

LIST OF COLLECTED DATA

(1) Daily Rainfall

	<u>Gauging Station</u>	<u>Observation period</u>
1.	HMAWBI	1954 - 1977
2.	TAIKKYI	1947 - 1977
3.	THARRAWADDY	1947 - 1977
4.	MINHLA	1959 - 1977
5.	OKPO	1977 - 1977
6.	GYOBINGAUK	1959 - 1977
7.	ZIGON	1959 - 1977
8.	PROME	1947 - 1977
9.	PAUKKAUNG	1966 - 1977
10.	SHWEDAUNG	1966 - 1977
11.	HENZADA	1947 - 1977

(2) Daily Water table of Irrawaddy River

	<u>Gauging Station</u>	<u>Observation Period</u>
1.	PROME	1960 - 1977
2.	HENZADA	1960 - 1977
3.	SEIKTHA	1975
4.	KYANGIN	1975
5.	MYANAUNG	1975
6.	KANAUNG	1975

(3) Daily Run-Off Discharge

	<u>Gauging Station</u>	<u>Observation Period</u>
1.	KYAUKPYINTHA	1970 - 1976
2.	KAUNGLAUNGTIME	1971 - 1976
3.	KWETMA	1972 - 1976
4.	CHAUNGZAUK	1971 - 1976
5.	BAUBIN	1970 - 1976
6.	MAGUIBIN	1972 - 1976
7.	TEME	1970 - 1976
8.	YONBINDET	1971 - 1973
9.	THAPANGAING	1972 - 1973
10.	MYODAUNG	1973 - 1976
11.	MAGWE	1973 - 1976
12.	YATTHIT	1973 - 1976
13.	KYIDAING	1971 - 1973
14.	KWINLAYGI	1971 - 1973

(4) Rating Curve

Prome

(5) Cross Section of Irrawaddy River

PROME

23/3/1966

7/8/1970

17/11/1970

13/2/1975

HENZADA

(6) Monthly Temperature

Rainfall

Actual Sunshine Time

Wind Velocity

Wind Direction

Humidity

Evaporation

<u>Station</u>	<u>Location</u>	
	(LN)	(LE)
PROME	18° 48'	95° 13'
HENZADA	17° 29'	95° 27'
THARRAWADDY	17° 38'	95° 48'
PEGU	17° 20'	96° 30'
BASSEIN	16° 46'	94° 46'
MAUBIN	16° 44'	95° 39'
PYINMANA	19° 43'	96° 13'
TOUNGOO	18° 55'	96° 28'
MINGALADON	16° 54'	96° 11'
RANGOON	16° 46'	96° 10'
MINBU	20° 10'	94° 53'

- (7) Engineering Geological Report on Thegaw Dam
- (8) Engineering Geological Report on Wagyi Dam
- (9) Engineering Geological Report on South Nawin Dam
- (10) Engineering Geological Map on South Nawin Dam  
(Scale 1 inch 800 feet, contour interval: 10 feet)
- (11) Geological Cross-Section of Alignment No.2  
(South Nawin Dam Project)
- (12) Geological Cross-Section of Alignment No.2  
(South Nawin Dam Project)
- (13) Geological Log of Drill Holes, South Nawin Dam
- (14) Soil Test Data (Sough Nawin Dam)
- (15) Seismic Zonation of Burma
- (16) Soil Laboratory Testing Equipment
- (17) Report to the Pyithu Hluttaw on  
The Financial, Economic and Social Conditions of  
The Socialist Republic of the Union of Burma  
For 1977-78  
1977 Ministry of Planning and Finance
- (18) Notes on Agriculture in Surma  
Dated the 10th January 1978  
Ministry of Agriculture and Forests
- (19) Land Revenue Rates in the Union of Burma
- (20) A Brief Description of the Fixation of Land  
Revenue Rates in Burma
- (21) Current Rates of Land Revenue
- (22) Higher Production Paddy Project in Taikkyi Township,  
Rangoon Division and Project Plan 1977-78

- (23) Actual performance of High Production Paddy Project in Taikkyi Township and Progress of Paddy Production in Taikkyi Township from 1974-75 to 1977-78
- (24) Crop Production in Taikkyi Township 1976-77 (Actual Performance) and 1977-78 (plan) and Double Cropping Acreage
- (25) Timber Production for the last 7 years nation wide and Project Area respectively
- (26) Transportation and Shipment
- (27) Road Network for Timber Industry in the Project Area
- (28) Teak and Hardwoods Extraction
- (29) List of Saw Mill in Ibaid Project Area
- (30) List of Timber Ship in Ibaid Project Area
- (31) Area of Forest Divisions
- (32) Area of the Reserved and Unclassed Forests
- (33) Growth and Increment of Teak and others of the respective Division
- (34) Annual Allowable Cut
- (35) Stocking

Data Source: 1 to 2, Meteorological Department

3 Irrigation Department

4 to 6, Meteorological Department

7 to 16, Irrigation Department

Data Source: 17 to 18, Agriculture Corporation

19 to 24, Land Records Department

25 to 30, State Timber Corporation

31 to 35, Forest Division

North Nawin Irrigation Project

1. Location : The Project is located in three township of Pegu Division, namely Prome, Paukkhaung, and Theogon.
  
2. Objective : A water impounding dam is to be constructed across North Nawin Chaung near Sezongon Village in Prome Township. The Project will serve 96769 acres of land on which it is projected to cultivate 182269 acres of crops under irrigation.
  
