

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 10

Region : **II** Province : **KALINGA-APAYAO**

Catchment Area : 7,047.6 km²

I. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Kabugao, Kalinga-Apayao	18° - 01' 121° - 11'	1948 - 1975
2	Latawan, Lubuagan	17° - 22' 121° - 07'	1964 - 1978
3	Naneng, Tabuk	17° - 25' 121° - 16'	1966 - 1988
4	Guiguila, Tanudan	17° - 18' 121° - 14'	1963 - 1978
5	Basao, Tinglayan	17° - 14' 121° - 07'	1963 - 1975
6	Luna Exptl., Luna	18° - 18' 121° - 21'	1949 - 1967

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Naneng, Tabuk, K. Apayao	17° - 25' 121° - 16'	

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Atok, Pudtol	Abulog	1,432	1952 - 1970
	Pinukpok, K. Apayao	Saltan	846	1965 - 1972
	Gawaan, Balbalan	Saltan	255	1967 - 1972 (F)
	Pasonglao, Tabuk	Chico	1,987	1963 - 1972
	Ambato, Tinglayan	Chico	1,087	1967 - 1972 (F)
	Baba-alan, Tabuk	Tanudan	365	1965 - 1972 (F)

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 2,561.9 mm
- Rainy season : 1,724.6 mm (67%)
- Dry season : 836.3 mm (33%)

iii) Monthly rainfall at Major Stations

Station Name	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Kabugao	73.5	50.9	50.6	82.4	189.7	250.0	290.8	291.6	293.8	422.2	477.9	219.0	2,692.4
Latawan	84.4	40.8	67.3	114.0	177.9	252.7	299.9	282.2	267.9	253.0	274.4	158.5	2,273.0
Naneng	34.9	17.3	43.4	64.3	200.1	245.8	237.3	296.5	232.7	309.9	288.6	73.8	2,044.6
Guiguila	115.7	56.1	62.5	79.0	223.5	330.1	319.9	282.7	306.6	298.8	377.4	246.4	2,698.7
Basao	95.4	27.1	71.0	113.3	290.9	426.8	385.7	338.8	316.4	508.5	440.1	286.1	3,100.1

iv) Meteorological Features at Major Stations

Station	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)													
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	0	0	0	3	4	5	9	5	7	7	4	2	46
Typhoon frequency (%)	0	0	0	7	9	11	20	11	15	15	9	4	100

3. SURFACE RUNOFF

i) Water Region II

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Abulog	Atok	1,432	6,939.18	0.15366
Saltan	Pinukpok	846	1,505.53	0.05643
Saltan	Gawaan	255	5,672.06	0.70533
Chico	Pasonglao	1,987		
Tanudan	Baba-alan	365		

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Atok	Abulog	1,432	240.47	155.15	106.12	72.10	56.80	117.56	194.41	238.27	251.48	379.35	437.93	390.79	220.04
Pinukpok	Saltan	846	32.15	19.48	20.81	20.98	29.45	41.01	65.48	63.03	55.58	62.82	80.21	81.89	47.74
Pasonglao	Chico	1,987	98.65	39.12	20.54	43.20	53.49	167.03	355.35	345.89	322.81	299.83	227.64	183.59	179.76
Gawaan	Saltan	255			7.34	8.28	8.77	23.24	23.59	35.53	25.10				
Ambato	Chico	1,087		18.95	18.18	15.51	23.53		89.66	157.83	138.63	66.98	48.79	37.71	
Baba-alan	Tanudan	365				27.36	27.92	39.73	41.36	24.99	42.74	17.57	19.71	19.63	

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.82 lit/sec/ha

(485 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. **11**

Region : **II** Province : **ISABELA**

Catchment Area : **10,644.4 km²**

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Ilagan Soil Conservation Proj.	17° - 09' 121° - 50'	1961 - 1965
2	Ilagan Tobacco Expt'l. Sta.	17° - 07' 121° - 53'	1957 - 1988
3	MRMP, Isabela		1957 - 1974

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Magat Damsite, San Ramon		1957 - 1972

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Muñoz, Roxas	Pinacanauan	170	1964 - 1970
	Casite, Mallig	Casite	195	1949 - 1989
	Muñoz, Malingay	Mallig	563	1948 - 1977
	Muñoz, Roxas	Siffo	686	1948 - 1975
	Dabubu, San Agustin	Dabubu	162	1964 - 1973
	Casite, Mallig	Casite	170	1949 - 1989

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Minangas, San Mariano	Pinacanauan	1,565	1964 - 1976
	Palatiao, Naguilian	Cagayan	6,266	1961 - 1979
	Capilan, Aurora	Taotao	430	1958 - 1973
	Osariz, San Mateo	Magat	4,150	1941 - 1965
	Cabulay, Santiago	Diadi	196	1955 - 1976
	Minuri, Jones	Dibulan	272	1964 - 1972

2. METEOROLOGY

i) Climate Type : **III**

ii) Annual Rainfall : **1,721.1 mm**

- Rainy season : **1,056.0 mm (61%)** from **May** to **October**

- Dry season : **665.1 mm (39%)** from **Nov.** to **April**

iii) Monthly rainfall at Major Stations

Station Name	Unit : mm												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Ilagan Soil Conservation Proj.	24.5	15.7	49.9	33.0	63.5	156.7	236.2	180.1	164.1	253.8	384.9	120.4	1,682.8
Ilagan Tobacco Expt'l. Sta.	66.7	40.9	38.7	56.4	130.0	147.0	164.2	189.8	177.1	283.5	305.0	150.6	1,749.9
MRMP	67.3	38.8	39.8	61.8	121.3	164.7	181.2	206.5	189.2	324.7	340.4	160.8	1,896.5

iv) Meteorological Features at Station

Station	Unit : mm												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)	115.6	125.1	177.9	208.1	204.7	163.9	164.0	139.7	139.1	129.9	110.9	107.5	148.9
Wind Speed (km/day)	0	0	0	3	4	5	9	5	7	7	4	2	46
Nos. of Typhoon (Nos.)	0	0	0	0	9	11	20	11	15	15	9	4	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region II

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Casite	Casite	195	113.53	0.03171
Mallig	Muñoz	563	565.44	0.03185
Cagayan	Palatiao	6,266	8,680.60	0.04393
Magat	Ozcariz	4,150	5,975.76	0.04566
Diadi	Cabulay	196	80.42	0.01301

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Casite, Mallig	Casite	195	2.38	1.26	1.20	1.33	1.51	2.91	3.02	6.46	5.37	6.79	7.47	3.54	3.60
Muñoz	Mallig	563	10.03	7.18	6.51	6.72	6.94	16.08	17.50	25.70	32.73	34.61	26.92	24.23	17.93
Palatiao	Cagayan	6,266	229.68	158.27	150.75	124.42	198.99	193.45	248.97	300.42	355.52	421.48	418.22	502.98	275.26
Ozcariz, San Mateo	Magat	4,150	118.29	88.71	82.50	83.51	110.30	168.37	226.36	273.05	338.92	297.68	265.51	220.67	189.49
Cabulay, Santiago	Diadi	196	1.30	0.79	0.58	0.84	1.69	2.23	2.05	2.77	4.01	5.08	6.15	3.08	2.55
San Agustin	Dabubu	162	11.49	4.85	4.42	2.55	3.67	2.48	5.13	6.13	7.69	13.26	26.22	17.53	8.79

4. Reference Figures for Planning

i) Irrigation Water Requirement

2.26 lit/sec/ha

(565 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 12

Region : **II** Province : **IFUGAO**

Catchment Area : 2,517.8 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Mt. Polis Pass, Banaue	16° - 58' 121° - 02'	1966 - 1976

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Dulao, Lagawe	Alimit	573	1967 - 1973
	Hapid, Lamut	Ibulao	606	1964 - 1986
	Kamandag, Kiangan	Cadaclan	261	1967 - 1972

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 3,895.6 mm
- Rainy season : 2,838.8 mm (73%)
- Dry season : 1,056.8 mm (27%)

iii) Monthly rainfall at Major Stations

Station Name	Monthly Rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mt. Polis Pass	162.9	59.8	89.5	149.5	409.6	476.9	572.6	574.1	421.8	383.8	365.0	230.1	3,895.6

Unit : mm

iv) Meteorological Features at

Station	Monthly Features											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean temp. (°C)												
Mean R. humidity (%)												
Pan evaporation (mm)												
Wind Speed (km/day)	0	0	0	0	4	5	9	5	7	4	2	46
Nos. of Typhoon (Nos.)	0	0	0	0	0	11	20	11	15	9	4	100
Typhoon frequency (%)												

3. SURFACE RUNOFF

i) Water Region II

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Alimit	Dulao	573	1,398.00	0.07736
Ibulao	Hapid	606	1,447.50	0.07574
Cadaclan	Kamandag	261	439.00	0.05333

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Monthly Runoff (mm)											
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dulao, Lagawe	Alimit	573	26.31	14.64	11.69	18.03	39.56	43.13	55.77	75.63	109.99	48.09	46.74	44.33
Hapid, Lamut	Ibulao	606	28.59	25.81	17.16	12.31	23.45	35.19	66.76	69.72	74.87	89.96	40.89	45.90
Kamandag	Cadaclan	261	13.20	9.45	6.42	8.31	11.31	10.92	20.11	18.74	21.35	15.38	12.57	13.93

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.82 lit/sec/ha

(454 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 13

Region: **II** Province: **NUEVA VIZCAYA**

Catchment Area: 3,903.9 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Barat, Bambang	16° - 23' 121° - 06'	1970 - 1976
2	Consuelo Ref. Proj., Sta. Fe	16° - 10' 120° - 57'	1948 - 1985
3	Solano, Solano, N.V.	16° - 31' 121° - 11'	1967 - 1971
4	Magat Ref. Proj., Bagabag		1956 - 1969

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Magat Damsite, Isabela		1957 - 1972

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Bato, Bayombong	Magat	1,784	1958 - 76; 1989
	Bante, Bambang	Matuno	558	1956 - 1979
	Pingkian, Kayapa	Sta. Cruz	162	1967-69; 1985-88
	Guinalayin, Aglipay	Adalam	721	1964 - 1974

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : III

ii) Annual Rainfall : 2,307.9 mm

- Rainy season : 1,640.0 mm (71%)

- Dry season : 667.9 mm (29%)

from May to October

from Nov. to April

Station Name	Monthly rainfall at Major Stations												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Barat	25.0	3.5	28.8	84.9	279.3	174.2	300.5	332.2	221.5	383.4	213.0	147.5	2,193.8
Consuelo Ref. Proj.	30.4	15.3	40.1	66.5	208.0	253.5	340.8	346.2	363.6	237.3	131.6	735.0	2,768.3
Solano	73.1	21.6	76.1	83.1	184.4	204.8	169.7	288.5	388.0	242.8	152.4	75.8	1,960.3

iv) Meteorological Features at

Station	Station											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean temp. (°C)												
Mean R. humidity (%)												
Pan evaporation (mm)												
Wind Speed (km/day)												
Nos. of Typhoon (Nos.)	1	0	1	2	0	2	3	3	3	4	1	23
Typhoon frequency (%)	4	0	4	9	0	9	13	13	13	17	4	100

3. SURFACE RUNOFF

i) Water Region II

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Magat	Bato	1,784	2,104.71	0.03741
Matuno	Bante	558	1,354.15	0.07695
Sta. Cruz	Pingkian	162	199.62	0.03907
Adalam	Guinalayin	721	1,691.91	0.07441

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Bato, Bayombong	Magat	1,784	51.37	38.01	31.85	27.29	41.21	72.40	80.38	103.39	117.02	82.73	81.04	74.20	66.74
Bante, Bambang	Matuno	558	29.72	20.31	20.45	19.13	26.25	39.65	47.86	70.08	67.33	72.61	54.55	47.28	42.94
Pingkian, Kayapa	Sta. Cruz	162	4.21	2.90	2.57	2.59	2.33	5.59	10.44	9.08	8.22	12.10	11.38	4.50	6.33
Guinalayin, Aglipay	Adalam	721	55.50	30.76	26.28	18.93	26.52	29.63	34.61	32.22	45.00	80.54	151.02	112.82	53.65

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.76 lit/sec/ha

(439 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 14

Region: II Province: QUIRINO

Catchment Area: 3,057.2 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Magat Damsite, Isabela		1957 - 1972

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Dagkan, Madella, Quirino	Casecan	873	1977 - 1982
	Dipadiw, Madella, Quirino	Conwap	255	1977 - 1983

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type III (No dry season)

ii) Annual Rainfall

- Rainy season from to

- Dry season from to

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual

iv) Meteorological Features at

	Station												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)													
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	1	0	1	2	0	2	3	3	3	3	4	1	23
Typhoon frequency (%)	4	0	4	9	0	9	13	13	13	17	17	4	100

3. SURFACE RUNOFF

i) Water Region II

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Casecan	Madella	873	1,213.19	0.04407
Conwap	Madella	255	191.42	0.02380

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Madella, Quirino	Casecan	873	19.34	13.26	10.88	12.11	14.87	22.10	55.89	74.85	48.99	82.14	77.49	29.73	38.47
Madella, Quirino	Conwap	255	4.04	3.17	3.00	2.73	2.98	3.23	6.71	5.95	6.57	10.75	18.22	5.49	6.07

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.76 lit/sec/ha

(439 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 15

Region: **III** Province: **NUEVA ECIJA**

Catchment Area: 5,284.3 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cabanatuan City, N.E.	15° - 29' 120° - 58'	1946 - 1980
2	Gapan, Gapan, N.E.	15° - 19' 120° - 57'	1945-60, 1966-79
3	Gabalidon, Gabalidon, N.E.	15° - 28' 121° - 20'	1966 - 1979
4	CLSU, Muñoz/N.E.	15° - 44' 120° - 56'	1946 - 1971, 1986
5	Pris Dam/Rizal, N.E.	15° - 42' 121° - 07'	1970 - 1985
6	San Jose/Talavera, N.E.	-	1946 - 1960

