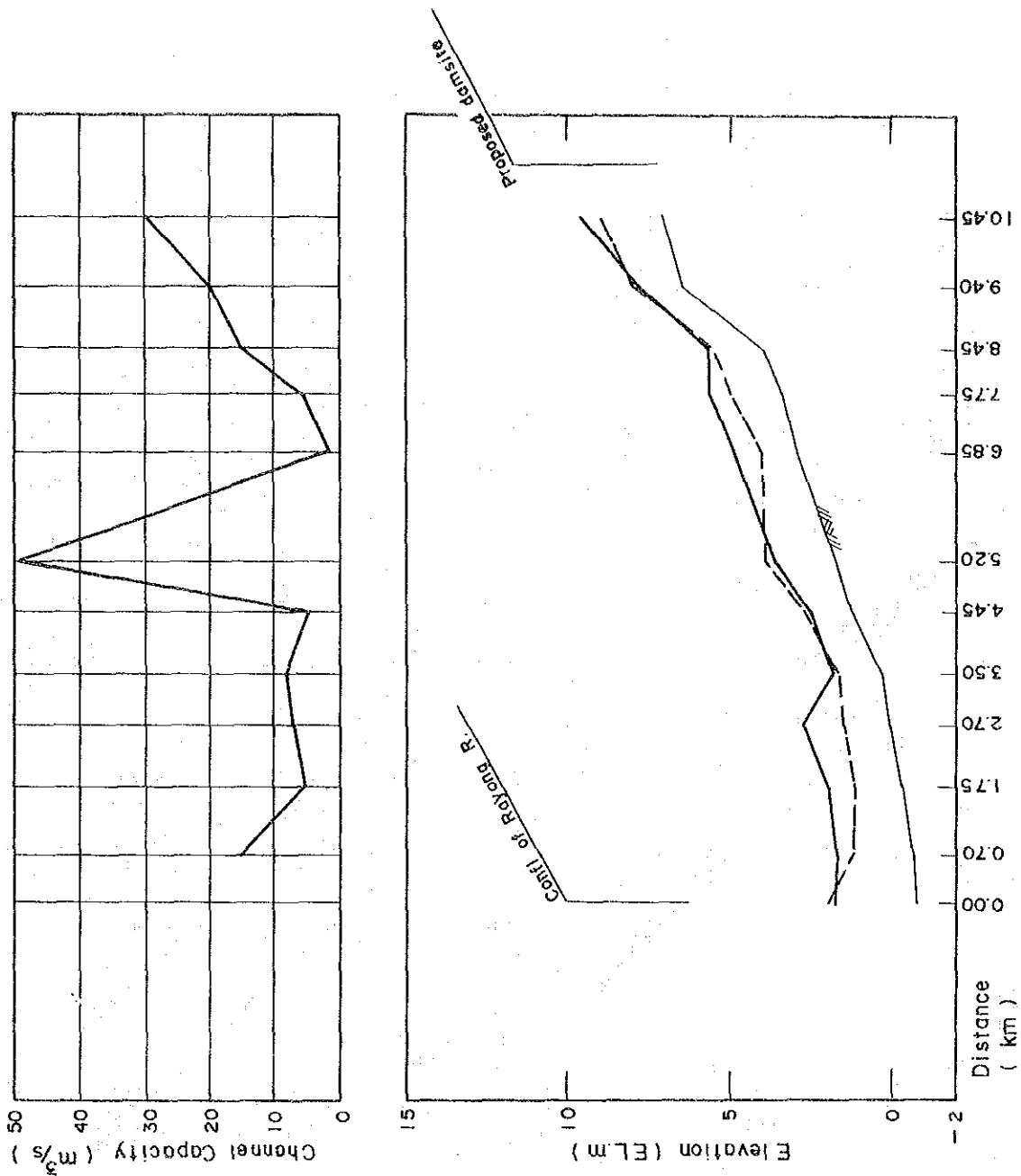


Fig. II Longitudinal Profile and Channel Capacity of klong Thap Ma River

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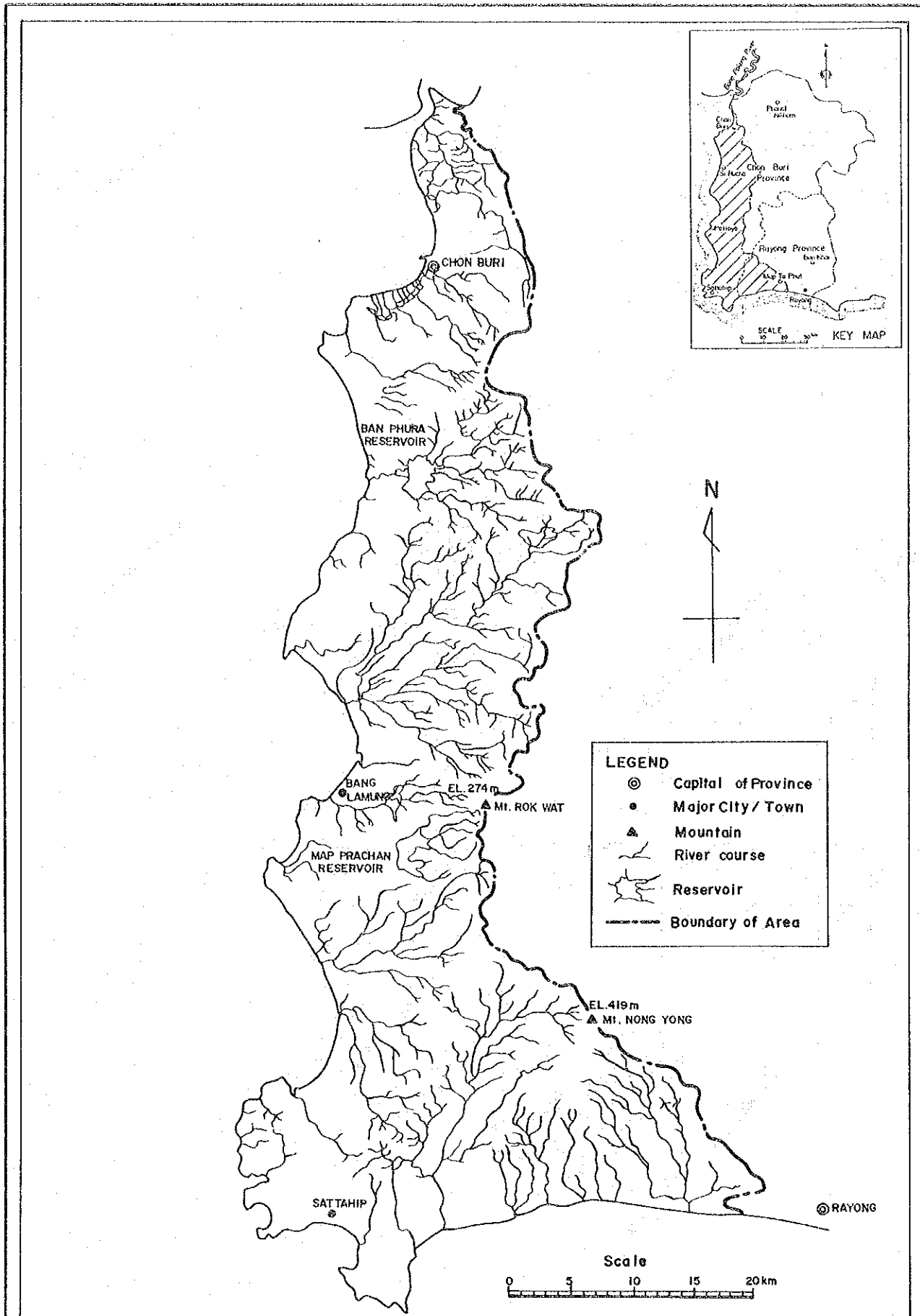
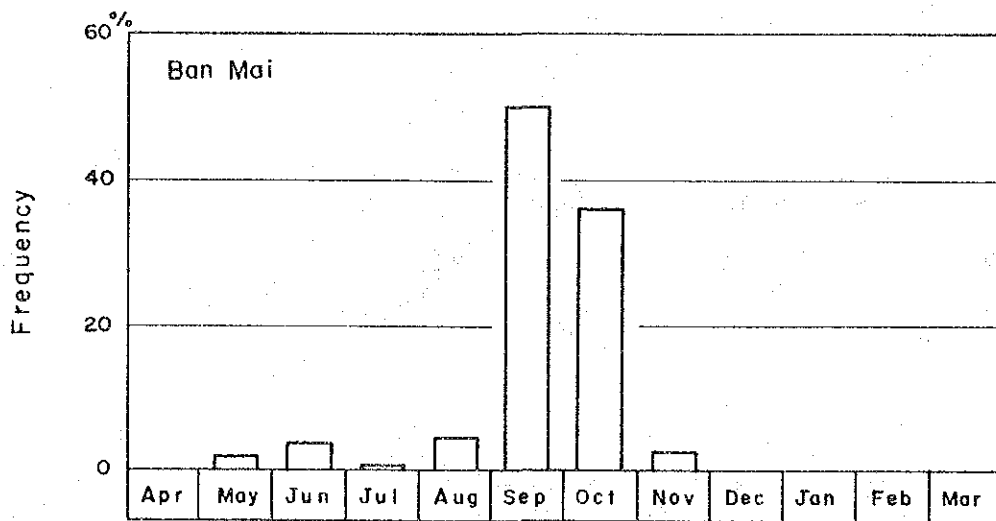


Fig.12 Basin Map of Coastal Rivers

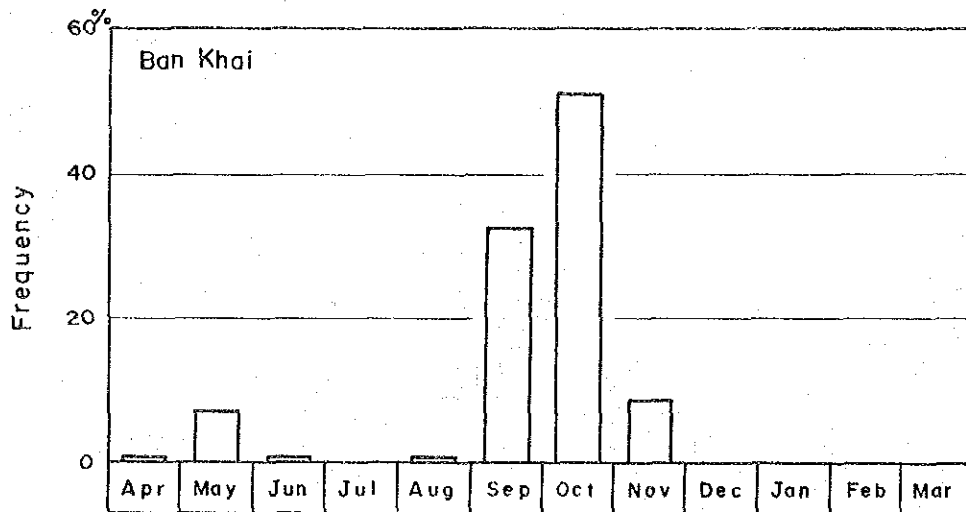
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Note: Daily discharge more than  $25\text{m}^3/\text{s}$  is counted as flood

Fig.13 Seasonal Frequency of Flood at Ban Mai Stream Gauge

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Note: Daily discharge more than  $70\text{m}^3/\text{s}$  is counted as flood

Fig.14 Seasonal Frequency of Flood at Ban Khai Weir

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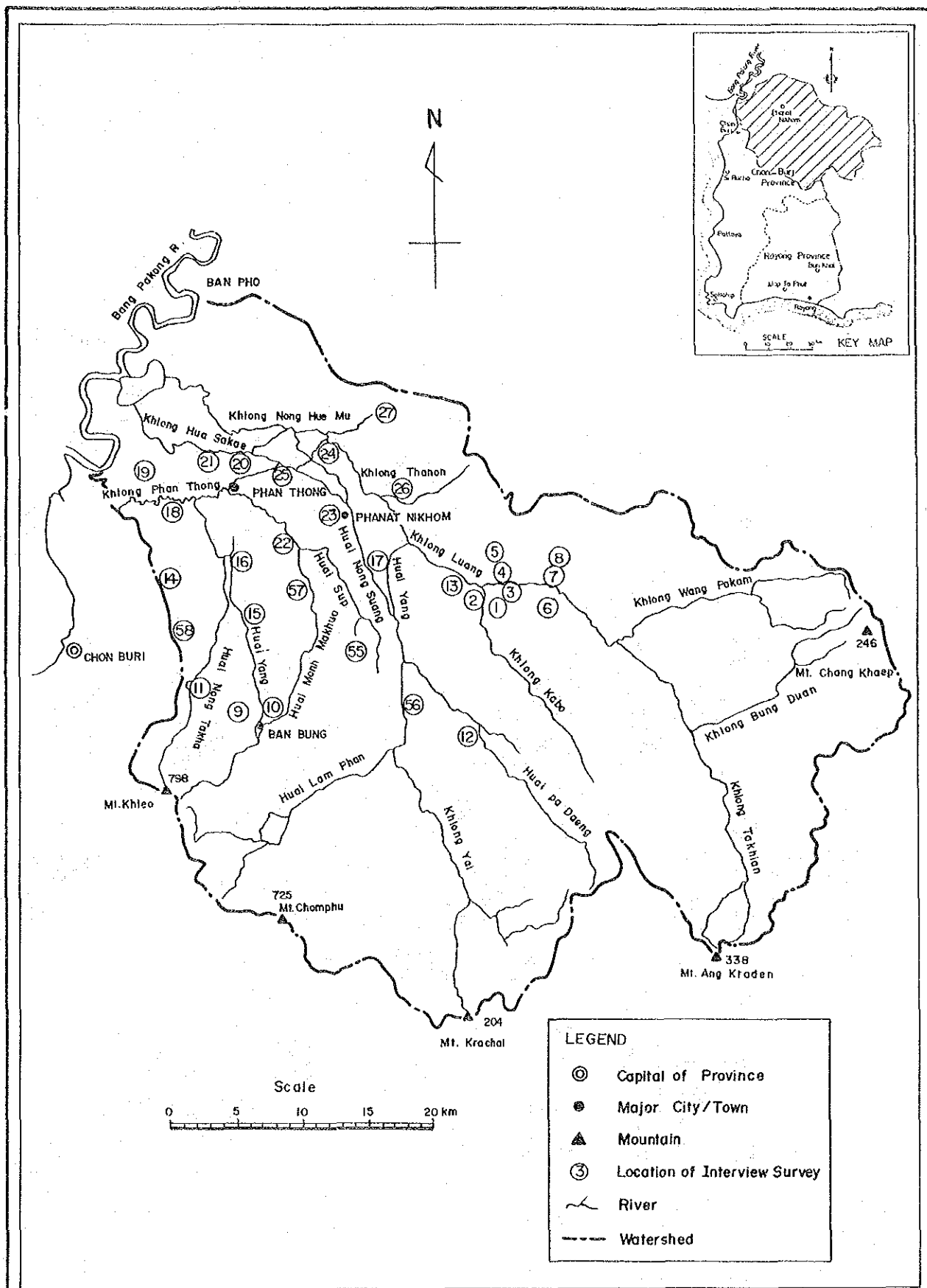


Fig. 15 Location of Interview Survey  
in Khlong Luang River Basin

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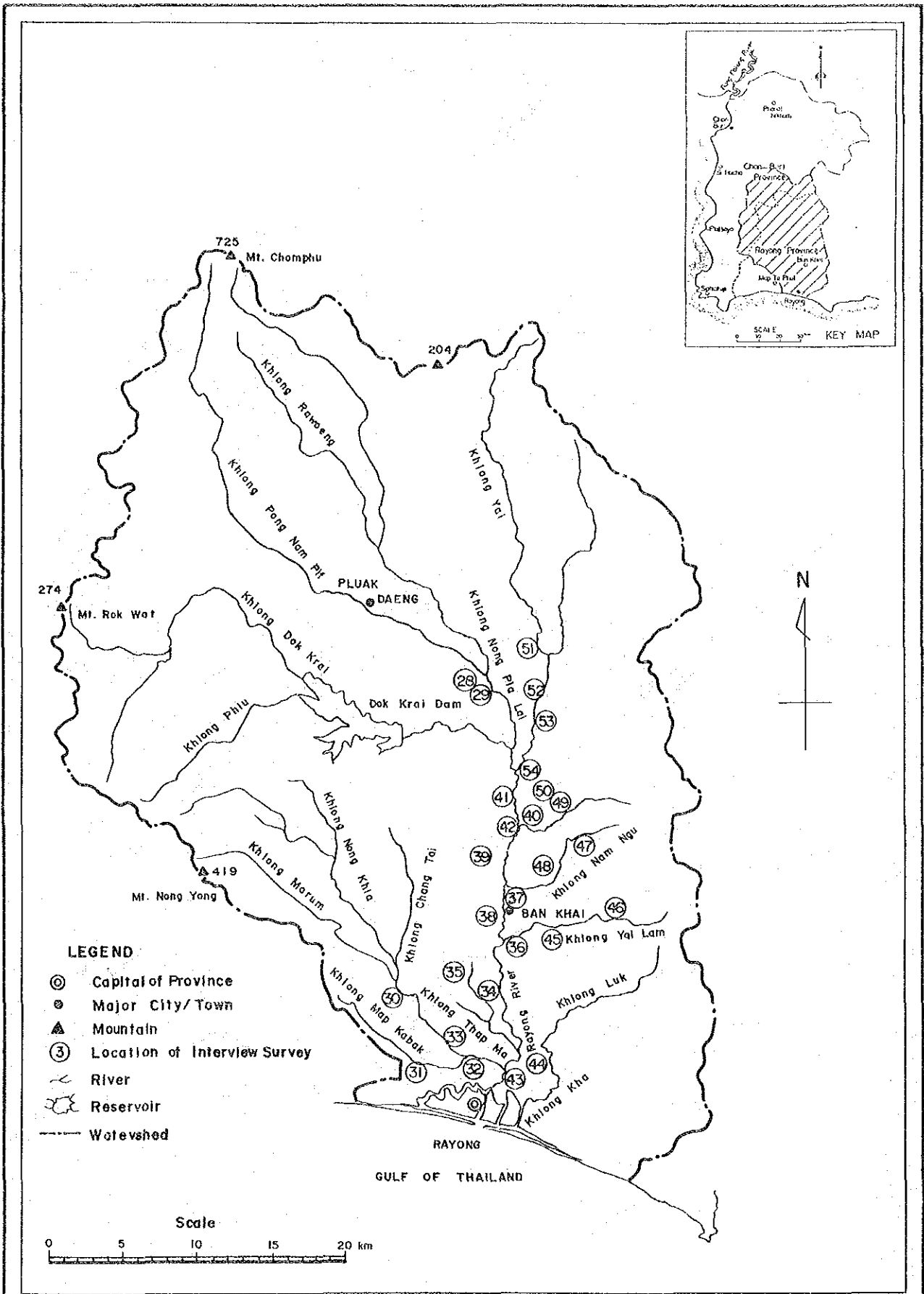


Fig.16 Location of Interview Survey  
In Rayong River Basin

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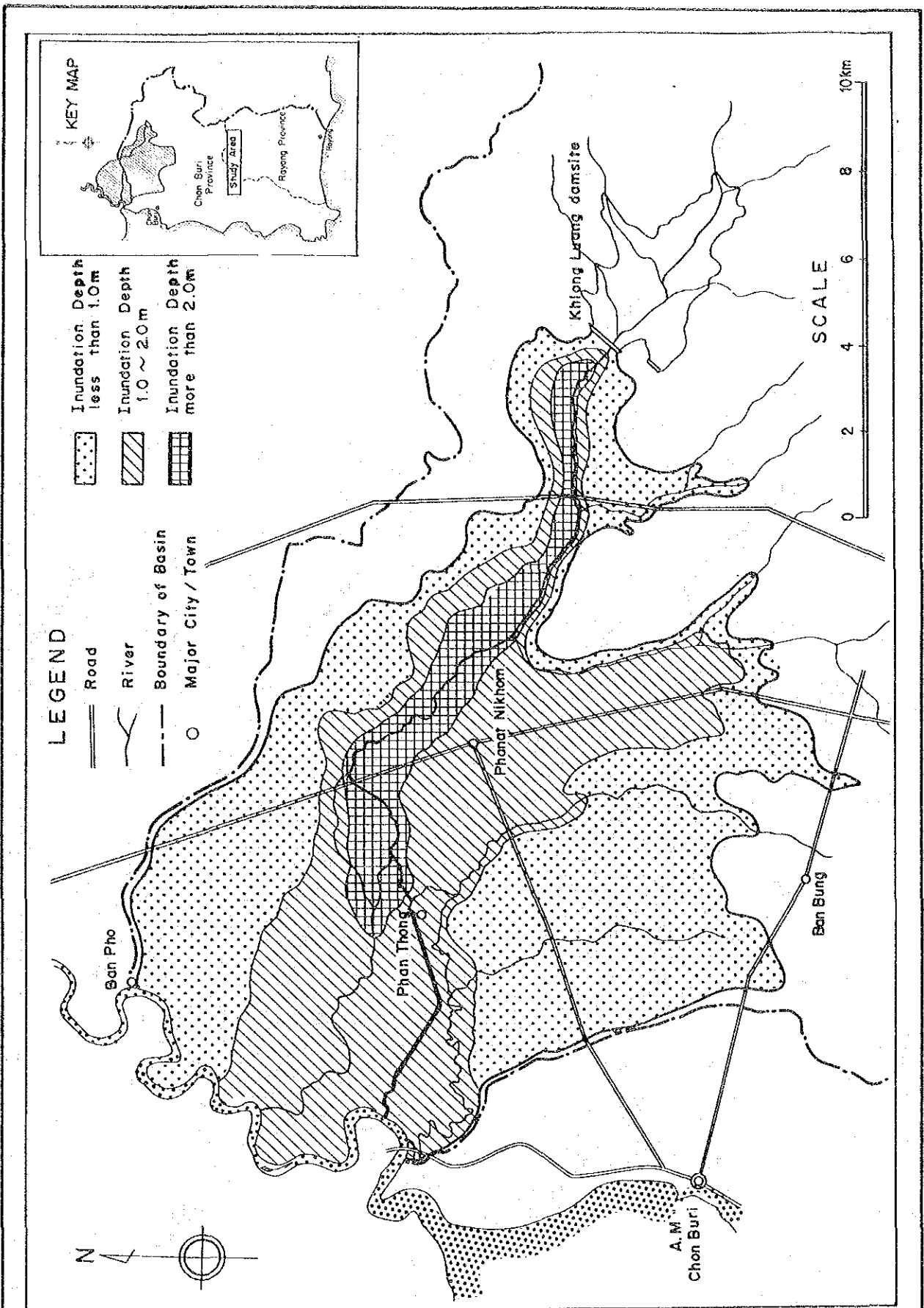


