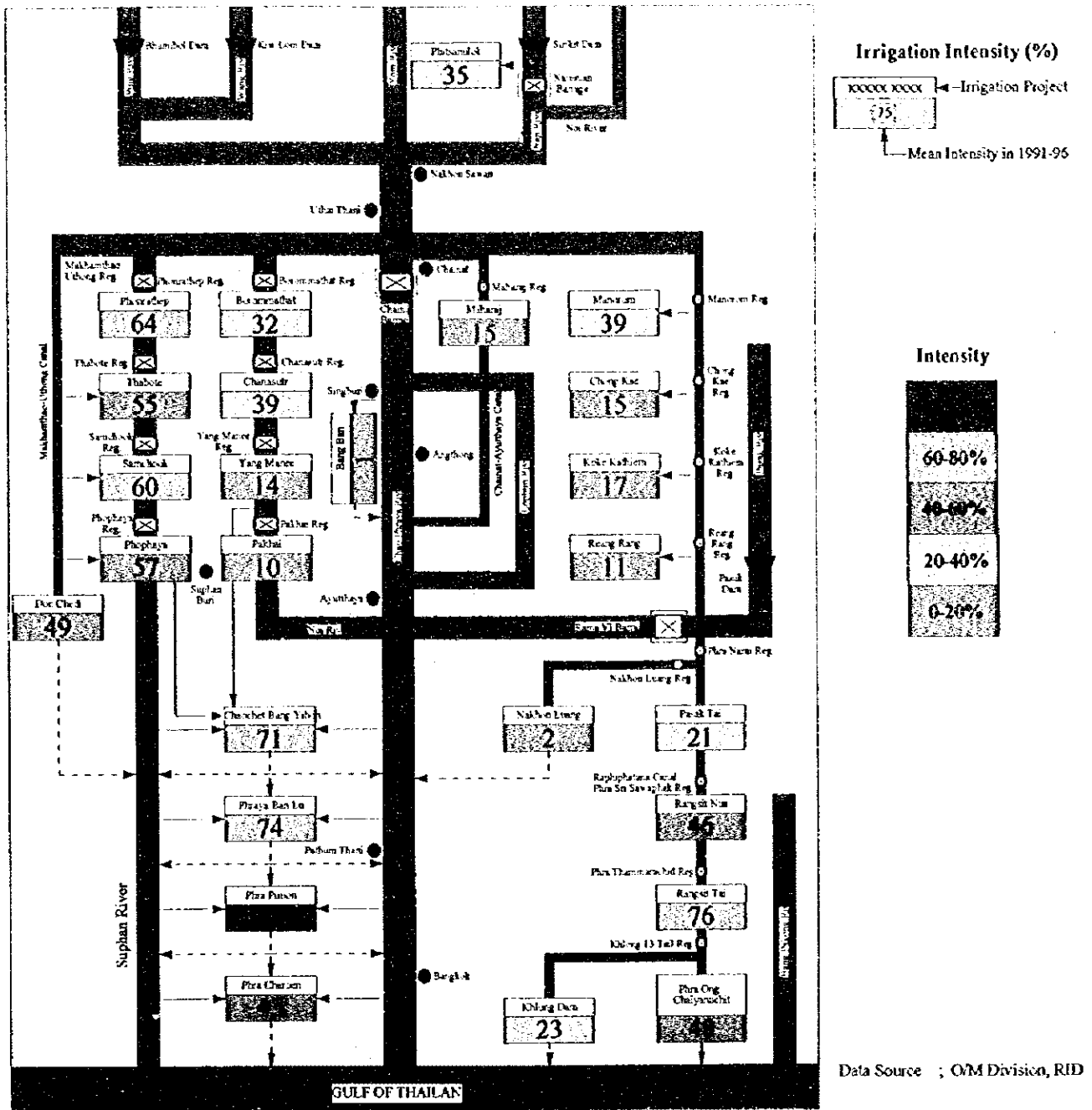


Figure 5.1 Dry Season Cropping Intensity in 25 Irrigation Projects in the Delta



Data Source : O/M Division, RID

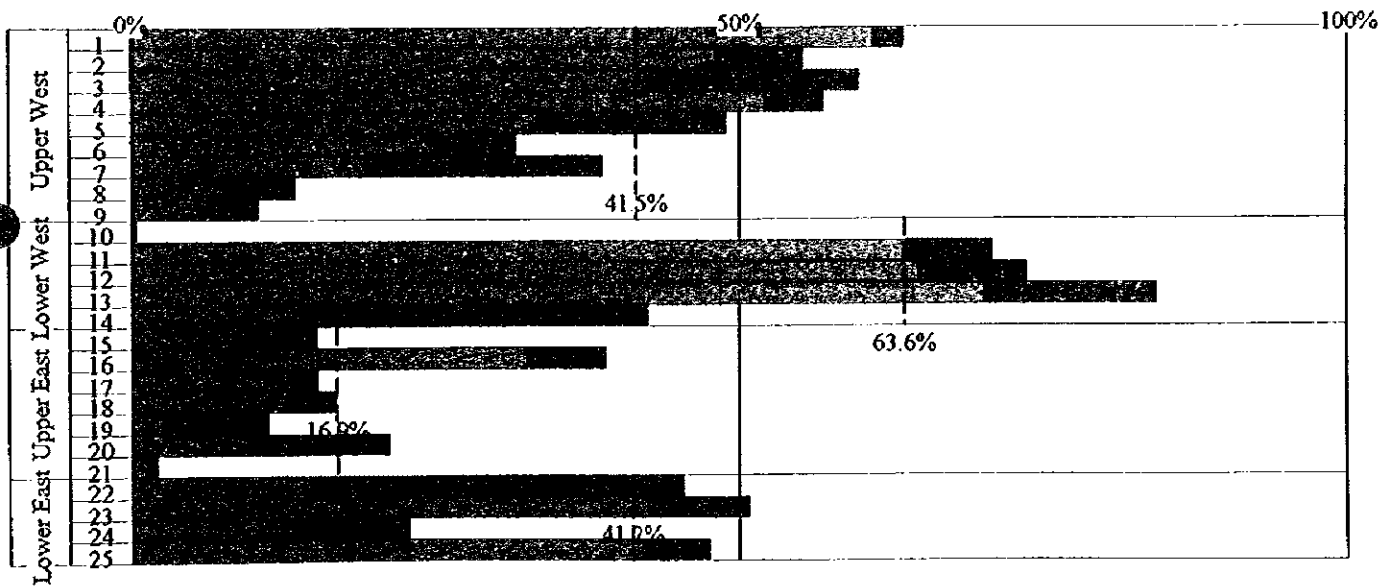


Figure 5.1 Dry Season Cropping Intensity in 25 Irrigation Projects in the Delta

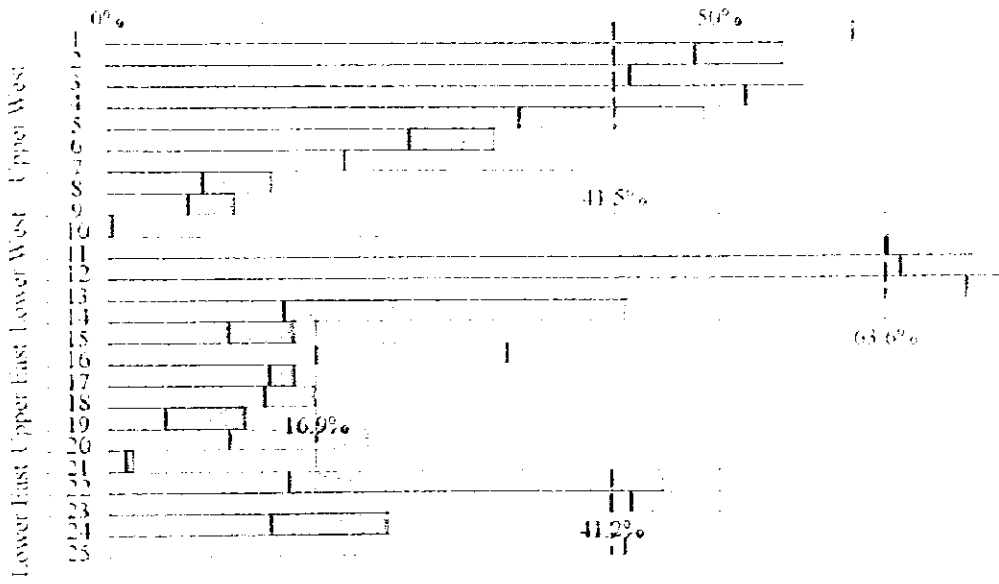
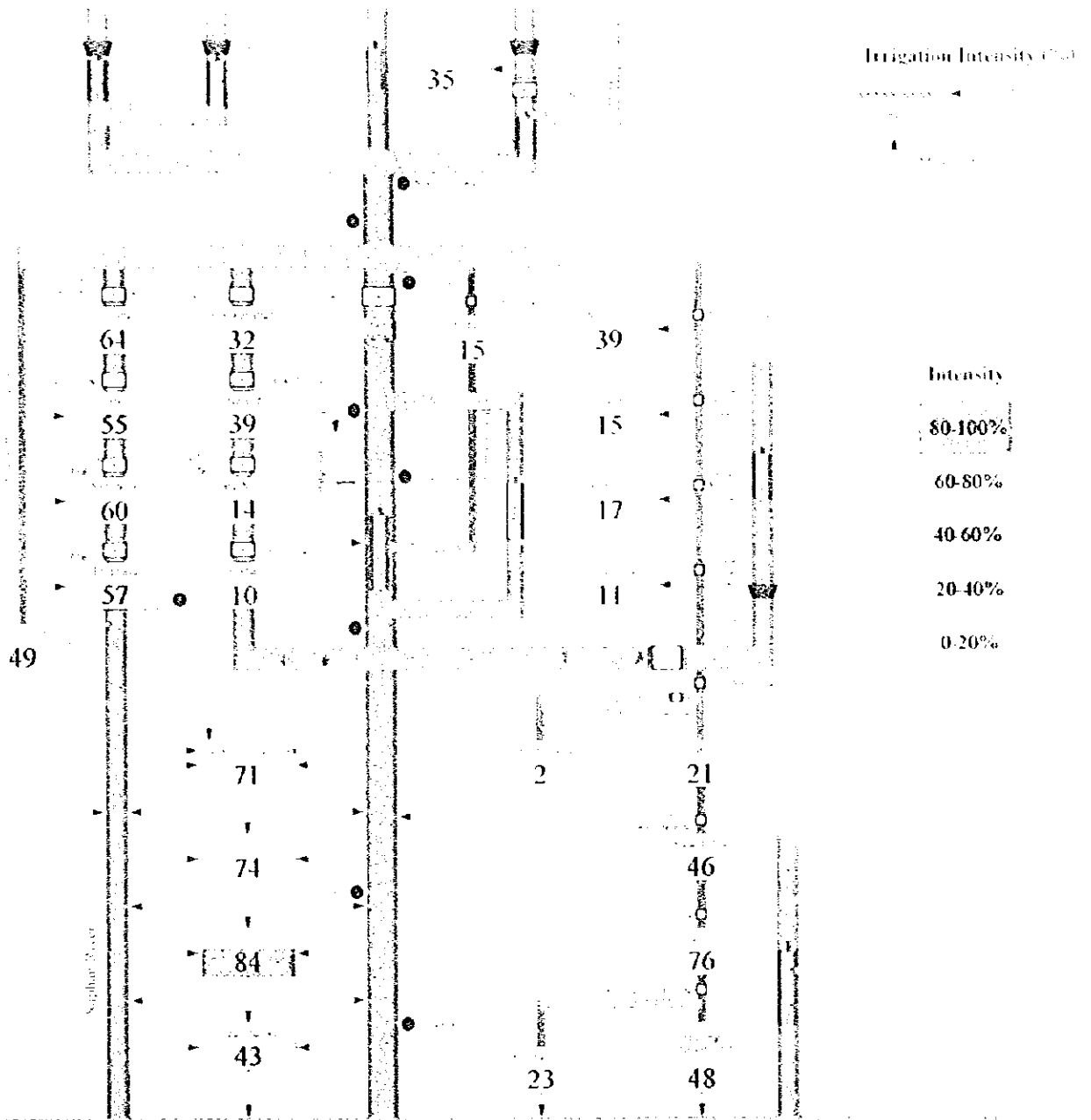