No.	Name of Station/Location	Coordinate	Period of Record
7	San Jose City/San Jose, N.E.	-	1946 - 1968
8	Muñoz/Muñoz, N.E.	-	1945 - 1960

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cabanatuan City, N.E.	15° - 29' 120° - 58'	1951 - 1980

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	CLSU, Muñoz, N.E.	15° - 44' 120° - 56'	1974 - 1986

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Balwarte, Caranglan	Caranglan	258	1958 - 1977
	San Vicente, Laur	Santor	544	1957 - 1976
	Labi, Bongabon	Digmala	52	1959 - 1972
	Bankerohan, Bongabon	Coronel	709	1960 - 1979
	Malate, Bongabon	Pampanga	2,015	1957 - 1973
	Cabu, Cabanatuan	Cabu	143	1957 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Vaifuerite, Cabanatuan	Pampanga	2,441	1964 - 1972
	Soledad, Sta. Rosa	Tabuating	81	1960 - 1979
	San Anton, San Leonardo	Pampanga	2,851	1958 - 1979
	San Vicente, Gapan	Peñaranda	575	1965 - 1973
	San Jose, Peñaranda	Peñaranda	512	1945 - 1974
	Pias, Gen. Tinio	Sumacbao	287	1960 - 1975

2. METEOROLOGY

i) Climate Type

I

: 1,972.6 mm

(85%)

from

May to October

from

Nov. to April

Unit : mm

ii) Annual Rainfall

: 1,668.6 mm

(15%)

from

May to October

from

Nov. to April

Unit : mm

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Cabanatuan City	6.1	4.0	17.9	33.9	168.6	252.9	321.7	385.7	315.7	200.2	131.3	62.2	1,900.2
Gapan	5.2	1.1	6.0	31.7	140.7	178.6	280.7	332.9	271.8	174.7	100.2	51.0	1,574.6
Gabalidon	40.4	12.6	25.0	24.4	240.4	199.9	315.8	309.6	287.5	332.0	358.2	153.7	2,299.5
CLSU Muñoz	4.0	1.8	19.3	50.9	169.6	249.0	289.5	466.5	325.5	177.6	69.2	51.2	1,874.1
San Jose CIM	5.4	4.7	4.7	49.5	161.8	381.3	363.9	462.8	399.1	187.7	126.5	67.1	2,214.5

iv) Meteorological Features at Cabanatuan Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.0	26.6	27.6	29.5	29.6	28.7	28.1	27.6	27.8	28.2	26.8	25.5	27.7
Mean R. humidity (%)	0.0	76.0	76.0	73.0	78.0	83.0	86.0	87.0	86.0	84.0	78.0	78.0	73.8
Pan evaporation (mm)	126.7	139.4	170.2	176.0	172.4	132.0	127.1	109.6	103.3	125.8	117.4	123.7	135.3
Wind Speed (km/day)	172.8	172.8	172.8	172.8	172.8	86.4	172.8	172.8	86.4	172.8	172.8	172.8	158.4
Nos. of Typhoon (Nos.)	0	0	0	1	1	4	1	1	0	3	9	2	22
Typhoon frequency (%)	0	0	0	5	5	18	5	5	0	14	41	9	100

3. SURFACE RUNOFF

i) Water Region III

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Caranglan	Balwarte	258	256.07	0.03147
Santor	Laur	544	993.38	0.05790
Coronel	Bankeruhan	709	1,526.03	0.06825
Pampanga	Malate	2,015	2,150.12	0.03384
Peñaranda	San Jose	512	560.39	0.03471

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Balwarte, Caranglan	Caranglan	258	2.89	1.58	1.14	0.94	2.58	6.60	16.47	17.59	17.98	15.02	9.88	4.84	8.13
San Vicente, Laur	Santor	544	14.66	12.29	9.30	7.84	13.92	23.48	42.99	51.62	59.48	52.28	54.96	36.19	31.58
Bankeruhan	Coronel	709	24.80	17.96	14.17	11.84	36.04	34.48	67.90	80.61	81.34	8.23	80.80	48.08	42.19
Malate, Bongabon	Pampanga	2,105	30.05	21.46	16.31	12.19	24.44	38.42	93.49	158.30	152.40	118.71	89.20	63.18	68.18
San Jose, Peñaranda	Peñaranda	512	12.42	7.07	4.93	3.74	4.44	9.10	18.12	28.89	31.52	31.19	30.17	31.69	17.77
Pias, Gen. Tinio	Sumacbao	287	17.22	13.64	12.29	7.73	12.78	21.55	35.08	26.62	36.15	47.30	46.31	26.30	25.25

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.77 lit/sec/ha

(442 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 16

Region : **III** Province : **TARLAC**

Catchment Area : 3,053.4 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	San Miguel/San Miguel, Tarlac	15° - 26' 120° - 36'	1948 - 1972
2	Balsa RGS/V. Aglipay, Tarlac	-	1961 - 1970

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Hacienda Luisita, San Miguel		1968 - 1980

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Hacienda Luisita, San Miguel		1958 - 1985

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	San Nicolas, Bamban	Parua	148	1958 - 1969
	Tibag, Tarlac	Tarlac	872	1965 - 1968

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : I
- ii) Annual Rainfall : 1,945.9 mm
- Rainy season : 1,734.9 mm (89%) from May to October
- Dry season : 211.0 mm (11%) from Nov. to April

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
San Miguel	2.9	8.2	15.9	60.0	184.1	273.8	345.4	426.1	333.9	177.5	95.6	41.9	1,965.3
Balsa RGS	1.3	3.8	4.6	96.3	196.9	254.4	322.6	370.4	471.1	113.8	82.5	9.4	1,927.1

Unit : mm

iv) Meteorological Features at Hacienda Luisita Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.6	26.9	27.9	28.9	29.3	28.5	28.1	28.2	28.0	28.1	27.5	27.1	27.9
Mean R. humidity (%)	67.0	62.0	59.0	58.0	69.0	76.0	79.0	82.0	80.0	74.0	69.0	67.0	70.2
Pan evaporation (mm)	151.7	169.0	213.0	216.6	180.1	128.0	115.3	100.0	104.0	123.1	126.2	140.3	147.3
Wind Speed (km/day)	285.6	268.8	292.8	268.8	216.0	206.4	199.2	189.6	172.8	206.4	285.6	302.4	241.2
Nos. of Typhoon (Nos.)	0	0	0	1	1	4	1	1	0	3	9	2	22
Typhoon frequency (%)	0	0	0	5	5	18	5	5	0	14	41	9	100

3. SURFACE RUNOFF

i) Water Region III

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Parua	San Nicolas	148	228.32	0.04892
Tarlac	Tibag	872	1,274.05	0.04633

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
San Nicolas	Parua	148	5.46	3.05	3.39	3.30	4.36	4.39	9.46	11.80	11.04	14.25	12.31	4.08	7.24
Tibag, Tarlac	Tarlac	872	4.81	2.64	2.19	2.31	5.98	34.43	74.82	144.81	121.25	54.51	25.36	11.65	40.40

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.98 lit/sec/ha

(496 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 17

Region : III Province : ZAMBALES

Catchment Area : 3,714.4 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Iba/Iba, Zambales	15° - 20' 119° - 59'	1949 - 1986
2	Olongapo City/Zambales	14° - 53' 120° - 13'	1955 - 1983
3	San Marcelino, Zambales	14° - 58' 120° - 09'	1948 - 64, 1977

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Iba, Zambales	15° - 20' 119° - 59'	1981 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Hacienda Luisita, Tarlac		1958 - 1985

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Dampay, Palauig	Bagait	68	1960 - 1972
	San Juan, Botolan	Bucaao	615	1955 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : I
- ii) Annual Rainfall : 3,537.9 mm
- Rainy season : 3,378.0 mm (96%)
- Dry season : 159.9 mm (5%)

from May to October
from Nov. to April

iii) Monthly rainfall at Major Stations

Station Name	Monthly Rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Iba	3.2	3.4	14.9	31.9	269.1	569.3	789.7	1,088.3	603.0	232.1	80.6	24.4	3,709.9
Olongapo City	4.0	2.8	4.7	13.5	241.5	515.3	679.1	1,056.8	624.4	227.6	91.1	18.8	3,479.6
San Marcelino	4.1	5.8	25.5	38.7	244.5	580.7	631.9	968.5	527.9	284.3	82.7	29.6	3,424.2

Unit : mm

iv) Meteorological Features at Iba, Zambales Station

Feature	Monthly Values												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	26.0	26.3	27.4	28.8	28.9	27.3	27.0	26.2	27.4	27.3	27.4	26.4	326.4
Mean R. humidity (%)	70.9	74.8	73.2	71.9	76.1	82.9	85.1	86.0	84.6	81.6	77.6	72.9	937.6
Pan evaporation (mm)													
Wind Speed (km/day)	233.3	216.0	250.5	267.8	293.8	380.2	354.2	397.4	293.8	293.8	293.8	293.8	297.4
Nos. of Typhoon (Nos.)	0	0	0	1	1	4	1	1	0	3	9	2	22
Typhoon frequency (%)	0	0	0	5	5	18	5	5	0	14	41	9	100

3. SURFACE RUNOFF

i) Water Region III

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Bagait	Dampay	68	224.10	0.11382
	San Juan	615	490.10	0.02527

iii) Monthly Runoff at Major Stations

Station	Monthly Runoff (mm)												Annual Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Dampay, Palauig	68	1.82	1.08	1.00	0.74	2.55	13.74	17.25	22.87	17.89	7.15	4.07	2.78	7.75
San Juan, Botolan	615	3.88	4.04	4.41	4.59	7.17	16.28	28.76	43.95	39.44	18.11	9.50	6.36	15.54

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.98 lit/sec/ha

(496 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 18

Region : III Province : PAMPANGA

Catchment Area : 2,180.7 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cabambaga/Bacoor, Pampanga	15° - 00' 120° - 39'	1969 - 1985
2	Bebe Manua/Masantol, Pampanga	14° - 54' 120° - 43'	1969 - 1986
3	Sta. Cruz, Porac, Pampanga	15° - 05' 120° - 33'	1969 - 1985
4	Del Carmen/S. Fernando, P.	15° - 02' 120° - 38'	1948 - 1986
5	Florida Blanca, Pampanga	-	1946 - 1973

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Hacienda Luisita, Tarlac		

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	NIA-PGRIS, Pampanga		1984 - 1987

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Cabuncan, Bacolor	Pasig Potero	242	1965 - 1972
	Hacienda Dolores, Porac	Pasig Potero	28	1966 - 1972
	Valdez, Floridablanca	Porac	118	1958 - 1975
	Del Carmen, Floridablanca	Porac	111	1945 - 1972
	Sta. Cruz, Luban	Gumain FW	370	1958 - 1979
	Pabanlag, Floridablanca	GUmain	128	1944 - 1978

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Pabanlag, Floridablanca	Caulaman	72	1954 - 1979

2. METEOROLOGY

i) Climate Type

: I

: 2,068.7 mm

ii) Annual Rainfall

: 1,844.2 mm

(89%)

from May to October

from Nov. to April

(11%)

iii) Monthly rainfall at Major Stations

Station Name	Monthly rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cabambagan	4.9	7.0	16.4	36.9	121.3	288.6	436.1	489.8	244.8	207.8	86.1	46.1	1,985.8
Bebematua	6.3	2.7	16.8	29.1	116.7	274.6	374.3	516.5	268.4	235.0	84.8	35.3	1,960.5
Sta. Cruz	8.2	12.0	16.9	45.1	171.1	277.7	444.1	452.6	281.7	212.4	87.4	31.8	2,041.0
Del Carmen	9.8	10.7	13.5	41.1	127.0	227.4	366.4	466.9	242.1	246.4	73.7	39.1	1,864.1
Floridablanca	31.1	25.9	35.7	51.1	147.6	320.7	422.6	573.4	416.3	250.8	130.0	86.4	2,491.6

Unit : mm

iv) Meteorological Features at Hacienda Luisita Station

Feature	Monthly Values												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	26.6	26.9	27.9	28.9	29.3	28.5	28.1	28.2	28.0	28.1	27.5	27.1	27.9
Mean R. humidity (%)	67.0	62.0	59.0	58.0	69.0	76.0	79.0	82.0	80.0	74.0	69.0	67.0	70.2
Pan evaporation (mm)	145.0	143.6	204.5	177.9	186.1	121.3	125.9	130.3	127.7	123.6	120.0	134.1	145.0
Wind Speed (km/day)	285.6	268.8	292.8	268.8	216.0	206.4	199.2	189.6	172.8	206.4	285.6	302.4	241.2
Nos. of Typhoon (Nos.)	0	0	0	1	1	4	1	1	0	3	9	2	22
Typhoon frequency (%)	0	0	0	5	5	18	5	5	0	14	41	9	100

3. SURFACE RUNOFF

i) Water Region III

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Porac	Valdez	118	97.13	0.02610
Porac	Del Carmen	111	159.57	0.04559
Gumain FW	Sta. Cruz	370	857.15	0.07346
Gumain	Pabanlag	128	331.76	0.08219
Caulaman	Pabanlag	72	122.04	0.05375