Fig.17 Inundation Area of Khlong Luang River Basin(1974)

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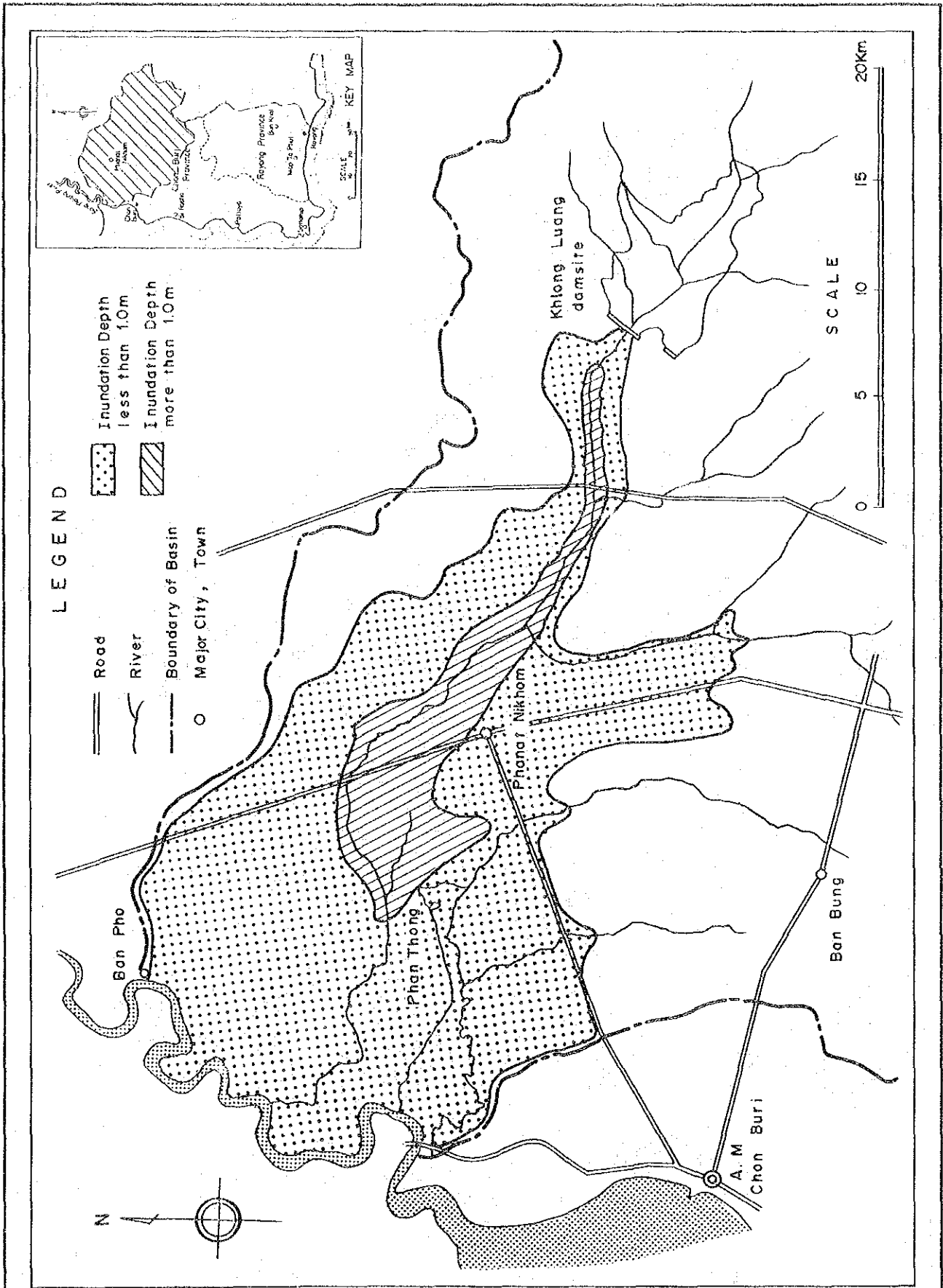


Fig.18 Inundation Area of Khlong Luang River Basin (1981)

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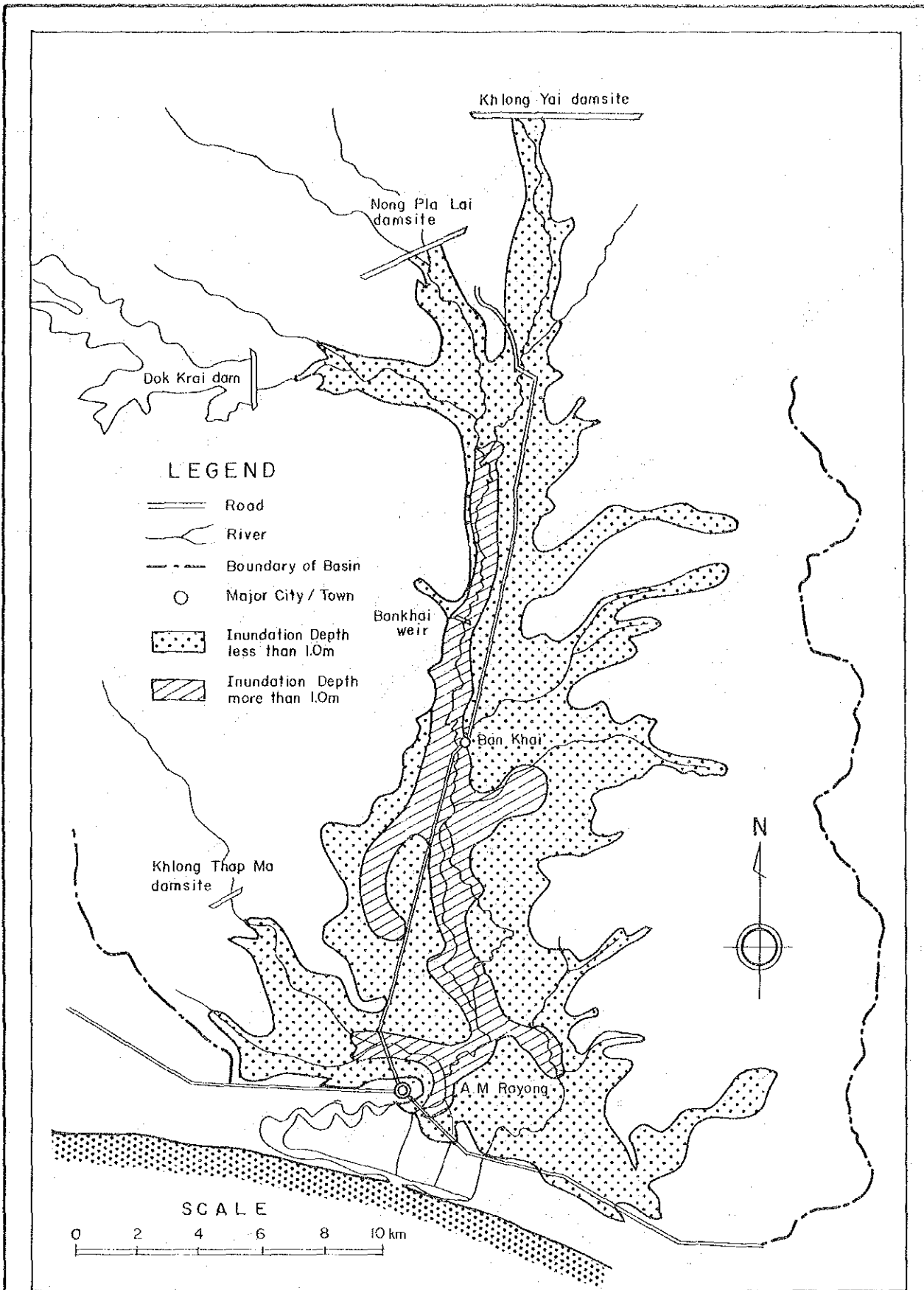


Fig.19 Inundation Area of Rayong River Basin (1974)

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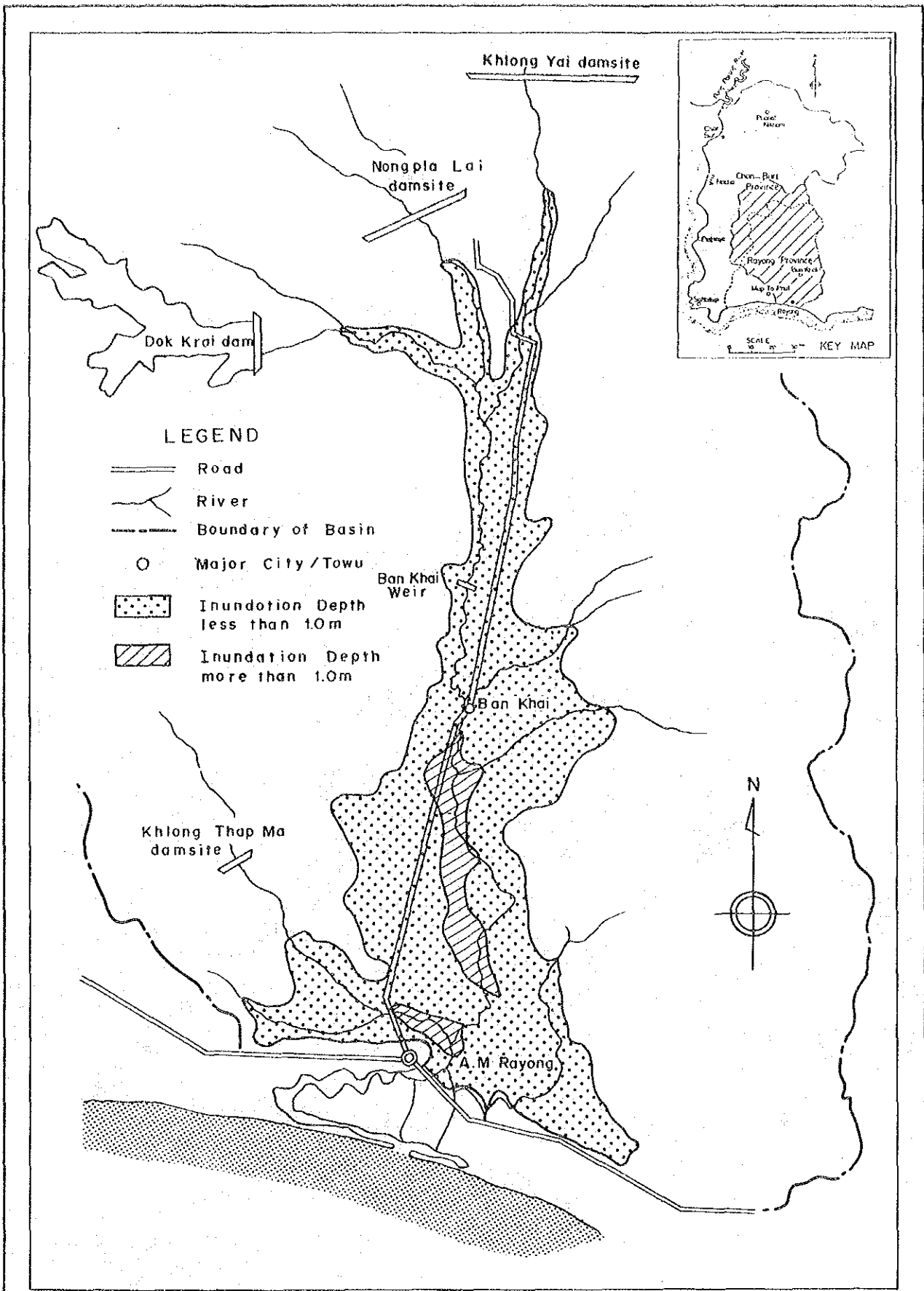


Fig.20 Inundation Area of Rayong River Basin (1981)

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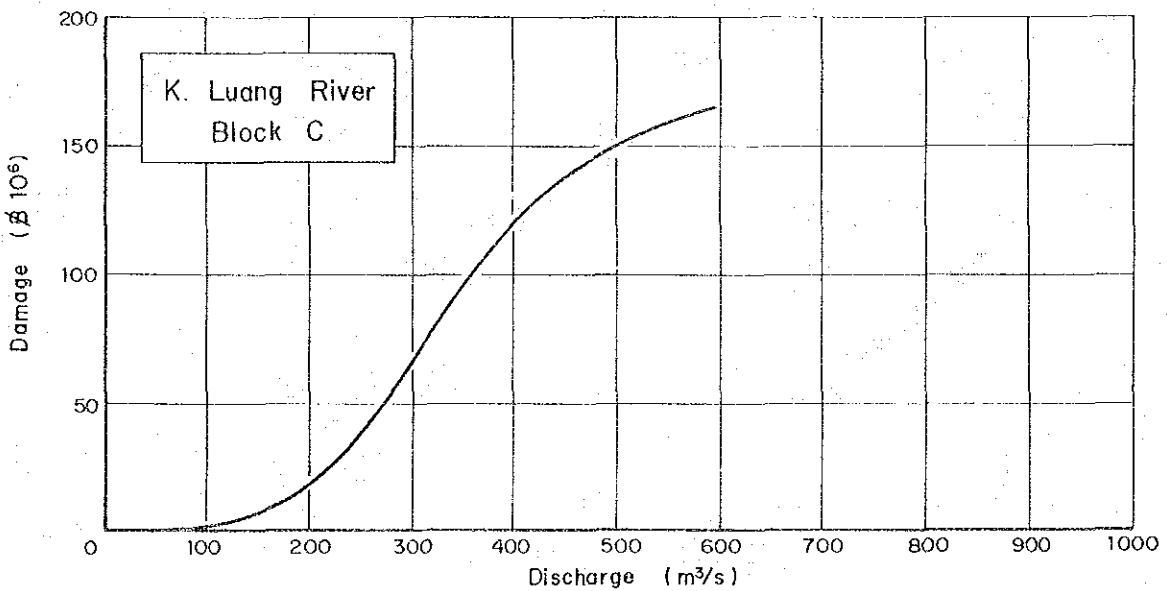
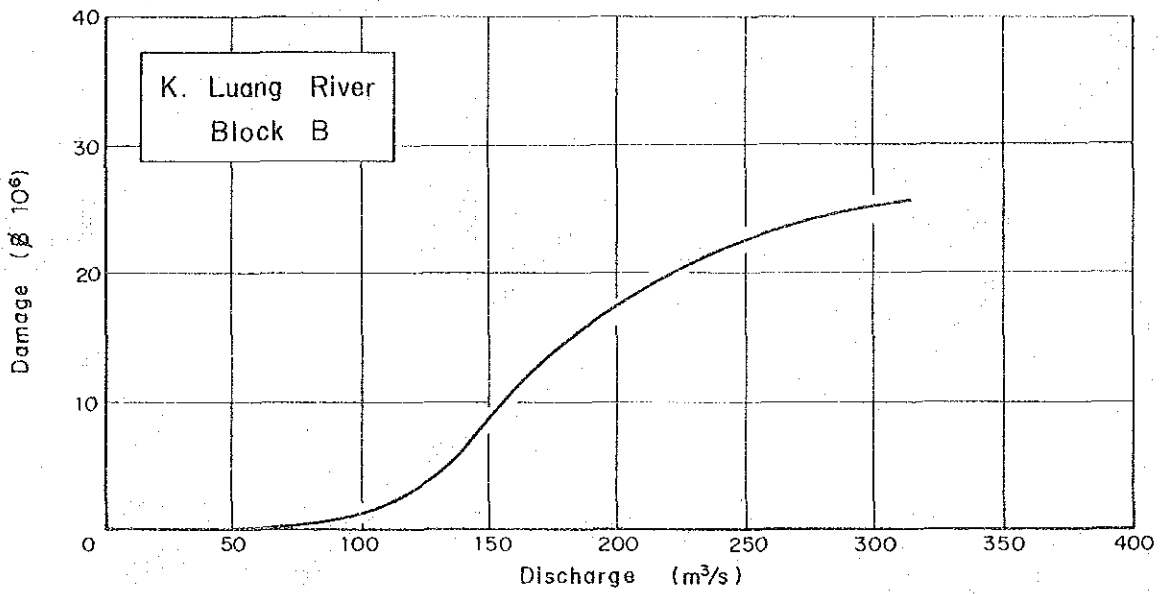
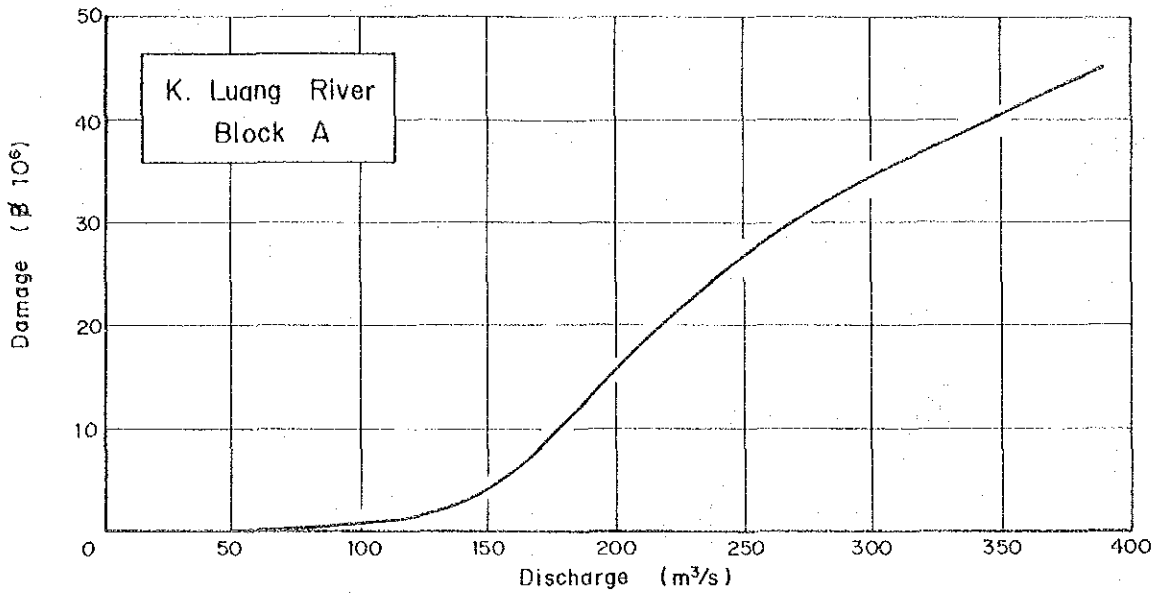


Fig. 21 Flood Damage Curve of  
Klong Luang River (1/2)