Figure 5.2 Current Situation of Salinity Intrusion into Groundwater Aquifer

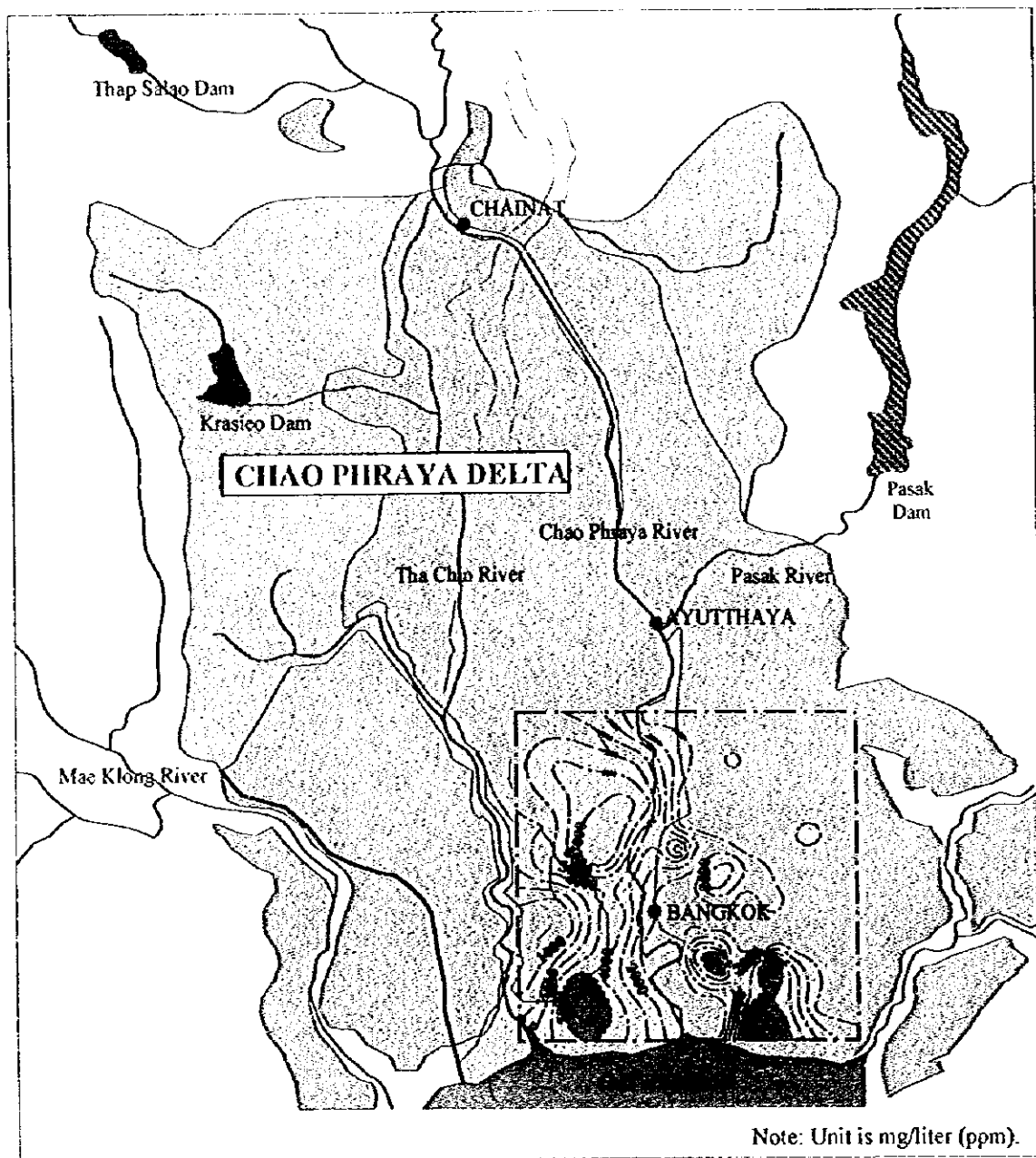
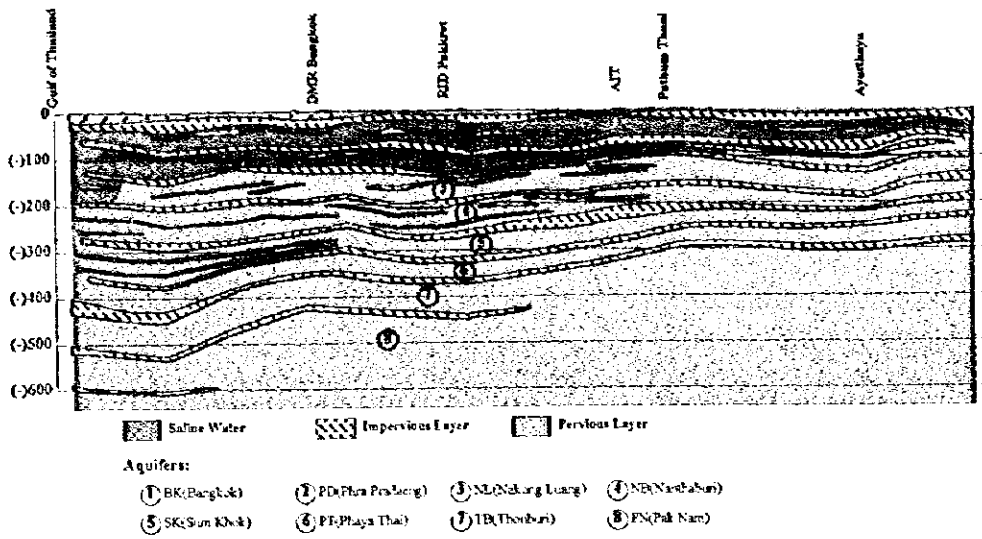
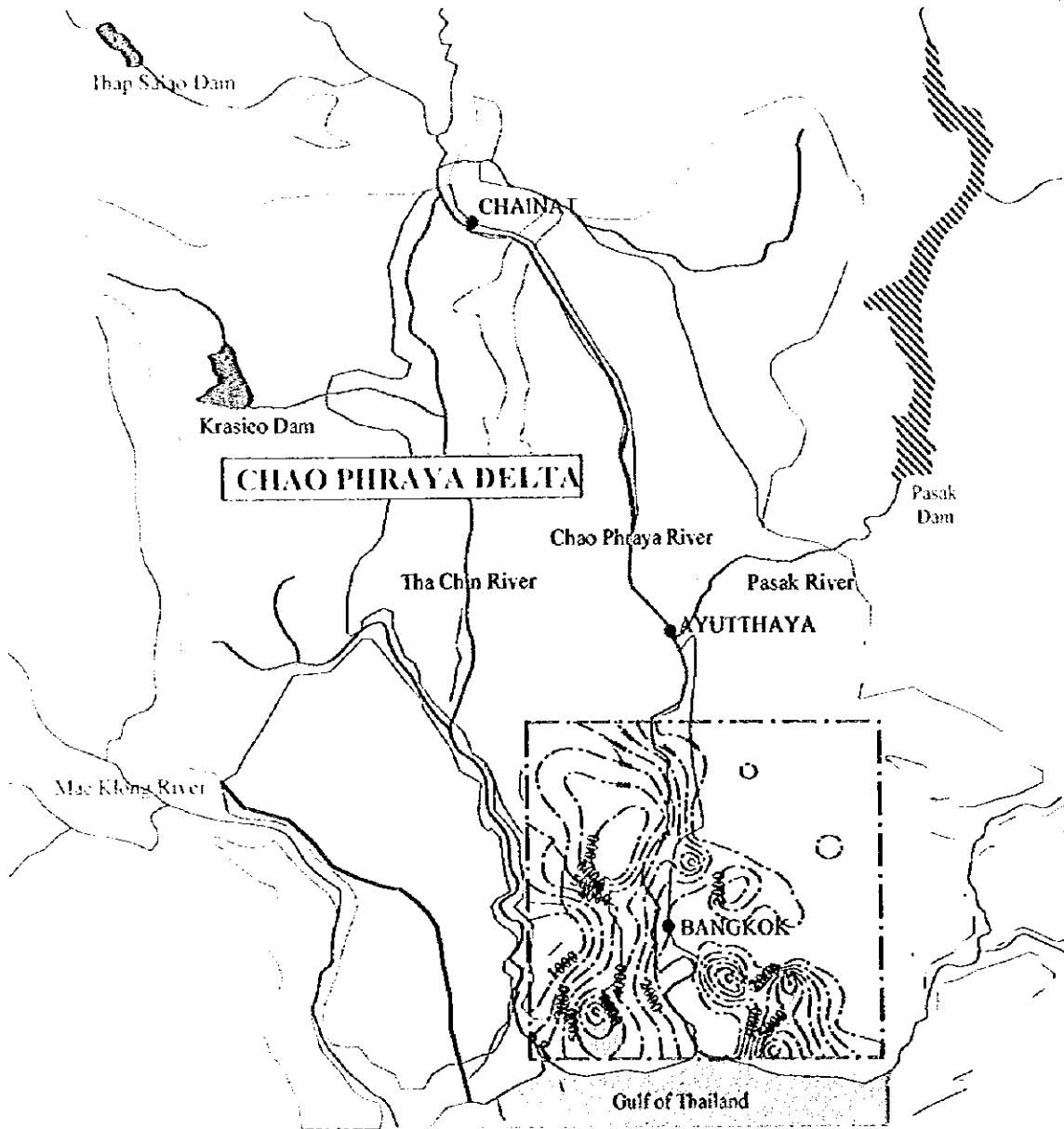
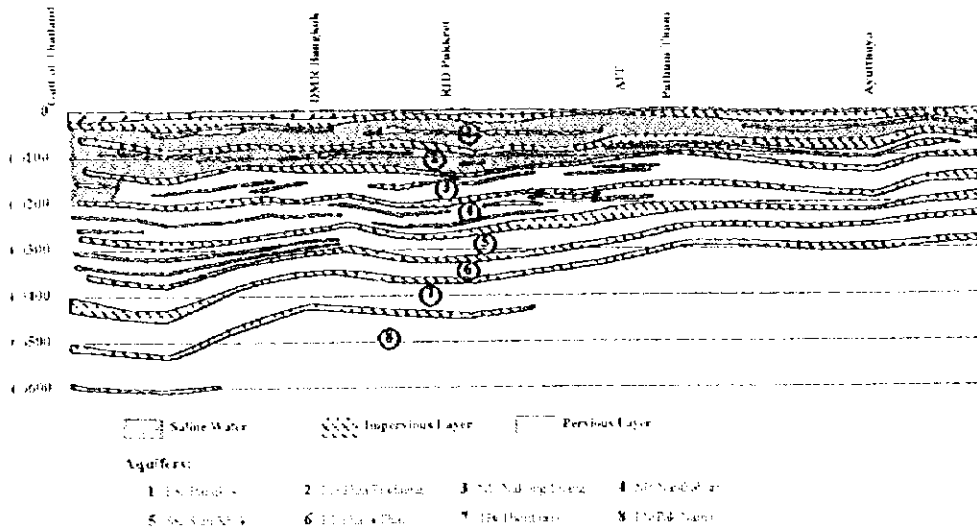


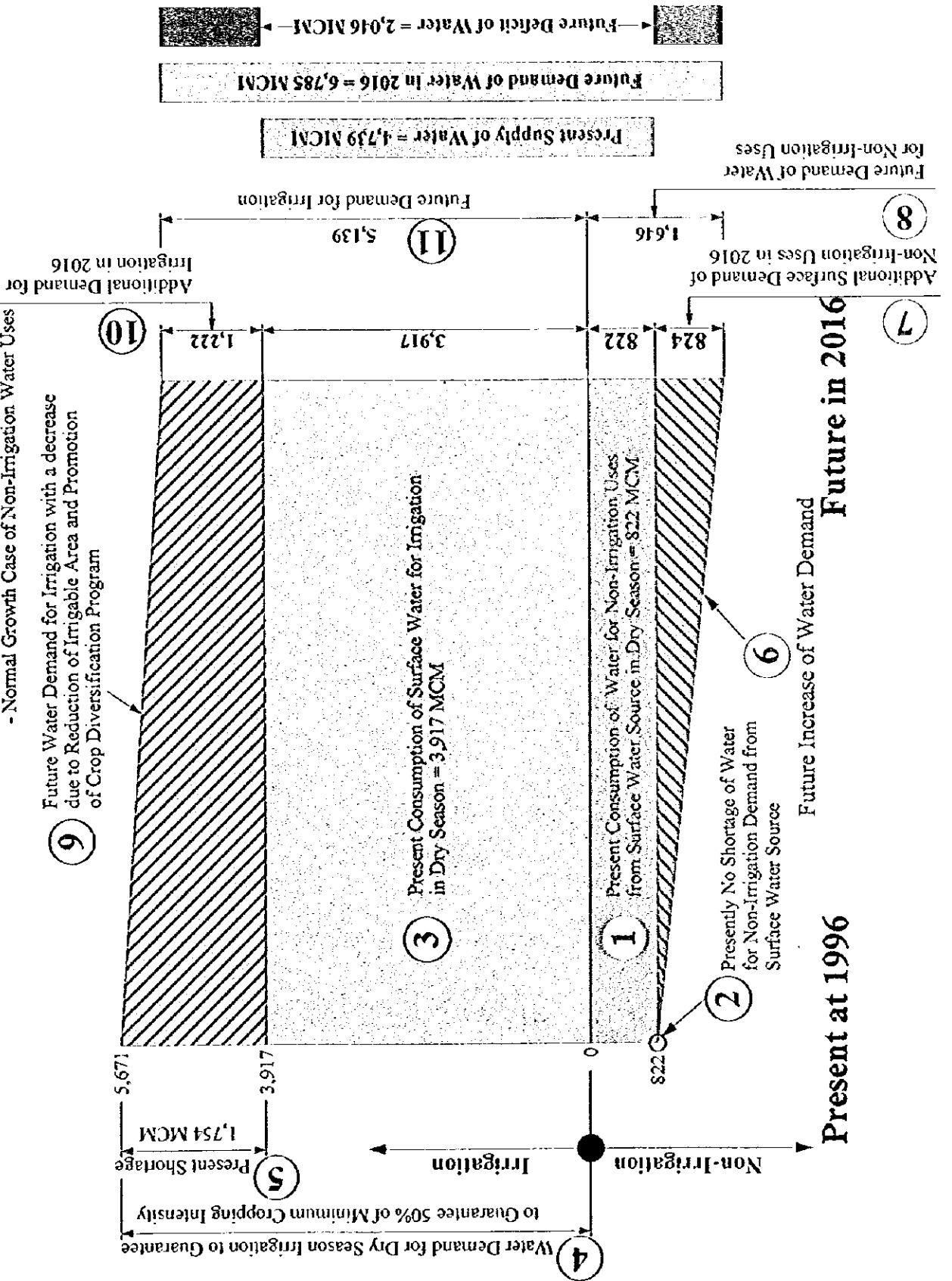
Figure 5.2 Current Situation of Salinity Intrusion into Groundwater Aquifer