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Monthly Runoff (mm)												Mean
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Valdez, Flor.	Porac	118	0.59	0.76	0.80	0.89	2.18	3.70	7.22	7.93	8.57	2.67	1.11	0.88	3.11
Del Carmen, Flor.	Porac	111	2.12	1.89	1.75	1.66	2.73	4.00	8.00	13.34	11.26	6.94	3.96	3.09	5.06
Sta. Cruz, Luban	Gumain	370	5.54	5.84	4.09	3.35	13.04	33.82	64.30	75.91	66.05	31.35	12.34	10.55	27.18
Pabanlag, Flor.	Gumain	128	3.78	3.37	2.68	3.46	5.47	9.78	17.38	27.53	23.38	15.31	9.32	4.83	10.52
Pabanlag, Flor.	Caulaman	72	0.65	0.50	0.33	0.59	2.52	3.46	11.32	10.06	11.17	2.79	1.62	1.19	3.87
Hacienda Dolores	Pasig P.	28	0.29	0.14	0.33	0.38	0.47	0.38	1.09	1.33	1.30	0.97	0.86	0.56	0.68

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.98 lit/sect/ha

(496 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 19

Region: **III** Province: **BULACAN**

Catchment Area: 2,625.0 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Marungo/Angat, Bulacan	14° - 56'	1969 - 1980
2	Makinabang/Baliwag, Bulacan	14° - 55'	1969 - 1986
3	Gatmon/Malolos, Bulacan	120° - 53'	1970 - 1986
4	Norzagaray/Norzagaray, Bulacan	120° - 49'	1948 - 1970
5	Pagasa/Obando, Bulacan	14° - 52'	1965 - 1986
6	Buenavista Estate/Bulacan	14° - 43'	1956 - 1973
		120° - 55'	1956 - 1973
		15° - 06'	1956 - 1973

No.	Name of Station/Location	Coordinate	Period of Record
7	Salakot/San Miguel, Bulacan	15° - 10'	1971 - 1982
8	Maasim/San Rafael, Bulacan	120° - 59'	1948 - 1964
9	Sta. Cruz/Sta. Maria, Bulacan	14° - 58'	1969 - 1985
10	Angat RIS/San Rafael, Bulacan	14° - 49'	1956 - 1960
11	South Main Canal/Bulacan	NR	1945 - 1973
12	Angat River/Bulacan	NR	1961 - 1981
		14° - 56'	1961 - 1981
		121° - 10'	1961 - 1981

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Tibagan, Bustos, Bulacan		1956 - 1971

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Diliman, San Rafael	Maasim	150	1945 - 1979
	Garlang, San Idefonso	Garlang	5	1955 - 1972
	Garlang, San Idefonso	Garlang No.1	85	1955 - 1972
	San Vicente, San Miguel	San Miguel	256	1955 - 1979
	Sta. Inez, San Miguel	Balaong-M.	204	1956 - 1979
	Malibay, San Miguel	Bulo	57	1964 - 1976

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Longos, Pulilan	Angat	959	1959 - 1979
	Pulong, Sampaloc	Bayabas	74	1964 - 1969
	Norzagaray, Bulacan	Angat	629	1956 - 1968

2. METEOROLOGY

i) Climate Type

I

2,070.0 mm

1,796.8 mm

273.2 mm

(87%)

(13%)

from May to

from October to

from April

from

from

from

from

from

ii) Monthly rainfall at Major Stations

Station Name	Unit : mm												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Marungo	20.3	11.3	14.7	16.6	150.6	181.8	249.4	268.2	259.0	265.9	176.2	90.0	1,704.0
Makinabang	12.0	3.3	12.4	19.5	152.8	292.0	382.8	503.3	255.6	253.5	118.4	54.3	2,059.9
Caunon	4.9	2.4	12.6	11.8	76.7	198.5	205.6	298.4	163.8	160.9	84.0	42.6	1,262.2
Norzagaray	9.3	6.4	27.3	42.1	268.3	446.3	623.2	545.2	417.9	226.6	250.9	102.3	2,965.8
Pagasa	18.5	2.6	15.6	20.7	178.6	376.4	477.1	514.0	348.2	283.4	110.9	52.4	2,398.4

iii) Meteorological Features at

Station	Station												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)	158.4	184.4	234.6	241.9	226.7	145.7	134.3	124.8	114.9	140.6	126.9	143.4	164.7
Wind Speed (km/day)	0	0	0	1	1	4	1	1	0	3	9	2	22
Nos. of Typhoon (Nos.)	0	0	0	5	5	18	5	5	0	14	41	9	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region III & IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Maasim	Diliman	150	276.57	0.03847
Garlang No.1	Garlang	85	89.56	0.03341
San Miguel	S. Vicente	256	391.68	0.04852
Bulaong-Madlum	Sta. Ines	204	188.27	0.02926
Angat	Longos	959	1,583.74	0.05237

iii) Monthly Runoff at Major Stations

Station	Monthly Runoff (mm)												Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Diliman, San Rafael	150	1.36	3.76	0.51	0.52	2.00	6.96	17.31	25.98	20.15	13.74	9.03	4.00	8.78
Garlang, San Idefonso	85	2.38	1.88	1.10	0.79	1.26	4.48	4.68	4.12	5.14	2.82	3.18	2.25	2.84
San Vicente	256	6.32	5.23	2.42	0.94	5.75	11.93	23.04	28.28	22.66	16.62	16.21	9.69	12.42
Sta. Ines, S. Miguel	204	0.94	0.60	0.47	0.43	1.43	5.03	13.83	14.03	16.52	8.84	6.39	3.12	5.97
Longos, Pulilan	959	16.23	21.53	20.03	15.60	30.29	37.59	63.98	108.27	123.21	60.92	59.13	45.88	50.22
Norzagaray	629	43.16	32.95	26.31	17.75	24.59	45.04	83.14	111.35	108.30	85.40	89.73	89.78	63.13

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.98 lit/sec/ha

(496 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 20

Region: III

Province: BATAAN

Catchment Area: 1,373.0 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Talisay/Balanga, Bataan	14° - 41' 120° - 33'	1970 - 1986
2	Mariveles/Mariveles, Bataan	14° - 26' 120° - 29'	1969 - 1980

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	San Benito, Dinalupihan	Colo	76	1955 - 1979
	Bulate, Dinalupihan	Bulate	16	1946 - 1972
	Nagwaling, Pilar	Pilar	14	1958 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : I
- ii) Annual Rainfall : 2,214.4 mm
- Rainy season : 2,236.2 mm (92%)
- Dry season : 178.2 mm (8%)

iii) Monthly rainfall at Major Stations

Station Name	Monthly Rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Talisay	10.8	6.0	14.1	25.6	165.5	395.1	546.3	761.7	319.0	228.8	114.5	37.3	2,624.7
Mariveles	22.8	1.7	6.2	6.0	59.8	184.6	502.8	526.3	227.2	155.6	88.7	22.4	1,804.1

Unit: mm

iv) Meteorological Features at

Station	Monthly Features											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean temp. (°C)												
Mean R. humidity (%)												
Pan evaporation (mm)												
Wind Speed (km/day)												
Nos. of Typhoon (Nos.)	0	0	0	0	1	4	1	0	0	3	9	2
Typhoon frequency (%)	0	0	0	0	5	18	5	0	0	14	41	9

3. SURFACE RUNOFF

i) Water Region III

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Colo	S. Benito	76	174.71	0.07289
Bulate	Bulate	16	17.66	0.03500
Pilar	Nagwaling	14	47.93	0.10857

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
San Benito	Colo	76	2.45	3.96	4.39	4.08	4.31	4.56	7.74	13.29	11.30	5.21	3.12	2.04	5.54
Bulate, Dinalupihan	Bulate	16	0.12	0.10	0.09	0.11	0.34	0.91	0.87	2.63	0.84	0.37	0.21	0.18	0.56
Nagwaling, Pilar	Pilar	14	0.84	0.74	0.84	0.67	1.09	1.79	2.31	3.04	2.84	2.26	1.26	0.79	1.54

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.88 lit/sec/ha

(470 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 21

Region: IV Province: AURORA

Catchment Area: 3,239.5 km²

1. STATIONS

i) Rainfall Stations			
No.	Name of Station/Location	Coordinate	Period of Record
1	Baler	15° - 46' 121° - 33'	1949 - 1982
2	Aurora	15° - 23' 121° - 24'	1962 - 1965
3	Dingalan Bay Camp		

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations			
No.	Name of Station/Location	Coordinate	Period of Record
1	Baler	15° - 46' 121° - 33'	1981 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations			
No.	Name of Station/Location	Coordinate	Period of Record
1	Maria Aurora		1949 - 1972

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations				
Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : : IV (Rainfall evenly distributed)

ii) Annual Rainfall : : 2,693.1 mm

- Rainy season : : mm from to

- Dry season : : mm from to

iii) Monthly rainfall at Major Stations

Station Name	Baler Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Baler	185.8	147.3	204.6	226.0	295.3	271.5	240.6	226.8	299.4	380.5	462.9	329.9	3,270.6
Aurora	62.0	18.2	52.9	24.2	103.9	164.8	226.8	207.8	188.2	230.5	178.8	141.0	1,599.1
Dingalan Bay Camp	124.4	142.9	103.4	189.3	143.2	269.3	450.2	378.7	445.0	260.9	469.6	232.7	3,209.6

iv) Meteorological Features at Baler Station

Parameter	Baler Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	24.3	24.8	25.9	27.2	28.2	28.5	28.1	28.2	27.9	26.7	26.2	24.8	26.7
Mean R. humidity (%)	78.5	80.5	81.8	80.8	79.8	76.3	76.7	78.4	78.3	80.1	79.0	78.5	79.1
Pan evaporation (mm)	112.2	107.8	117.4	126.1	142.7	147.6	147.5	149.6	134.8	121.9	108.3	107.7	127.0
Wind Speed (km/day)	216.0	172.8	146.9	129.6	190.1	224.6	224.6	328.3	181.4	172.8	224.6	198.7	200.9
Nos. of Typhoon (Nos.)	0	0	0	1	3	7	8	8	9	6	10	3	55
Typhoon frequency (%)	0	0	0	2	5	13	15	15	16	11	18	5	100

3. SURFACE RUNOFF

i) Water Region III

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)

iii) Monthly Runoff at Major Stations

Station	Monthly Runoff (mm)												Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.55 lit/sec/ha

(387 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 22

Region : IV Province : QUEZON

Catchment Area : 8,706.7 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Alabat	14° - 06' 122° - 01'	1958 - 1974
2	Infanta	14° - 45' 121° - 39'	1947 - 1980
3	Cabatangan	-	1949 - 1972
4	Bo. Isabang, Lucena City	13° - 56' 121° - 37'	1949 - 1981

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Infanta	14° - 45' 121° - 39'	1981 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cabatangan	-	1949 - 1972

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Banugao, Infanta	Agus	879	1949 - 1977
	Poblacion, Sampaloc	Maapon	88	1958 - 1978
	Ayaas, Tayabas	Ibia	15	1956 - 1977
	Alsam, Tayabas	Dumaca-an	54	1945 - 1977
	Lakawan, Tayabas	Dumaca-an	74	1945 - 1975
	Morong, Sariaya	Morong	12	1956 - 1977

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Tombaga, Sariaya	Sariaya	6	1956 - 1977
	Mawala, Sariaya	Hibanga	5	1956 - 1976
	Lagalag, Tiaong	Lagunas	54	1952 - 1976
	Bulabin, Tiaong	Bulakin	10	1959 - 1976
	Diamman, Ma. Aurora	Cabatangan	242	1955 - 1973
	San Luis, Baler	Dipaít	25	1956 - 1976

2. METEOROLOGY

i) Climate Type : II (No dry season)

ii) Annual Rainfall : 3,498.2 mm

- Rainy season : mm from

- Dry season : mm to

iii) Monthly rainfall at Major Stations

Station Name	Monthly Rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Alabat	246.5	171.0	96.3	68.4	88.0	203.5	214.0	222.8	300.7	591.7	538.1	610.7	3,351.7
Infanta	355.2	225.5	190.1	168.7	230.2	249.5	238.6	208.3	305.7	505.6	565.2	580.9	3,823.5
Cabatangan	201.7	144.7	197.9	233.0	316.3	250.0	249.1	248.9	264.7	393.7	476.4	348.0	3,324.4

iv) Meteorological Features at Infanta Station

Feature	Monthly Values												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	24.9	25.1	26.1	27.6	28.6	28.9	28.4	28.7	27.9	27.1	26.1	24.9	324.3
Mean R. humidity (%)	85.3	84.5	83.2	82.2	80.7	78.4	81.0	77.6	82.8	86.0	82.2	84.9	82.4
Pan evaporation (mm)	108.0	103.8	117.4	126.1	142.6	150.1	147.5	149.6	134.7	121.9	108.3	107.8	126.5
Wind Speed (km/day)	259.2	164.2	172.8	121.0	121.0	146.9	155.5	172.8	121.0	172.8	242.0	285.1	177.9
Nos. of Typhoon (Nos.)	0	0	0	0	2	3	2	3	4	11	9	0	34
Typhoon frequency (%)	0	0	0	0	6	9	6	9	12	32	26	0	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Agus	Banugao	879	3,706.11	0.13370
Maapon	Poblacion	88	194.89	0.07023
Ibia	Ayaas	15	51.72	0.10933
Dumaca-an	Alsam	54	197.10	0.11574
Dumaca-an		74	206.56	0.08851

iii) Monthly Runoff at Major Stations

Station	Monthly Runoff (mm)												Annual	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Banugao, Infanta	879	177.94	199.77	87.91	55.96	46.27	48.38	61.51	86.79	92.74	152.52	224.37	256.06	124.19
Poblacion, Sampaloc	88	7.64	4.43	2.59	2.45	2.05	5.85	5.34	5.00	6.96	7.99	12.70	11.02	6.17
Ayaas, Tayabas	15	1.88	1.46	1.22	1.15	1.33	1.34	1.40	1.39	1.64	2.02	2.29	2.60	1.64
Alsam, Tayabas	45	8.10	5.26	4.37	3.41	3.31	3.92	4.25	4.67	4.90	8.72	11.74	12.39	6.25
Lakawan, Tayabas	74	8.90	5.17	4.50	3.28	3.93	4.73	4.68	4.78	5.37	9.16	11.62	12.52	6.55
Morong, Sariaya	12	0.81	0.69	0.58	0.59	0.65	0.66	0.80	0.80	0.91	0.98	1.36	1.27	0.84