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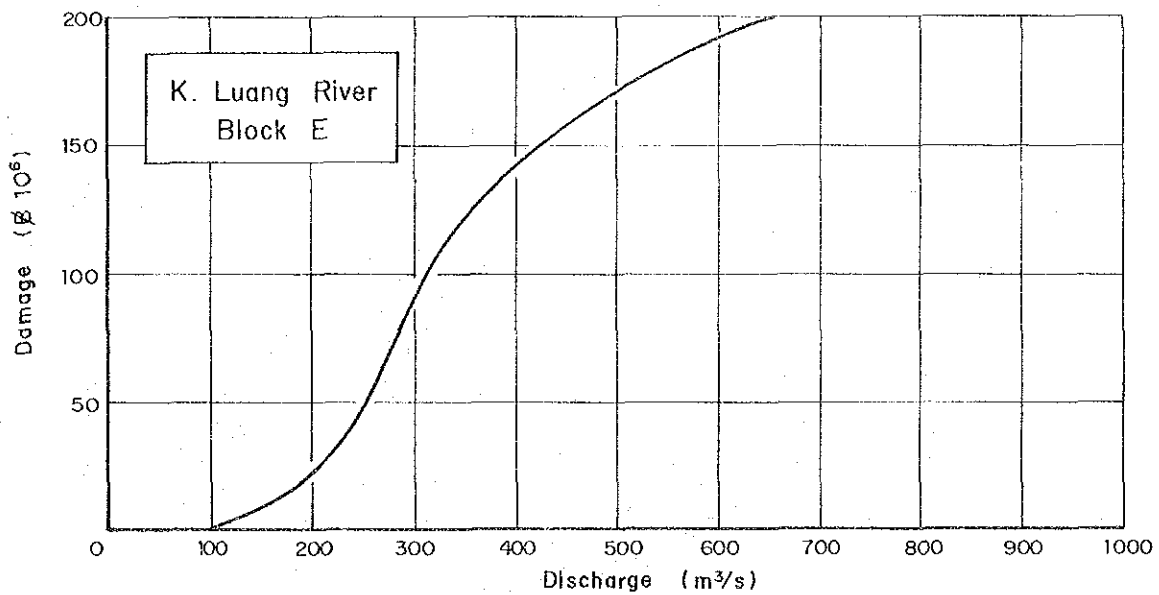
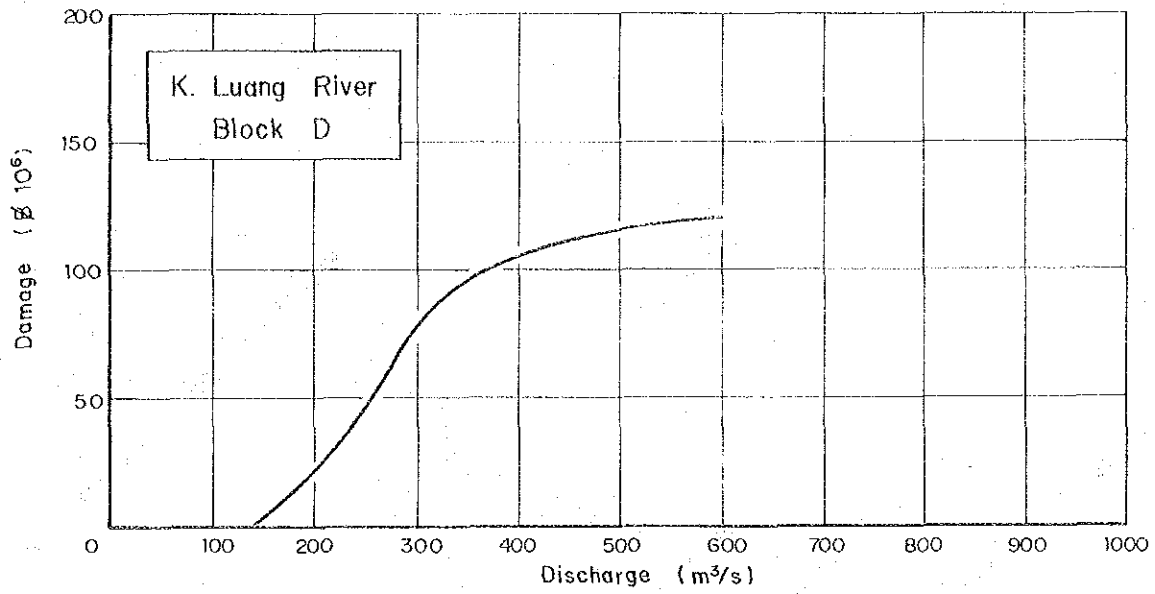


Fig. 21 Flood Damage Curve of  
Khlong Luang River (2/2)

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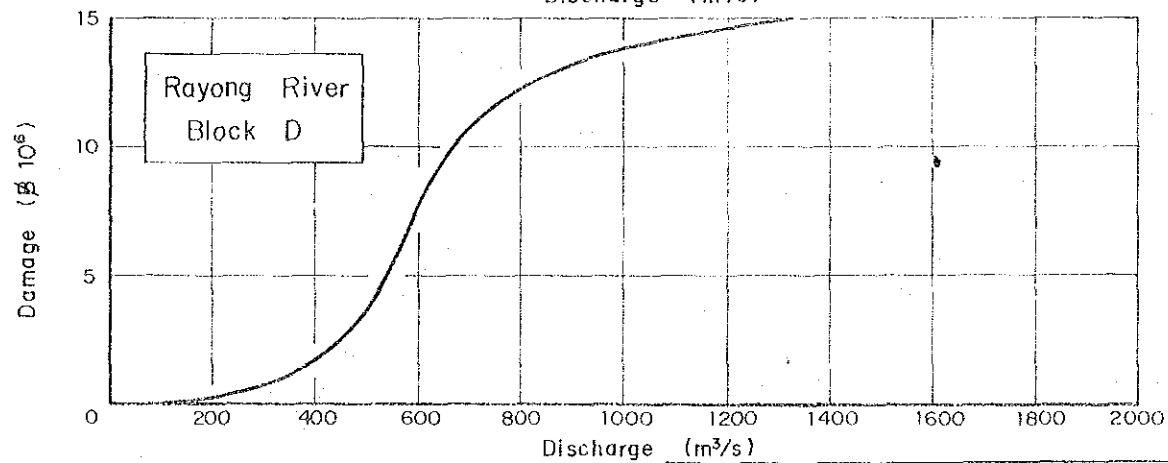
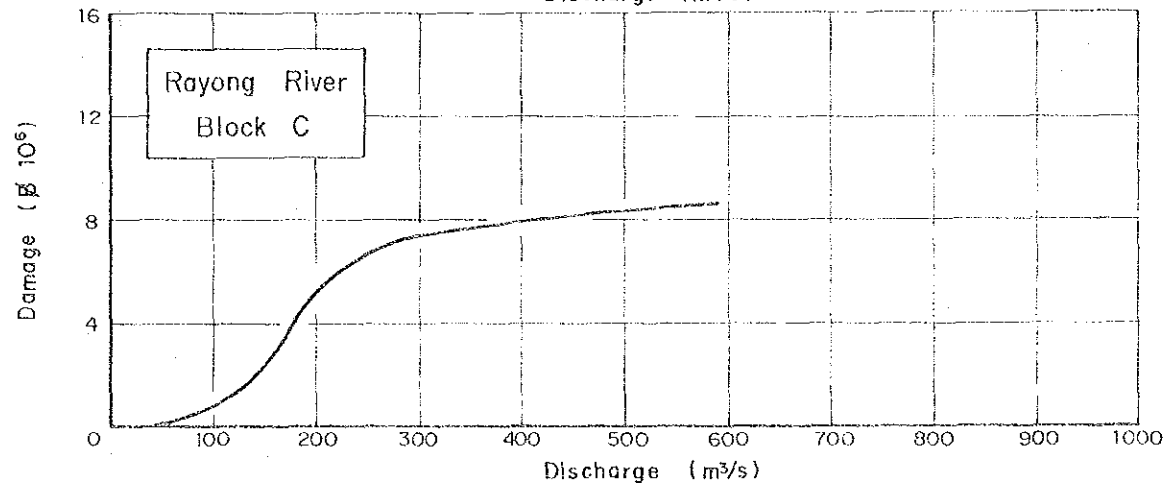
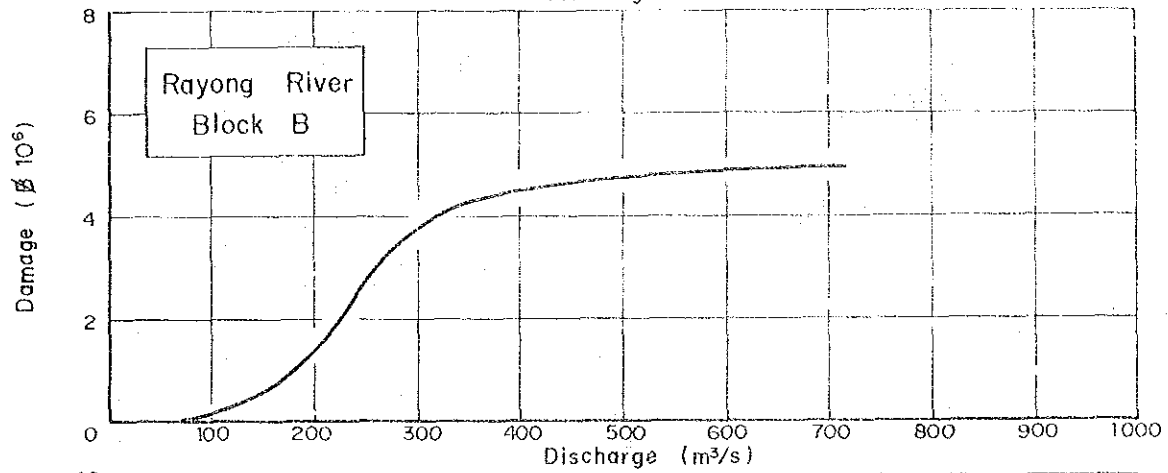
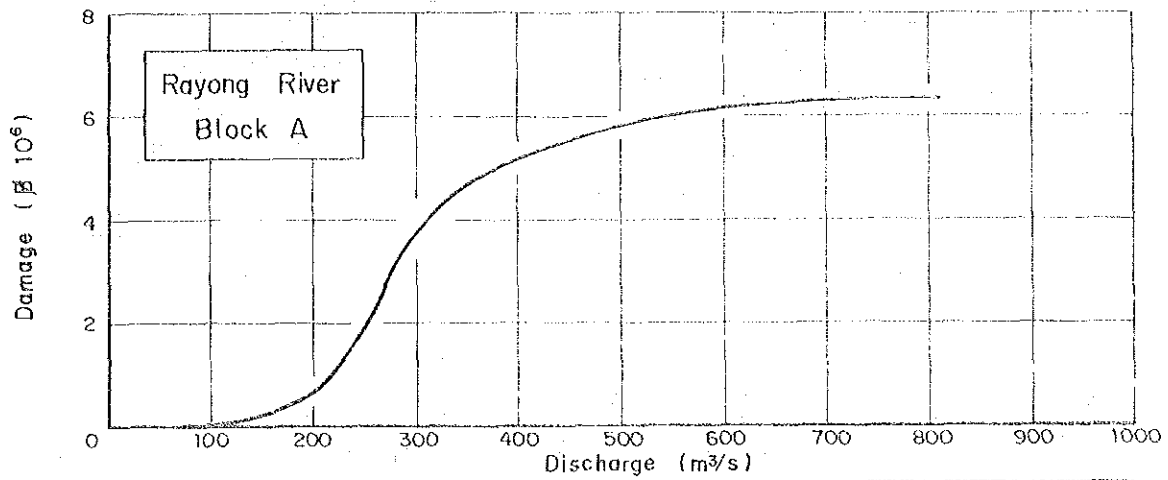


Fig. 22 Flood Damage Curve of Khlong Yai River (1/2)

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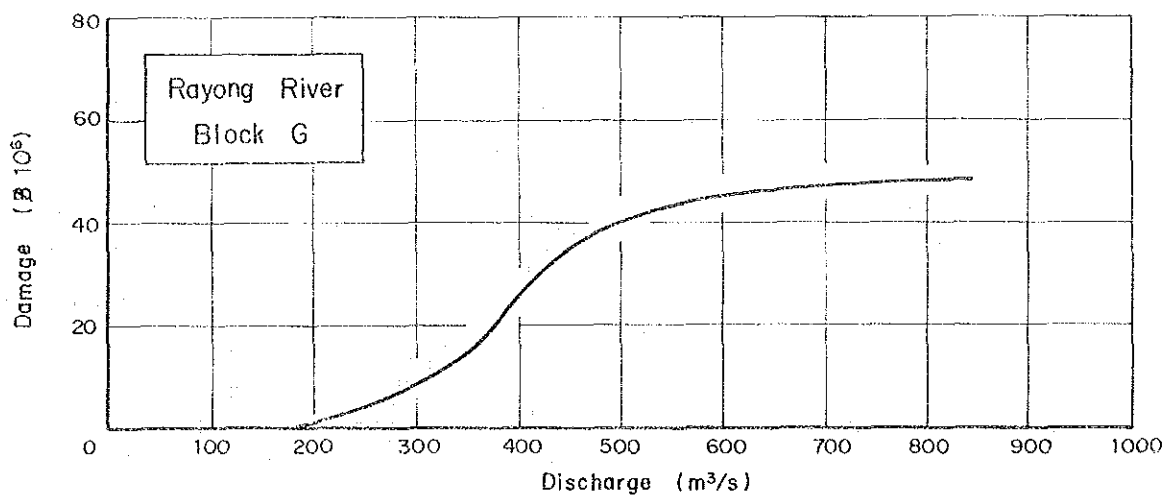
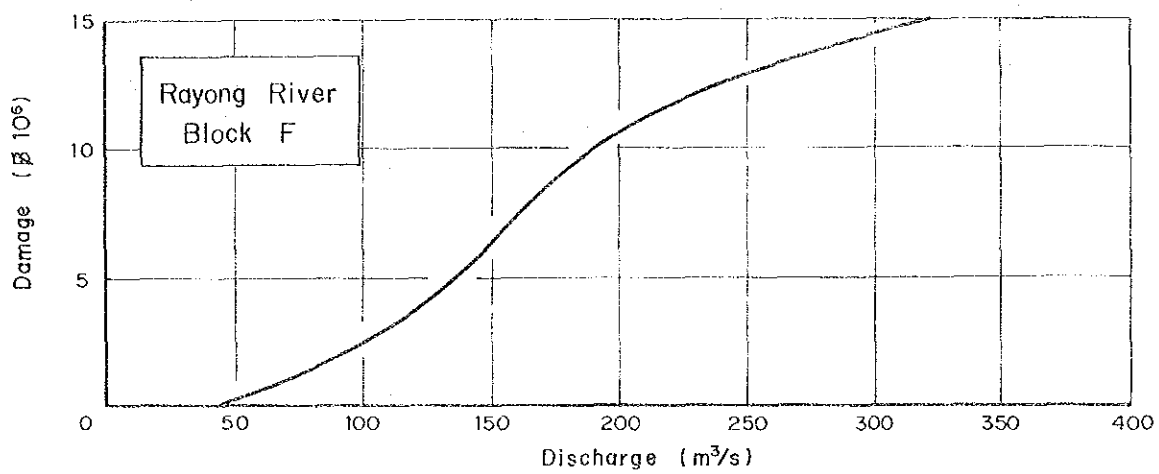
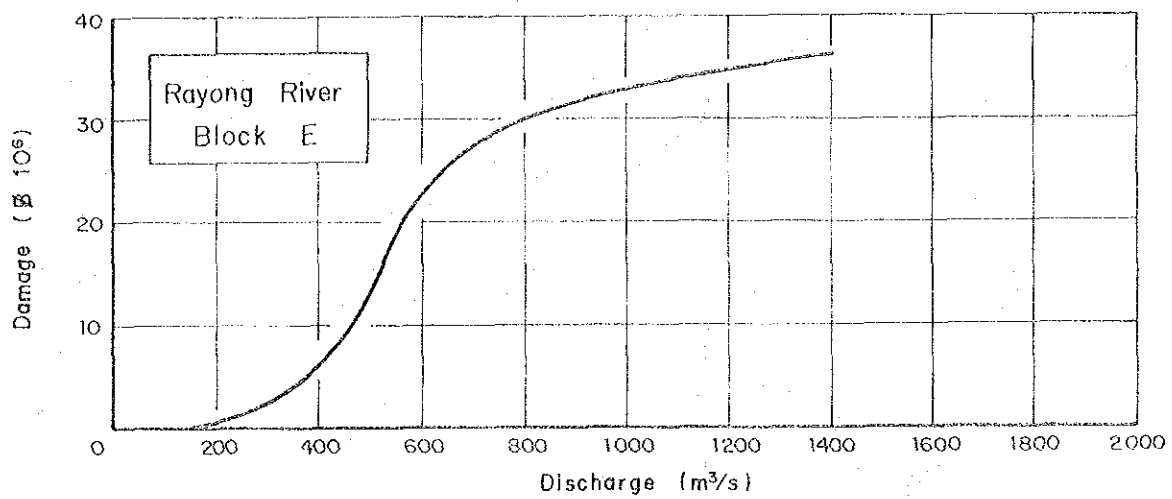


Fig. 22 Flood Damage Curve of Khlong Yai River (2/2)

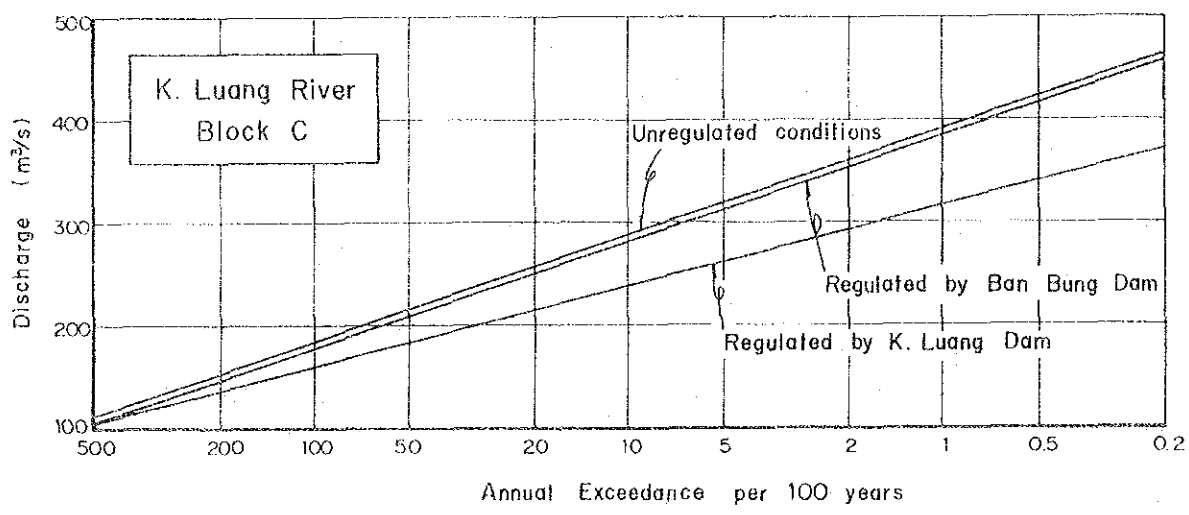
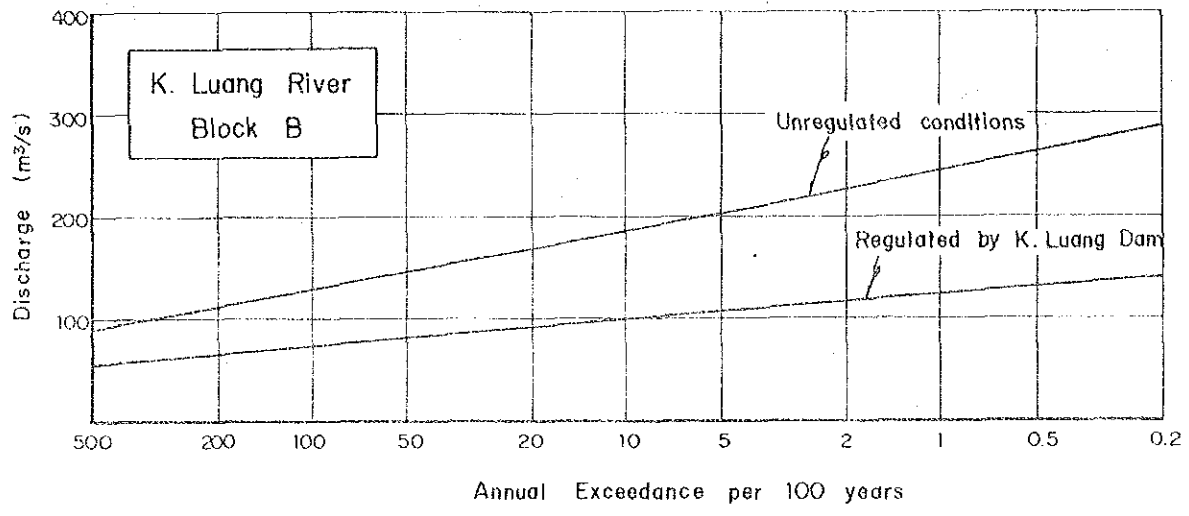
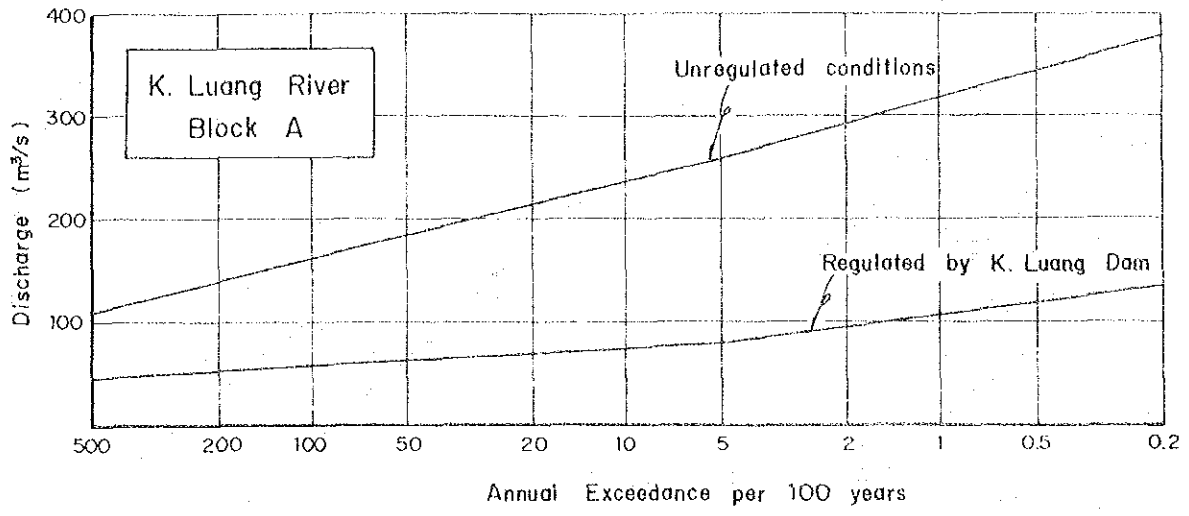