Note: Unit is mg/liter (ppm)

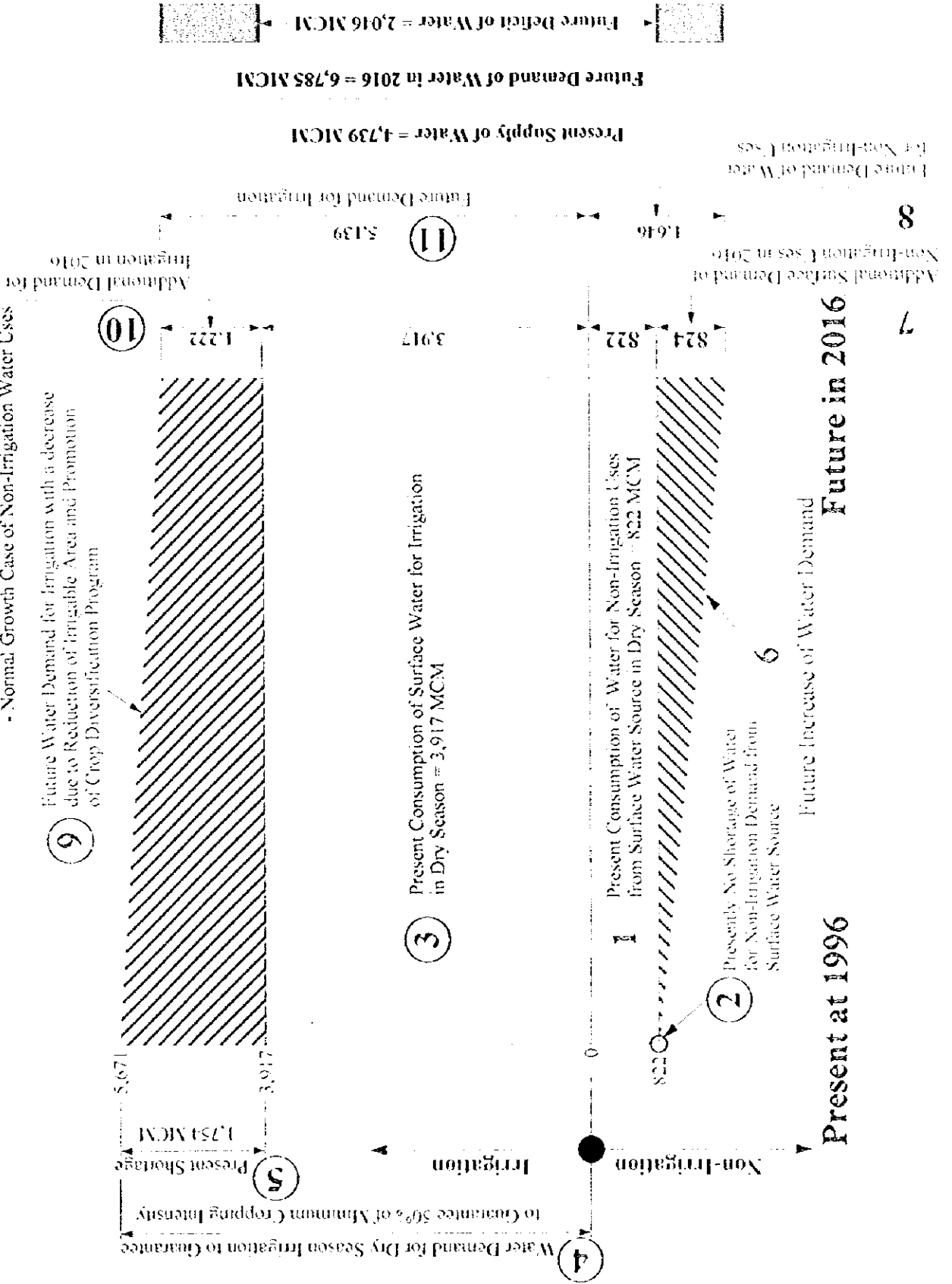
**Figure 5.3 Structure of Water Demand and Supply**

- 50% Minimum Cropping Intensity Case
- Normal Promotion of Crop Diversification Program
- Normal Growth Case of Non-Irrigation Water Uses



**Figure 5.3 Structure of Water Demand and Supply**

- 50% Minimum Cropping Intensity Case
- Normal Promotion of Crop Diversification Program
- Normal Growth Case of Non-Irrigation Water Uses



**Figure 5.4 Structure of Water Demand and Supply**

- 50% Minimum Cropping Intensity Case
  - Normal Promotion of Crop Diversification Program
  - Normal Growth Case of Non-Irrigation Water Uses
  - 100% of Proposed Development in the Upper Chao Phraya Basins
- Future Water Demand for Irrigation with a decrease due to Reduction of Irrigable Area and Promotion of Crop Diversification Program