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.71 lit/sec/ha

(428 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 23

Region: **IV**

Province: **RIZAL**

Catchment Area: 1,308.9 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Rizal Prov'l. Nursery	14° - 35' 121° - 12'	1948 - 1973
2	Montalban Headworks	14° - 44' 121° - 08'	1948 - 1958
3	CLDFF, Tanay		1966 - 1970
4	Sitio Tabak, Montalban		1976 - 1985
5	Boso - Boso		1972 - 1985
6	Antipolo		1971 - 1985

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Tanay, Rizal		1959 - 1974

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Sto. Niño, Marikina	Marikina	499	1958 - 1986

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : 1
- ii) Annual Rainfall : 2,109.8 mm (86%)
 - Rainy season : 1,818.6 mm (14%)
 - Dry season : 291.2 mm

from May to October
from Nov. to April

Station Name	Monthly rainfall at Major Stations												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Rizal Prov'l. Nursery	20.9	4.9	8.2	38.8	120.4	285.0	468.4	514.2	422.0	173.8	120.4	133.0	2,310.0
Montalban Headworks	15.8	9.9	19.9	52.1	139.9	312.4	408.4	695.4	510.3	301.9	166.0	124.2	2,756.2
CLDFF, Tanay	21.4	8.9	10.2	5.3	72.6	192.2	290.2	322.2	319.6	153.1	190.8	70.0	1,656.5
Sitio Tabak, Montalban	12.8	2.9	49.2	100.8	215.3	444.8	469.4	654.6	466.2	384.5	159.3	65.7	3,025.5
Boso - Boso	3.9	2.0	1.0	8.2	46.7	145.1	82.6	243.5	141.4	96.9	22.2	7.3	800.8

iv) Meteorological Features at

Station	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)													
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	0	0	0	0	2	2	0	1	4	6	2	2	19
Typhoon frequency (%)	0	0	0	0	11	11	0	5	21	32	11	11	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Marikina	Sto. Niño	499	927.79	0.05896

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Sto. Niño, Marikina	Marikina	499	4.24	2.12	1.37	1.56	4.60	23.98	43.13	88.15	102.79	37.81	28.50	14.84	29.42

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.84 lit/sec/ha

(460 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 24

Region: IV Province: CAVITE

Catchment Area: 1,287.6 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Rosario	14° - 28'	1965 - 1968
2	Naic	120° - 51'	1958 - 1960

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Alapan 2nd, Imus	Ilang-Ilang	60	1952 - 1985
	Palububan, Gen. Trias	Panaysayan	29	1957 - 1979
	Palangue, Naic	Balsahan	22	1954 - 1985
	Mabacao, Maragondon	Maragondon	260	1945 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type

I

1,273.2 mm

1,194.3 mm

78.9 mm

(94%)

(6%)

from May to October

from Nov. to April

ii) Monthly rainfall at Major Stations

Station Name	Unit: mm												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Rosario	9.7	0.9	0.0	10.2	63.3	79.2	274.9	220.1	110.8	12.3	10.3	10.1	801.8
Naic	0.0	0.0	14.1	46.7	152.5	81.4	294.3	252.3	472.8	384.7	76.3	12.0	1,787.1

iv) Meteorological Features at

	Station												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)													
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	0	0	0	0	2	2	0	1	4	6	2	2	19
Typhoon frequency (%)	0	0	0	0	11	11	0	5	21	32	11	11	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Ilang-Ilang	Alapan 2nd	60	39.11	0.02067
Panaysayan	Palububan	29	35.01	0.03828
Balsahan	Palangue	22	50.46	0.07273
Maragondon	Mabacao	260	656.58	0.08008

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Alapan 2nd, Imus	Ilang-Ilang	60	0.11	0.07	0.06	0.05	0.49	0.80	1.35	3.28	4.05	1.61	2.18	0.85	1.24
Palububan, G. Trias	Panaysayan	29	0.30	0.21	0.22	0.21	0.72	1.59	2.01	2.97	2.29	1.39	0.92	0.51	1.11
Palangue, Naic	Balsahan	22	0.49	0.32	0.30	0.27	0.85	2.21	3.31	3.33	3.70	2.06	1.61	0.81	1.60
Mabacao, Maragondon	Maragondon	260	2.63	2.88	2.48	2.24	9.52	16.26	44.14	67.37	56.19	19.40	16.61	10.15	20.82

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.90 lit./sec/ha

(475 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 25

Region : IV Province : LAGUNA

Catchment Area : 1,759.7 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cavinti	14° - 15' 121° - 10'	1954 - 1980
2	Los Baños	14° - 10' 121° - 15'	1954 - 1975
3	Sta. Cruz	14° - 17' 121° - 25'	1956 - 1986
4	Lumban	14° - 17' 121° - 30'	1954 - 1970

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	U.P. Los Baños		1959 - 1975

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Calamias, Cabuyao	Arangilan	87	1956 - 1976
	Mabacan, Calauan	Mabacan	46	1955 - 1980
	Mabacan, Calauan	Paputok	8	1955 - 1979
	Calumpang, Lilio	Sta. Cruz	103	1944 - 1974
	Bukal, Magdalena	Balanac (U)	116	1958 - 1980
	Bukal, Magdalena	Balanac (L)	-	1956 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Bagumbayan, Similaoan	Mayor	45	1949 - 1980

2. METEOROLOGY

i) Climate Type : IV (Evenly distributed)

ii) Annual Rainfall : 2,653.0 mm

- Rainy season : mm from to

- Dry season : mm from to

iii) Monthly rainfall at Major Stations

Station Name	Monthly Rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cavinti	220.8	119.7	93.5	112.4	185.8	275.6	272.1	297.0	336.8	407.5	574.2	450.8	3,346.2
Los Baños	42.2	27.8	28.3	35.5	148.6	249.3	265.0	247.0	257.1	218.5	258.1	177.6	1,955.0
Sta. Cruz	44.2	16.3	27.6	40.9	137.5	246.6	251.1	260.2	248.3	281.3	232.6	133.2	1,919.8
Lumban	146.6	70.6	70.8	85.1	194.4	293.7	292.0	323.1	379.1	323.1	393.4	351.5	2,923.4

iv) Meteorological Features at

Station	Monthly Features												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)	135.2	158.5	209.8	240.7	215.7	159.4	141.7	138.4	125.2	135.1	111.0	114.2	157.1
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	0	0	0	0	2	2	0	1	4	6	2	2	19
Typhoon frequency (%)	0	0	0	0	11	11	0	5	21	32	11	11	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Arangilan	Calamias	87	18.61	0.00678
Mabacan	Mabacan	46	39.42	0.02717
Paputok	Mabacan	8	28.07	0.11125
Sta. Cruz	Calumpang	103	146.64	0.04515
Balanac (U)	Unidentified	-	295.80	-

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Monthly Runoff (MCM)												
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Calamias, Cabuyao	Arangilan	87	0.21	0.19	0.21	0.19	0.23	0.63	0.59	0.85	2.05	1.05	0.48	0.41	0.59
Mabacan, Calauan	Mabacan	46	1.26	1.01	0.87	0.92	1.18	1.31	1.05	1.08	1.59	1.60	1.83	1.31	1.25
Mabacan, Calauan	Paputok	8	0.88	0.83	0.72	0.67	0.76	1.06	0.89	0.91	0.96	0.89	1.09	1.01	0.89
Calumpang, Lilio	Sta. Cruz	103	5.84	4.49	3.50	2.74	2.69	3.51	3.70	4.48	5.05	5.97	6.74	7.07	4.65
Bukal, Magdalena	Balanac (U)	116	8.80	7.44	6.33	6.68	6.94	7.37	9.58	9.35	9.79	11.88	15.41	12.96	9.38
Balanac (L)	Balanac (L)	-	5.03	3.83	4.15	3.54	3.45	3.20	3.20	3.61	3.42	4.27	6.07	6.20	4.15

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.75 lit/sec/ha

(437 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 26

Region: IV

Province: BATANGAS

Catchment Area: 3,165.8 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Ambulong	14° - 05' 121° - 03'	1954 - 1984

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Ambulong	14° - 05' 121° - 03'	1976 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Bilaran, Nasugbu	Palico	158	1956 - 1980
	Guinhawa, Tuy	Molino	51	1956 - 1980
	Sampaga, Balayan	Dacaniiao	40	1958 - 1979
	Poblacion, San Nicolas	Pansipa	644	1958 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 1,820.3 mm
- Rainy season : 1,497.9 mm (82%)
- Dry season : 322.4 mm (18%)

iii) Monthly rainfall at Major Stations

Station Name	Monthly Rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Ambulong	23.6	9.9	17.2	30.9	155.9	237.2	305.1	299.1	295.6	205.0	156.0	84.8	1,820.3

Unit : mm

iv) Meteorological Features at Ambulong Station

Feature	Monthly Values												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	26.4	27.1	28.2	29.4	29.1	28.5	27.8	27.6	27.6	27.6	27.1	26.3	27.7
Mean R. humidity (%)	74.7	71.2	70.5	70.1	72.7	80.5	81.4	82.0	82.6	81.2	79.1	76.6	76.9
Pan evaporation (mm)	191.1	155.5	146.9	112.3	112.3	129.6	129.6	164.2	112.3	121.0	172.8	198.7	145.5
Wind Speed (km/day)	0	0	0	0	1	1	1	1	1	4	4	5	2
Nos. of Typhoon (%)	0	0	0	0	6	6	6	6	6	22	22	28	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Palico	Bilaran	158	237.47	0.04766
Molino	Guinhawa	51	68.75	0.04275
Dacaniiao	Sampaga	40	75.06	0.59500
Pansipit	Poblacion	644	548.41	0.02700

iii) Monthly Runoff at Major Stations

Station	Monthly Runoff (mm)												Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Bilaran, Nasugbu	3.86	3.09	3.44	2.64	4.38	6.18	13.31	16.36	16.47	9.40	6.66	4.62	7.53
Guinhawa, Tuy	2.16	1.31	1.27	1.15	1.56	1.59	2.63	3.83	4.21	2.87	1.97	1.57	2.18
Sampaga, Balayan	1.47	1.45	1.43	1.18	1.19	1.33	2.99	5.46	4.17	3.84	2.30	1.74	2.40
Poblacion, San Nicolas	16.78	12.95	10.50	8.80	8.58	11.24	13.47	21.16	28.07	27.95	26.21	23.03	17.40

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.75 lit/sec/ha (437 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 27

Region: IV Province: MARINDUQUE

Catchment Area: 959.2 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Sta. Cruz	13° - 29' 122° - 01'	1954 - 1965
2	Boac		1970 - 1987
3	Gasan		1980 - 1986

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Butinsapa, Moggog	Mangamnan	39	1959 - 1972
	Tampus, Boac	Boac	218	1959 - 1972
	Malabon, Sta. Cruz	Malabon	48	1959 - 1972

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type

: IV

ii) Annual Rainfall

: 1,820.7 mm

- Rainy season

mm

- Dry season

mm

iii) Monthly rainfall at Major Stations

from to

from to

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Sta. Cruz	60.7	53.2	79.1	48.8	102.4	183.4	162.8	228.2	182.9	241.9	201.4	181.4	1,726.2
Boac	133.6	79.7	72.4	74.1	128.2	220.6	225.1	165.7	201.8	272.2	254.6	222.3	2,050.3
Gasan	45.3	28.1	49.8	46.5	130.9	205.4	331.9	131.3	261.4	323.7	230.1	100.7	1,885.1

Unit : mm

iv) Meteorological Features at

Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)													
Wind Speed (km/day)	1	0	0	0	1	1	1	0	1	8	2	2	17
Nos. of Typhoon (Nos.)	6	0	0	0	6	6	6	0	6	47	12	12	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region

IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Mangamnan	Butinsapa	39	32.17	0.02615
Boac	Tampus	218	340.90	0.04959
Malabon	Malabon	48	53.61	0.03542

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Butinsapa, Moggog	Mangamnan	39	1.41	0.46	0.31	0.36	0.48	0.78	0.90	0.88	0.86	1.26	3.22	1.37	1.02
Tampus, Boac	Boac	218	15.76	5.36	3.82	4.21	5.33	8.06	9.67	11.75	6.42	7.33	39.64	12.33	10.81
Malabon, Sta. Cruz	Malabon	48	1.13	0.53	0.47	0.38	0.80	1.38	1.56	1.61	2.68	2.77	4.57	2.46	1.70

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.90 lit/sec/ha

(475 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 28

Region: **IV** Province: **MINDORO ORIENTAL**

Catchment Area: 4,364.7 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Calapan, Mdo.Or.	13° - 25' 121° - 11'	1949 - 1981

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Calapan, Mdo. Or.	13° - 25' 121° - 11'	1981 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Baño, Calapan		1976 - 1978
2	Eastern Mindoro College		1976 - 1978

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Bucayao, Calapan	Bucayao	339	1951 - 1972
	Pangalaan, Naujan	Pangalaan	28	1951 - 1972
	Bacoron, Naujan	Mag-Asawang Tubig	435	1951 - 1972
	Inclanay, F Pinamalayan	Pola	148	1952 - 1972

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : IV (Evenly distributed)

ii) Annual Rainfall : 1,961.2 mm

- Rainy season

- Dry season

from from

to to

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Calapan	102.4	57.9	38.5	90.2	164.6	186.7	196.0	200.9	177.2	286.0	248.3	192.5	1,961.2