Fig. 23 Flood Frequency Curve of Khlong Luang River (1/2)

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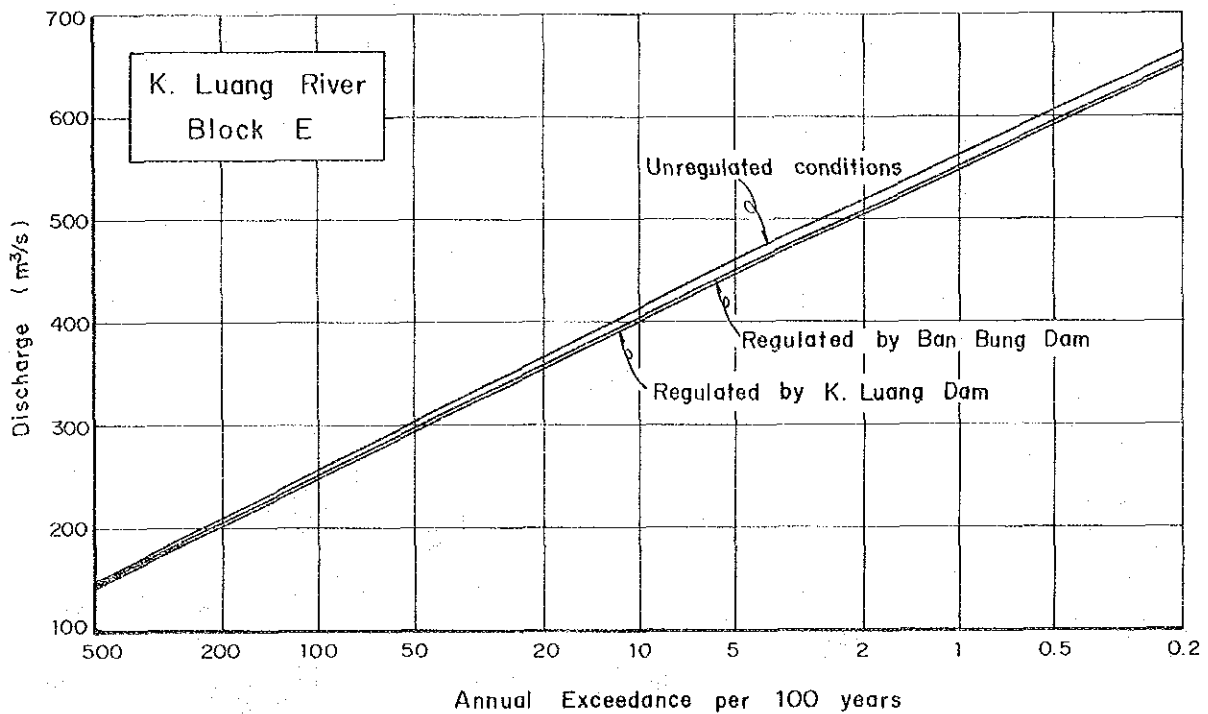
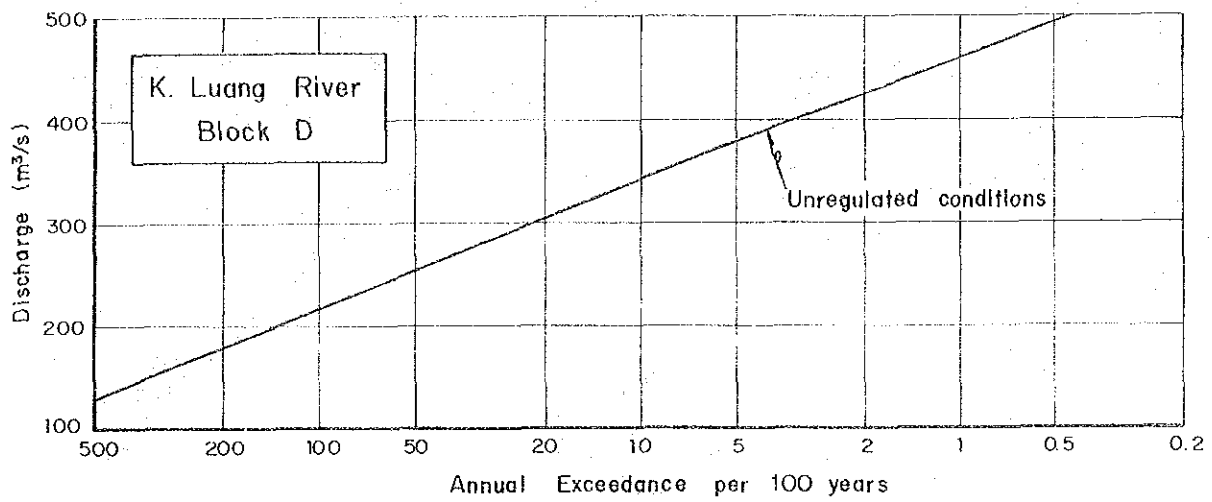


Fig. 23 Flood Frequency Curve of  
Khlong Luang River (2/2)

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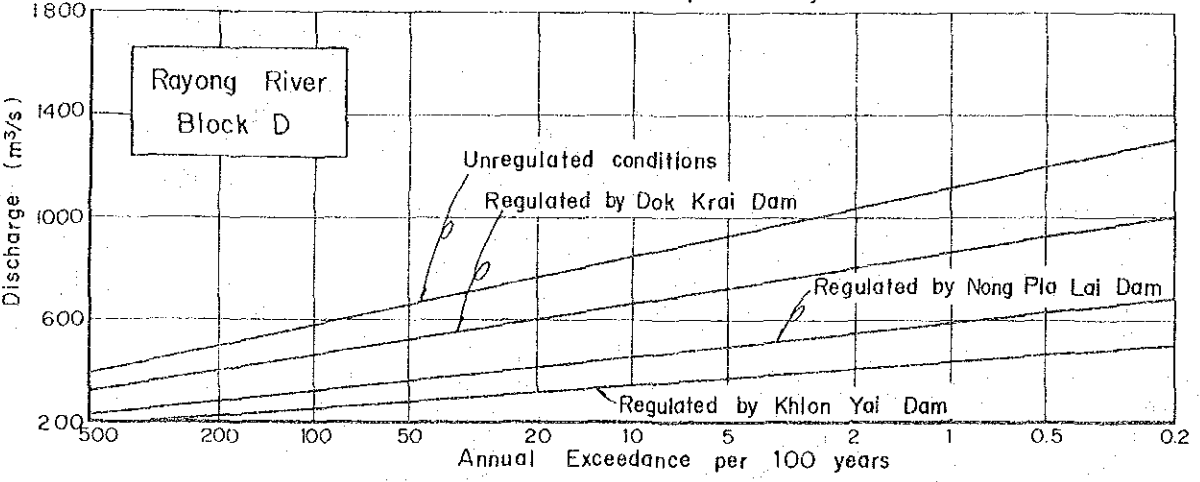
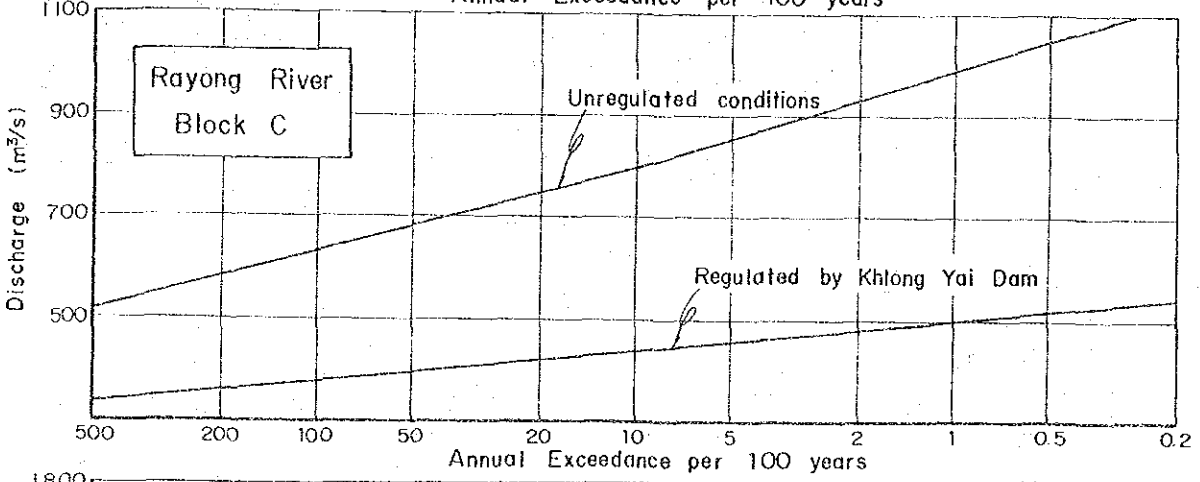
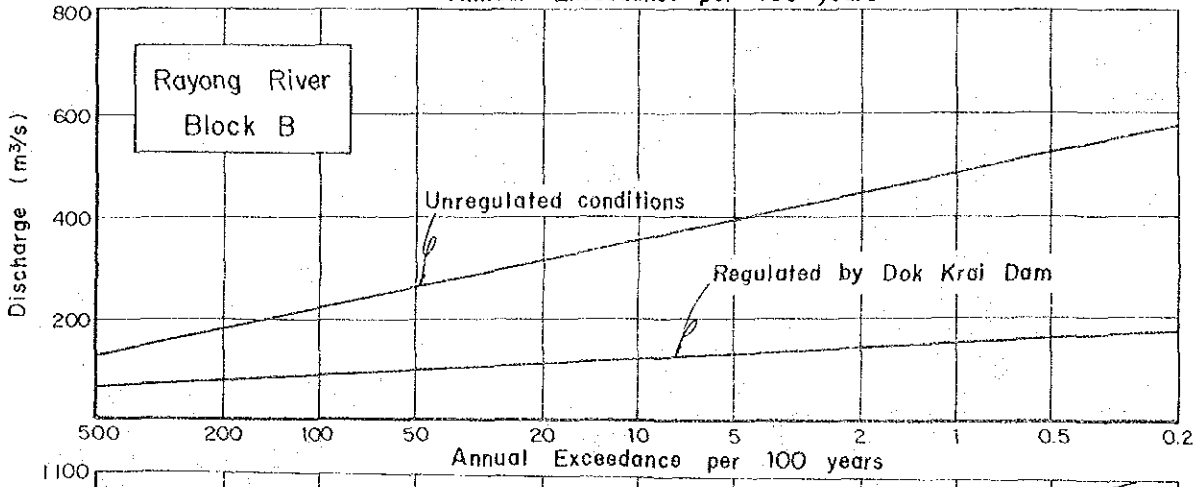
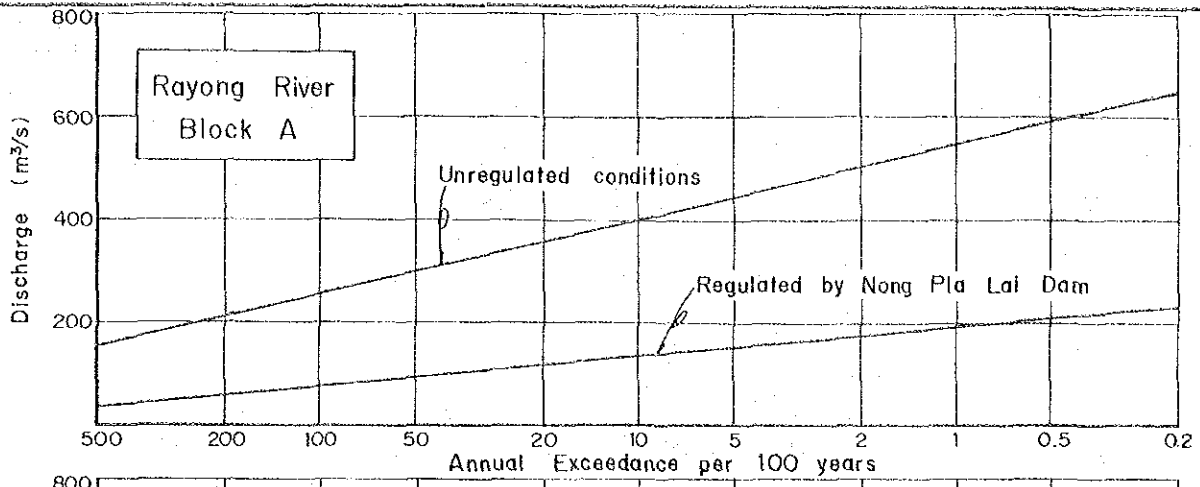


Fig. 24 Flood Frequency Curve of Rayong River (1/2)

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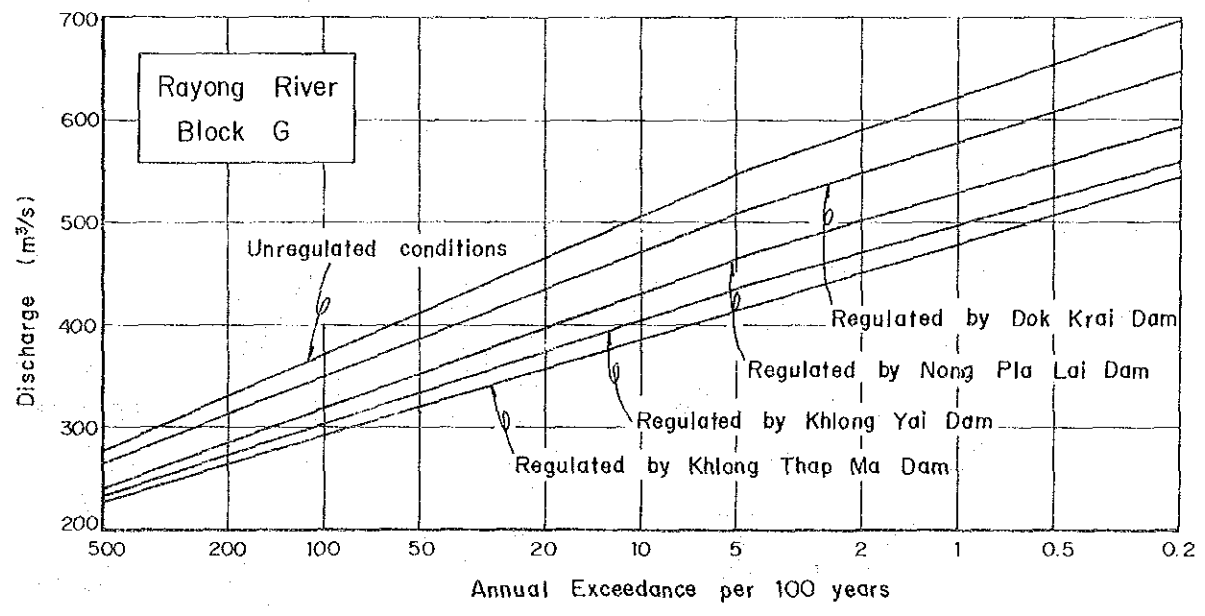
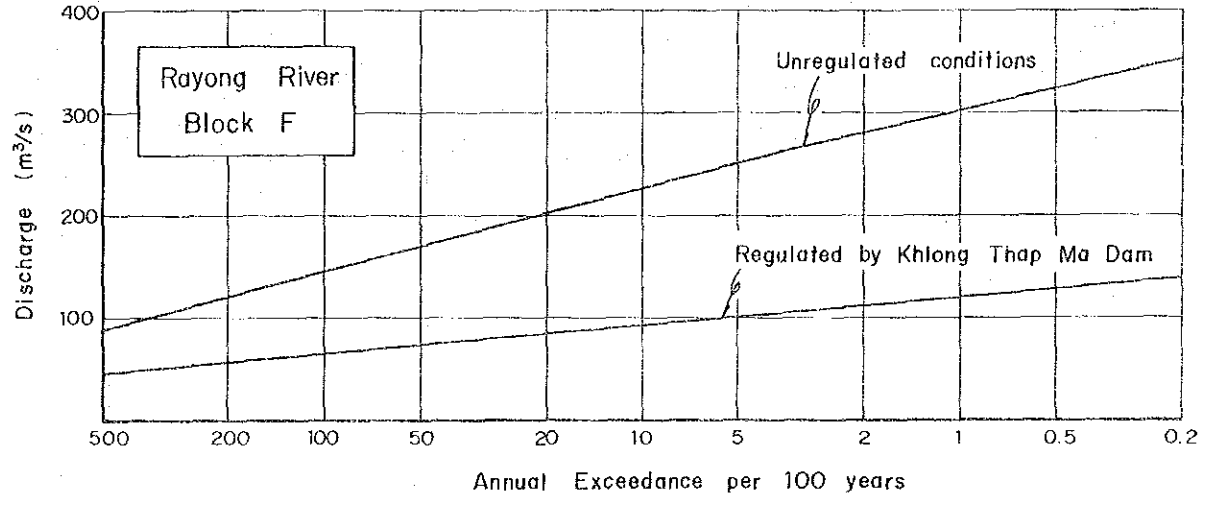
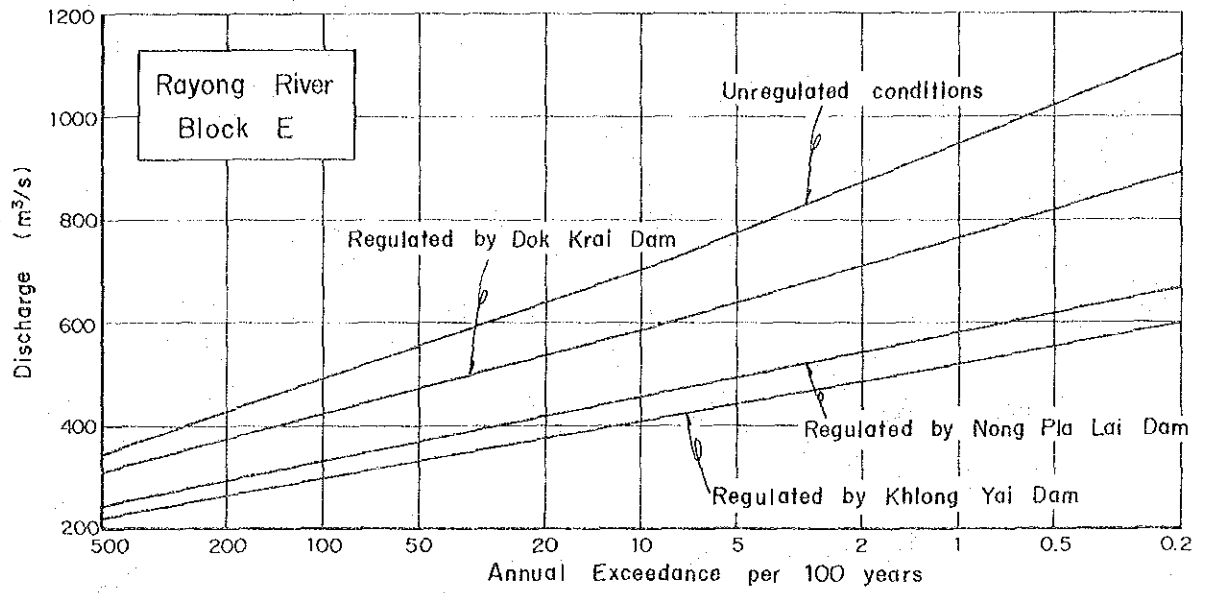


Fig. 24 Flood Frequency Curve of Rayong River (2/2)