3. Project Description : The utilization of water resources of the North Nawin Chaung for irrigation purposes was first conceived by Government in 1953. In 1957 Energoproject was entertained by the Government to prepare a preliminary report for this project and again in 1963 the same firm was entrusted with the preparation of feasibility report and final designs of the Project. Feasibility report and final designs were submitted by the firm in 1967. Preliminary works were stated in 1967-68.  
  
In 1970 Energoproject was again employed by the Government for giving construction guidance to the Irrigation Department in the Implementation of the Project.

The Project provides for the construction of an earth dam to impound the stream flow and utilize it for year-round irrigation and also an irrigation and Drainage network will be constructed under the project.

Main features of the reservoir and irrigation system are:

- (1) Catchment Area ..... 228.6 sq. miles
- (2) Length of Dam ..... 5300 ft.
- (3) Height of Dam ..... 115 ft.
- (4) Maximum depth at ..... 103.5 ft.  
full reservoir
- (5) Top width of Dam ..... 20 ft.
- (6) Storage Capacity ..... 291000 acre ft.
- (7) Waterspread Area ..... 8800 acres
- (8) Length of Conduit ..... 414 ft.
- (9) Diameter of Conduit ... 8 ft.
- (10) Full Supply Discharge .. 810 ft<sup>3</sup>/sec.
- (11) Spillway Width ..... 210 ft.
- (12) Main Canal . . . . . 3 Nos. 45 miles
- (13) Distributaries 123 Nos. 278 miles
- (14) Lined Canal ..... 120 miles
- (15) Syphons . . . . . 103 Nos.
- (16) Falls . . . . . 140 Nos.

- |      |                          |           |
|------|--------------------------|-----------|
| (17) | Canal Head<br>Regulators | 220 Nos.  |
| (18) | Bridges                  | 279 Nos.  |
| (19) | Outlets                  | 2224 Nos. |

4. Cost Estimate : The total estimated cost of the North Nawin Irrigation Project is about K 250 Millions.

5. Project Construction Period : Implementation of the Project and Preliminary Works were started in 1967-68 and the Project is phased for completion 1981-82.

Source : Planning and Design Division, Irrigation Department, MAF.



ITEM OF THE DATA COLLECTED FROM TOWNSHIPS

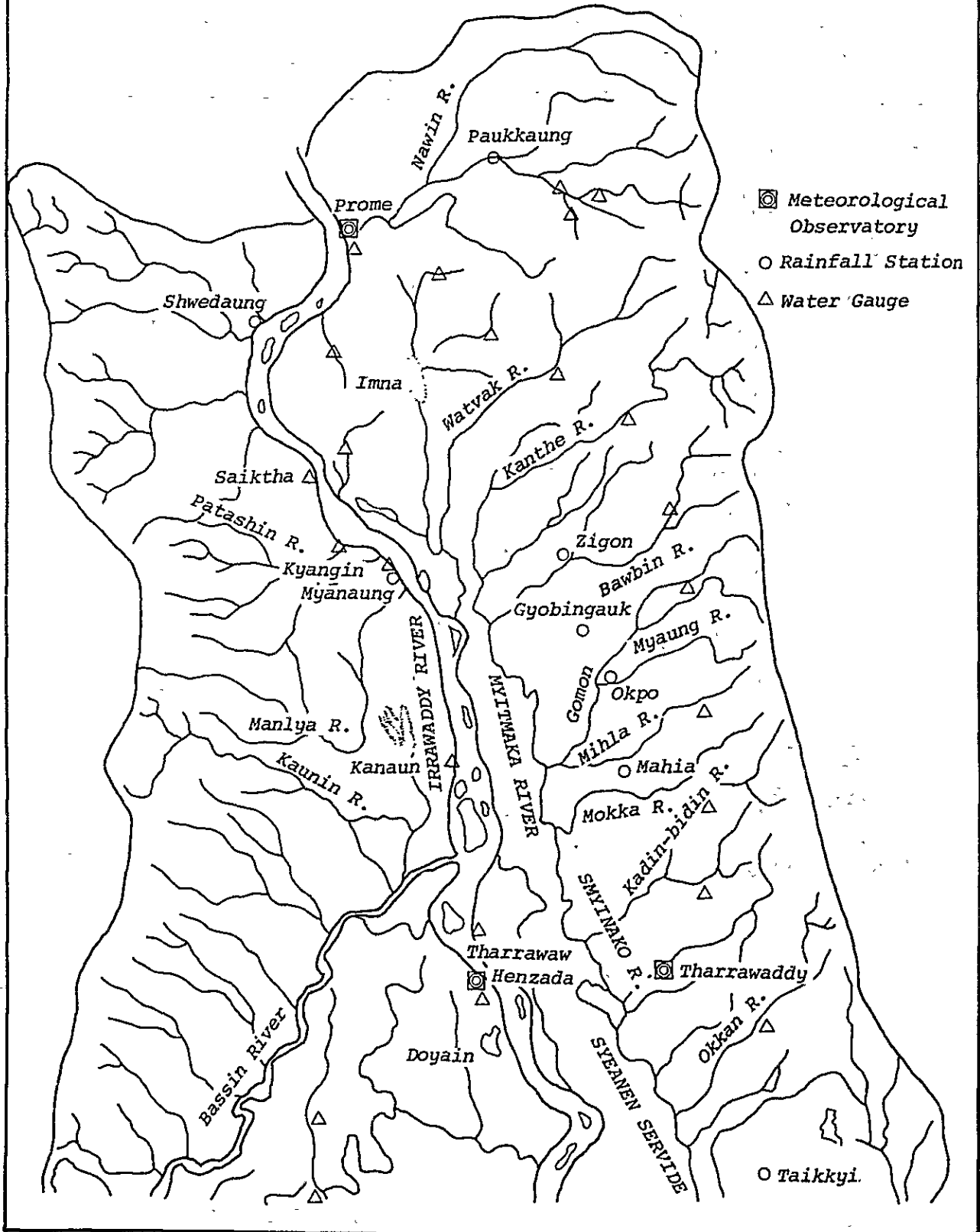
- No. 1      Population classified by ages and number of families
- No. 2      Composition of estimated active labour forces engaged  
            in various sectors
- No. 3      Land Utilization
- No. 4      Net sown area specified by irrigated and rainfed area
- No. 5      Position of peasant families and land area occupied  
            by them
- No. 6      Irrigated area by means of irrigation
- No. 7      Irrigated area by crops
- No. 8      Production of crops
- No. 9      Cropping pattern (including growth duration of each  
            crop)
- No. 10     High yielding variety paddy specified by Foreign H.Y.V.,  
            local improved varieties and Local ordinary varieties
- No. 11     Distribution of quality seeds of paddy, groundnut and  
            jute specified by varieties, by Government Agencies and  
            Co-operatives