Unit : mm

iv) Meteorological Features at Calapan Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	25.3	25.8	26.9	27.8	28.5	28.2	27.8	27.7	27.6	27.2	26.5	25.7	27.1
Mean R. humidity (%)	83.7	81.0	79.1	79.9	79.0	81.7	84.4	83.8	84.4	86.2	86.1	83.7	82.8
Pan evaporation (mm)	103.4	93.8	121.7	126.1	119.4	128.5	125.1	127.5	115.3	127.2	100.5	103.8	116.0
Wind Speed (km/day)	198.7	233.3	241.9	198.7	172.8	155.5	138.2	138.2	172.8	233.3	250.6	241.9	198.0
Nos. of Typhoon (Nos.)	1	0	0	1	2	3	4	1	1	7	2	7	29
Typhoon frequency (%)	3	0	0	3	7	10	14	3	3	24	7	24	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Bucayao	Bucayao	339	1,593.20	0.14903
Pangalaan	Pangalaan	28	1,660.37	1.88036
Mag-Asawang Tubig	Bacoron	435	1,017.98	0.07421
Pola	Inclanay	148	508.68	0.10899

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Bucayao, Calapan	Bucayao	339	79.22	50.81	33.01	24.18	26.66	27.06	45.42	53.04	46.68	46.96	106.32	66.89	50.52
Pangalaan, Naujan	Pangalaan	28	79.59	52.02	44.00	30.54	26.01	26.00	40.08	46.27	51.88	59.11	82.48	93.77	52.65
Bacoron, Naujan	M-Asawang Tubig	435	84.21	29.92	12.09	9.04	9.38	9.71	15.84	23.30	31.66	33.34	54.81	74.12	32.29
Inclanay, F Pinamalayan	Pola	148	32.21	11.79	11.77	9.16	6.35	5.09	10.14	12.73	8.83	23.99	29.83	31.64	16.13

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.61 lit/sec/ha

(403 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 29

Region : IV Province : MINDORO OCCIDENTAL

Catchment Area : 4,364.7 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Lubang Island	13° - 49' 120° - 12'	1956 - 1983
2	Poblacion, San Jose	12° - 21' 121° - 02'	1971 - 1976
3	La Curva, San Jose		1977 - 1984
4	Pag-asa		1976 - 1984

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	San Jose, Mindoro Occ.	12° - 21' 121° - 02'	1981 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	La Curva, San Jose		1976 - 1978
2	Sabluyan		1948 - 1975

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Tuay, Abra de Ilog	Tuay	24	1958 - 1972
	Cabaco, Abra de Ilog	Mamburao	189	1958 - 1972
	Talabaan, Mamburao	Pagbahau	263	1960 - 1972
	Batasan, San Jose	Bugsuanga	434	1956 - 1972
	Otoyay, San Jose	Caguray	136	1956 - 1972

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : I
- ii) Annual Rainfall : 2,117.8 mm
- Rainy season : 1,866.4 mm (88%)
- Dry season : 251.4 mm (12%)

from May to October
from November to April

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct.	Nov	Dec	Annual
Lubang Island	12.7	5.5	2.9	21.3	202.3	276.3	451.6	564.9	385.8	255.2	90.9	32.5	2,301.9
Poblacion, San Jose	12.2	0.0	5.9	30.8	21.5	160.9	270.8	500.3	160.1	362.3	29.8	105.1	1,659.7
La Curva, San Jose	34.6	7.2	2.8	52.3	86.2	321.7	443.9	574.7	471.2	279.0	44.6	5.0	2,329.2
Pag-asa	189.5	1.9	14.8	90.7	225.3	395.5	699.2	858.7	801.5	334.8	121.0	91.9	3,824.8

iv) Meteorological Features at San Jose Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.9	26.9	28.4	29.3	28.6	27.5	26.7	26.7	26.8	27.0	27.3	27.0	27.4
Mean R. humidity (%)	69.2	67.7	65.5	68.2	74.4	83.6	85.4	86.1	85.7	83.0	77.5	72.9	76.6
Pan evaporation (mm)	186.0	229.3	276.0	276.4	227.1	162.1	156.8	177.3	139.9	173.3	176.7	207.3	199.0
Wind Speed (km/hour)	250.6	250.6	259.2	267.8	233.3	241.9	172.8	250.6	172.8	172.8	216.0	250.6	228.3
Nos. of Typhoon (Nos.)	1	0	0	1	2	3	4	1	1	7	2	7	29
Typhoon frequency (%)	3	0	0	3	7	10	14	3	3	24	7	24	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Tuay	Tuay	24	140.40	0.08792
Mamburao	Cabaco	189	643.97	0.10804
Pagbahau	Talabaan	263	956.17	0.11529
Bugsuanga	Batasan	434	1,238.73	0.09051
Caguray	Otoyay	136	811.11	0.18912

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Tuay, Abra de Ilog	Tuay	24	1.02	0.36	0.27	0.24	0.54	1.74	3.60	6.32	6.03	2.88	1.56	0.75	2.11
Cabaco, Abra de Ilog	Mamburao	189	10.07	6.24	5.05	4.43	5.29	10.34	44.59	44.13	49.35	32.86	18.22	14.46	20.42
Talabaan, Mamburao	Pagbahau	263	12.15	8.78	6.53	4.50	6.01	46.30	61.67	85.18	65.20	21.49	28.27	17.77	30.32
Batasan, San Jose	Bugsuanga	434	13.03	6.09	4.28	5.01	16.67	30.74	65.61	113.24	115.9	51.39	30.46	18.98	39.28
Otoyay, San Jose	Caguray	136	5.72	2.30	1.82	1.49	12.43	20.71	40.63	66.73	72.84	44.38	23.09	16.53	25.72

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.61 lit/sec/ha

(403 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 30

Catchment Area : 1,355.9 km²

Region : IV Province : ROMBLON

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Romblon, Romblon	12° - 35' 122° - 16'	1949 - 1981

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Romblon, Romblon	12° - 35' 122° - 16'	1981 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Balogo Grande, San Agustin	Balogo	4	1958 - 1976
	Calatrava, San Agustin	Banadero	6	1959 - 1979
	Dubububan, San Agustin	Dubububan	1	1957 - 1972
	Binonga-an, San Agustin	Binonga-an	1	1960 - 1979
	San Agustin	Hinugusan	5	1958 - 1979
	Luzong, San Agustin	Luzong	4	1958 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Taclobo, San Fernando	Cantingas	48	1956 - 1972

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 2,078.5 mm
- Rainy season : 1,332.4 mm (64%)
- Dry season : 746.1 mm (36%)

iii) Monthly rainfall at Major Stations

Station Name	Unit : mm											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Romblon	117.7	50.0	61.1	72.7	119.7	205.0	238.1	231.0	236.4	302.3	234.9	209.7

iv) Meteorological Features at Romblon Station

	Unit : mm											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean temp. (°C)	26.1	26.9	28.0	29.2	29.8	29.0	28.2	28.2	28.2	28.1	27.6	26.6
Mean R. humidity (%)	86.6	85.9	84.0	82.9	81.7	84.8	86.0	84.3	85.0	86.3	87.1	86.6
Pan evaporation (mm)	397.4	319.7	285.1	259.2	198.7	285.1	233.3	328.3	198.7	216.0	285.1	302.4
Wind Speed (km/day)	0	0	0	0	2	2	3	0	1	6	4	3
Nos. of Typhoon (%)	0	0	0	0	10	10	14	0	5	29	19	14
Typhoon frequency (%)	0	0	0	0	10	10	14	0	5	29	19	14

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Balogo	Balogo Grande	4	16.40	0.13000
Banadero	Calatrava	6	12.61	0.06700
Luzong	Luzong	1	12.30	0.09750
Binonga-an	Binonga-an	5	5.05	0.16000
Hinugusan	San Agustin	4	8.83	0.05600

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Balogo Gr., Sn Agustin	Balogo	4	0.32	0.27	0.21	0.14	0.14	1.69	0.37	0.68	0.47	0.70	0.73	0.49	0.52
Calatrava, Sn Agustin	Banadero	6	0.43	0.27	0.21	0.18	0.23	0.31	0.46	0.50	0.49	0.60	0.67	0.43	0.40
Binonga-an, Sn Agustin	Binonga-an	1	0.13	0.07	0.06	0.05	0.08	0.07	0.13	0.21	0.35	0.29	0.29	0.22	0.16
San Agustin	Hinugusan	5	0.12	0.04	0.03	0.12	0.08	0.19	0.32	0.44	0.36	0.68	0.54	0.41	0.28
Luzong, San Agustin	Luzong	4	0.36	0.11	0.11	0.10	0.22	0.43	0.51	0.50	0.57	0.73	0.68	0.37	0.39

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.61 lit/sec/ha

(403 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 31

Region: IV Province: PALAWAN

Catchment Area: 14,896.3 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Brookes Point	08° 46' 117° 50'	1956 1985
2	Coron	12° 00' 120° 12'	1951 1973
3	Cuyo	10° 51' 121° 02'	1949 1975
4	Puerto Princesa	09° 45' 118° 44'	1949 1985

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : I & III

ii) Annual Rainfall : 2,057.4 mm

- Rainy season : 1,614.6 mm (79%) from

- Dry season : 442.8 mm (22%) from

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Brookes Point	81.0	25.1	32.4	43.3	127.5	162.8	178.1	158.2	154.4	181.6	240.6	235.2	1581.1
Coron	25.2	7.1	5.2	18.0	175.0	370.2	488.7	545.4	438.7	278.8	168.8	123.6	2602.8
Cuyo	19.2	3.0	6.6	31.9	175.6	384.2	425.8	429.6	363.4	301.7	160.0	65.6	2331.1
Puerto Princesa	35.3	19.2	39.3	40.7	143.6	176.9	182.7	180.2	212.6	222.9	204.6	139.9	1599.5

Unit : mm

iv) Meteorological Features at Puerto Princesa Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.5	26.5	27.2	27.6	28.6	27.5	26.9	27.1	27.0	27.0	27.0	26.6	27.1
Mean R. humidity (%)	78.9	78.5	78.5	77.9	78.9	84.0	84.4	84.4	84.4	82.5	83.4	80.5	81.4
Pan evaporation (mm)													
Wind Speed (km/day)	319.7	276.5	241.9	198.7	172.8	155.5	138.2	138.2	172.8	129.6	207.4	267.8	201.6
Nos. of Typhoon (Nos.)	3	0	0	2	1	1	1	0	0	3	11	10	32
Typhoon frequency (%)	9	0	0	6	3	3	3	0	0	9	34	31	100

3. SURFACE RUNOFF

i) Water Region IV

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.61

lit/sec/ha

(403 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 32

Region: V Province: CAMARINES NORTE

Catchment Area : 2,112.5 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Daet	14° 07' 122° 57'	1949 - 1975
2	Daet-Talisay RIS		1958 - 1960
3	Tulay na Lupa		
4	Imelda		
5	San Felipe		

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Daet, Camarines Norte	14° 07' 122° 57'	1971 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Matogdon, Labo	Matogdon	28	1950 - 1978
	Cahabaan, Talisay	Talisay	22	1956 - 1972
	Alawihao, Daet	Daet	80	1954 - 1972

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : 1
- ii) Annual Rainfall : 3,619.5 mm
- Rainy season : 1,516.2 mm (42%)
- Dry season : 2,103.3 mm (58%)

from May to October
from November to April

iii) Monthly rainfall at Major Stations

Station Name	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Daet	357.4	183.2	170.7	128.0	141.9	174.1	199.4	241.9	270.4	506.6	577.4	616.1	3567.1
Daet-Talisay RIS	382.7	212.8	189.2	130.3	170.5	169.0	119.3	265.4	217.1	556.7	517.4	381.4	3311.8

Unit : mm

iv) Meteorological Features at Major Stations

Station	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	25.5	25.8	26.5	27.7	28.5	28.5	28.1	28.3	27.7	27.4	26.9	25.9	27.2
Mean R. humidity (%)	83.1	81.6	79.9	80.8	80.7	82.5	82.6	81.9	83.5	84.3	83.9	84.4	82.4
Pan evaporation (mm)	362.9	311.0	285.1	216.0	207.4	198.7	216.0	241.9	198.7	241.9	362.9	440.6	273.6
Wind Speed (km/day)	1	0	0	0	4	5	1	1	0	7	11	6	36
Nos. of Typhoon (Nos.)	3	0	0	0	11	14	3	3	0	19	31	17	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region V

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Matogdon	Matogdon	28	100.28	0.11357
Talisay	Cahabaan	22	53.61	0.07727
Daet	Alawihao	80	147.59	0.0585

iii) Monthly Runoff at Major Stations

Station	River DA(km ²)												Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Matogdon, Labo	28	5.55	4.04	2.89	2.56	1.99	1.75	1.63	1.70	1.96	3.43	4.72	6.00	3.19
Talisay	22	3.00	1.46	1.09	0.88	0.53	0.66	0.59	0.55	0.84	2.34	3.66	4.81	1.70
Alawihao, Daet	80	11.38	6.34	4.44	3.59	2.19	1.55	1.82	1.75	1.94	4.43	8.34	8.36	4.68

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.68 lit/sec/ha

(420 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 33

Region: V Province: CAMARINES SUR

Catchment Area: 5,266.8 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Poblacion, San Francisco, Buhí	13° 26' 123° 21'	1954 - 1969
2	Inarihan RIS, Calabanga	13° 42' 123° 12'	
3	NIA Compound, Yabo Farms	13° 37' 123° 11'	
4	Baao, Sta. Cruz		
5	Pasacao		
6	Sabang, Sipocot		

No.	Name of Station/Location	Coordinate	Period of Record
7	Napulindan, Lupi		
8	Inipig, Sipocot		
9	Caranan, Pasacao		

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Naga City, Camarines Sur		1956 - 1965