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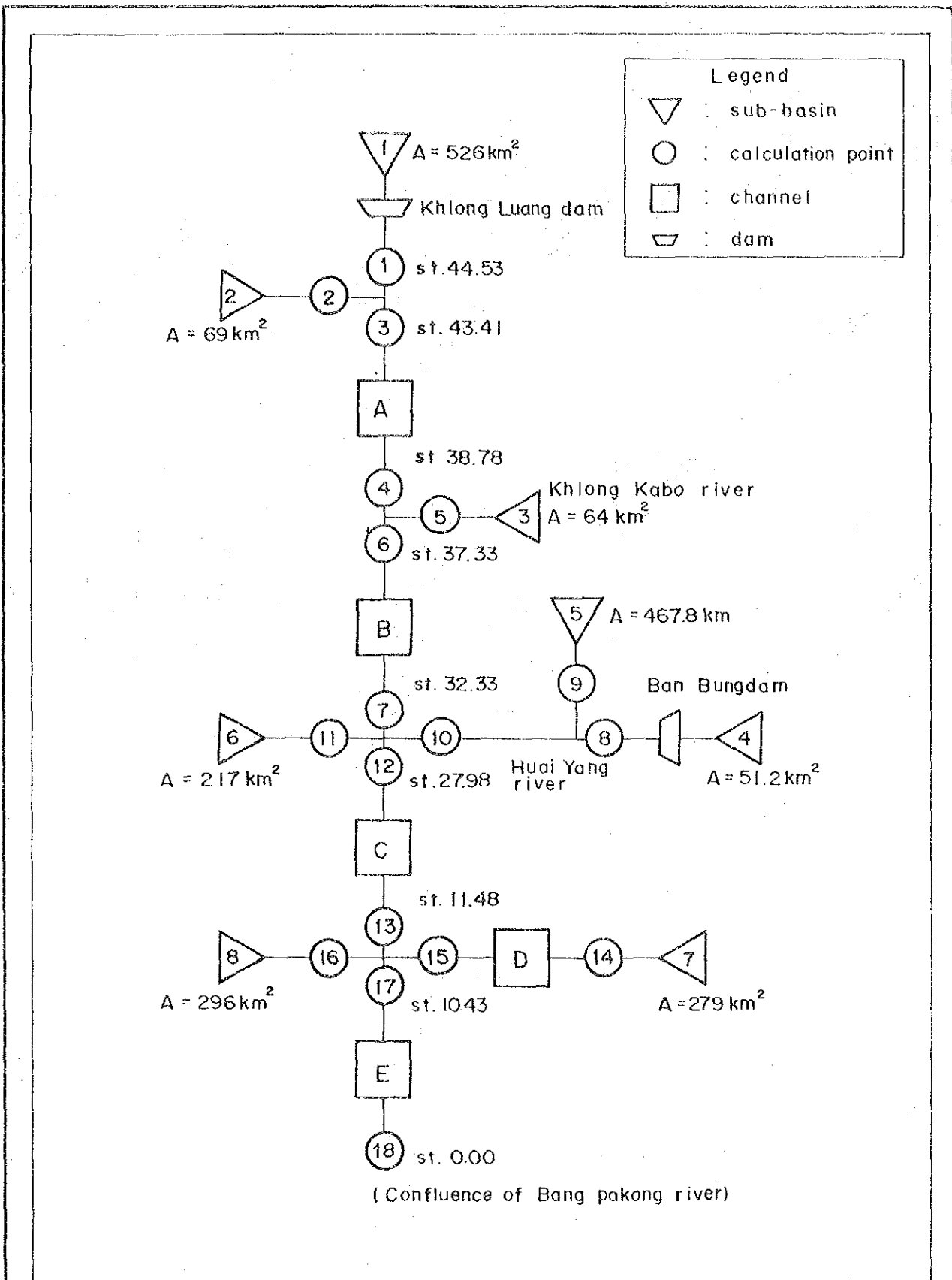


Fig.25 Runoff Calculation Model Diagram, Khlong Luang River Basin

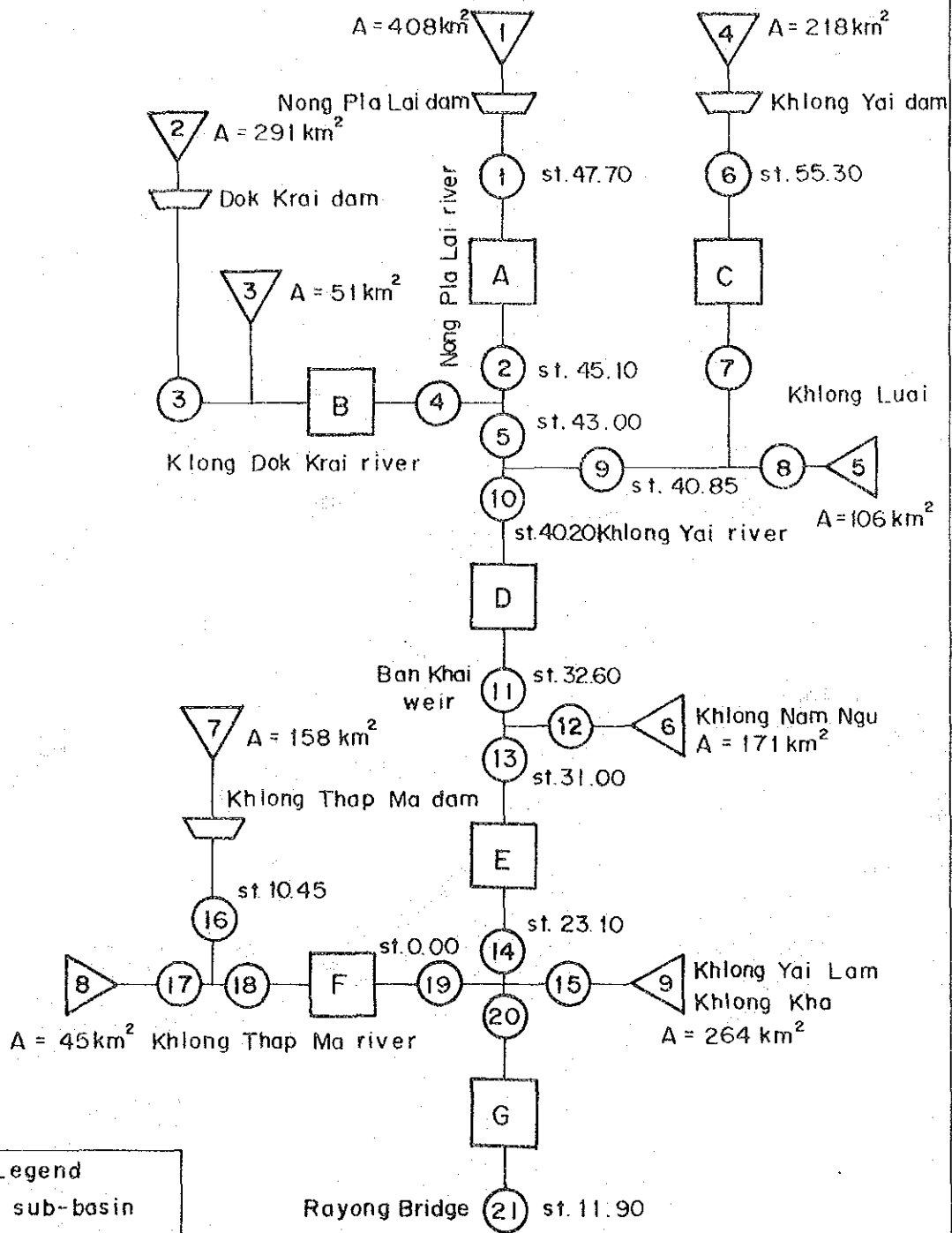
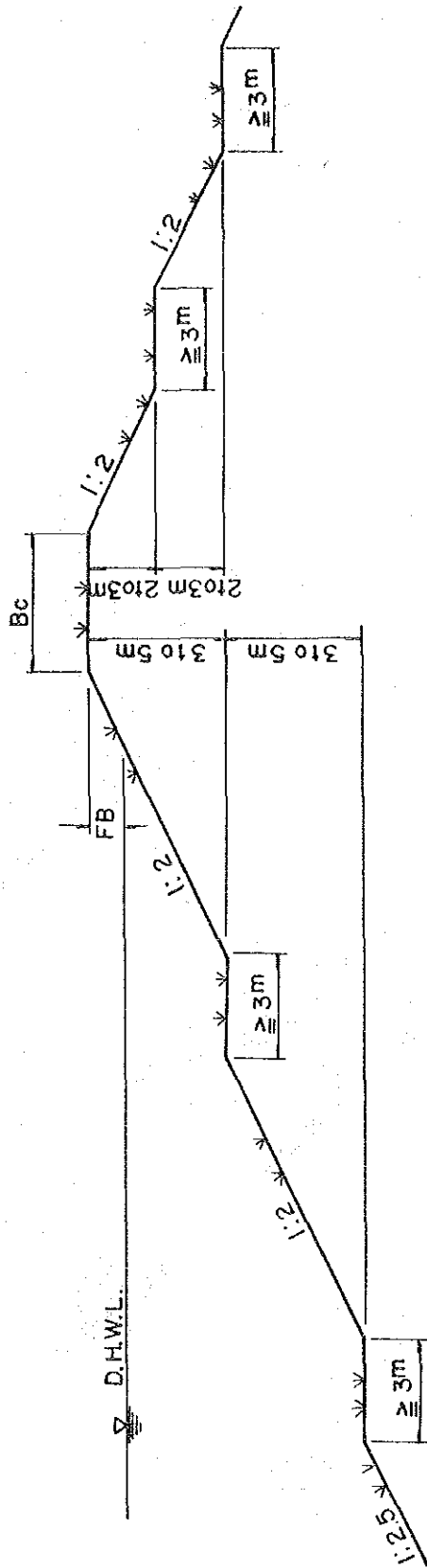


Fig. 26 Runoff Calculation Model Diagram, Rayong River Basin

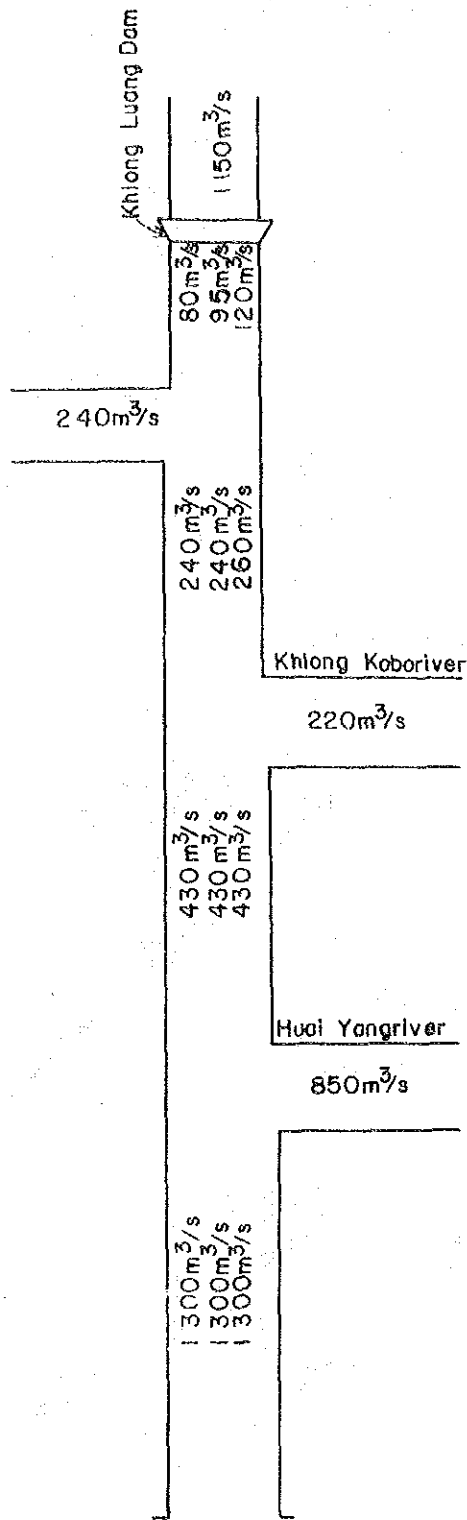




Design Discharge Q (m <sup>3</sup> /s)	Free-board FB (m) not less than	Crown width Bc (m) not less than
< 200	0.6	3
200 to 500	0.8	3
500 to 2,000	1.0	4
2,000 to 5,000	1.2	5
5,000 to 10,000	1.5	6
10,000 <	2.0	7

Fig. 27 Standard Dike Section

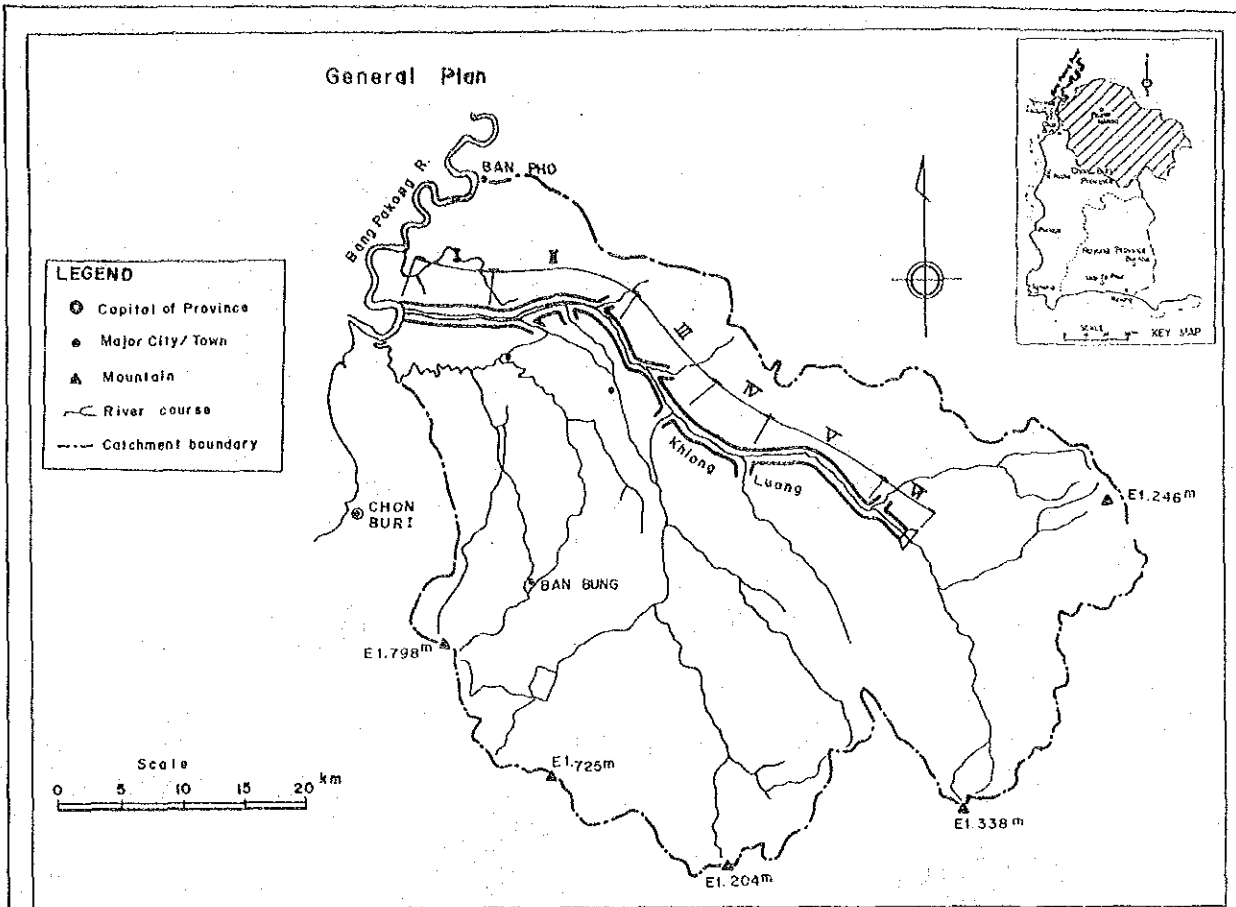
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Note.

Upper Line : Alternative	1. Spillway of Khlong Luang dam : 50m wide.
Middle Line : Alternative	2. Spillway of Khlong Luang dam : 70m wide.
Lower Line : Alternative	3. Spillway of Khlong Luang dam : 90m wide.

Fig.28 Discharge Distribution for Flood Control Alternatives Khlong Luang River



Design Discharge Distribution (m<sup>3</sup>/sec)

Alternatives	Block NO.						Spillway width (m)
	I	II	III	IV	V	VI	
1	1300	1300	1300	430	240	80	50
2	1300	1300	1300	430	240	95	70
3	1300	1300	1300	430	240	120	90

Fig. 29 Flood Control Alternatives for Khlong Luang River

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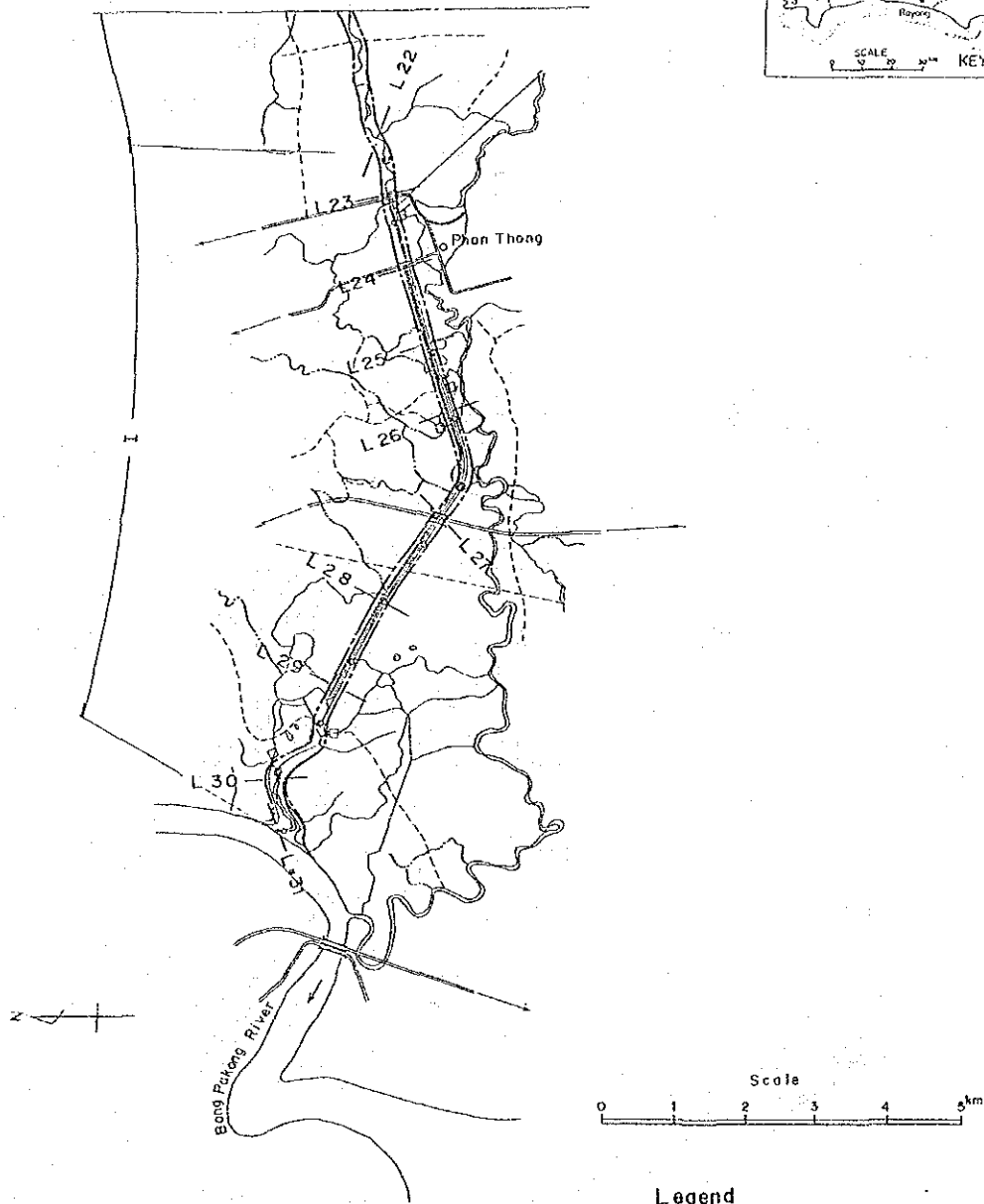
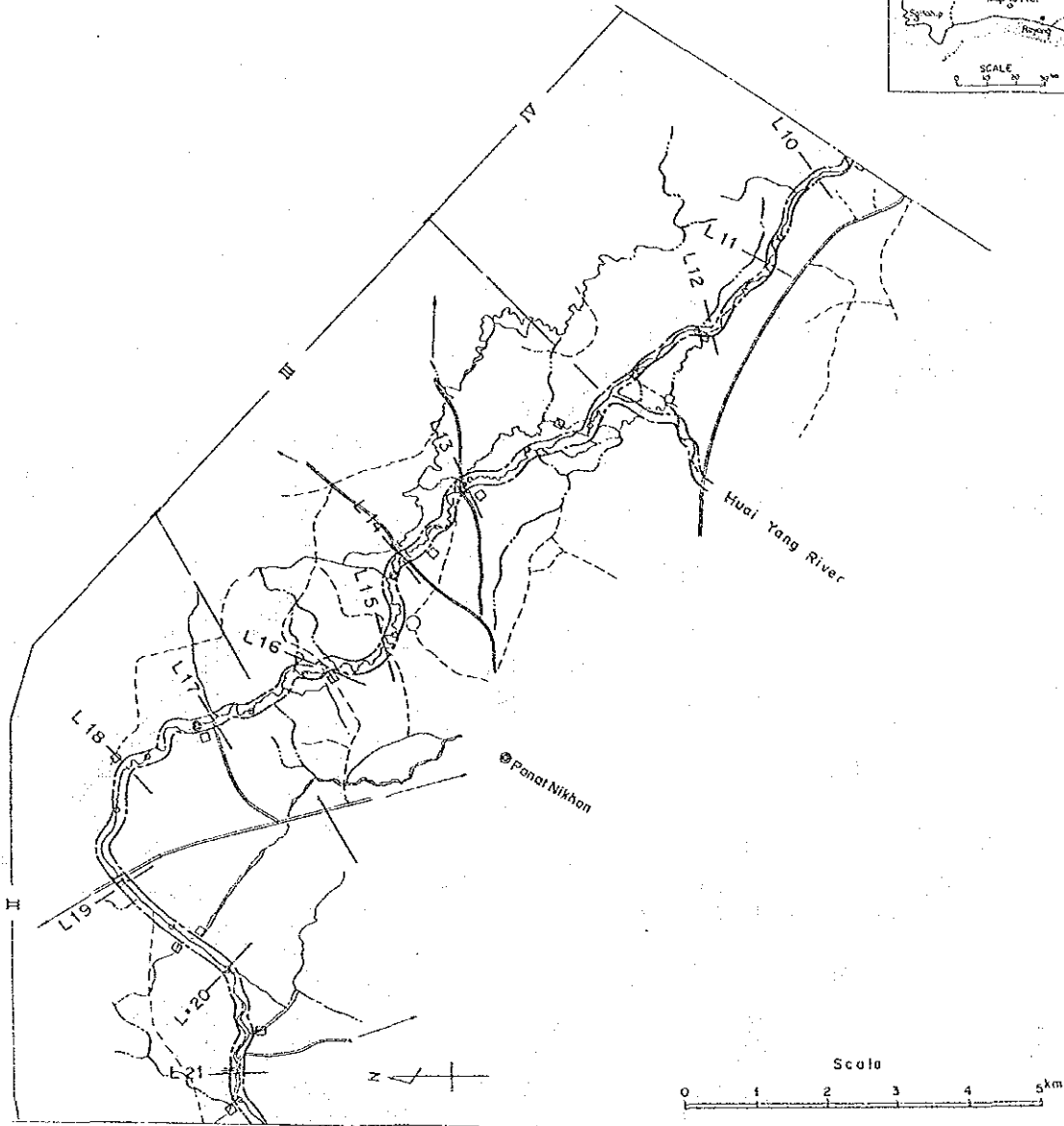
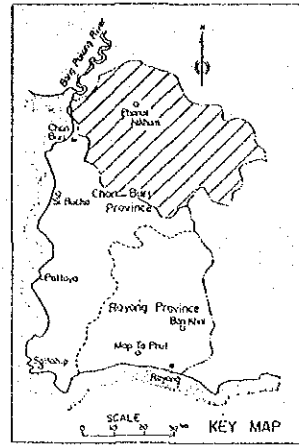