- No. 12      Mechanization
- 1) Number of tractors and power tiller for agriculture use owned by Government co-operatives and group of farmers
  - 2) Draught cattle and agricultural implements
- No. 13      Utilization of fertilizer and chemicals by crops
- No. 14      Procurement of paddy, pulses and jute by the State Enterprises
- No. 15      Quota of paddy per acre
- No. 16      Total amount of Advance Payment of Trade Corporation for paddy
- No. 17      Agricultural Loans by Corporations (paddy, groundnut, sesamum, jute)
- No. 18      Village Manager
- No. 19      Expenditure on Rural Development Works such as land reclamation, road and bridges, health and education

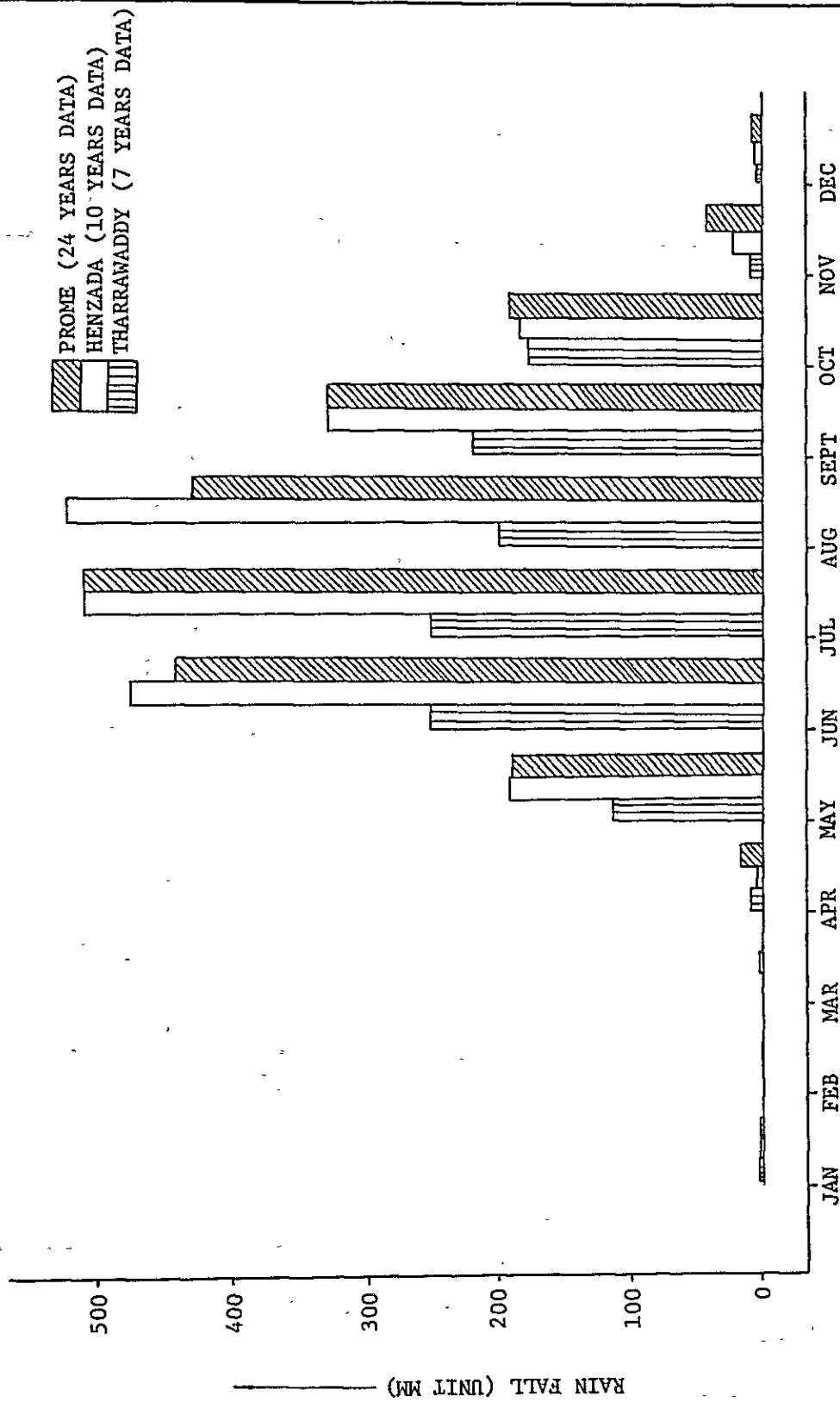
LOCATION OF OBSERVATORY

<u>STATION</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (E)</u>
Prome	18° 48'	95° 13'
Henzada	17° 29'	95° 27'
Tharrawaddy	17° 38'	95° 38'
Pegu	17° 20'	96° 30'
Bassein	16° 46'	94° 46'
Maubin	16° 44'	95° 39'
Pyinmana	19° 43'	96° 13'
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Mingaladon	16° 54'	96° 11'
Rangoon	16° 46'	96° 10'
Minbu	20° 10'	94° 53'