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Napulindan, Lupi	Pulanunna	172	1964 - 1989
	Yabo, Sipocot	Yabo	85	1964 - 1978
	Del Rosario, Lupi	Culacling	64	1964 - 1989
	Sabang, Sipocot	Sipocot	477	1946 - 1978
	San Isidro, Libmanan	Aslong	12	1954 - 1989
	San Isidro, Naga City	Yabo	20	1954 - 1978

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Baliwag, Nuevo, Minalabac	Bicol	1720	1963 - 1978
	Ombao, Buiz	Bicol	1630	1963 - 1978
	San Roque, Buiz	Pawili	240	1963 - 1985
	San Roque, Pili	Anayan	17	1954 - 1978
	San Vicente, Ocampo	Pawili	112	1952 - 1984
	Sto. Nino, Inga	Barit	142	1951 - 1978

2. METEOROLOGY

i) Climate Type : IV (Evenly distributed)

ii) Annual Rainfall : 2,400.6 mm

- Rainy season : 1,354.1 mm (56%) from

- Dry season : 1,046.5 mm (44%) from

iii) Monthly rainfall at Major Stations

Station Name	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Poblacion, San Francisco, Buhí	135.6	73.8	89.7	85.8	146.4	190.1	246.7	271.6	295.4	242.5	307.6	359.1	2444.3
Inarihan, RIS, Calabanga	150.9	63.2	92.5	67.8	79.3	101.1	181.5	211.1	222.8	374.6	388.3	436.7	2369.8
NIA Compound	138.4	42.4	72.2	75.4	108.7	210.5	259.5	261.1	321.9	337.8	281.1	279.1	2388.1

Unit : mm

iv) Meteorological Features at

Station	Station												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)													
Mean R. humidity (%)	138.1	133.2	158.2	177.1	173.5	153.2	135.0	132.2	122.3	113.7	124.4	122.8	140.3
Pan evaporation (mm)													
Wind Speed (km/day)	1	0	0	0	4	5	1	1	0	7	11	6	36
Nos. of Typhoon (Nos.)	3	0	0	0	11	14	3	3	0	19	31	17	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region V

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Pulanunna	Napulindan	172	675.19	0.12448
Yabo	Yabo	85	125.51	0.04682
Culacling	Del Rosario	64	77.58	0.03844
Sipocot	Sabang	447	1331.45	0.09445
Aslong	San Isidro	12	42.26	0.11167

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Napulindan Lupi	Pulanunna	172	34.93	18.75	13.11	10.59	7.90	7.36	13.14	10.83	12.49	32.54	39.65	55.66	21.41
Yabo, Sipocot	Yabo	85	6.31	3.89	2.92	2.20	2.69	2.37	2.48	2.55	3.66	5.57	5.96	7.12	3.98
del Rosario, Lupi	Culacling	64	1.93	1.04	0.83	0.57	0.66	1.61	2.67	2.00	2.78	4.41	5.69	5.32	2.46
Sabang, Sipocot	Sipocot	447	56.90	32.81	28.65	18.02	18.45	17.78	21.22	27.64	32.82	56.27	95.36	100.75	42.22
San Isidro, Libmanan	Aslong	12	1.49	1.10	1.03	0.88	0.82	0.86	0.93	1.00	0.98	1.95	2.50	2.56	1.34
San Isidro, Naga City	Yabo	20	1.58	0.98	0.76	0.60	0.59	0.68	0.80	0.79	0.72	1.05	1.67	1.86	1.01

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.44 lit/sec/ha

(360 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 34

Region: V Province: CATANDUANES

Catchment Area: 1,511.5 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Virac, Catanduanes	13° 35' 124° 14'	1949 - 1975

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Virac, Catanduanes	13° 35' 124° 14'	1971 - 1989

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : II (No dry season)

ii) Annual Rainfall : 2,974.1 mm

- Rainy season : mm from

- Dry season : mm to

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Virac	236.4	135.3	128.1	126.5	187.1	222.3	207.1	189.3	231.1	379.8	465.2	465.8	2974.0

Unit: mm

iv) Meteorological Features at Virac Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	25.3	25.4	26.0	26.9	27.7	27.7	27.5	27.6	27.3	27.0	26.5	25.8	26.7
Mean R. humidity (%)	80.5	80.2	78.6	79.5	79.9	81.0	82.2	81.2	82.8	83.7	83.7	83.1	81.4
Pan evaporation (mm)	262.0	266.5	293.1	266.5	230.9	217.6	235.4	248.7	208.7	230.9	266.5	306.4	252.8
Wind Speed (km/day)	1	0	0	2	1	1	1	0	0	1	8	9	24
Nos. of Typhoon (Nos.)	4	0	0	8	4	4	4	0	0	4	33	38	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region V

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.99 lit/sec/ha

(498 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 35

Region: V Province: ALBAY

Catchment Area: 2,552.6 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Banao, Guinobatan	13° 12' 123° 36'	1956 - 1983
2	Legaspi City	13° 08' 123° 44'	1949 - 1974
3	Manito	13° 07' 123° 52'	1954 - 1973
4	Libog, Sto. Domingo	13° 14' 123° 41'	1954 - 1972
5	Jordan, Tiwi	13° 30' 123° 37'	1954 - 1973
6	Ligao Soil Con.Proj.	13° 14' 123° 32'	1958 - 1965

No.	Name of Station/Location	Coordinate	Period of Record
7	Hibiga RIS		1955 - 1960

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Legaspi City	18° 08' 123° 44'	1971 - 1989

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Polangui	Agus	879	1954 - 1989
	San Agustin, Libon	San Agustin	262	1959 - 1989
	Obaliw, Oas	Irraya	217	1959 - 1978
	Busac, Oas	Quinali	233	1954 - 1989
	Nasisi, Ligao	Nasisi	39	1951 - 1978

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : II (No dry season)

ii) Annual Rainfall : 2,825.4 mm

- Rainy season : mm from to

- Dry season : mm from to

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Barao	155.3	81.1	72.8	88.2	159.9	249.1	310.3	269.3	317.6	294.3	267.1	324.9	2589.9
Legaspi City	314.1	180.5	215.0	158.2	185.5	221.1	240.0	264.1	245.2	319.5	491.9	495.3	3330.4
Manito	157.3	85.0	85.1	69.7	91.0	90.4	88.9	100.0	108.4	194.0	247.3	297.1	1624.2
Libog, Sto. Domingo	369.1	218.5	245.8	239.6	181.7	136.9	189.6	247.7	252.1	343.0	528.5	528.5	3481.0
Jordan, Tiwi	271.1	153.7	182.9	174.3	213.1	185.0	196.7	216.0	242.5	371.1	440.0	454.5	3100.9

iv) Meteorological Features at Legaspi City Station

Mean temp. (°C)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean R. humidity (%)	25.5	25.9	26.4	27.6	28.2	28.1	27.5	27.9	27.7	27.1	26.7	25.9	27.0
Pan evaporation (mm)	80.4	82.3	80.4	81.1	81.4	82.9	83.4	82.7	84.6	84.7	85.6	85.3	82.9
Wind Speed (km/day)	302.4	302.4	267.8	250.6	216.0	198.7	216.0	241.9	181.4	190.1	250.6	293.8	242.6
Nos. of Typhoon (Nos.)	1	0	0	0	4	5	1	1	0	7	11	6	36
Typhoon frequency (%)	3	0	0	0	11	14	3	3	0	19	31	17	100

3. SURFACE RUNOFF

i) Water Region V

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Agus	Polangui	879	211.29	0.00762
San Agustin	San Agustin	262	273.73	0.03313
Irraya	Obaliw	217	251.66	0.03677
Quinali	Busac	233	242.2	0.03296
Nasisi	Nasisi	39	64.02	0.05205

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Polangui	Agus	879	7.21	3.69	3.61	3.25	3.15	3.61	5.69	6.43	7.24	10.61	14.61	11.35	6.70
San Agustin, Libon	San Agustin	262	8.04	6.76	6.46	5.45	5.40	6.32	9.87	9.50	12.41	10.15	10.49	13.34	8.68
Obaliw, Oas	Irraya	217	6.67	6.09	5.59	4.95	5.14	6.83	7.59	8.34	9.45	9.48	11.91	13.69	7.98
Busac, Oas	Quinali	233	6.41	5.10	4.97	5.51	5.07	5.92	15.58	13.01	7.47	8.02	8.25	6.94	7.69
Nasisi, Ligao	Nasisi	39	2.64	1.96	1.87	1.75	1.70	1.72	1.53	1.68	1.73	1.98	2.73	3.10	2.03

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.54 lit/sec/ha

(384 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 36

Region : **V** Province : **SORSOGON**

Catchment Area : 2,141.4 km²

1. STATIONS

i) Rainfall Stations			
No.	Name of Station/Location	Coordinate	Period of Record
1	Castilla	12° 57' 123° 53'	1956 - 1971
2	Juban	12° 51' 123° 59'	1954 - 1970

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations			
No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations			
No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations				
Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : II (No dry season)

ii) Annual Rainfall : 3,123.7 mm

- Rainy season : mm

- Dry season : mm

from from
to to

iii) Monthly rainfall at Major Stations

Station Name	Monthly rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Castilla	188.9	132.9	118.4	114.8	126.2	143.9	243.6	234.8	278.2	273.1	383.3	322.6	2560.7
Juban	419.8	275.8	249.6	175.1	163.9	165.9	232.6	249.6	294.8	427.4	480.4	546.7	3681.6

iv) Meteorological Features at

Station	Monthly Features											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean temp. (C)												
Mean R. humidity (%)												
Pan evaporation (mm)												
Wind Speed (km/day)												
Nos. of Typhoon (Nos.)	1	0	0	0	4	5	1	1	0	7	11	6
Typhoon frequency (%)	3	0	0	0	11	14	3	3	0	19	31	17

3. SURFACE RUNOFF

i) Water Region : V

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.68 lit./sec/ha

(420 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 37

Region: **V** Province: **MASBATE**

Catchment Area: 4,047.7 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Masbate	12° 22' 122° 37'	1949 - 1973
2	Poblacion, Milagros	12° 13' 123° 31'	1954 - 1969
3	Nipa, Palanas	12° 09' 123° 55'	1954 - 1973

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Cabitan, Mandaon	Batongan	72	1959 - 1969
	Umabay, Mobo	Sagawsawan	8	1959 - 1970
	Uson, Masbate	Pinangapugan	43	1951 - 1970

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : III

ii) Annual Rainfall : 2,349.7 mm

- Rainy season : 1,355.7 mm (58%)

- Dry season : 994.0 mm (42%)

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Masbate	187.3	73.2	75.9	38.2	110.2	138.6	176.6	189.8	198.4	219.0	230.7	219.8	1857.7
Poblacion, Milagros	299.3	100.7	92.0	71.8	188.0	349.0	479.0	307.8	334.5	310.9	376.9	415.9	3325.8
Nipa, Palanas	142.4	71.0	65.0	51.3	89.6	143.9	231.9	211.8	186.9	200.8	247.8	222.8	1865.2

Unit : mm

iv) Meteorological Features at Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (C)	26.3	26.6	27.4	28.7	29.6	29.0	28.6	28.6	28.4	28.1	27.7	26.8	28.0
Mean R. humidity (%)	84.4	83.8	81.8	80.4	79.4	81.8	82.6	82.9	84.0	83.8	85.2	85.7	83.0
Pan evaporation (mm)	275.3	248.7	222.0	208.7	213.2	262.0	248.7	266.5	217.6	226.5	262.0	270.9	243.5
Wind Speed (km/day)	3	0	0	2	3	3	4	1	0	5	7	9	37
Nos. of Typhoon (Nos.)	8	0	0	5	8	8	11	3	0	14	19	24	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region : V

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Batongan	Cabitan	72	114.48	0.05042
Segawsawan	Umabay	8	11.35	0.045
Pinangapugan	Uson	43	92.4	0.06814

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Cabitan, Mandaon	Batongan	72	2.94	0.57	0.64	0.21	2.03	4.88	6.96	8.16	3.60	4.70	5.05	3.87	3.63
Umabay, Mobo	Sagawsawan	8	0.55	0.19	0.09	0.06	0.27	0.23	0.24	0.38	0.43	0.32	0.78	0.81	0.36
Uson, Masbate	Pinangapugan	43	3.01	0.68	0.31	0.23	0.34	1.49	1.43	3.25	2.86	4.24	8.26	9.03	2.95

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.62 lit/sec/ha

(404 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 38

Region : VI Province : AKLAN

Catchment Area : 1,817.9 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Balete, Aklan	11° 33' 122° 23'	1956 - 1975
2	Kalibo Bridge, Kalibo	11° 44' 122° 21'	1971 - 1975
3	Libacao, Janlud, Aklan	11° 29' 122° 18'	1971 - 1975
4	Malinao, Malinao, Aklan	NR NR	1950 - 1970

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Panayakan, Tangalan	Tangalan	38	1958 - 1980
	Rosario, Malinao	Aklan	705	1950 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 4,402.7 mm
- Rainy season : 2,406.3 mm (55%) from May to October
- Dry season : 1,996.4 mm (45%) from November to April

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Balete, Aklan	275.9	159.9	140.8	98.3	175.1	245.5	308.0	185.2	207.3	365.5	442.7	400.1	3004.3
Kalibo Bridge, Aklan	518.2	218.2	251.6	256.0	291.2	595.4	1,097.5	941.5	896.8	945.3	563.3	799.4	7374.4
Libacad, Janlud, Aklan	533.5	309.1	307.7	95.0	242.6	313.8	257.5	275.0	360.6	550.5	626.3	588.4	4460.0
Malinao, Malinao, Aklan	231.7	133.9	150.5	168.7	194.7	232.6	294.0	272.6	215.0	361.8	381.8	333.6	2970.9

iv) Meteorological Features at

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)													
Wind Speed (km/day)	3	0	1	2	1	1	4	1	0	2	6	6	27
Nos. of Typhoon (Nos.)	11	0	4	7	4	4	15	4	0	7	22	22	100
Typhoon frequency (%)													