Fig. 30 Design Plan of Khlong Luang River (1/3)

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Legend

- Design Alignment
- Drainage Sluice

Fig.30 Design Plan of Khlong Luang River (2/3)

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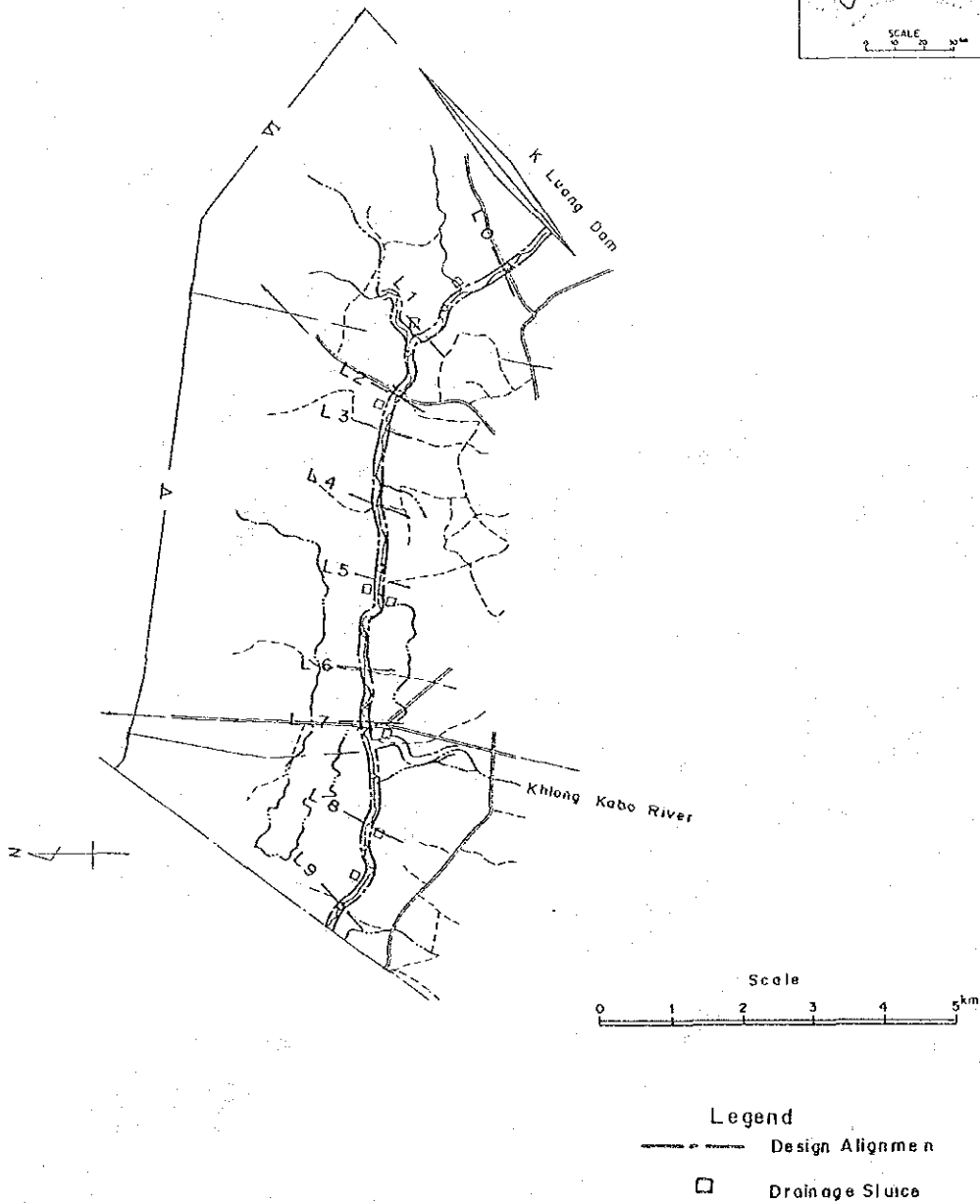
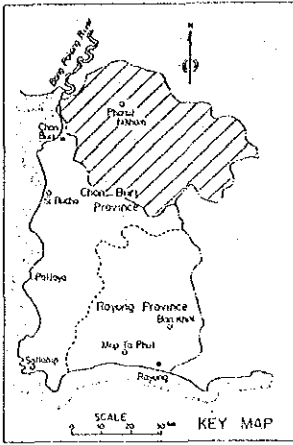


Fig. 30 Design Plan of Khlong Luang River (3/3)

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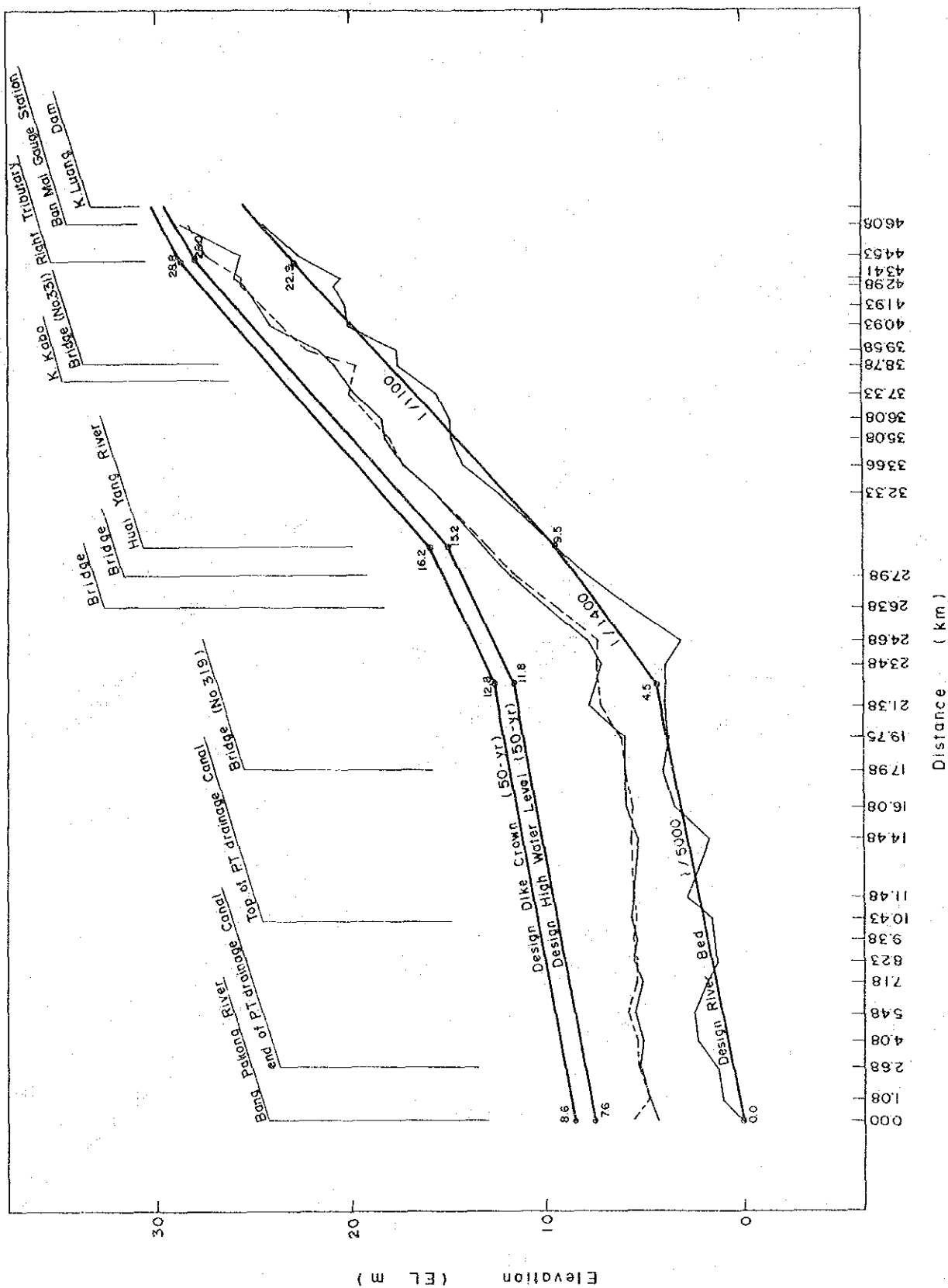


Fig. 31 Longitudinal Profile for Basic Flood Control Plan of Khlong Luang River

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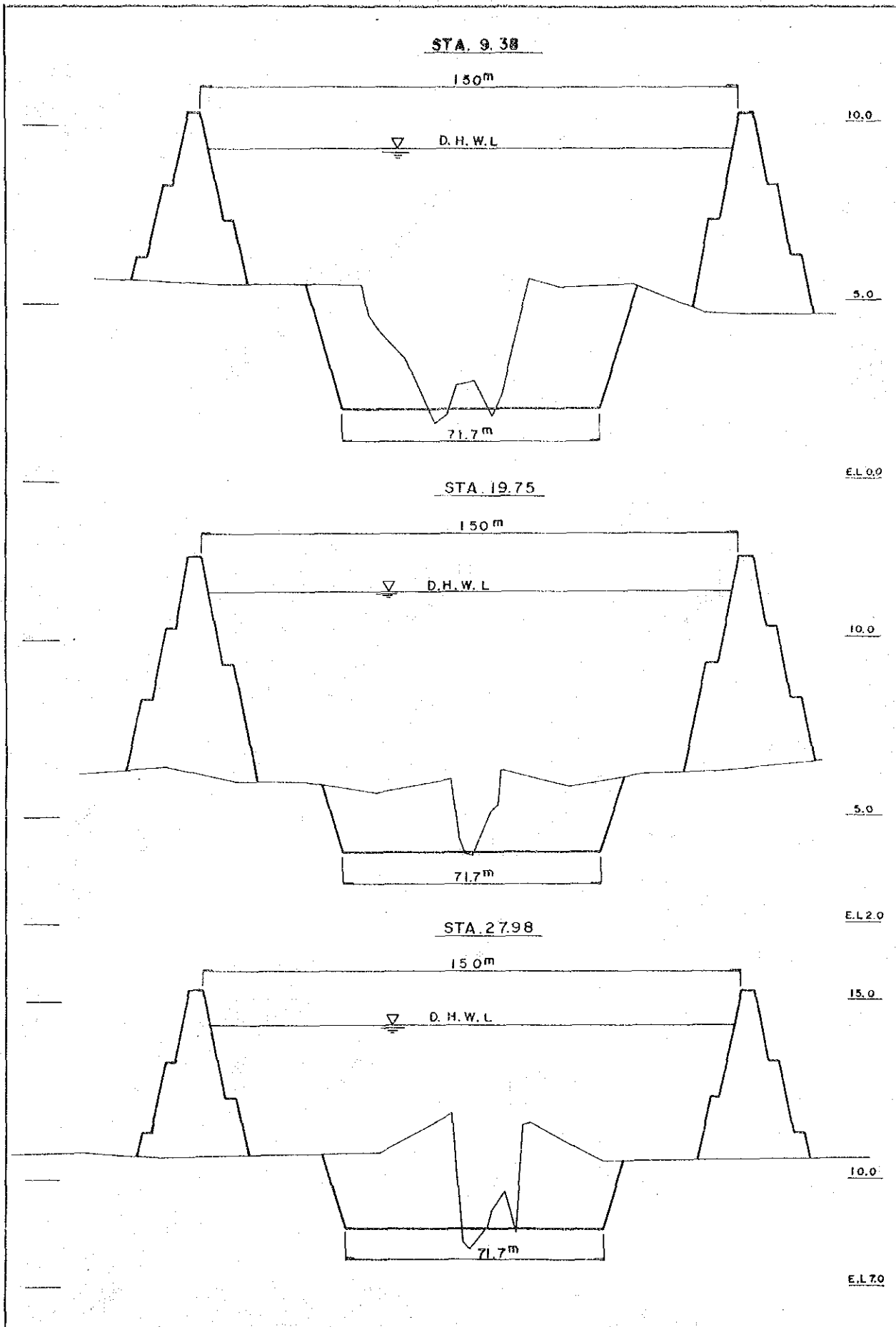


Fig. 32 Channel Section for Basic Flood Control Plan of Khlong Luang River (1/2)

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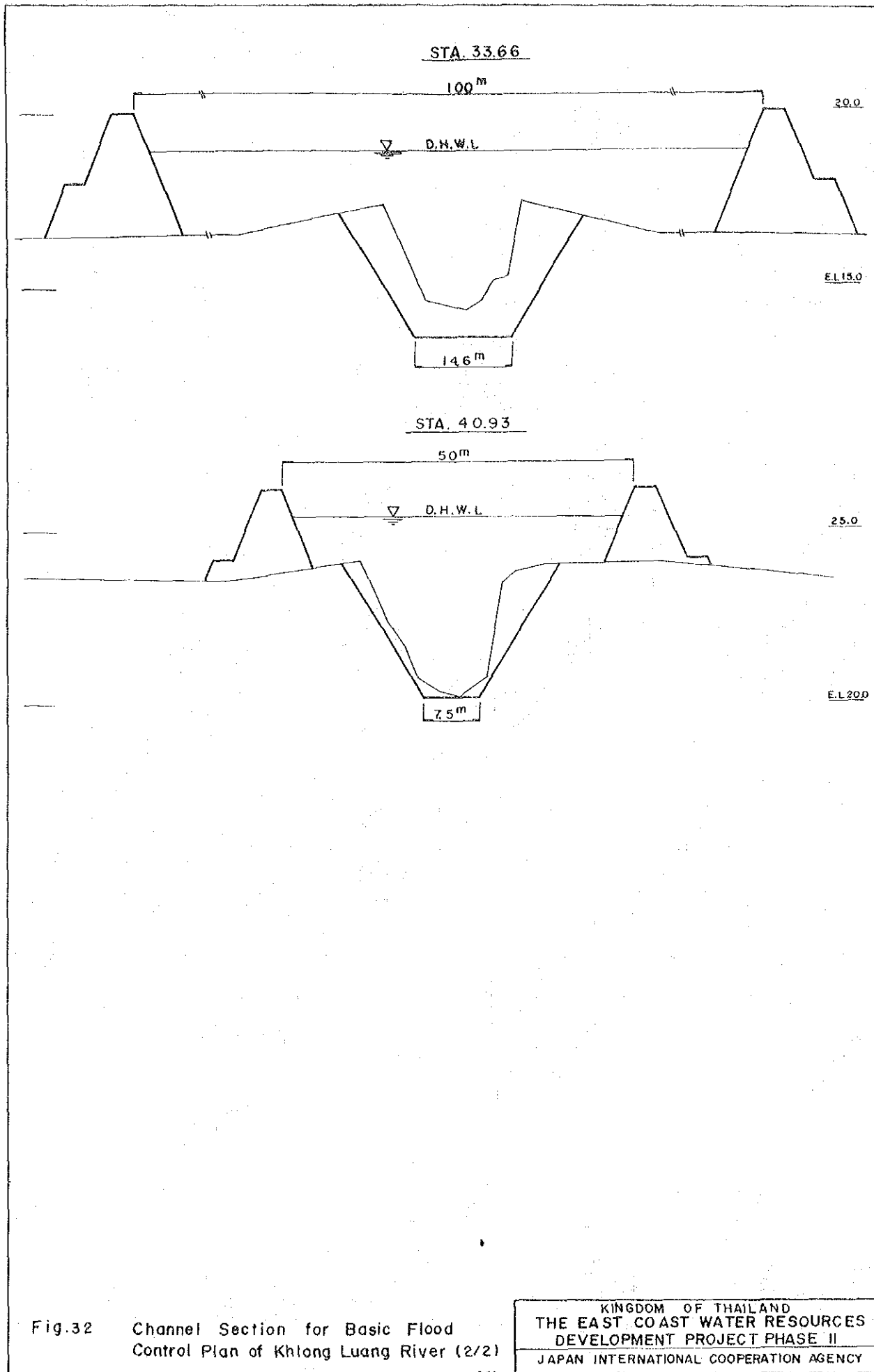


Fig.32 Channel Section for Basic Flood Control Plan of Khlong Luang River (2/2)