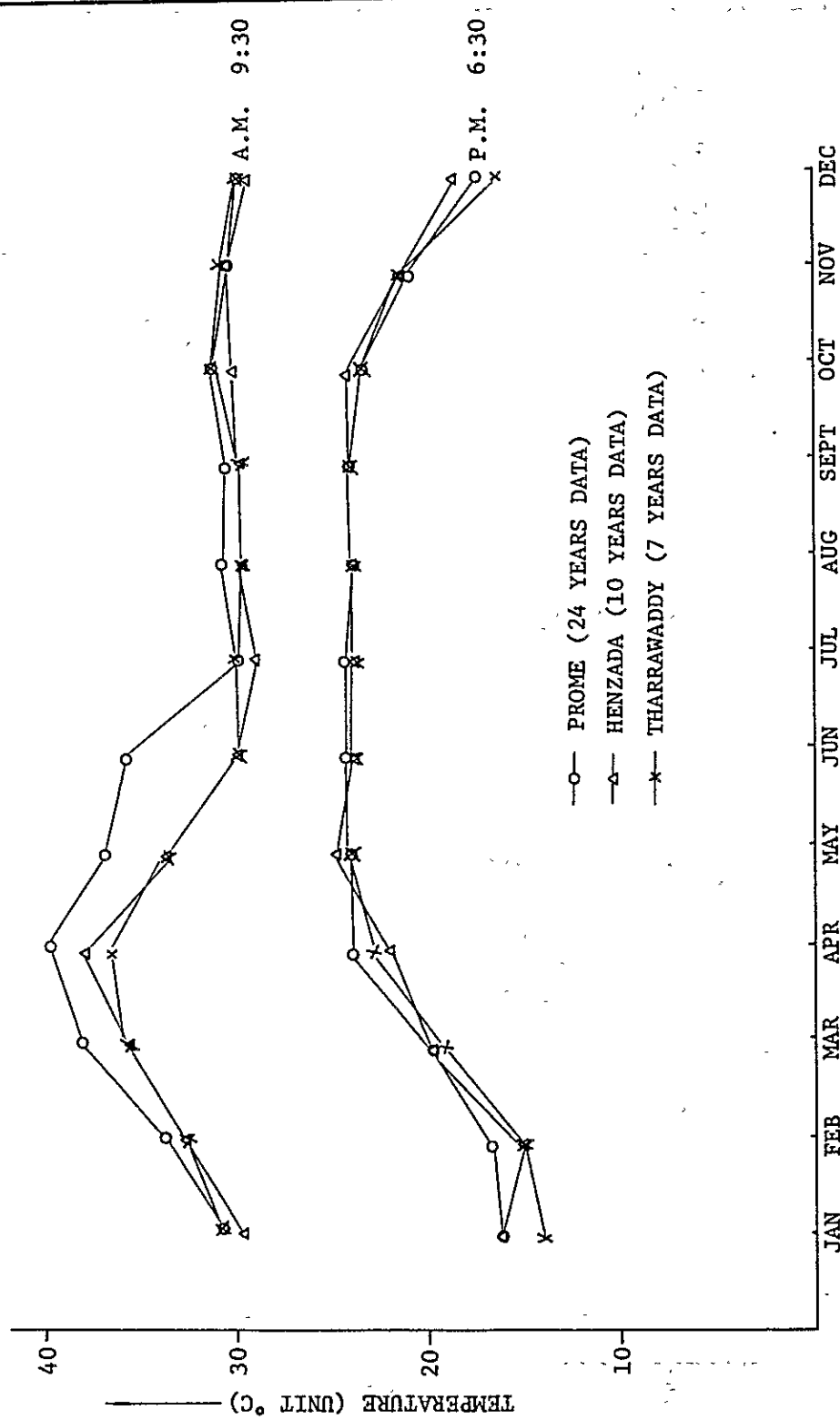
LOCATION OF GAUGING STATION



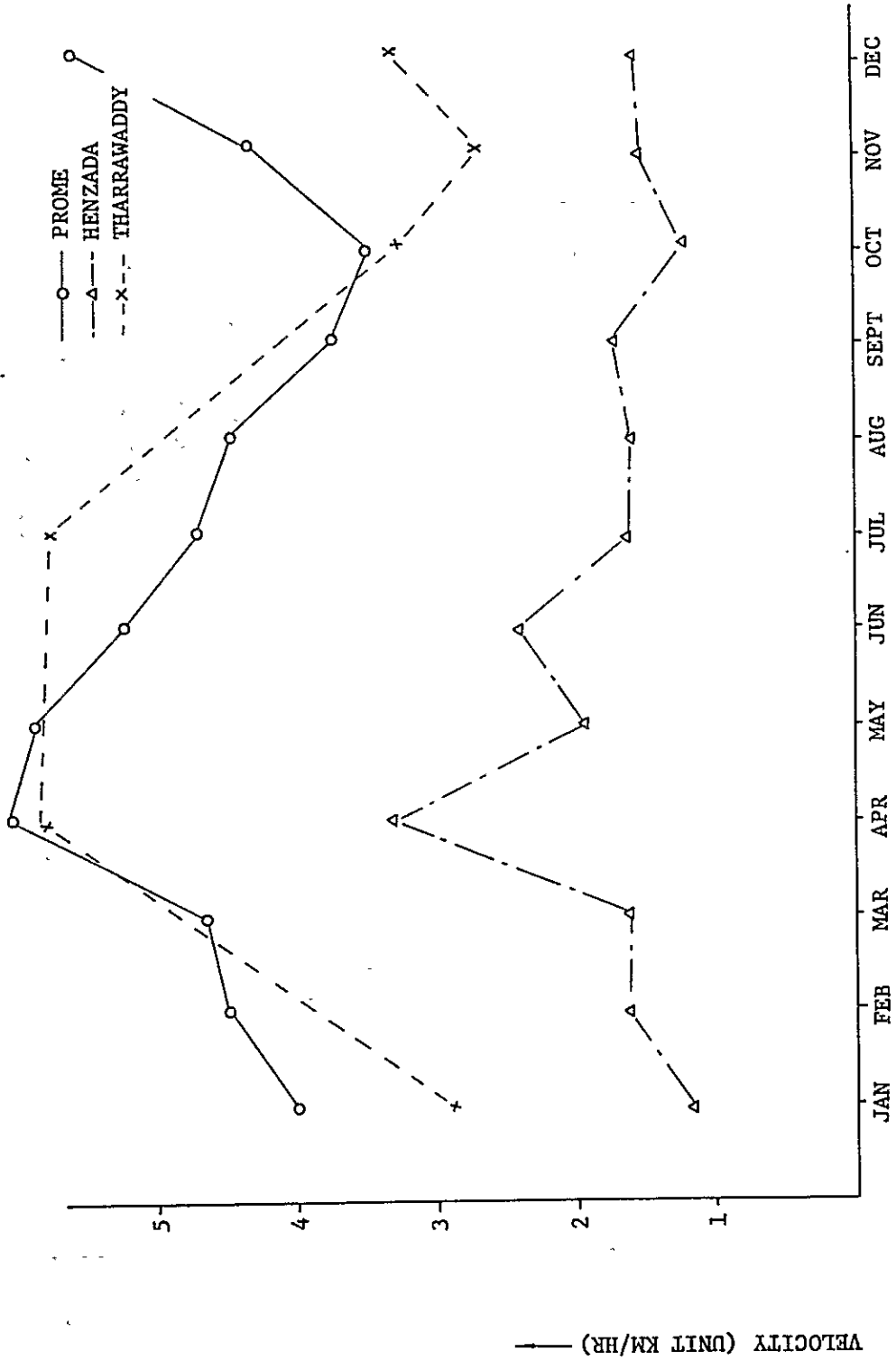
MONTHLY MEAN RAINFALL



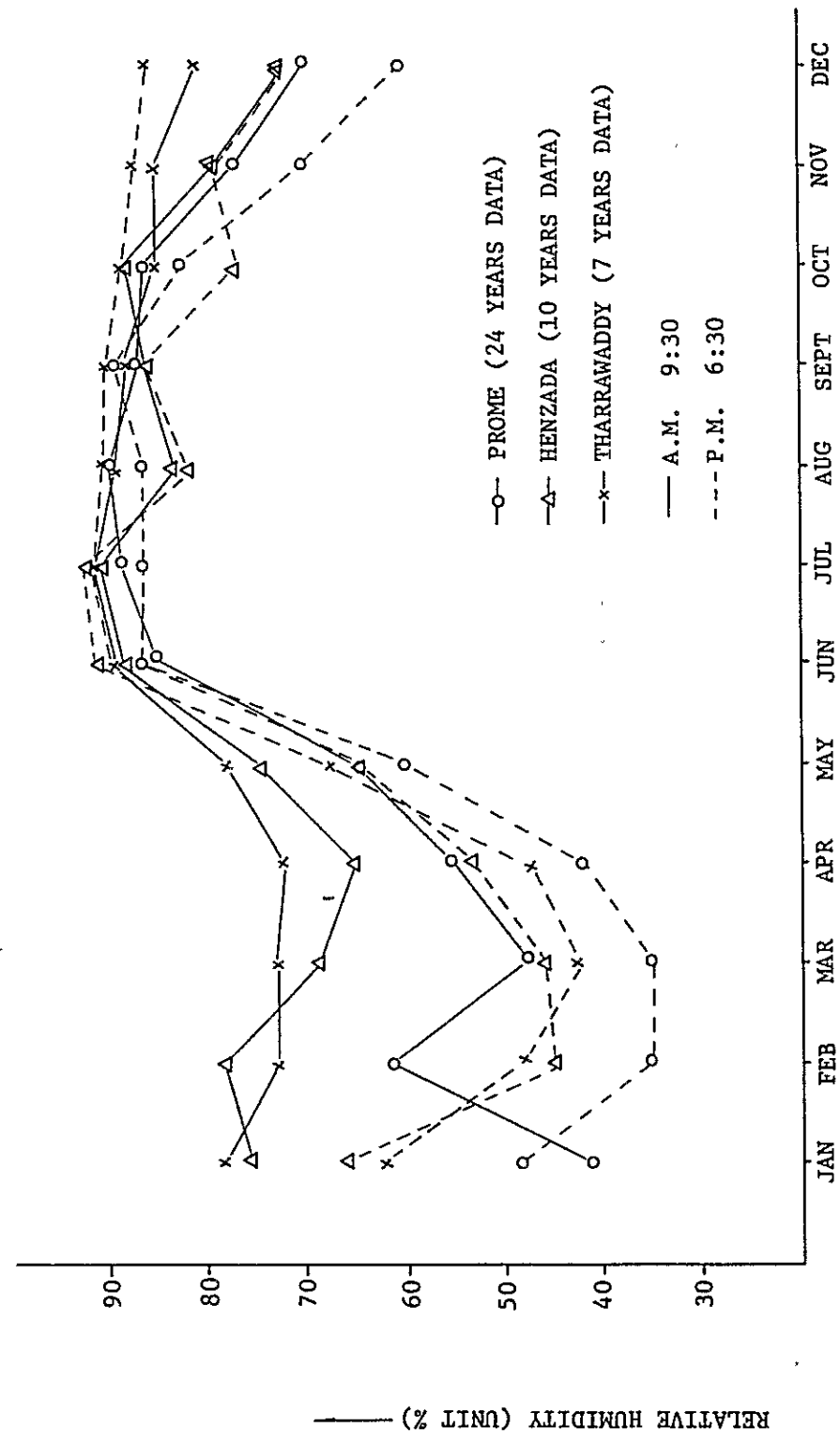
MONTHLY MENA TEMPERATURE



WIND SPEED



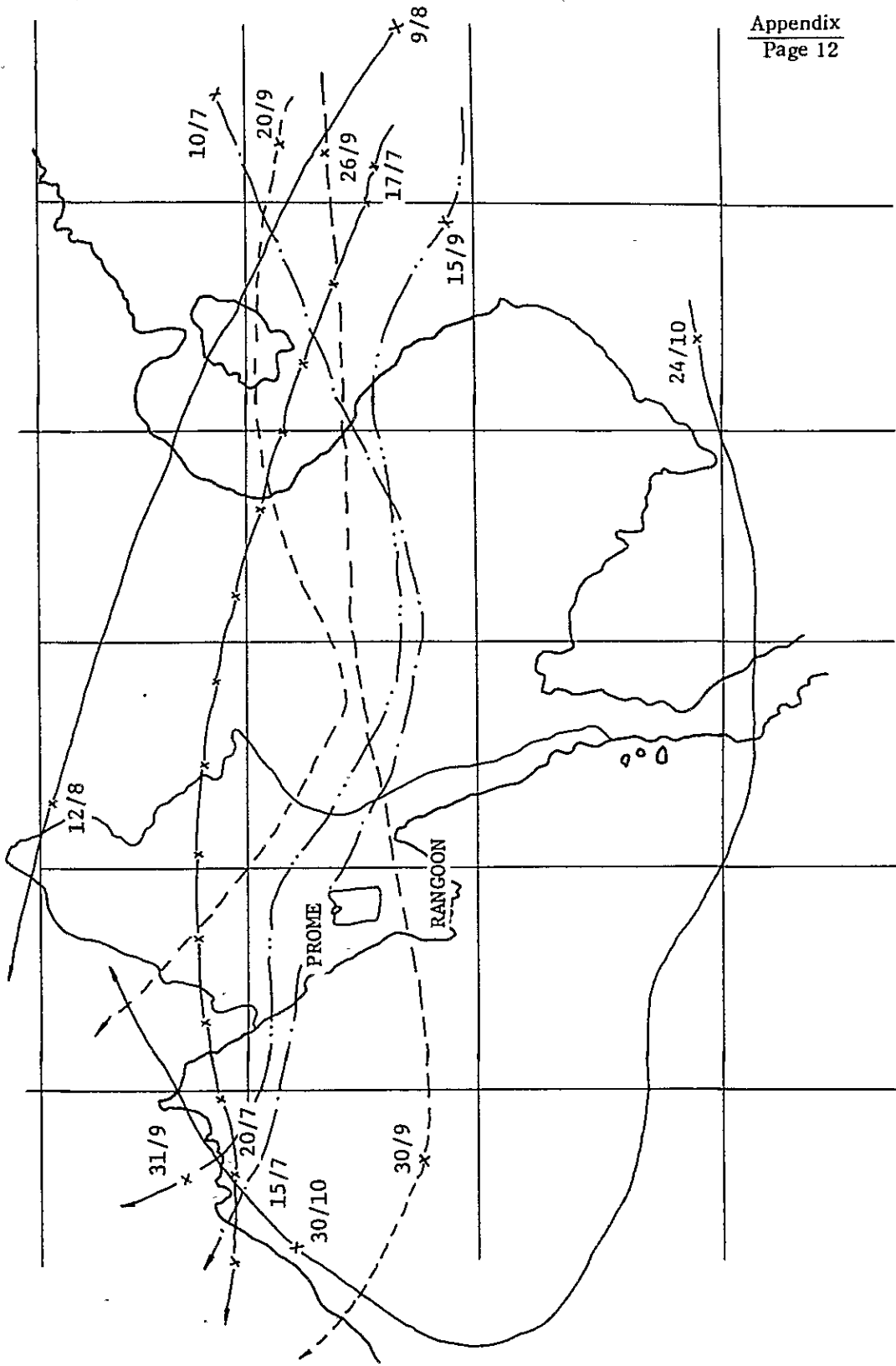
RELATIVE HUMIDITY