3. SURFACE RUNOFF

i) Water Region VI

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Tangalan	Panayakan	38	103.44	0.08692
Aklan	Rosario	705	2680.88	0.12058

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Panayakan	Tangalan	38	3.23	2.31	1.4	1.27	2.56	2	4.05	4.18	2.63	4.96	5.72	5.08	3.28
Rosario	Aklan	705	108.24	90.52	71.95	55.27	54.67	63.02	73.89	84.4	75.42	100.06	111.46	131.17	85.01

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.44 lit/sec/ha

(359 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 39

Region : VI Province : CAPIZ

Catchment Area : 2,633.2 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Roxas City, Capiz	11° 35' 122° 45'	1949 - 1981
2	Culasi, Roxas City	11° 37' 122° 43'	1971 - 1976
3	Mambusao, Capiz	11° 25' 122° 33'	1950 - 1970
4	Pres. Roxas, Capiz	11° 27' 122° 57'	1952 - 1968

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Roxas City, Capiz	11° 35' 122° 45'	1951 - 1980

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Roxas City (Perman)	11° 35' 122° 45'	1949 - 1974

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Palaguian, Maayon	Maayon	265	1956 - 1981
	Tumalalud, Mambusao	Mambusao	307	1950 - 1977

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 2,193.5 mm
- Rainy season : 1,419.8 mm (65%)
- Dry season : 773.7 mm (35%)

from May to October
from November to April

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Roxas City	116.2	55.2	56.8	50.0	140.3	254.9	233.8	235.6	238.0	320.9	236.4	183.3	2121.4
Culasi	110.3	9.6	21.5	6.0	37.4	125.4	171.3	134.4	215.9	133.8	122.5	52.5	1140.6
Mambusao	185.1	119.1	108.2	95.6	161.9	286.8	268.2	240.3	249.1	284.0	322.9	276.5	2597.7
Pres. Roxas	185.4	126.4	88.6	74.9	201.8	187.5	323.8	323.8	309.3	400.6	280.2	201.1	2703.4

Unit : mm

iv) Meteorological Features at

Station	Station												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.1	26.3	26.8	28.0	28.6	28.2	27.6	27.7	27.5	27.4	27.2	26.5	27.33
Mean R. humidity (%)	83.5	82.6	80.5	78.6	79.1	82.5	82.9	83.4	83.9	83.9	82.8	83.5	82.27
Pan evaporation (P) (mm)	141.2	137.5	175.7	185.9	181.4	151.0	152.6	146.6	138.6	145.6	138.7	138.2	152.75
Wind Speed (km/day)	371.5	328.3	328.3	311.0	241.9	233.3	224.6	224.6	207.4	267.8	337.0	388.8	288.71
Nos. of Typhoon (Nos.)	1	0	0	2	1	1	1	0	0	1	8	4	19
Typhoon frequency (%)	5	0	0	11	5	5	5	0	0	5	42	21	100

3. SURFACE RUNOFF

i) Water Region VI

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Maayon		265	291.39	0.03486
Mambusao		307	526.34	0.05436

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Palaguian	Maayon	265	7.56	3.49	3.15	2.76	3.63	6.96	14.49	13.10	10.97	15.37	16.63	12.76	9.24
Tumalalud	Mambusao	307	23.79	7.81	5.81	5.20	7.85	17.35	18.47	13.00	15.47	25.32	32.45	27.72	16.69

4. Reference Figures for Planning

- i) Irrigation Water Requirement

: 1.45 lit/sec/ha (362 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 40

Region: VI Province: ANTIQUE

Catchment Area: 2,522.0 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Barbaza, Antique	11° 12' 122° 02'	1954 - 1975
2	Culasi, Antique	11° 26' 122° 03'	1954 - 1984
3	San Jose Buenavista, Antique	11° 45' 122° 56'	1971 - 1974
4	Valderama, Antique	11° 00' 122° 08'	1952 - 1982
5	Igalaguit, Dao, Antique	10° 29' 122° 59'	1954 - 1963
6	Sibalom, S. Ris, Antique	NR NR	1946 - 1960

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Pototan, Iloilo		1957 - 1965

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Tagudtod, Bugasong Panggang, Antique	Paliuan	176	1956 - 1980
		Sibalom	635	1958 - 1988

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : I

ii) Annual Rainfall : 4,305.1 mm

- Rainy season : 3,678.0 mm (85%)

- Dry season : 627.1 mm (15%)

iii) Monthly rainfall at Major Stations

Station Name	Monthly rainfall at Major Stations												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Barbaza	56.8	30.4	21.7	46.9	281.4	495.2	661.9	767.6	562.9	377.0	239.3	144.3	3685.4
Culasi	90.2	51.8	55.6	72.5	228.9	489.7	621.5	765.8	569.0	392.5	336.2	240.3	3914.0
San Jose de Buenavista	6.0	2.8	123.3	131.1	334.2	2,337.8	2,211.0	460.7	343.9	330.1	249.8	191.2	6721.9
Valderama	40.6	9.1	34.3	55.4	321.0	479.0	676.1	628.2	569.1	388.4	178.2	100.2	3479.6
Sibalom	33.8	32.1	30.8	148.0	338.2	428.5	567.1	660.8	560.6	452.7	263.1	119.9	3635.6

iv) Meteorological Features at Station

Station	Meteorological Features at Station												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)													
Pan evaporation (mm)	148.3	153.7	207.3	211.7	207.3	166.1	152.9	152.0	141.5	144.4	135.2	139.8	163.35
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	3	0	1	2	1	1	4	1	0	2	6	6	27
Typhoon frequency (%)	11	0	4	7	4	4	15	4	0	7	22	22	100

3. SURFACE RUNOFF

i) Water Region VI

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Paliuan	Tagudtod	176	768.53	0.13846
Sibalom	Panggang	635	1513.79	0.06561

iii) Monthly Runoff at Major Stations

Station	Monthly Runoff at Major Stations												Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Tagudtod	176	10.07	6.07	5.05	4.40	14.24	26.48	40.54	62.10	44.20	40.61	24.21	14.45	24.37
Panggang	635	17.61	15.27	13.49	13.71	26.80	42.85	61.20	88.67	100.33	58.40	37.68	23.40	41.66

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.74 lit/sec/ha

(435 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 41

Region: VI Province: ILOILO

Catchment Area: 5,324.0 km²

1. STATIONS

No.	Name of Station/Location	Coordinate	Period of Record
7	Passi, Jalaor, Iloilo		1956 - 1974

No.	Name of Station/Location	Coordinate	Period of Record
1	Barotac Viejo, Iloilo	11° 03' 122° 51'	1971 - 1984
2	Estancia, Iloilo	11° 23' 123° 07'	1971 - 1983
3	Iloilo City, Iloilo	10° 42' 122° 34'	1949 - 1982
4	Miagao, Miagao, Iloilo	10° 38' 122° 14'	1971 - 1984
5	Pototan, Catoogan, Iloilo	10° 52' 122° 38'	1957 - 1973
6	Dingle, Dingle, Iloilo		1956 - 1972

No.	Name of Station/Location	Coordinate	Period of Record
1	Iloilo City	10° 42' 122° 34'	1960 - 1986

No.	Name of Station/Location	Coordinate	Period of Record
1	Pototan, Iloilo		1957 - 1965

No.	Name of Station/Location	Coordinate	Period of Record
1	Pototan, Iloilo		1957 - 1965

No.	Name of Station/Location	Coordinate	Period of Record
1	Pototan, Iloilo		1957 - 1965

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Simsiman, Calinog	Jalaor	169	1956-79, 1986-88
	Alibunan, Calinog	Jalaor	120	1956 - 1970
	Sta. Ana, Battad	Sibajao	12	1958 - 1979

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Omabong, Leon	Sibalom	117	1950 - 1979
	San Matias, Dingle	Jalaor	1065	1956 - 1980
	Calayan, Pototan	Jalaor	1499	1956 - 1989
	Mina, Pototan	Suage	186	1957-69, 1979-81
	Pader, Duenas	Ulian	247	1960 - 1979
	Poblacion, Passi	Jalaor	534	1956-69, 1986-89

2. METEOROLOGY

- i) Climate Type : I & II
- ii) Annual Rainfall : 1,946.9 mm
- Rainy season : 1,378.8 mm (71%)
- Dry season : 568.1 mm (29%)

Station Name	Monthly rainfall at Major Stations												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Barotac Viejo	71.9	41.5	44.8	40.8	130.6	141.9	168.1	128.5	143.8	209.9	178.2	123.1	1423.1
Estancia	155.6	87.1	48.3	51.1	124.9	266.3	302.5	275.3	282.9	213.7	242.3	183.3	2233.3
Iloilo City	43.6	23.2	34.1	47.3	121.5	255.9	316.9	346.4	265.9	272.2	176.3	100.8	2004.1
Pototan	72.0	46.8	46.1	56.9	134.8	288.3	318.1	271.5	214.6	291.9	225.6	99.3	2085.9
Dingle	78.6	33.3	46.7	102.0	151.6	300.2	270.0	195.1	206.4	284.2	210.0	130.1	2008.2

Meteorological Features at Iloilo City Station	Monthly Data												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.6	27.1	28.0	29.1	29.4	28.2	27.6	27.6	27.7	27.8	27.7	26.9	27.8
Mean R. humidity (%)	81.7	79.4	74.7	73.3	77.0	82.7	84.9	84.6	85.2	84.1	84.2	83.4	81.3
Pan evaporation (mm)	148.3	153.7	207.3	211.7	183.7	166.1	152.9	152.0	141.5	144.4	135.3	139.8	161.4
Wind Speed (km/day)	362.9	345.6	354.2	311.0	241.9	216.0	267.8	293.8	216.0	241.9	276.5	319.7	287.3
Nos. of Typhoon (Nos.)	1	0	0	2	1	1	1	0	0	1	8	4	19
Typhoon frequency (%)	5	0	0	11	5	5	5	0	0	5	42	21	100

3. SURFACE RUNOFF

Water Region VI	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
	Leon	117	115.42	0.03128
	Dingle	1065	1920.34	0.05718
	Pototan	1499	2014.84	0.04262
	Duenas	247	359.83	0.04619
	Pototan	186	155.16	0.02645

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Omabong, Leon	Sibalom	117	2.02	1.35	1.06	1.14	1.23	3.33	8.22	8.24	7.54	5.28	2.47	2.02	3.66
San Matias, Dingle	Jalaor	1065	33.30	25.42	14.94	25.73	39.81	74.48	91.26	68.80	98.27	103.25	76.36	79.13	60.90
Calayan, Pototan	Jalaor	1499	44.00	31.12	14.36	25.53	34.85	62.42	97.72	76.04	82.40	126.71	105.52	69.03	63.89
Pader, Duenas	Ulian	247	10.07	7.47	6.59	5.17	7.36	10.04	15.99	12.76	16.02	15.97	17.62	11.85	11.41
Mina, Pototan	Suage	186	4.09	2.62	1.33	1.39	3.45	4.09	7.11	7.11	6.57	10.00	5.76	5.49	4.92
Simsiman, Calinog	Jalaor	169	17.16	10.76	6.71	10.97	7.98	11.84	17.28	16.38	16.30	22.09	26.50	19.61	15.30

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.42 lit/sec/ha (354 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 42

Region: VI Province: NEGROS OCCIDENTAL

Catchment Area: 7,926.1 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Ma-ao, Neg Occ	10° 31' 122° 50'	1954 - 1982
2	Kabankalan, Neg Occ	09° 59' 122° 49'	1957-65, 1971-82
3	La Carlota, Neg Occ	10° 24' 122° 56'	1954 - 1973
4	La Granja, Neg Occ	10° 25' 122° 57'	1954 - 1984
5	Silay City, Neg Occ	10° 50' 122° 59'	1954 - 1984
6	Victorias Milling, Neg Occ	10° 53' 123° 04'	1954 - 1984

No.	Name of Station/Location	Coordinate	Period of Record
7	Manapla, Neg Occ	10° 58' 123° 07'	1956 - 1973
8	La Castellana, Neg Occ	10° 22' 123° 03'	1954 - 1965
9	Cadiz, Neg Occ		1964 - 1979

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Victorias, Neg Occ		1967 - 1987

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Orong, Kabankalan	09° 59' 122° 49'	1957 - 1965
2	Jerusalem, Cadiz		1966 - 1979
3	Victoria Milling Co.		1967 - 1987

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Hda Kabungahan, Silay	Malogo	129	1960 - 1986
	Ma-ao, Bago	Bago	683	1949 - 1979
	Pandanon	Bago	445	1967 - 1975
	Cadre, Magallon	Binalbagan	350	1959 - 1980
	Cabacungan, Castellana	Piguang	12	1965 - 1979
	Dos Hermanas, Talisay	Imbang	33	1950 - 1980

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Camugao, Kabankalan	Ilog	1959	1964 - 1979
	San Juan, Kabankalan	Ilog	1947	1964 - 1979
	Dangsud, Kabankalan	Hilabangan	431	1955 - 1980
	Tagbac, Kabankalan	Hilabangan	392	1960 - 1980
	Pandan Orong, Kabankalan	Ilog	1453	1956 - 1979
	Dahile, Kabankalan	Ilog	1390	1962 - 1977