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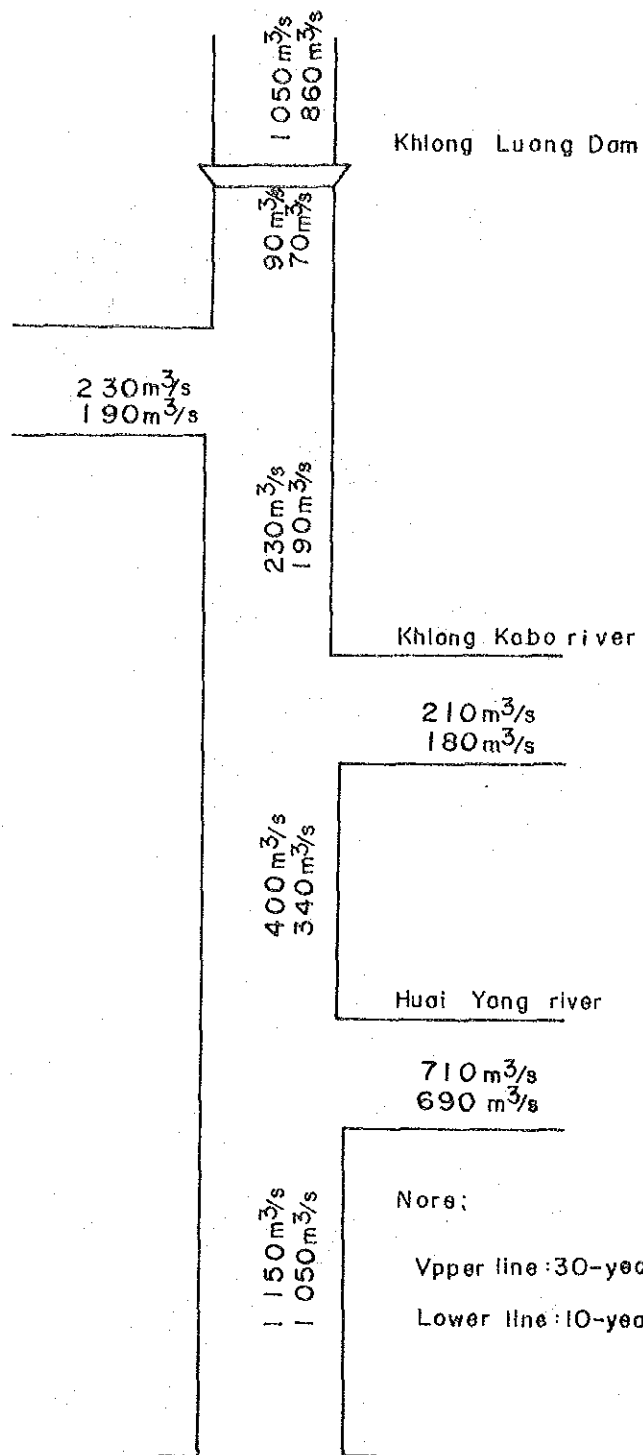
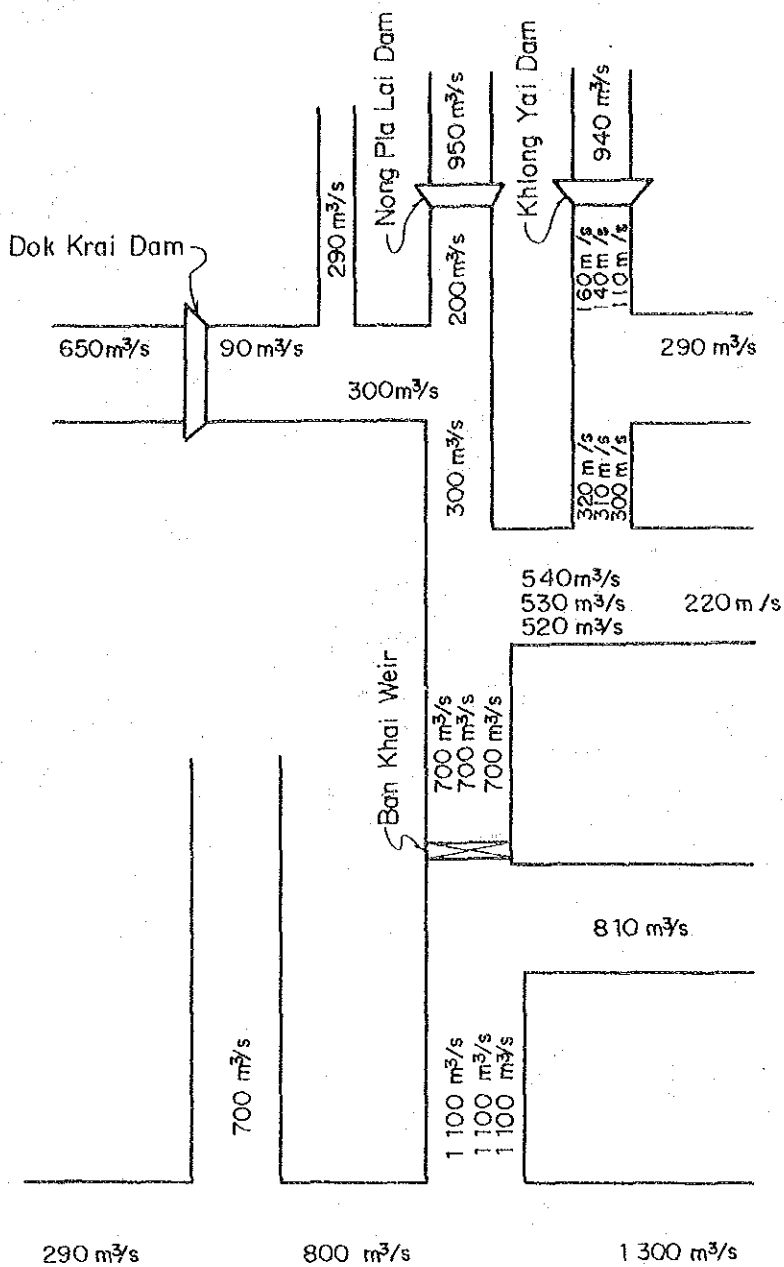


Fig. 33 Discharge Distribution of 10- and 30-year Flood, Khlong Luang River

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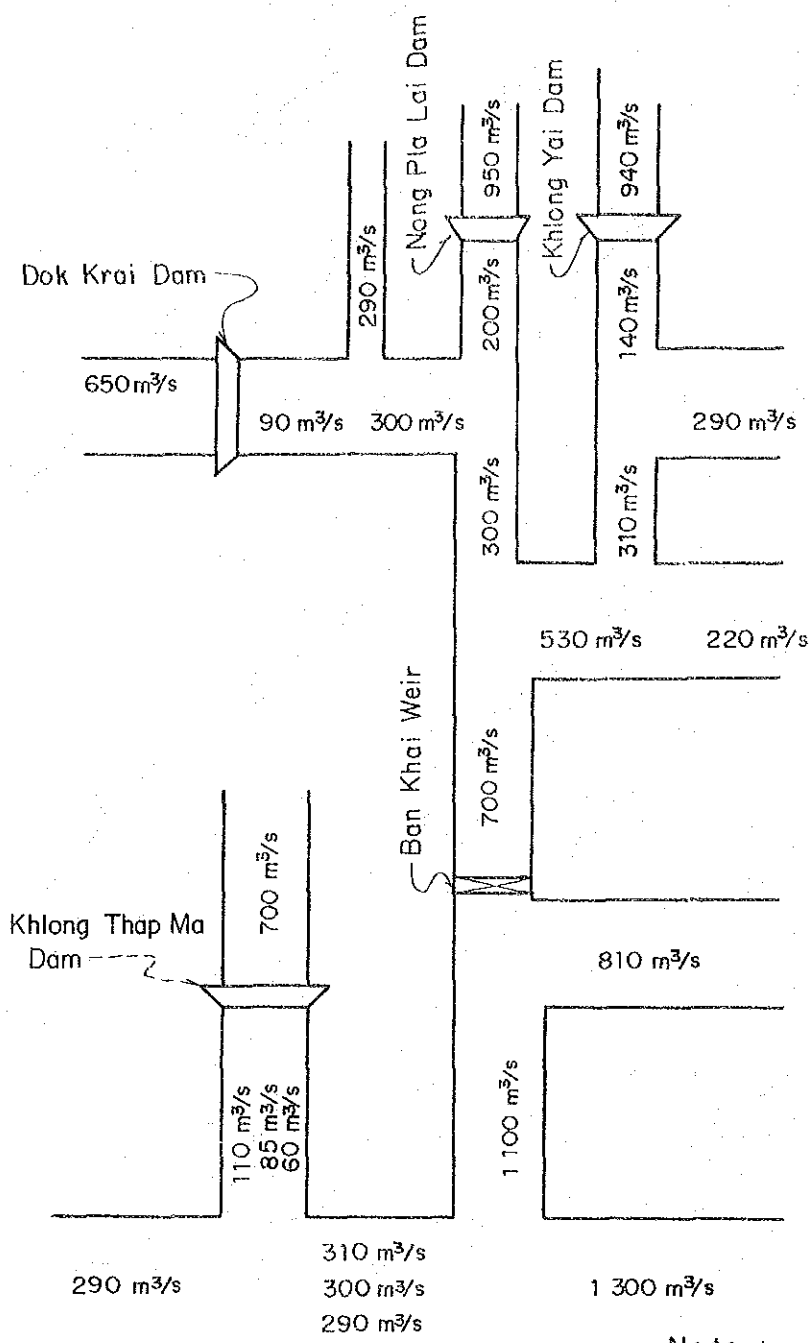


Khlong Yai  
Spillway (m)

Note ;		
Upperline	Alternative 1.	90
Middleline	Alternative 2.	70
Lower line	Alternative 3.	50

2 650 m³/s  
2 650 m³/s  
2 650 m³/s

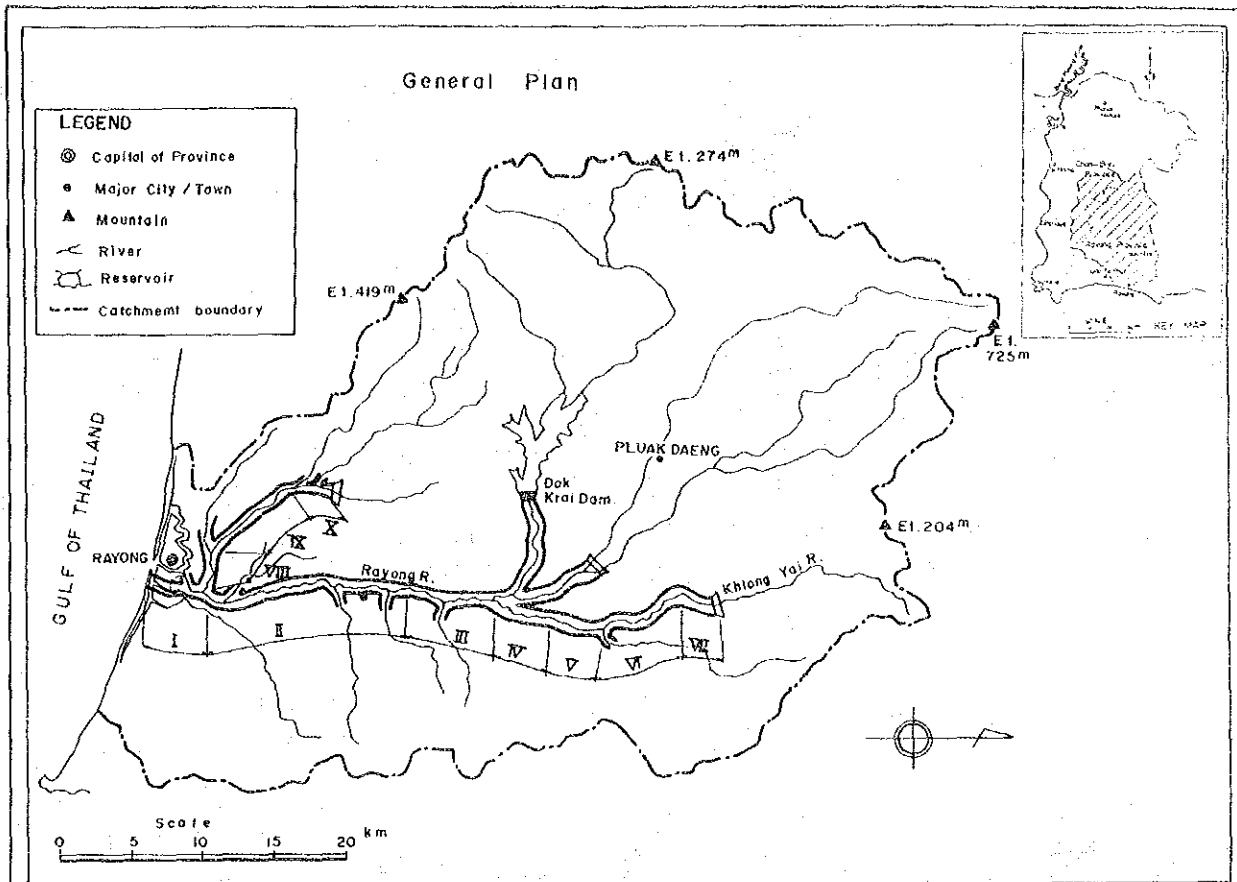
Fig. 34 Discharge Distribution of Rayong River,  
3 Dams Plus River Improvement Works



Note ;

	Upperline ; Alternative 1.	Middleline ; Alternative 2.	Lowerline ; Alternative 3.
Khlong Thap Ma Dam Spillway (m)	70	50	30

Fig. 35 Discharge Distribution of Rayong River, 4 Dams Plus River Improvement Works.



#### Flood Control Alternatives      B = Spillway Width (m)

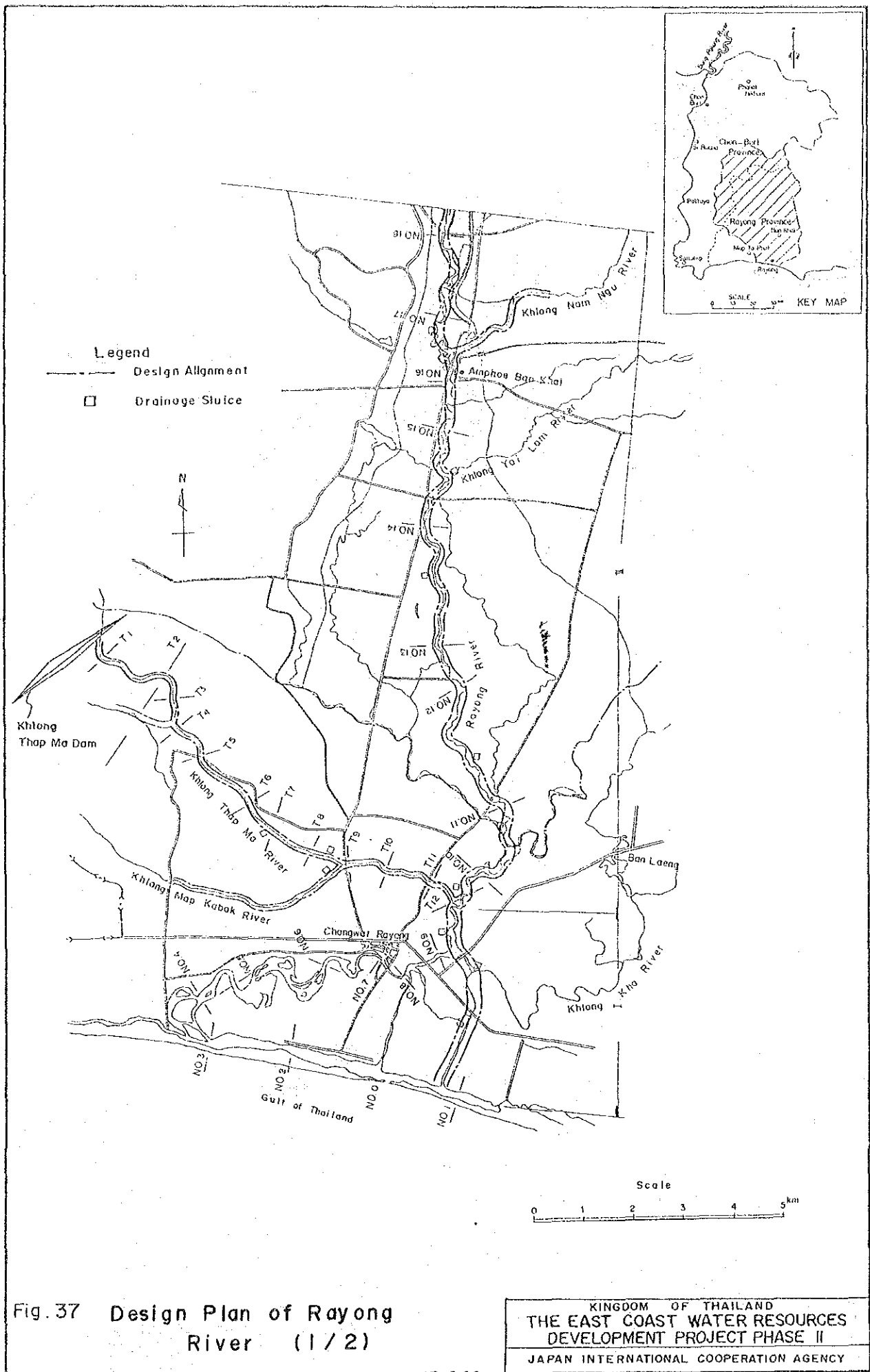
River	Alternatives	Scheme
Rayong River		
	1.	Channel Improvement with K.Yai Dam (B = 50)
	2.	Channel Improvement with K.Yai Dam (B = 70)
	3.	Channel Improvement with K.Yai Dam (B = 90)
K Thap Ma River		
	1.	Channel Improvement with K.Yai and T.Ma Dams (B=30)
	2.	Channel Improvement with K.Yai and T.Ma Dams (B=50)
	3.	Channel Improvement with K.Yai and T.Ma Dams (B=70)

#### Design Discharge Distribution      (m<sup>3</sup>/sec)

River	Alternatives	Block NO.						
		I	II	III	IV	V	VI	VII
Rayong River								
	1.	2 650	1 100	700	520	300	110	110
	2.	2 650	1 100	700	530	310	140	140
	3.	2 650	1 100	700	540	320	160	160
Block NO.								
		I	VIII	IX	X			
K.Thap Ma River								
	1.	2 000	290	60	60			
	2.	2 000	300	85	85			
	3.	2 000	310	110	110			

Fig. 36 Flood Control Alternatives for Rayong River

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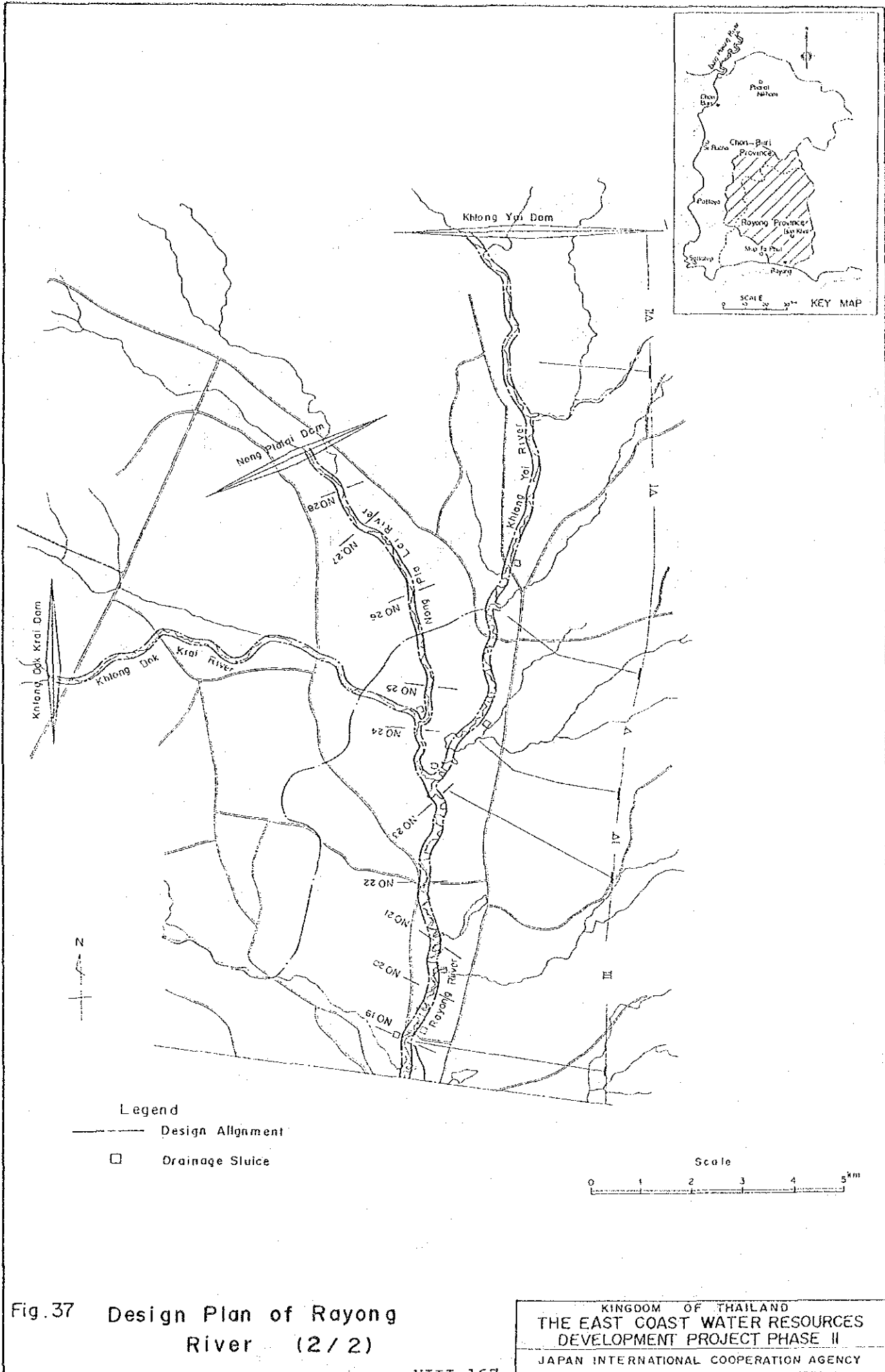


Fig.37 Design Plan of Rayong River (2/2)