MAP SHOWING THE TRACT OF STORMS AND DEPRESSIONS WHICH PASSED OVER

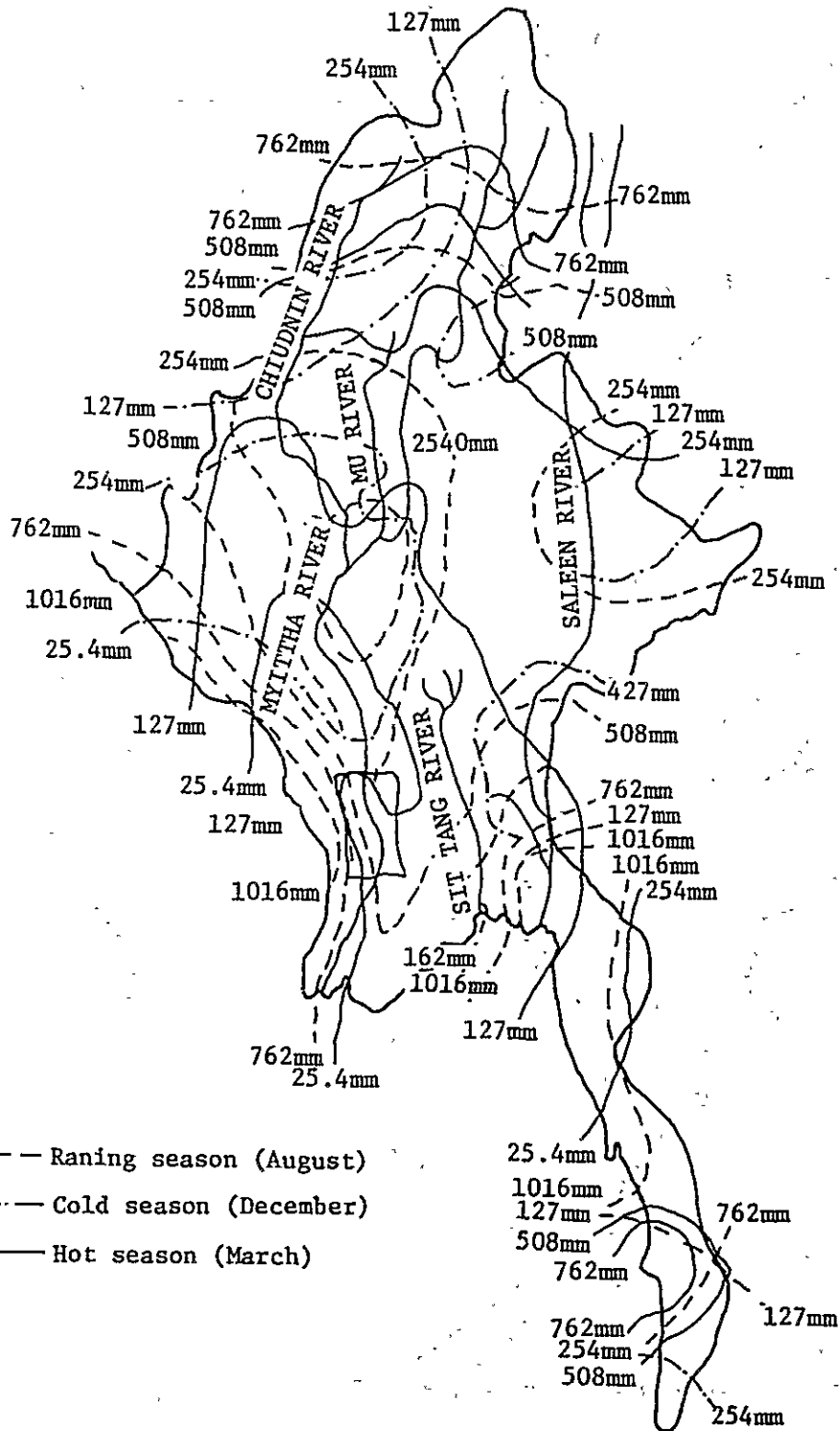
BURMA IN 1962



AVERAGE RAINFALL MAP OF BURAMA

1951 ~ 1961

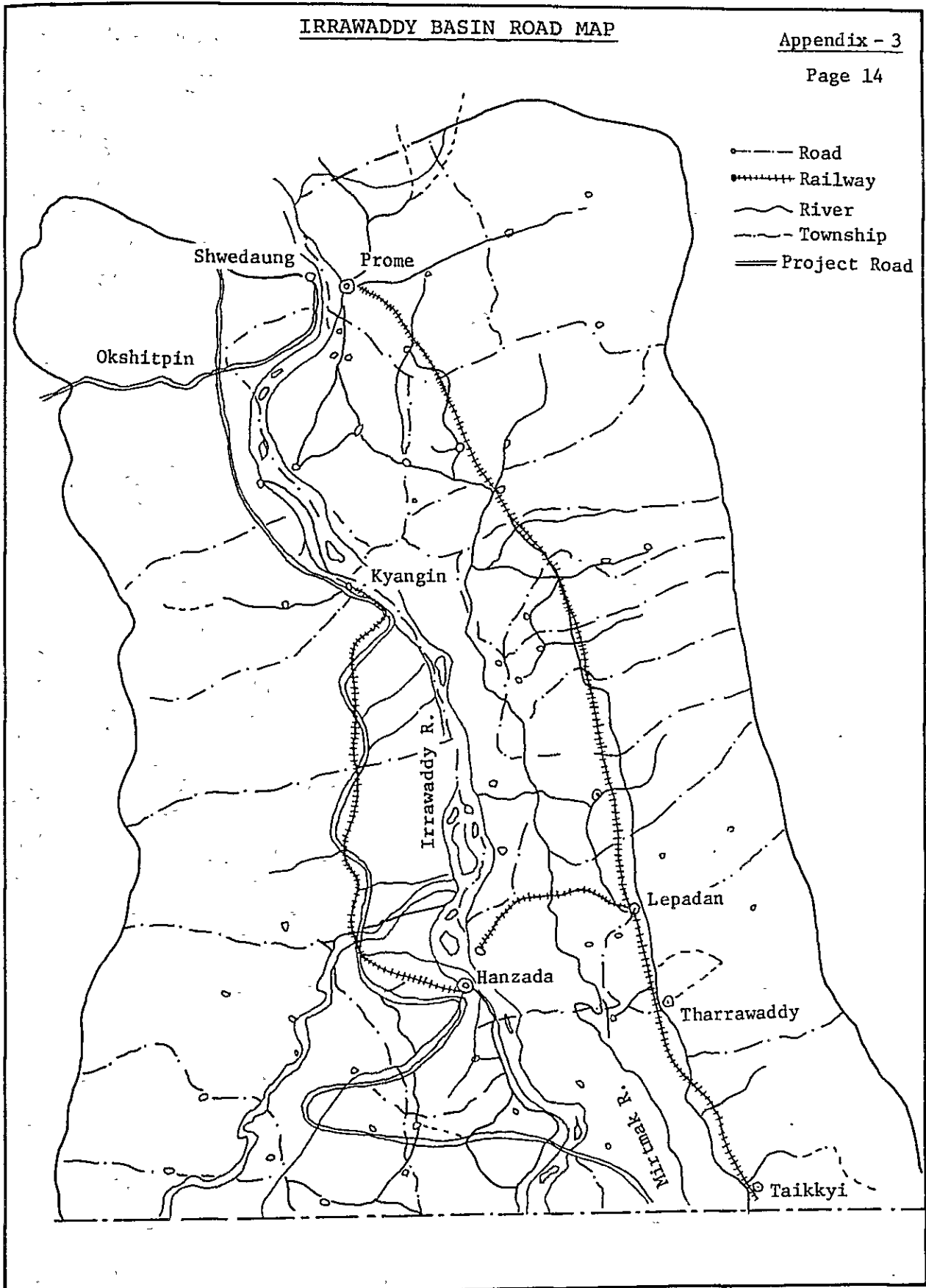
Appendix  
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IRRAWADDY BASIN ROAD MAP