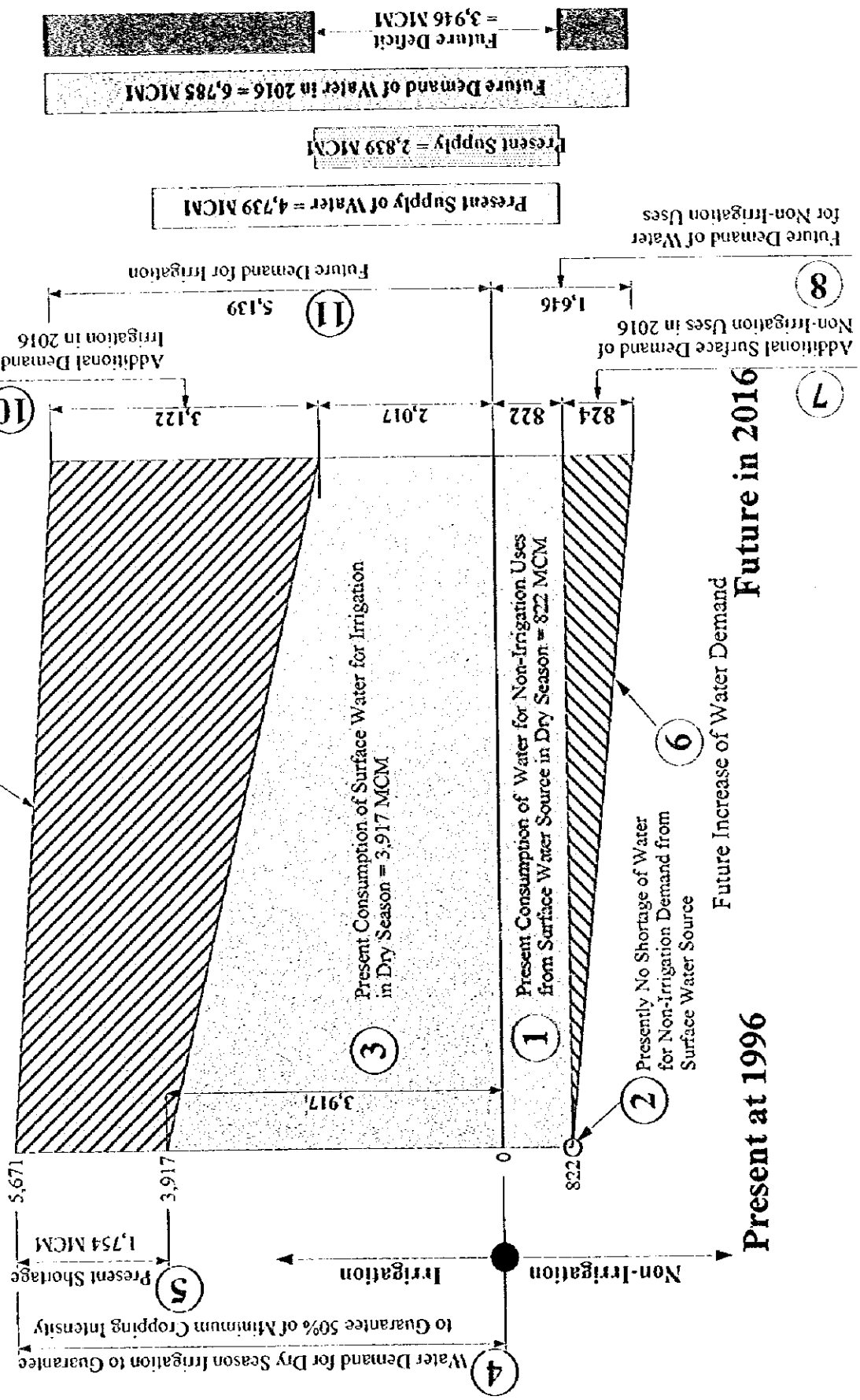


Figure 6.1 Location of Alternative Water Diversion Plan

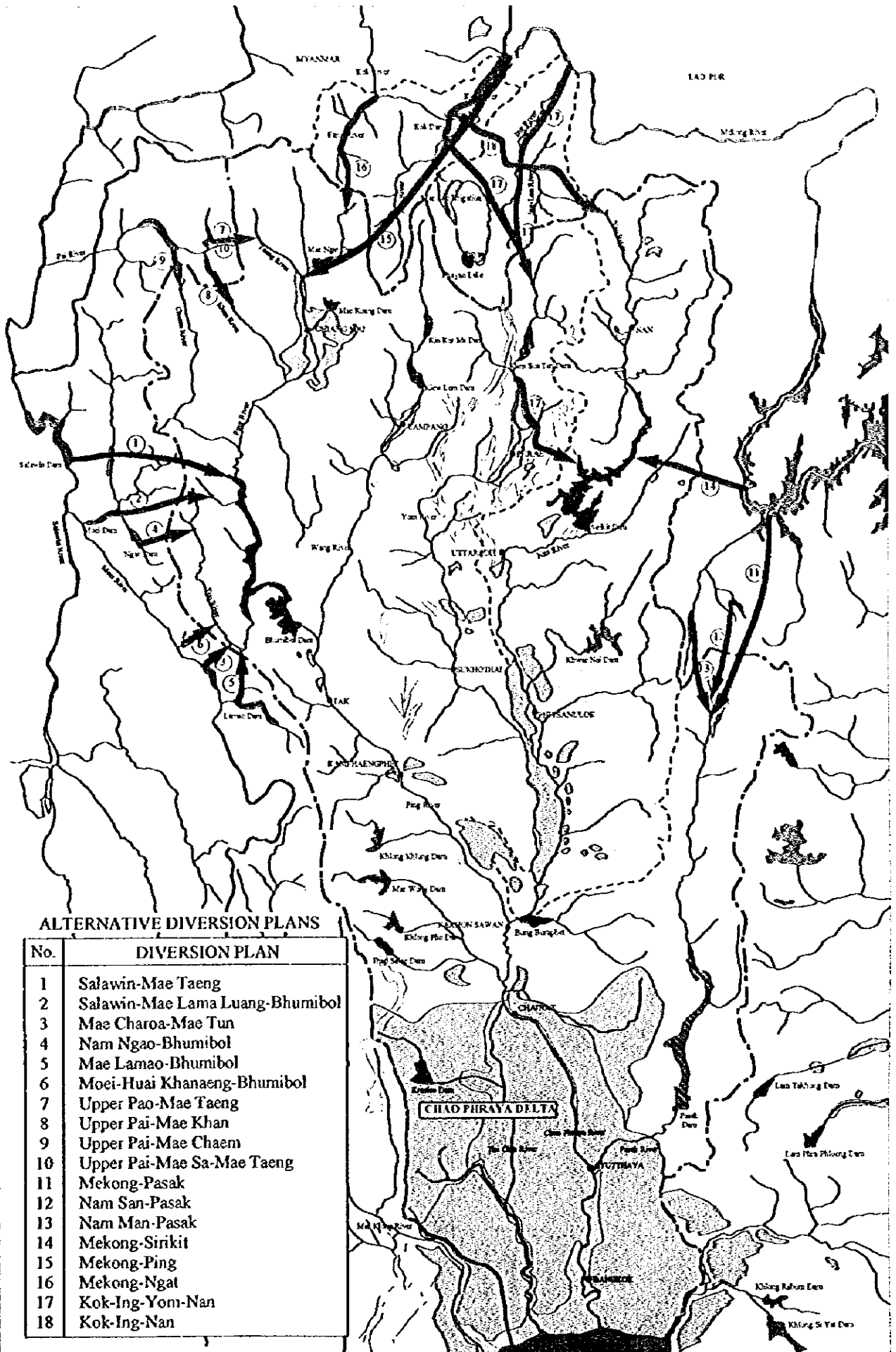




Figure 7.1 Present Operation and Improved Operation of Sirikit Reservoir

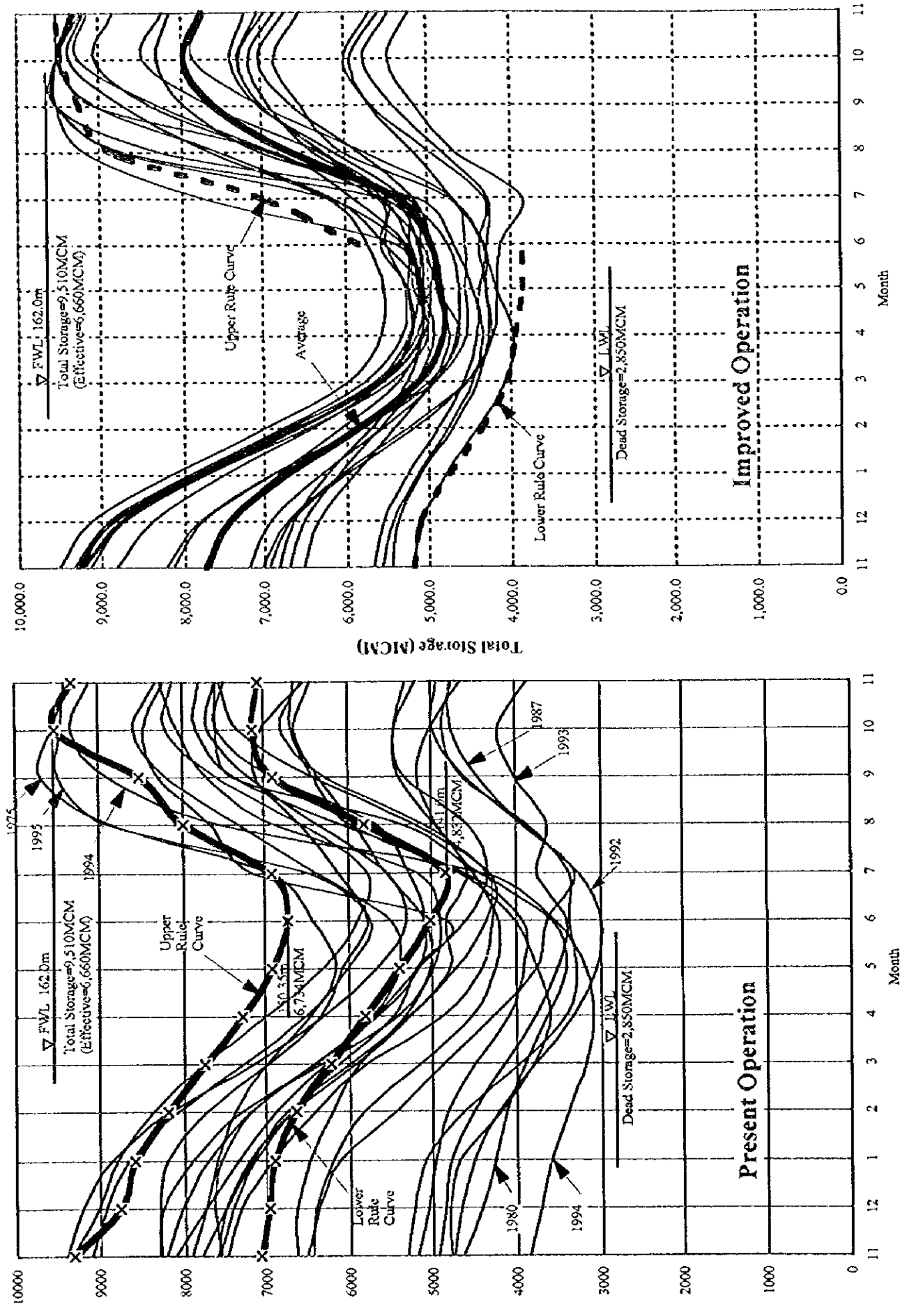


Figure 8.1 Irrigation Development and River Runoff in Kok, Ing and Upper Nan Basins

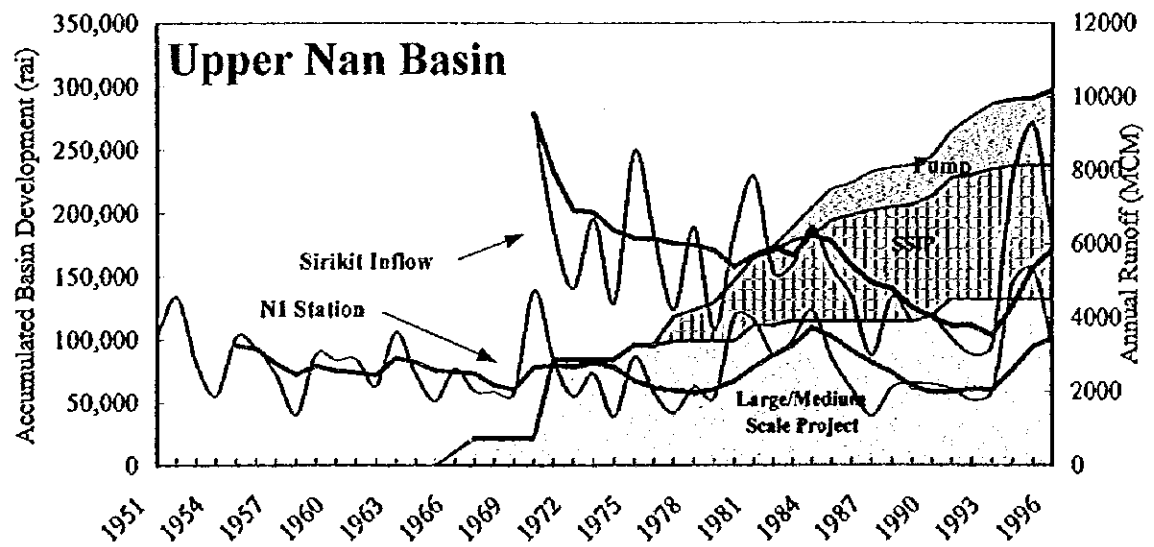
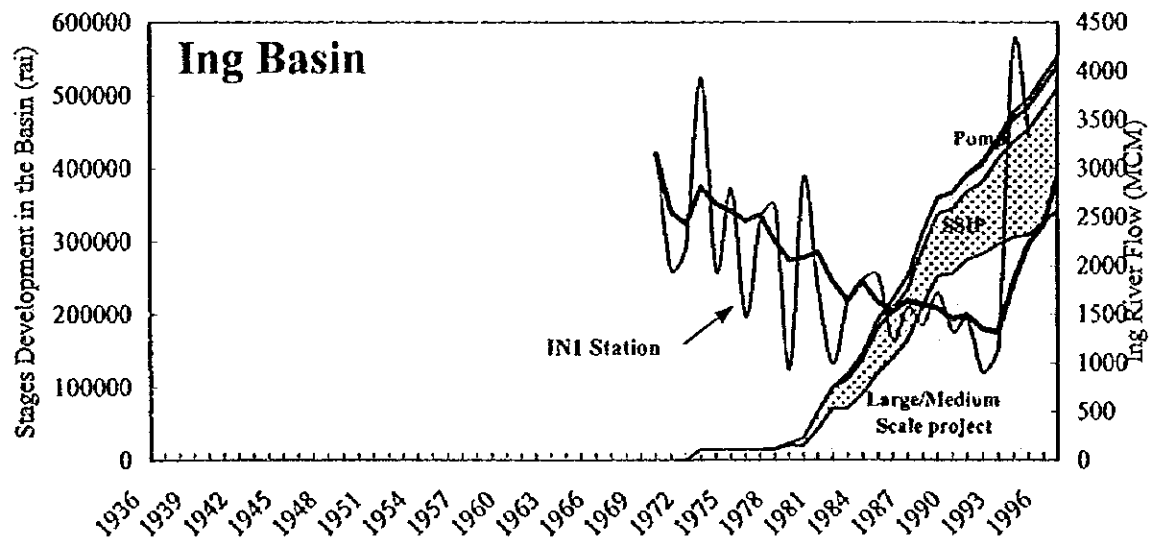
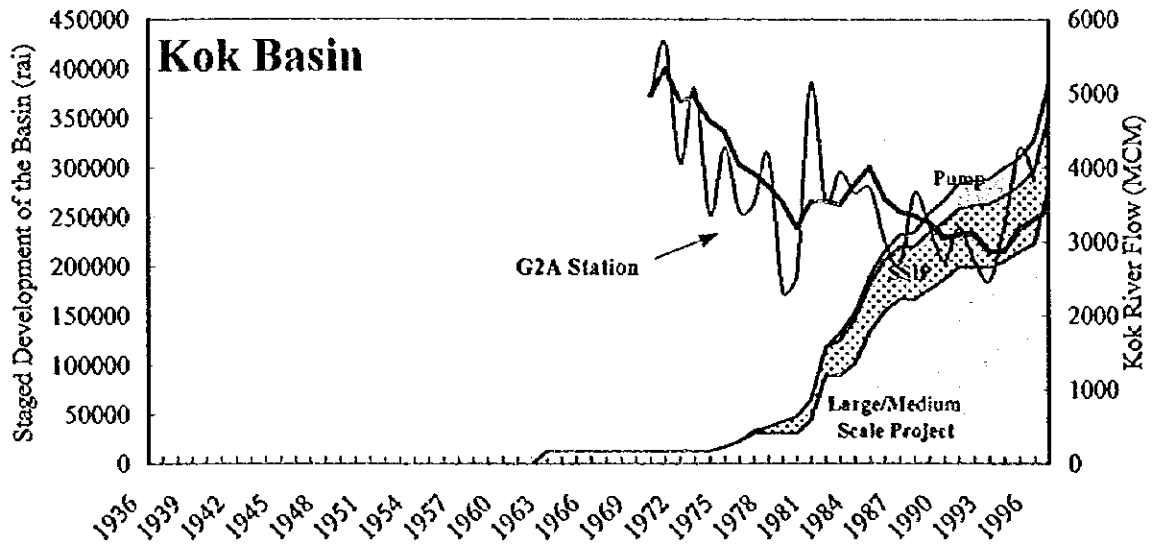