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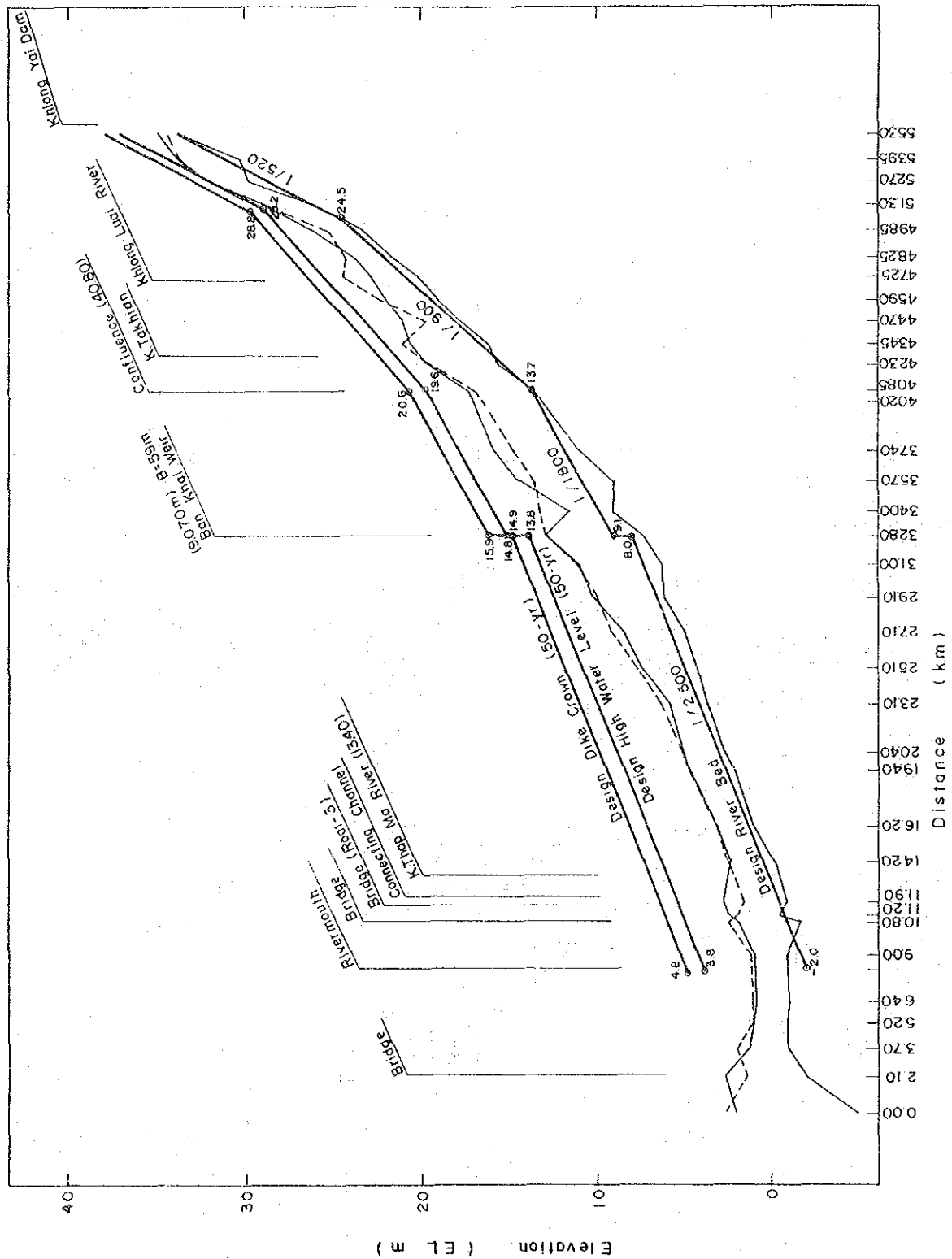


Fig.38 Longitudinal Profile for Basic Flood Control Plan of Rayong River (1/2)

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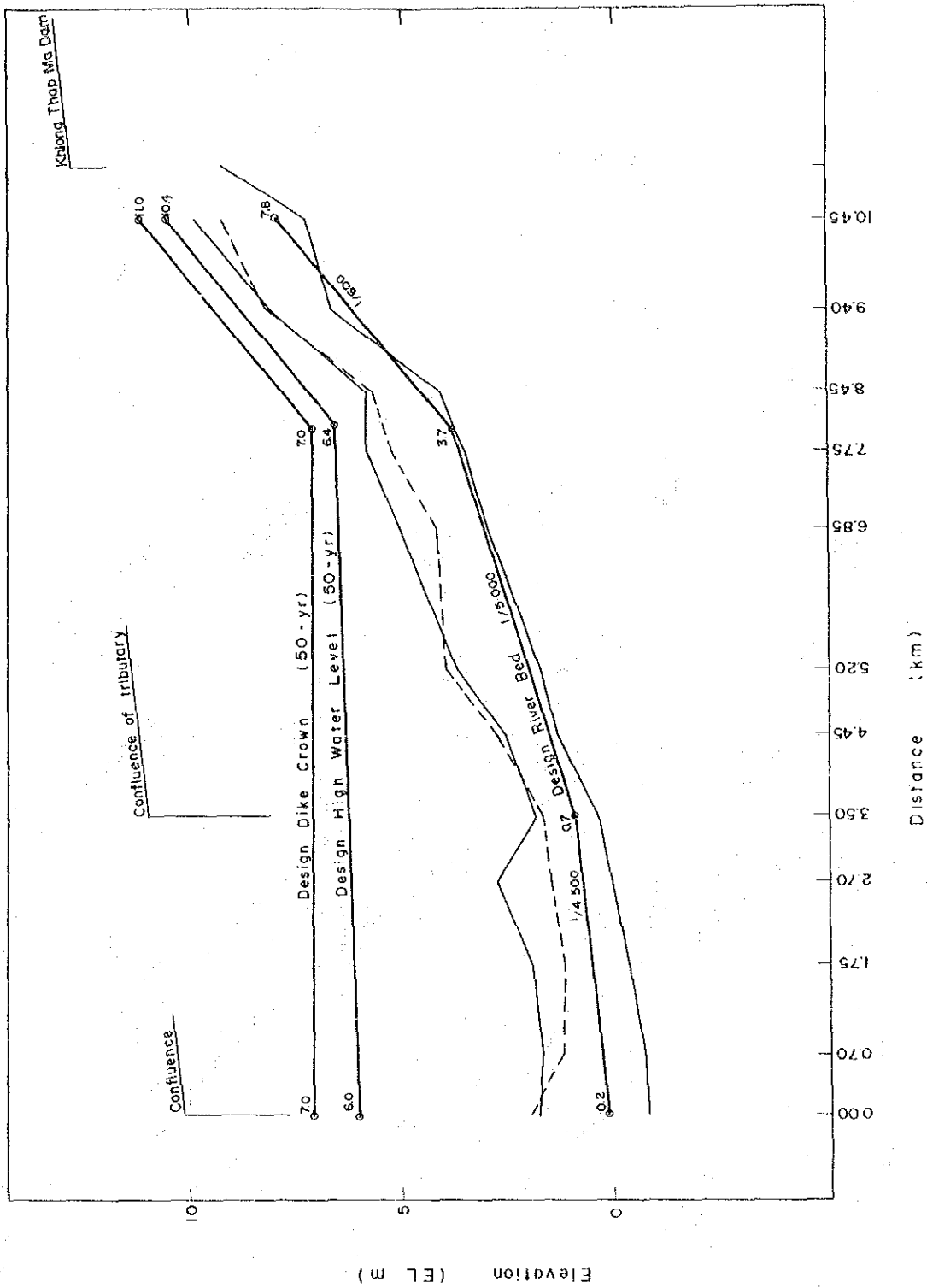


Fig. 38 Longitudinal Profile for Basic Flood Control Plan of Rayong River (2/2)

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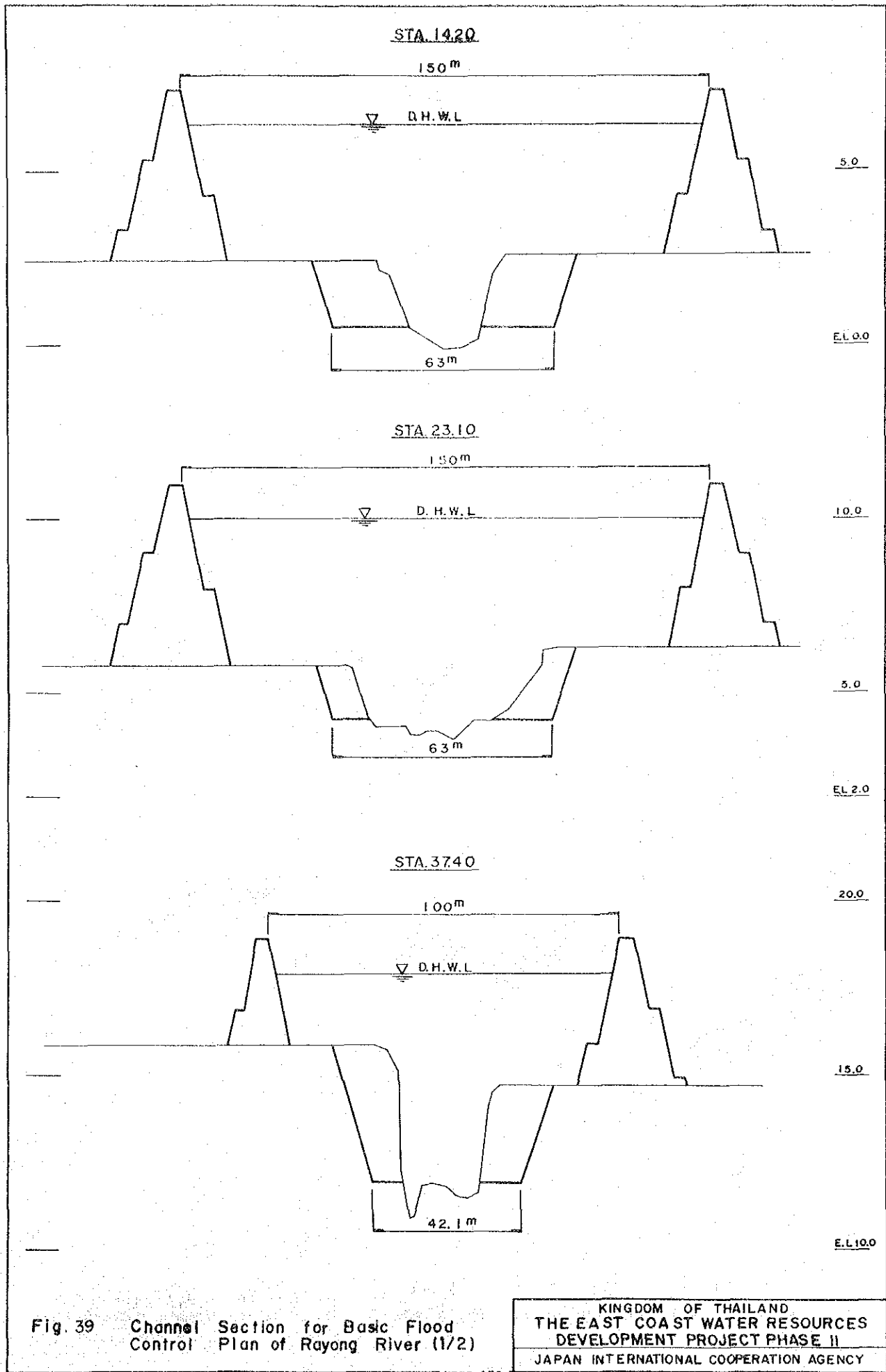


Fig. 39 Channel Section for Basic Flood Control Plan of Rayong River (1/2)

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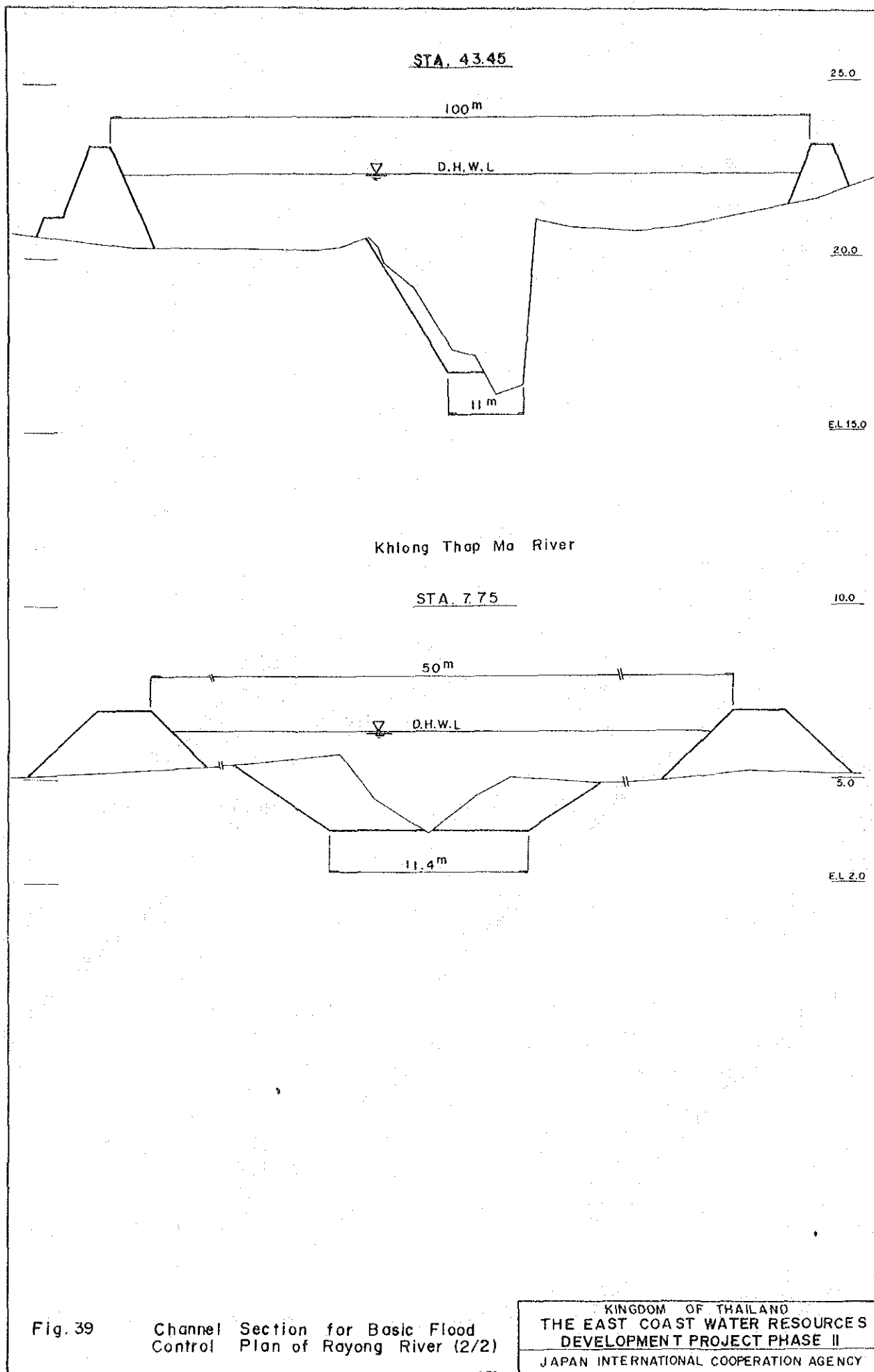


Fig. 39 Channel Section for Basic Flood Control Plan of Rayong River (2/2)

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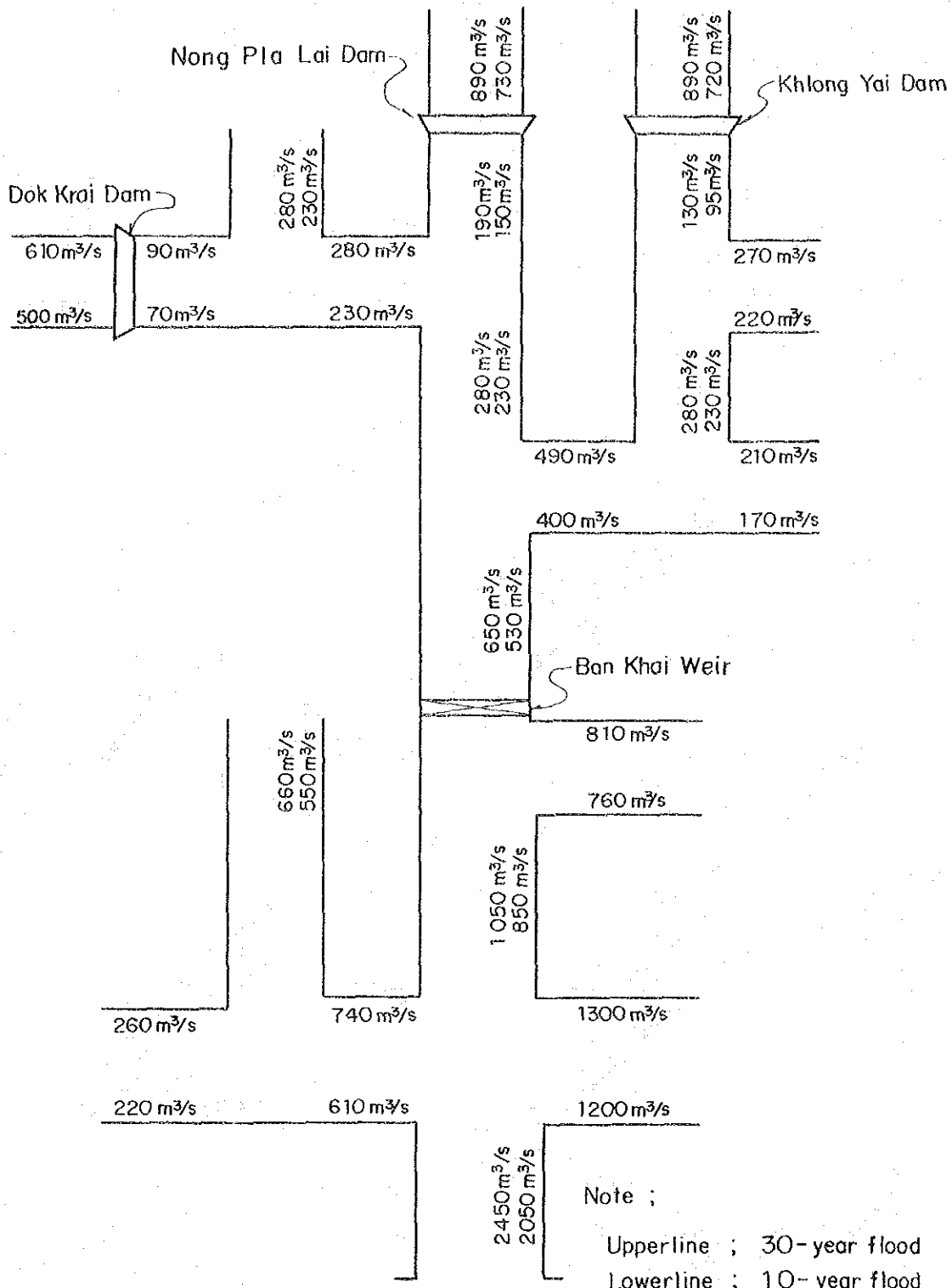
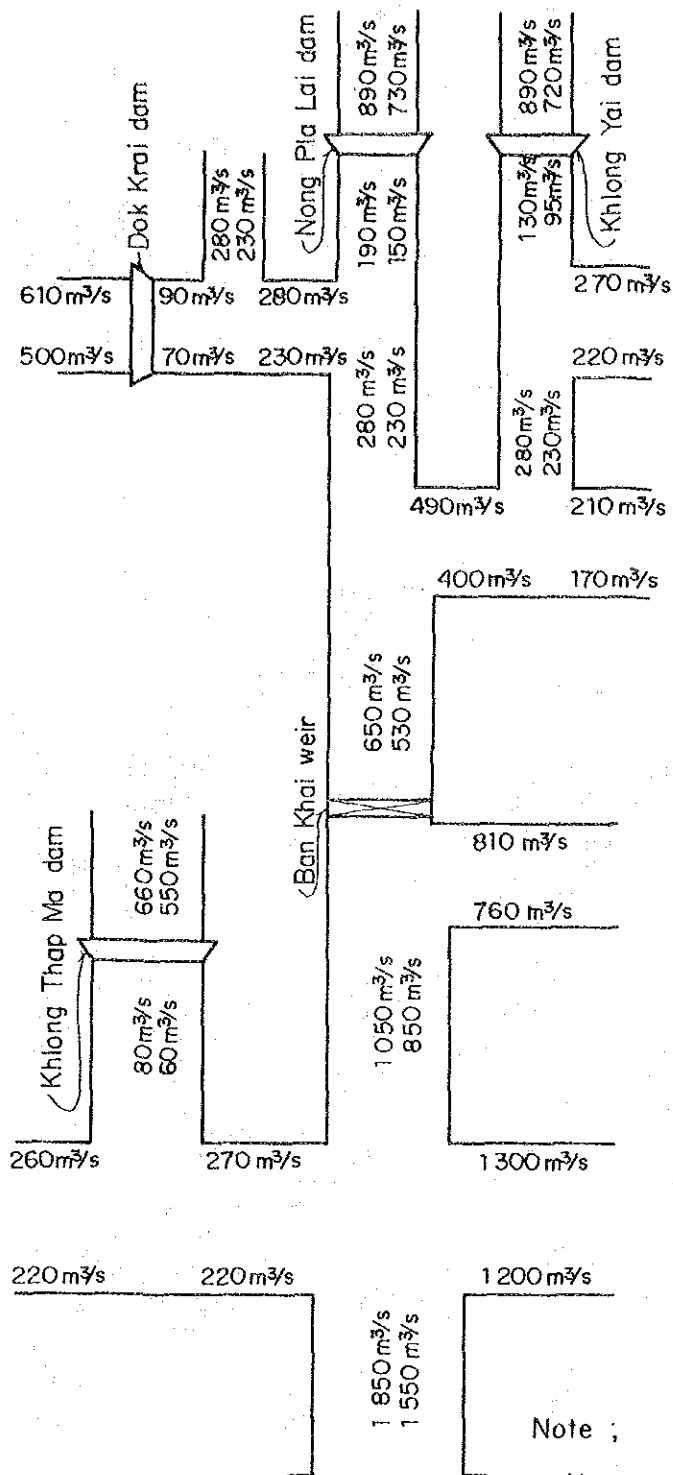


Fig. 40 Discharge Distribution of 10- and 30-Year Floods for Case "I"

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Note ;

Upperline ; 30 - year flood

Lowerline ; 10 - year flood

Fig. 41 Discharge Distribution of 10- and 30 - Year Floods for Cases "2" & "3"

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