Appendix - 3

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- Road
- +— Railway
- River
- - - Township
- == Project Road

WATER MEASURED IN THE FIELD SURVEY

(1978)

	Date	Time	Dissolved Oxygen	PH	Water Tempera- ture	Remarks
Irrawaddy	Mar. 20th	12:30	8.5 PPM	8.3	27.3°C	
River	Mar. 22nd	12:20	8.5	8.5	27.4	
Daka	Mar. 20th	16:00	6.9	7.6	31.0	
River	Mar. 21st	07:30	5.3	7.5	27.9	
Invegyi	Mar. 21st	09:00	7.8	8.5	28.5	Kanzu Village
Lake	"	10:15	5.4	8.1	27.5	Sai-Lay Station
	"	12:00	4.2	7.9	29.3	Inyegyi Station
	"	14:00	8.2	8.5	32.7	Kanzu Village
Duva Lake	Mar. 22nd	09:20	7.3	8.4	27.5	
Ragwinpyin	Mar. 24th	11:10	5.4	7.4	30.9	
River						
Kanzu Village fish pond	Mar. 21st	14:30	6.0	7.1	33.6	
Private fish pond	Mar. 24th	08:00	5.5	8.1	28.3	
near Rangoon	Mar. 24th	08:30	6.6	8.4	27.4	







JICA

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