Figure 8.2(1) Kok River Flow before/after Potential Development

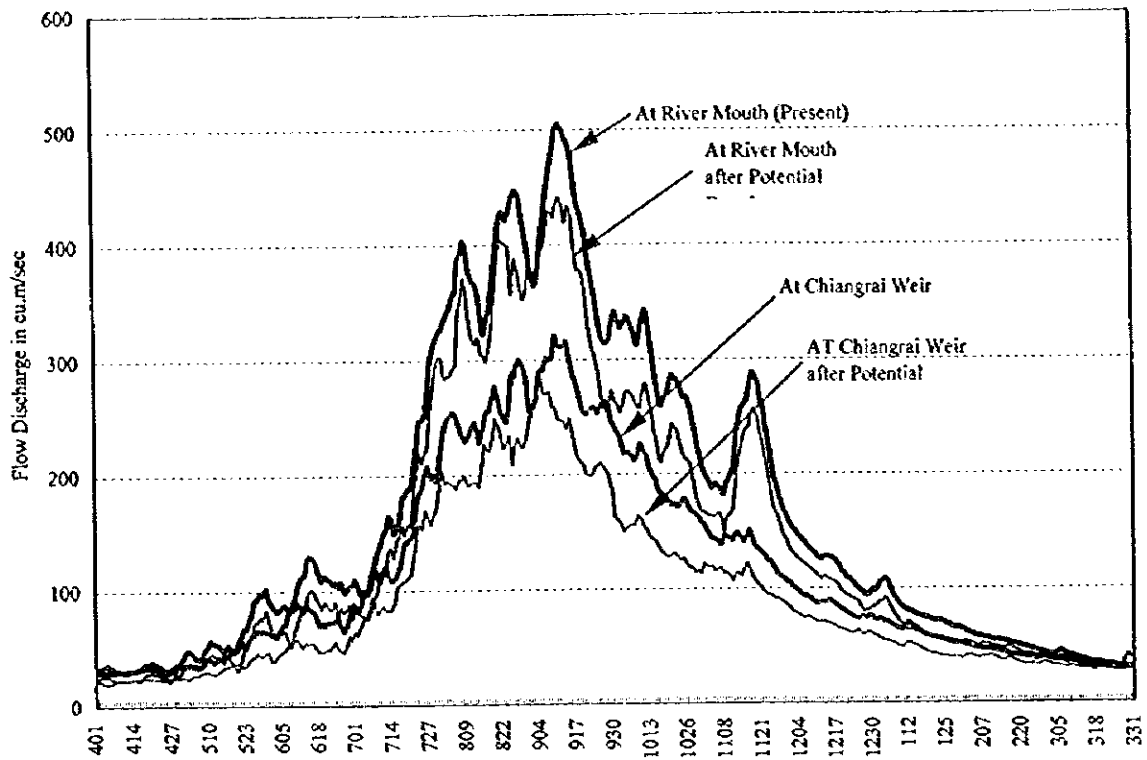


Figure 8.2(2) Ing River Flow before/after Potential Development

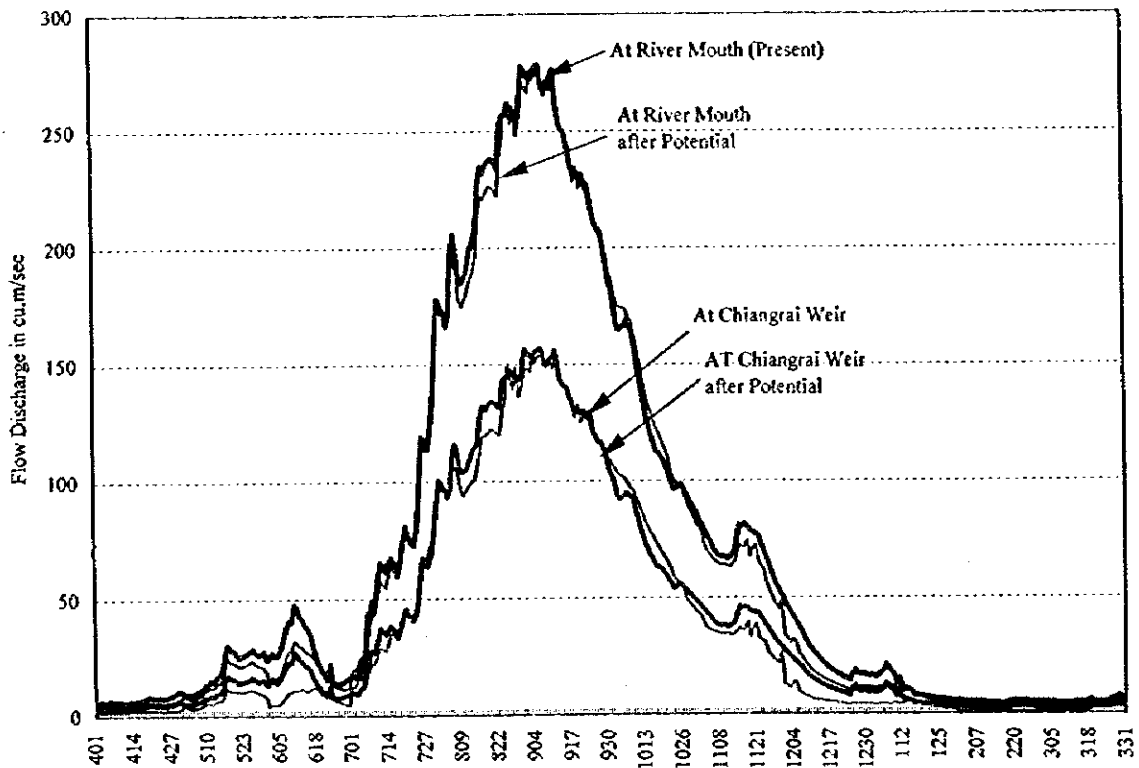
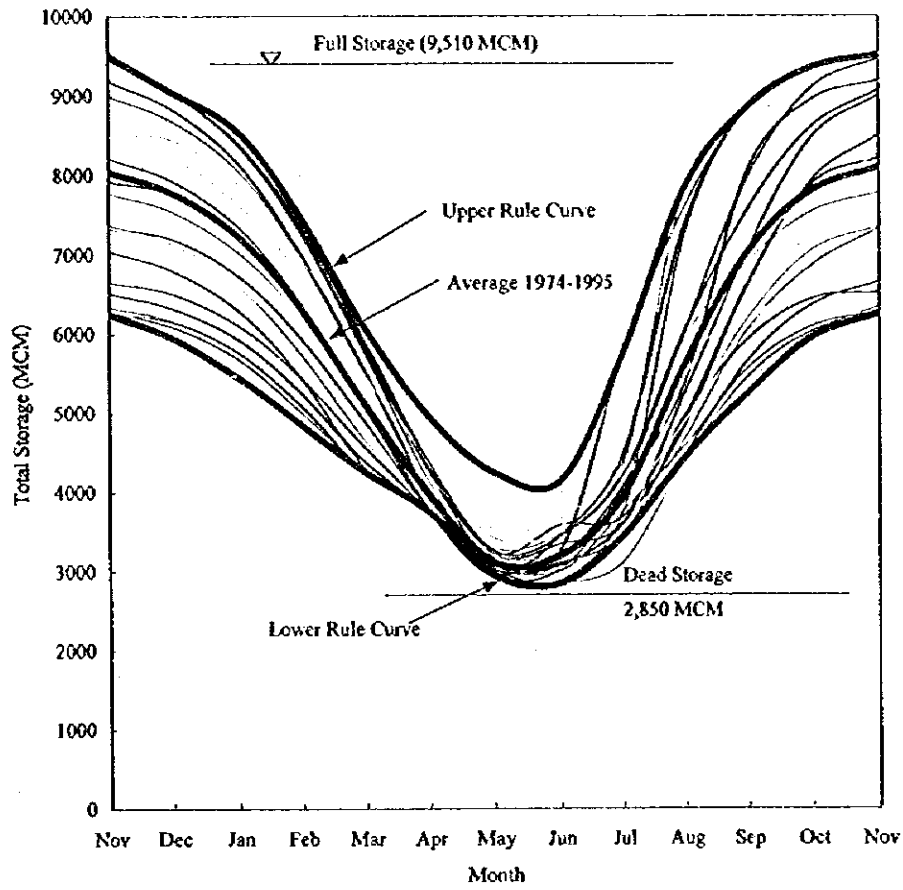


Figure 8.3 Sirikit Reservoir under Improved Operation with Kok-Ing-Nan Project



Graph showing Monthly Storage before/after Project, Inflow and Outflow after Project

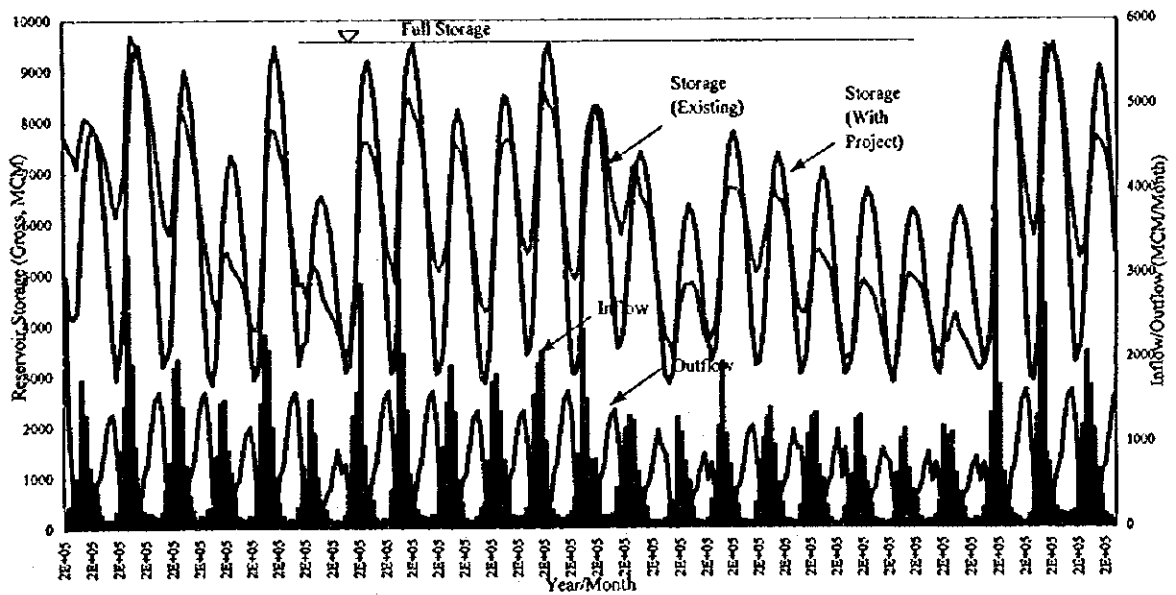


Figure 10.1 Existing, Proposed and Potential Water Resources Development Project

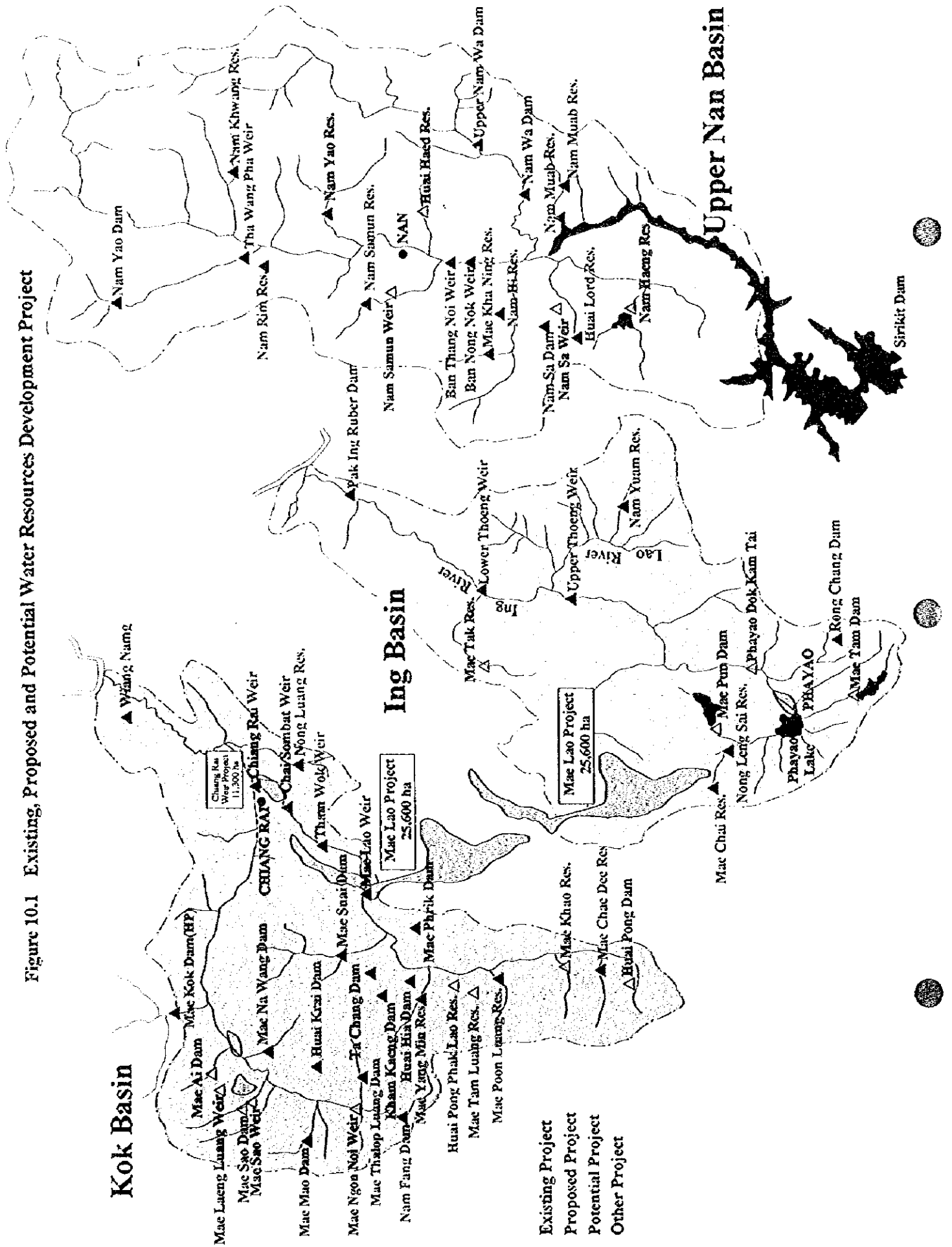


Figure 10.2 Associated Irrigation Projects in the Ing Basin

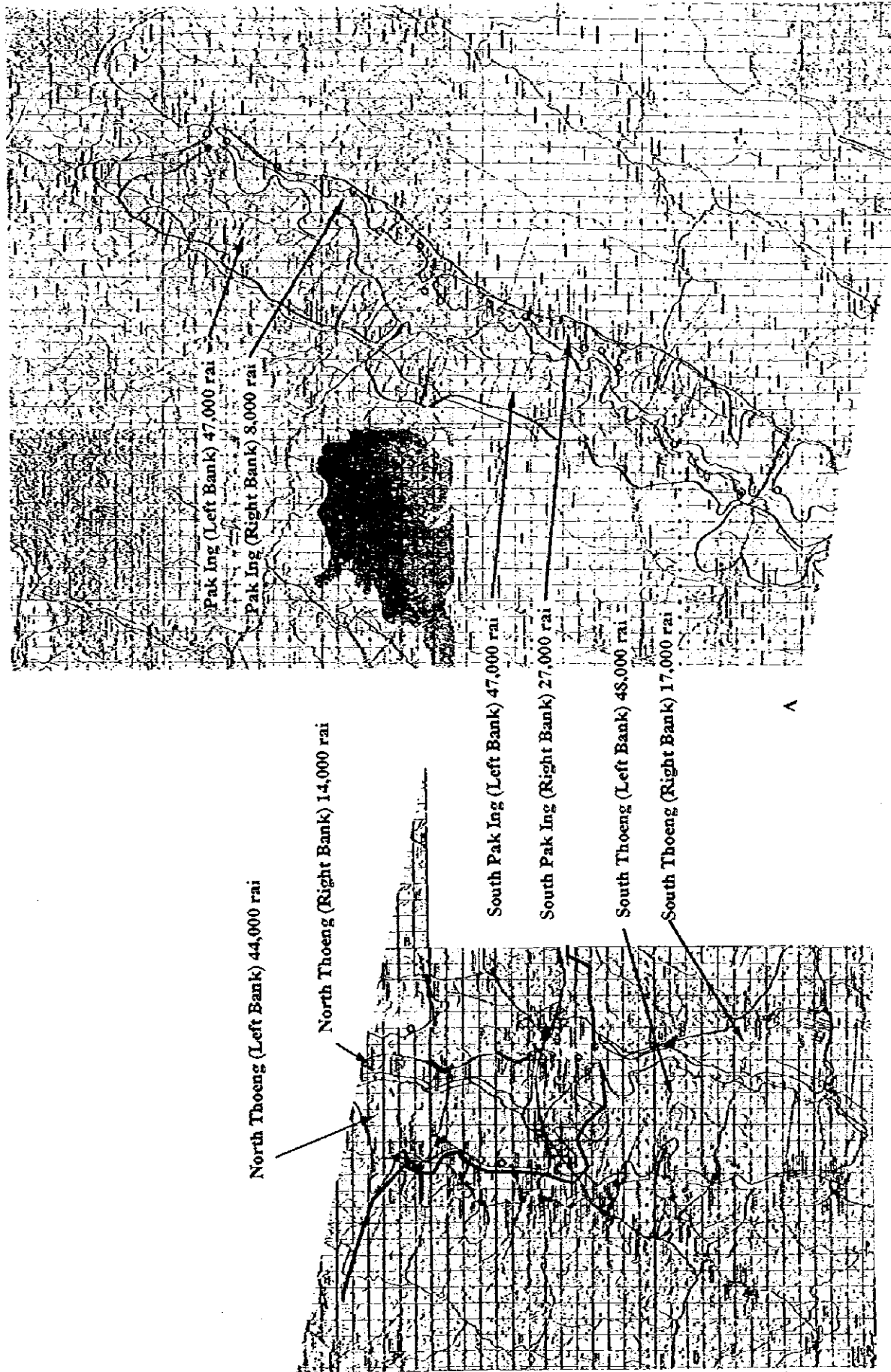
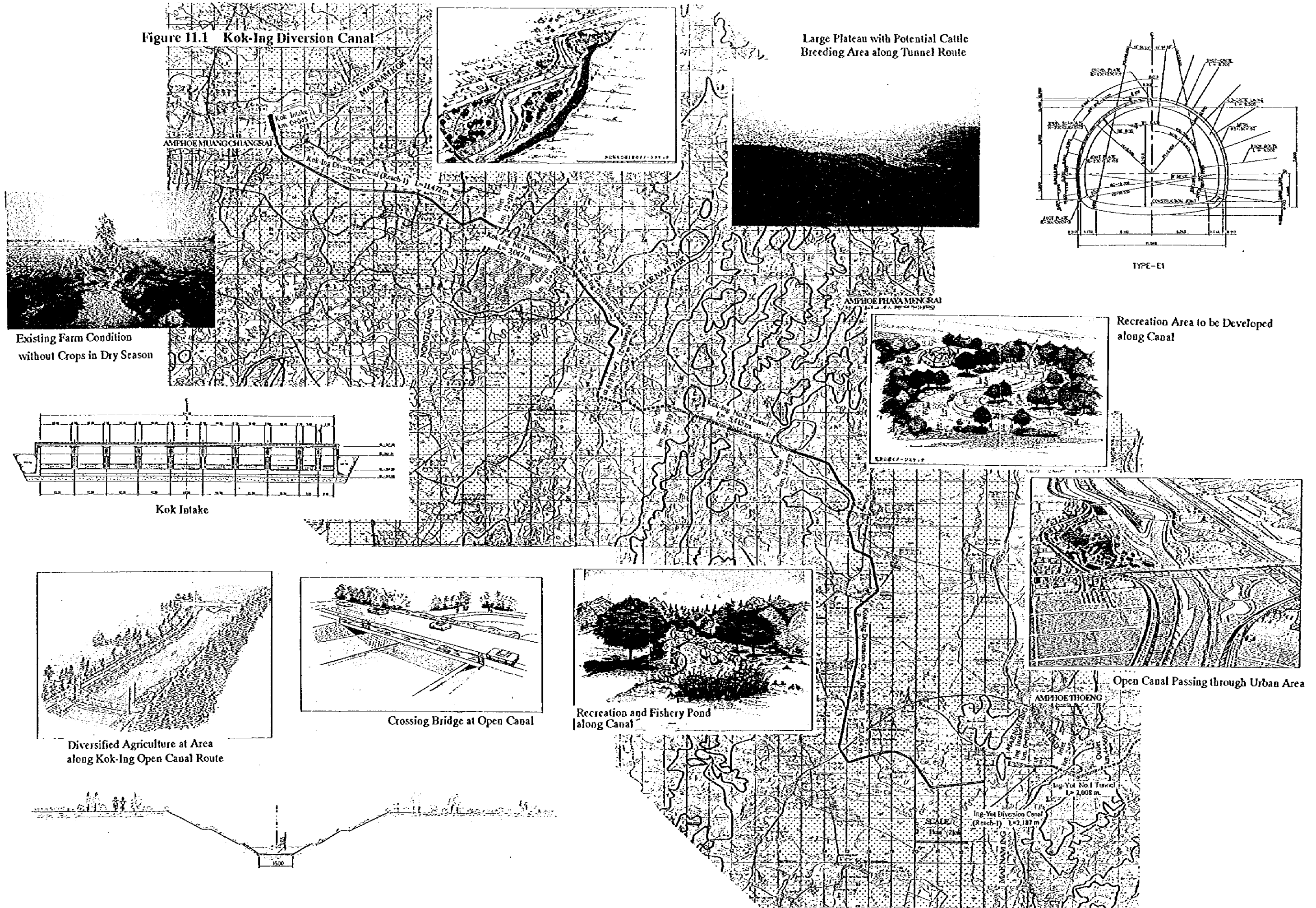
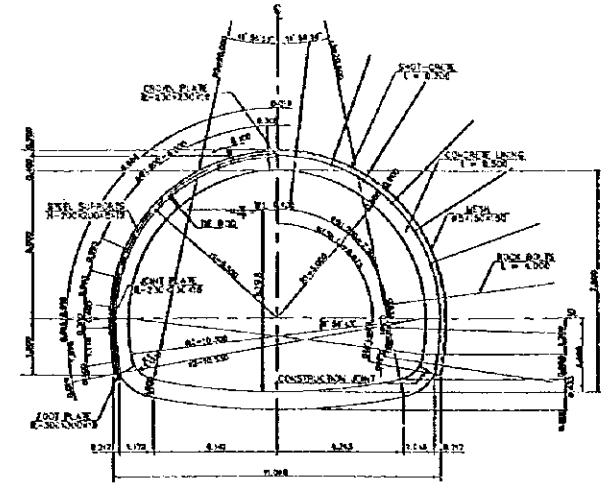
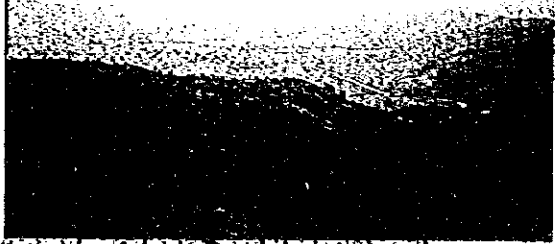


Figure 11.1 Kok-Ing Diversion Canal

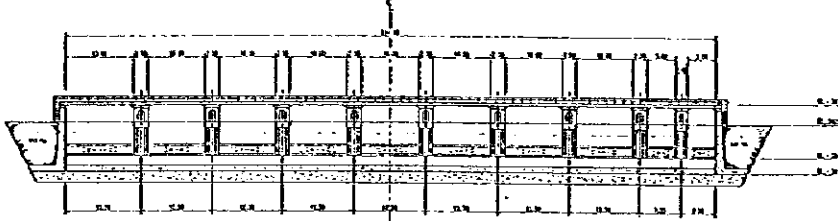


Large Plateau with Potential Cattle Breeding Area along Tunnel Route



TYPE-E1

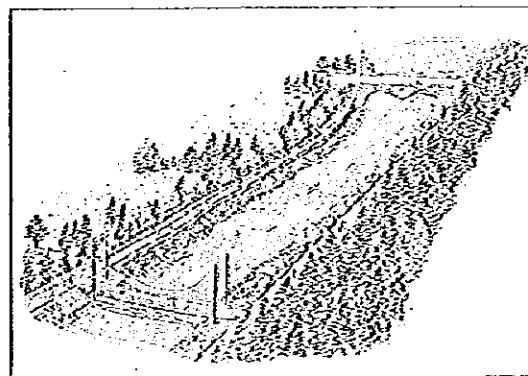
Existing Farm Condition without Crops in Dry Season



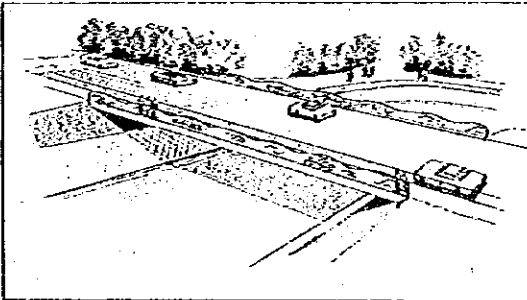
Kok Intake



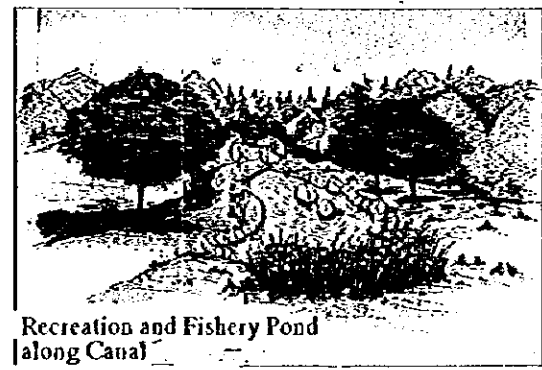
Recreation Area to be Developed along Canal



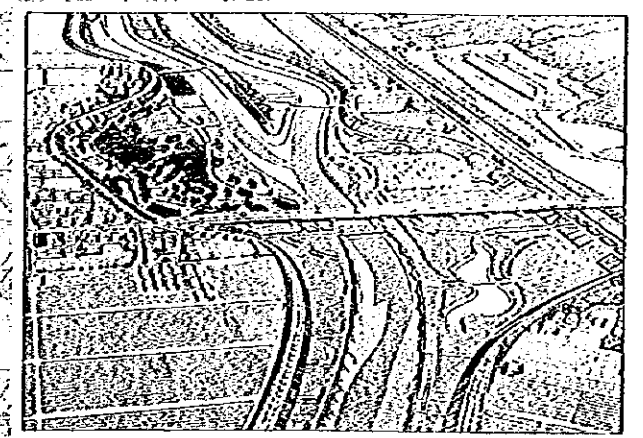
Diversified Agriculture at Area along Kok-Ing Open Canal Route



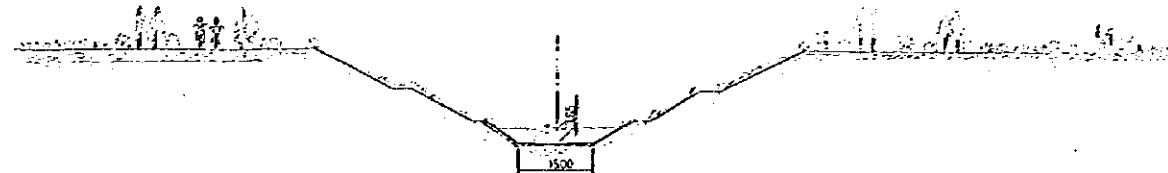
Crossing Bridge at Open Canal



Recreation and Fishery Pond (along Canal)



Open Canal Passing through Urban Area

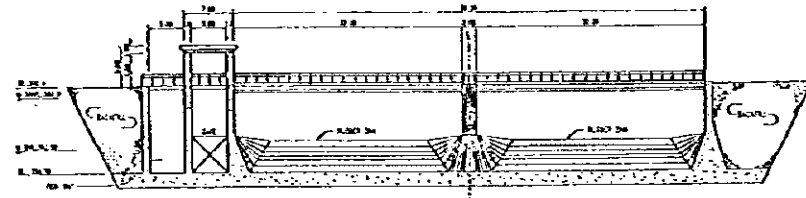
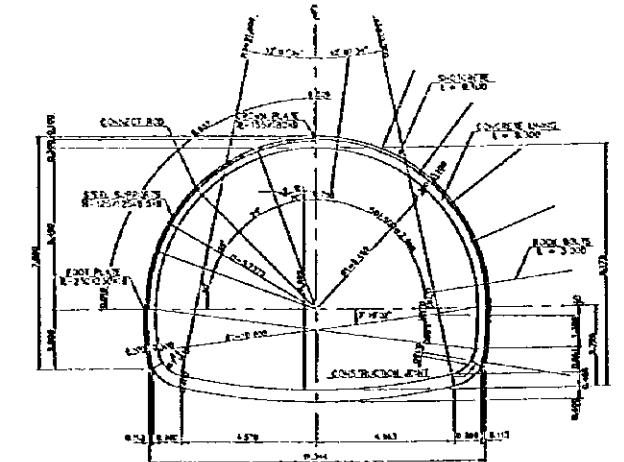
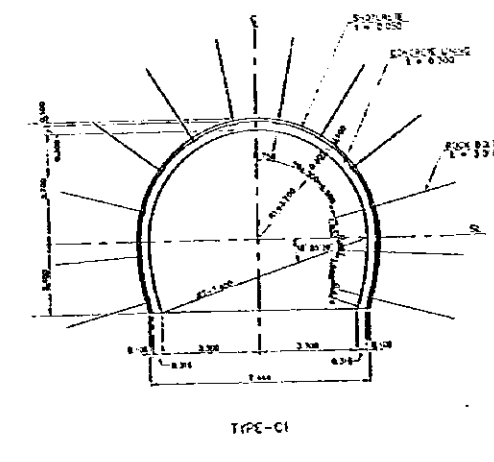
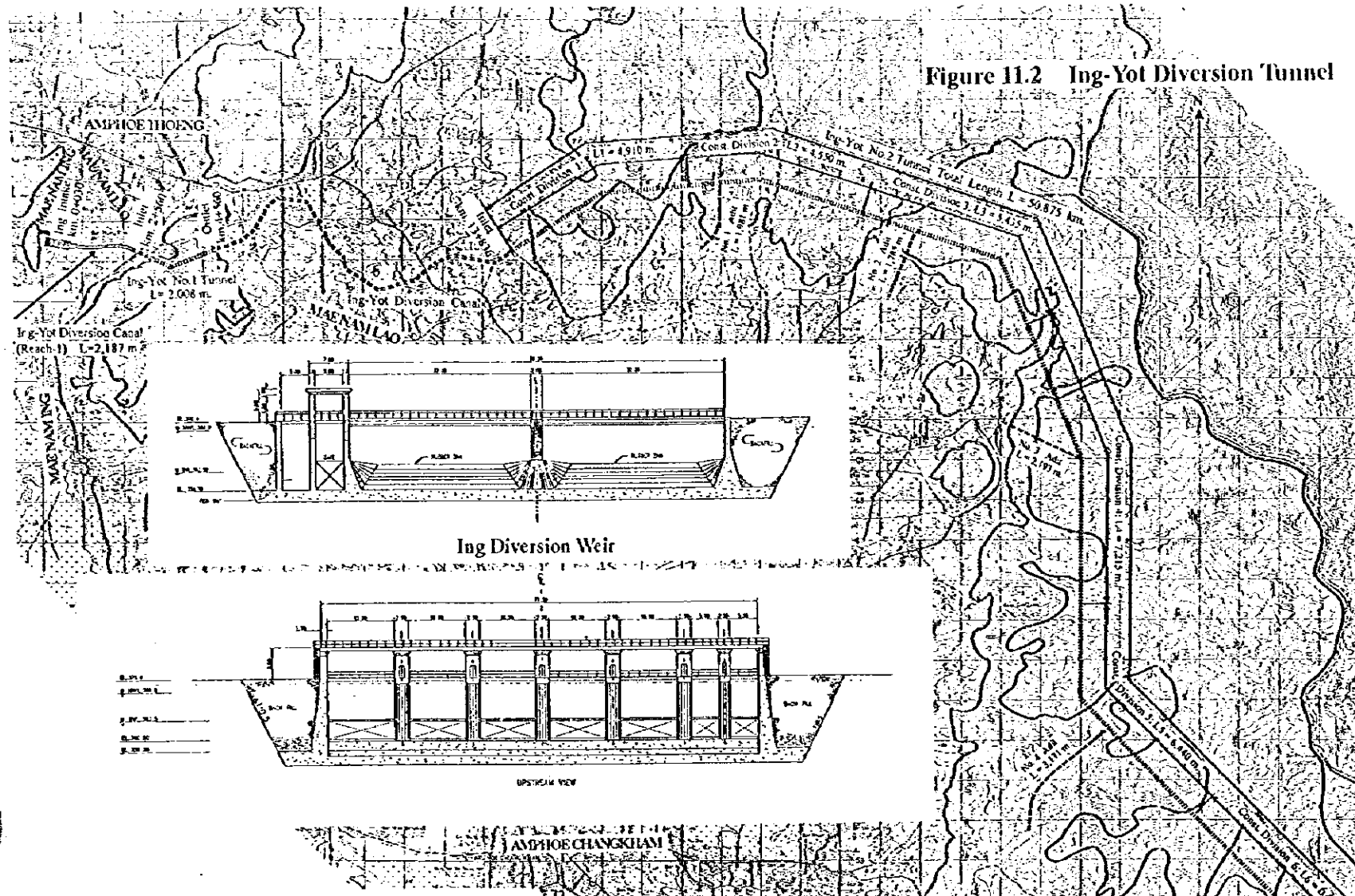


AMPHOE THOENG

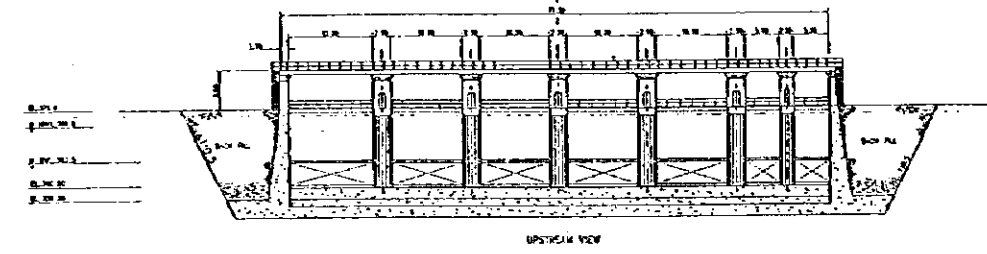
SCALE 1:1000



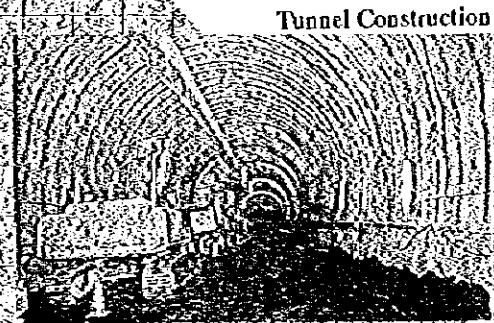
Figure 11.2 Ing-Yot Diversion Tunnel



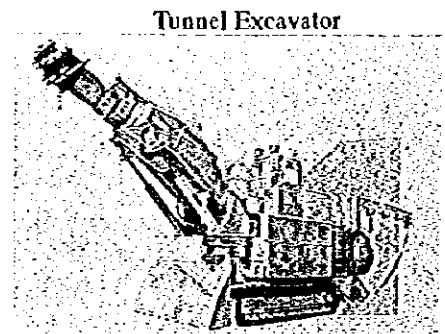
Ing Diversion Weir



Culvert Section



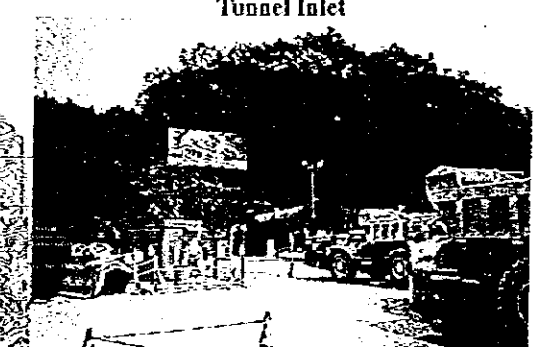
Tunnel Construction



Tunnel Excavator

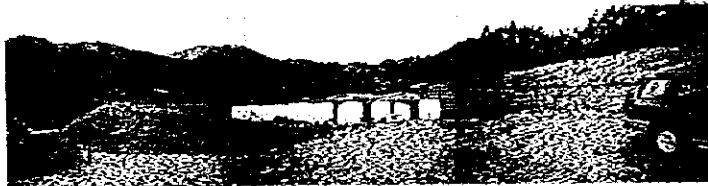


Treatment of Polluted Drainage Water

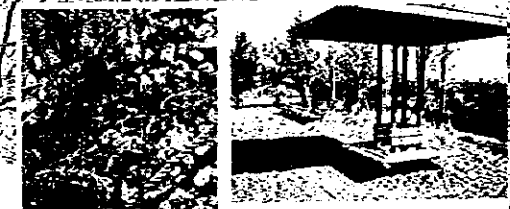


Tunnel Inlet

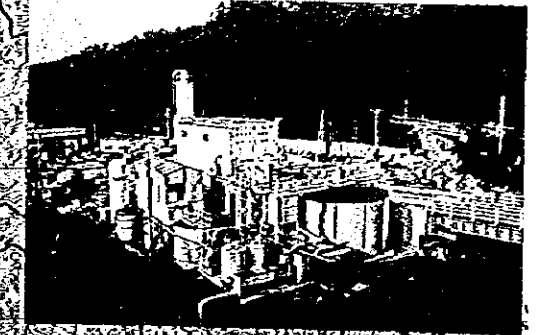
Land Consolidation Work for Orchard by using Tunnel Muck



Orchard and Flower Garden Developed at Spoil Bank with Tunnel Muck



Eco-Park Created by using Tunnel Muck



KING AMPHOE SONG KHIVAE



Release the Flood Water smoothly to the "Nam Mae Nan".

- Measures**
1. Provision of Flood Control Dam
  2. Stoppage of Water Diversion when Flooding is predicted to occur in the Yao and Nan Rivers.
  3. River Channel Improvement
  4. Provision of series of consolidation sills for river channel

**Present Condition of Yao River**

Habitual Inundation by Flood  
Agricultural Use of Narrow Plain along the River Channel



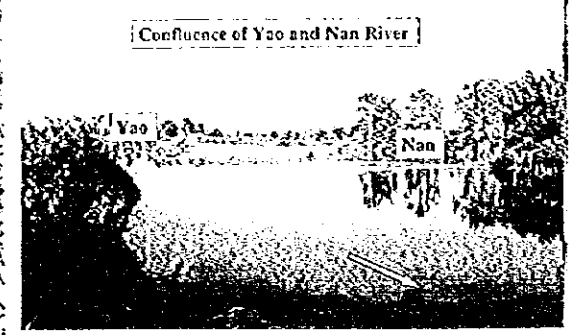
Riverbank Erosion at the Meandering Channel in the Lower Reaches



Inundation of Existing Road in Ban Song Khwae



Land Use along the Middle Reaches of the Yao River



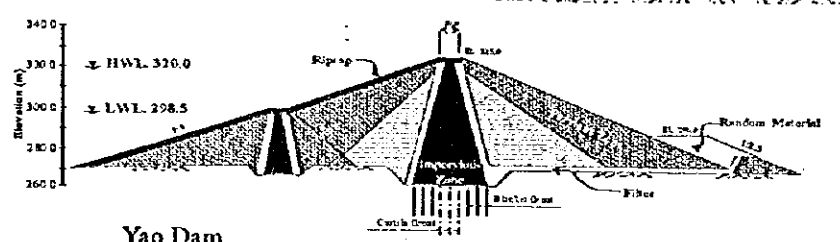
Confluence of Yao and Nan River



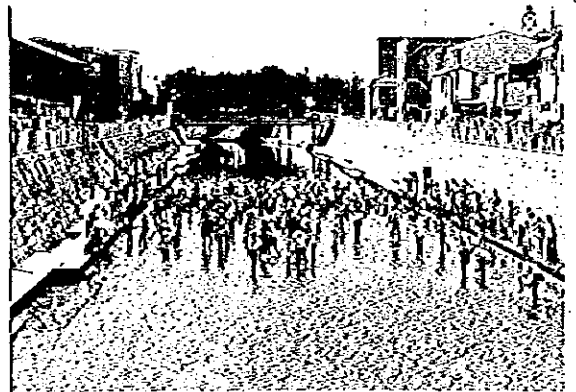
Ing-Yot No 2 Tunnel Total L. = 50875m  
Const. Division 9: L9 = 4915 m

**YAO FLOOD CONTROL DAM**  
KING ABUTHOE SONGKHINE

Figure 11.3 Yao Dam and River Training



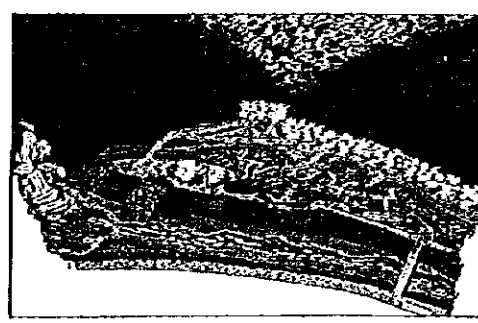
Yao Dam



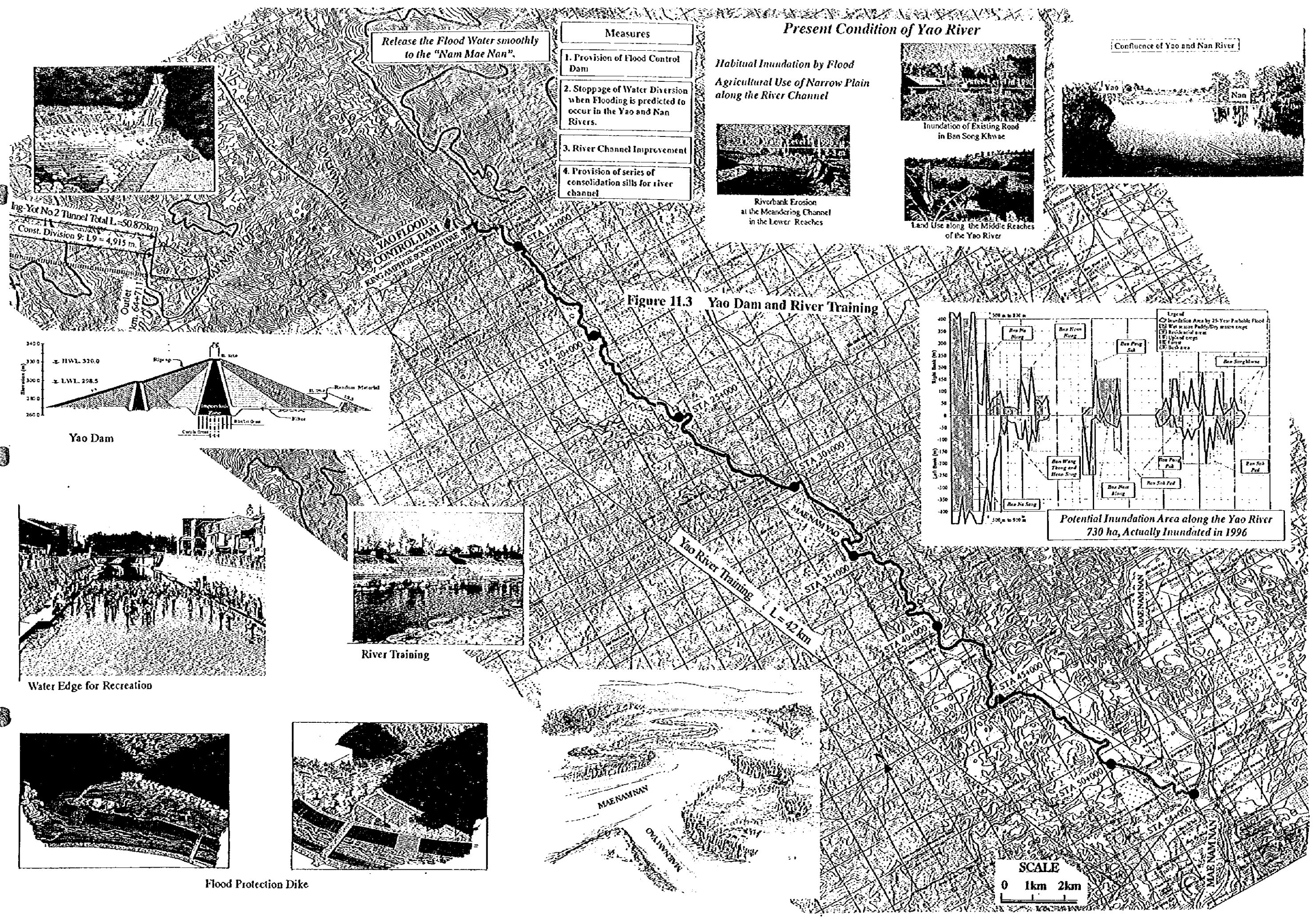
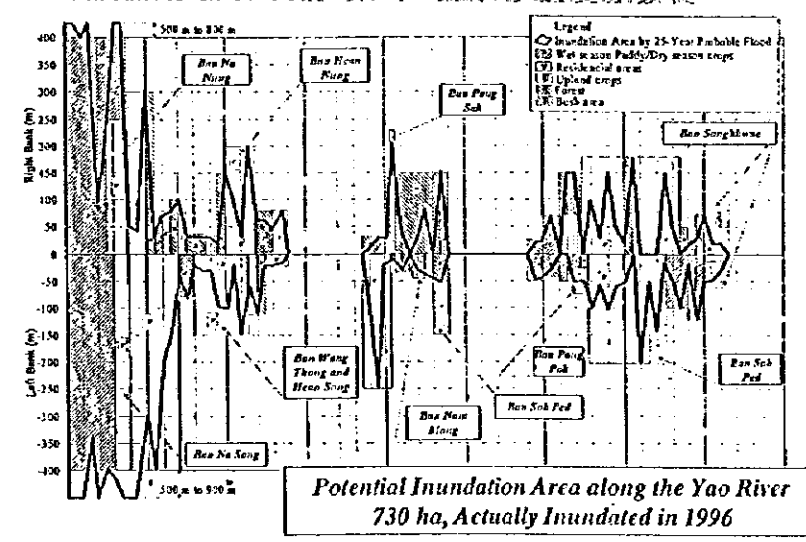
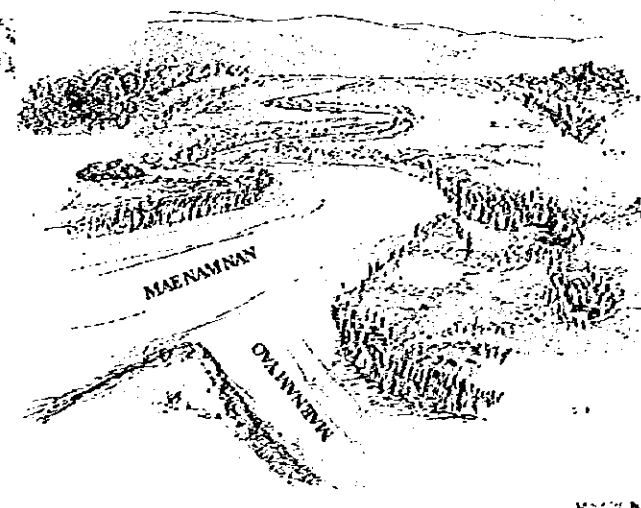
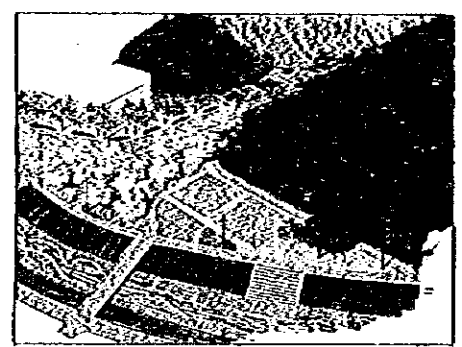
Water Edge for Recreation



River Training



Flood Protection Dike



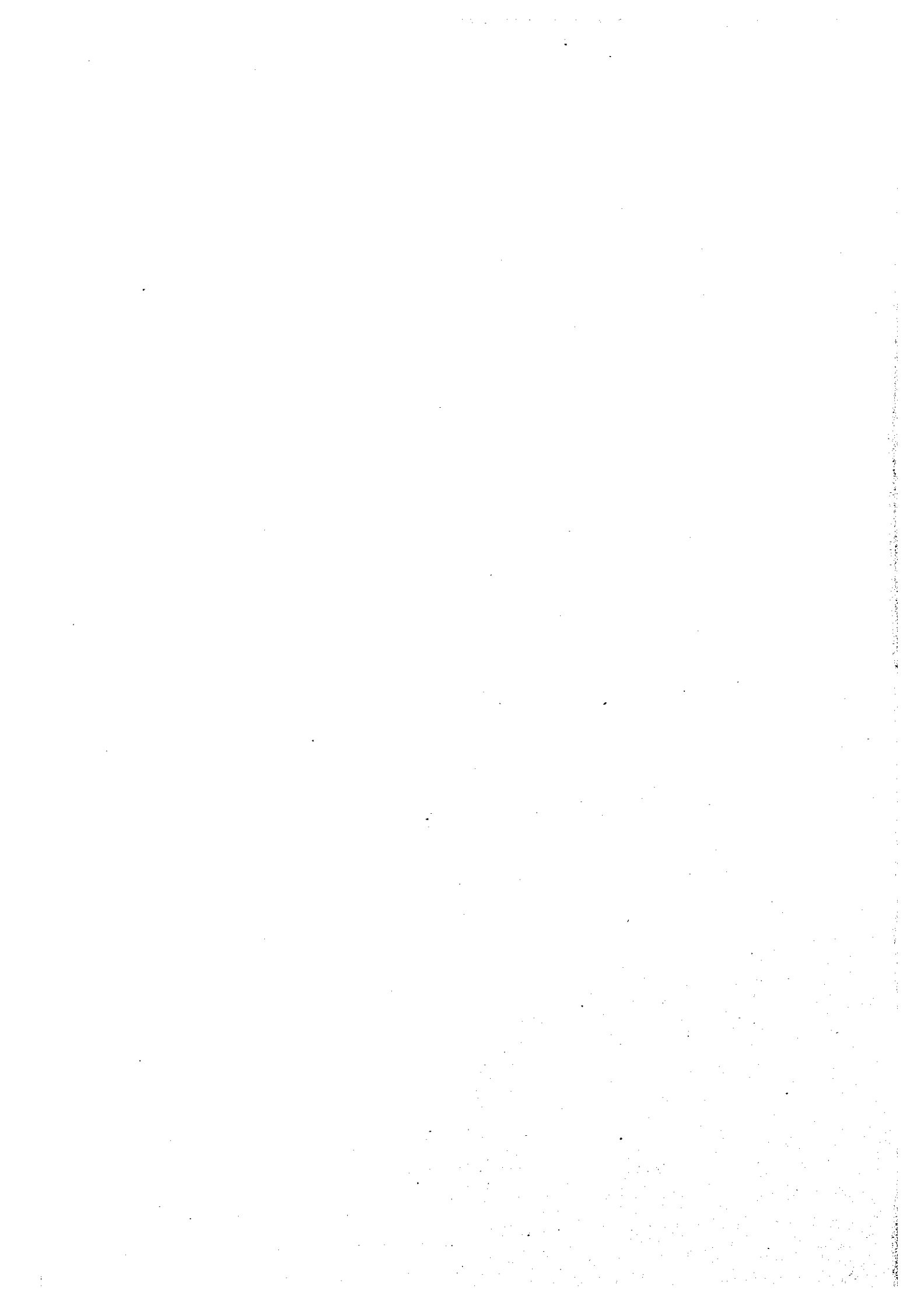


Figure 13 Project Benefit Estimation

(1) Economic Project Benefit at Full Development

(Unit : million Baht)

Plan A-1	406 (3)	14,704 (100)
	3,693 (25)	10,600 (72)
A-2	406 (3)	14,089 (100)
	2,766 (20)	10,917 (77)
A-3	406 (3)	13,544 (100)
	1,938 (14)	11,200 (83)
B-1	406 (3)	13,588 (100)
	3,693 (27)	9,484 (70)
B-2	406 (3)	13,042 (100)
	2,766 (21)	9,870 (76)
B-3	406 (3)	12,557 (100)
	1,938 (16)	10,213 (81)

■ : Power Generation    ■ : Water Supply    □ : Agriculture

(2) Net Farm Household Income (Owner Cultivator)

(Unit : 1,000 Baht)

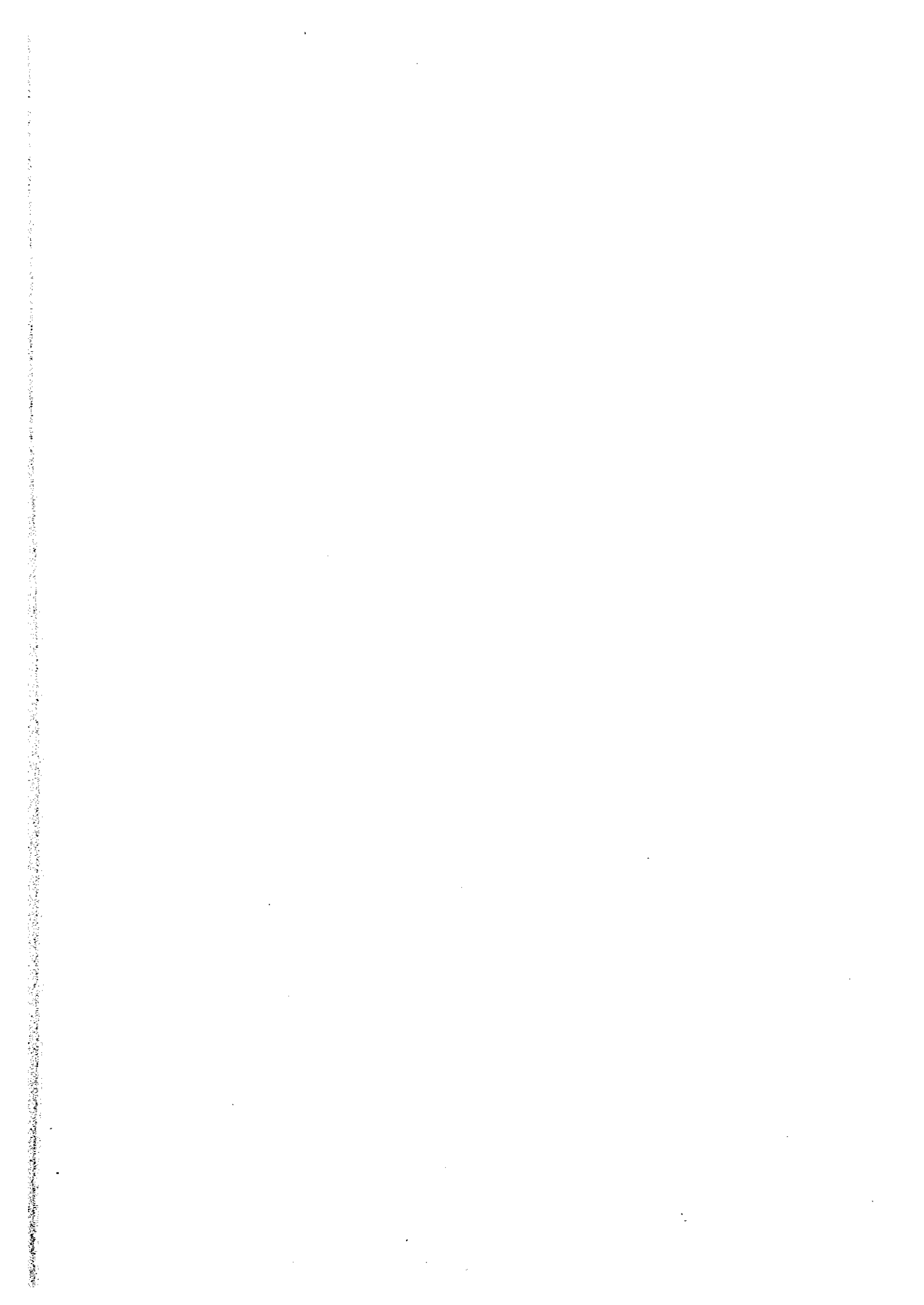
Cho Phraya Delta ( 31.6 rai )	42 (FW/O)
	103 (FW)
Phitsanulok Irrigation Project (Stage1) (31.9 rai)	44
	119
Exsting DEDP Pumping Scheme (16.1rai)	18
	59
Phitsanulok Irrigation Project (Stage2) (31.9 rai)	6
	139
New DEDP Pumping Scheme (16.1 rai)	5
	72
Associate Irrigation Projects (15.5 rai)	11
	108

Note: Household expenses were subtracted.









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