2. METEOROLOGY

- i) Climate Type : I
- ii) Annual Rainfall : 2,523.2 mm
- Rainy season : 1,829.1 mm (72%)
- Dry season : 694.1 mm (28%)

iii) Monthly rainfall at Major Stations

Station Name	Monthly rainfall (mm)												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Ma-ao	56.4	25.3	39.9	83.4	225.7	305.4	367.8	365.5	289.4	181.3	96.4	2389.7	
Kabankalan	60.5	48.6	48.8	65.2	160.8	290.7	291.2	345.5	277.4	214.4	110.1	2173.4	
La Carlota, S. Central	62.8	47.6	69.4	102.7	230.6	335.8	348.8	346.0	406.9	224.7	122.1	2566.2	
La Granja	82.3	40.6	51.3	108.2	216.9	359.9	433.2	403.5	371.9	223.1	129.7	2780.7	
Silay City	152.6	100.0	80.2	88.7	138.1	280.8	268.6	262.5	317.7	377.2	337.8	2667.9	

Unit: mm

iv) Meteorological Features at Victorias, Neg Occ Station

Feature	Monthly Values												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mean temp. (°C)	25.5	25.9	26.8	27.9	28.6	28.1	27.5	27.5	27.4	27.3	26.8	26.3	27.1
Mean R. humidity (%)	82.6	81.0	77.9	76.7	76.9	79.6	80.6	80.7	80.3	80.6	82.3	83.6	80.2
Pan evaporation (mm)	127.3	135.5	189.7	210.0	196.6	147.9	149.7	158.5	140.3	145.6	129.4	120.4	154.2
Wind Speed (km/day)	165.6	165.6	171.8	161.3	119.3	104.4	112.3	140.9	111.1	106.1	119.8	142.1	135.0
Nos. of Typhoon (Nos.)	1	1	1	2	1	2	1	0	0	3	9	7	28
Typhoon frequency (%)	4	4	4	7	4	7	4	0	0	11	32	25	100

3. SURFACE RUNOFF

i) Water Region VI

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Malogo	Silay	129	573.64	0.14101
Bago	Bago	683	1362.04	0.06324
Binalbagan	Magallon	350	522.24	0.04731
Imbang	Talisay	33	85.15	0.08182
Hilabangan	Tagbac	392	345.32	0.02793

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Monthly Runoff (lit/sec/ha)												Mean
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Silay City	Malogo	129	28.64	28.31	13.74	7.96	9.98	13.50	15.89	17.24	14.39	17.17	26.18	25.32	18.19
Ma-ao, Bago	Bago	683	68.62	20.40	17.06	16.97	23.52	26.88	58.91	61.94	70.82	58.40	51.70	43.00	43.19
Cadre, Magallon	Binalbagan	350	11.39	8.40	8.70	8.76	12.42	18.14	24.93	23.42	21.61	28.87	20.82	11.26	16.56
Talisay	Imbang	33	2.54	1.96	1.62	1.58	2.01	2.14	3.08	3.12	2.79	3.81	4.44	3.30	2.70
Tagbac	Hilabangan	392	10.83	6.05	4.41	4.29	5.67	9.53	12.63	13.86	16.68	18.35	13.99	15.10	10.95
Pandan Orong	Ilog	1453	26.50	19.11	15.99	16.77	35.82	67.90	121.10	129.52	106.30	132.69	81.84	45.57	66.59

4. Reference Figures for Planning

i) Irrigation Water Requirement

1.74 lit/sec/ha

(435 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 43

Region: VI Province: NEGROS DEL NORTE Catchment Area: km²

1. STATIONS

i) Rainfall Stations			
No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations			
No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations			
No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations				
Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : : mm
- ii) Annual Rainfall : : mm
- Rainy season : : mm
- Dry season : : mm

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
	Unit : mm												
Ma-ao													
Kabankalan													
La Carlota, S. Central													
La Granja													
Silay City													

iv) Meteorological Features at Victorias, Neg Occ Station

Mean temp. (°C)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
	Mean R. humidity (%)												
Pan evaporation (mm)													
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)													
Typhoon frequency (%)													

3. SURFACE RUNOFF

- i) Water Region
- ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)

iii) Monthly Runoff at Major Stations

Station	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean

4. Reference Figures for Planning

- i) Irrigation Water Requirement : : (mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 44

Region : VII Province : CEBU

Catchment Area : 5,088.4 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cebu City/Cebu City, Cebu	10° 20' 123° 54'	1949 - 1983
2	Dalaguete/Dalaguete, Cebu	09° 47' 123° 27'	1954 - 1983
3	Medellin/Medellin, Cebu	11° 03' 124° 00'	1960 - 1970
4	Cebu Ref.Proj/Minglanilla,Cebu	10° 15' 123° 47'	1954 - 1977
5	Lahug/Lahug Soil Con.Proj,Cebu	10° 18' 123° 55'	1956 - 1973

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cebu City, Cebu City	10° 20' 123° 54'	1971 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Cebu City (Penman)	10° 20' 123° 54'	1950 - 1973

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Consolacion, Cebu	Pitogo	40	1955 - 1977
	Poblacion, Carcar	Carcar	31	1955 - 1974
	Lusaran, Cebu	Balamban	49	1962 - 1969

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

- i) Climate Type : III
- ii) Annual Rainfall : 1,698.3 mm
- Rainy season : 1,102.9 mm (65%)
- Dry season : 595.4 mm (35%)

from May to October
from Nov. to April

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Cebu City	102.0	65.6	48.9	51.5	105.3	184.7	205.3	182.8	198.3	187.2	162.0	128.5	1622.1
Dalaguete	122.8	102.7	92.4	67.4	154.6	176.3	180.1	158.3	178.1	233.0	183.8	151.2	1800.7
Medellin	78.0	62.7	43.7	42.6	111.8	203.5	206.6	212.1	174.2	214.5	169.8	88.0	1607.5
Cebu Ref. Proj.	92.6	80.4	72.7	95.4	146.8	246.0	182.7	163.9	189.3	279.2	166.6	140.4	1856.0
Lahug	69.9	56.3	63.4	65.8	111.5	177.6	191.8	196.6	178.1	184.8	207.2	102.8	1605.8

Unit : mm

iv) Meteorological Features at Cebu City

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.6	26.9	27.8	28.6	29.1	28.2	27.9	28.1	27.4	27.8	27.4	27.1	27.7
Mean R. humidity (%)	81.2	80.0	77.2	74.1	76.2	80.5	81.8	81.0	82.2	82.6	82.7	82.4	80.2
Pan evaporation (P) (mm)	130.9	133.4	165.4	175.7	162.2	130.7	124.8	131.4	116.3	121.7	118.9	120.7	136.0
Wind Speed (km/day)	177.6	182.1	186.5	186.5	155.4	146.6	142.1	164.3	146.6	142.1	151.0	168.8	162.5
Nos. of Typhoon (Nos.)	1	0	0	2	1	1	1	0	0	1	8	6	21
Typhoon frequency (%)	5	0	0	10	5	5	5	0	0	5	38	29	100

3. SURFACE RUNOFF

i) Water Region VII

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Pitogo	Cebu	40	15.77	0.0125
Carcar	Carcar	31	14.51	0.0317
Balamban	Cebu	49	66.86	0.04327

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Consolacion, Cebu	Pitogo	40	0.80	0.43	0.22	0.24	0.35	0.47	0.46	0.91	0.57	0.71	0.71	0.31	0.52
Poblacion, Carcar	Carcar	31	0.40	0.42	0.38	0.46	0.40	0.44	0.55	0.44	0.39	0.44	0.60	0.56	0.46
Lusaran, Cebu	Balamban	49	2.17	1.51	1.46	0.91	2.05	1.94	2.15	1.81	1.88	2.03	5.91	1.65	2.12

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.9 lit./sec/ha

(475 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. **45**

Region: **VII** Province: **NEGROS ORIENTAL**

Catchment Area: **5,402.3 km²**

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Bayawan/Nonas Col., Neg.Or	09° 22' 122° 48'	1956 - 1977
2	Dumaguete City/Neg.Or	09° 18' 123° 18'	1949 - 1980
3	Station/Siaton, Neg.Or	09° 04' 123° 02'	1956 - 1978
4	Mt. Bandilaan/Neg.Or	09° 12' 121° 25'	1954 - 1967

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Dumaguete City, Neg Or	09° 18' 123° 18'	1971 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Dumaguete City (Penman)	09° 18' 123° 18'	1955 - 1978

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Consolacion, Bais	Bais	52	1962 - 1976
	Novallas, Tanjay	Nagsala	23	1962 - 1977
	Abug, Pamplona	Tanjay	138	1959 - 1976
	Palinpinon, Valencia	Okoy	60	1950 - 1986
	Palinpinon, Valencia	Maite	3	1959 - 1972

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : **III**

ii) Annual Rainfall : **2,190.5 mm**

- Rainy season : **1,634.4 mm (75%)**

- Dry season : **556.1 mm (25%)**

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Bayawan	54.0	46.8	44.7	92.7	222.3	481.2	561.9	555.8	525.4	485.1	291.1	150.0	3511.0
Dumaguete City	77.8	56.8	59.8	38.1	78.7	131.4	141.2	113.1	133.8	170.8	176.2	121.9	1299.6
Siaton	24.1	13.8	14.0	31.2	112.0	246.7	333.1	358.9	330.3	264.1	136.3	54.4	1928.9
Mt. Bandilaan	135.0	112.6	83.0	46.6	139.7	232.0	260.7	227.9	186.7	244.9	189.3	163.7	2022.1

Unit : mm

iv) Meteorological Features at Dumaguete Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	26.9	26.9	27.5	28.5	28.8	28.4	28.1	28.2	28.0	27.9	27.8	27.2	27.9
Mean R. humidity (%)	82.5	81.9	79.4	77.5	77.7	78.9	79.5	79.6	80.2	80.3	81.1	81.9	80.0
Pan evaporation (P) (mm)	134.5	129.2	154.6	162.1	150.0	127.9	132.2	137.2	128.6	134.3	128.1	129.7	137.4
Wind Speed (km/day)	311.0	267.8	224.6	198.7	146.9	138.2	155.5	198.7	138.2	164.2	207.4	276.5	202.3
Nos. of Typhoon (Nos.)	1	0	0	2	1	1	1	0	0	1	8	4	19
Typhoon frequency (%)	5	0	0	11	5	5	5	0	0	5	42	21	100

3. SURFACE RUNOFF

i) Water Region VII

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Bais	Bais	52	47.93	0.02923
Nagsala	Tanjay	23	19.24	0.02652
Tanjay	Pamplona	138	360.77	0.0829
Okoy	Valencia	60	95.87	0.05067
Maite	Valencia	3	5.05	0.05333

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Consolacion, Bais	Bais	52	0.69	0.87	1.66	1.85	0.78	1.15	2.45	2.01	3.04	2.02	0.63	1.09	1.52
Novallas, Tanjay	Nagsala	23	0.40	0.37	0.44	0.25	0.41	0.53	0.81	0.92	1.12	1.13	0.66	0.30	0.61
Abug, Pamplona	Tanjay	138	21.13	18.30	10.79	4.32	3.79	5.19	11.93	7.27	9.85	13.38	16.16	15.01	11.44
Palinpinon, Valencia	Okoy	60	3.57	3.21	2.62	2.39	2.23	2.73	4.37	3.23	3.02	3.17	3.14	2.84	3.04
Palinpinon, Valencia	Maite	3	0.15	0.14	0.14	0.11	0.14	0.16	0.26	0.16	0.12	0.18	0.14	0.16	0.16

4. Reference Figures for Planning

i) Irrigation Water Requirement

: **1.9** lit/sec/ha (**475** mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 46

Region: VII Province: BOHOL

Catchment Area: 4,117.3 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Dagohoy/Dagohoy, Bohol	09° 54' 124° 16'	1956 - 1984
2	Tagbilaran City/Bohol	09° 39' 123° 51'	1960 - 1984
3	Tubigon/Tubigon, Bohol	09° 57' 124° 00'	1954 - 1984
4	Ubay/Ubay Central, Bohol	10° 02' 128° 28'	1957 - 1984
5	Panacasalan/Panacasalan, Bohol	NR	1967 - 1976

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Tagbilaran, Bohol	09° 39' 123° 51'	1960 - 1965
2	Danicop, S.Bullones		1977 - 1988

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	Panacasalan, S.Bullones	Panacasalan	71	1956 - 1981
	Bugsok, S.Bullones	Wahig	25	1955 - 1977
	Owac, Bilar, Bohol	Bilar	92	1959 - 1977
	Tigao, Loboc	Loboc	618	1955 - 1977

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : IV (Rainfall more or less evenly distributed)

ii) Annual Rainfall : 1,750.0 mm
 - Rainy season : mm from to
 - Dry season : mm from to

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Dagohoy	196.9	154.8	100.4	63.2	98.7	188.5	253.6	180.3	195.4	230.4	212.4	197.8	2072.4
Tagbilaran City	96.6	83.0	76.3	67.9	77.3	134.0	126.3	105.5	125.2	168.2	195.3	113.0	1368.6
Tubigon	190.2	127.9	99.4	54.7	77.4	136.9	164.5	144.5	168.0	189.4	214.0	204.6	1771.9
Ubay	145.9	125.6	77.0	26.3	72.2	121.5	188.9	135.5	147.9	168.8	120.0	141.7	1471.3
Panacasalan	212.0	158.7	121.9	48.4	72.3	244.3	153.5	149.4	194.1	199.1	257.0	255.6	2066.3

iv) Meteorological Features at

Station	Statik Station												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)													
Mean R. humidity (%)	116.1	121.8	152.8	153.9	153.9	112.1	123.3	124.3	107.3	105.6	106.7	106.8	123.7
Pan evaporation (mm)													
Wind Speed (km/day)													
Nos. of Typhoon (Nos.)	3	0	1	0	2	2	2	0	0	1	10	5	26
Typhoon frequency (%)	12	0	4	0	8	8	8	0	0	4	38	19	100

3. SURFACE RUNOFF

i) Water Region VII

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Panacasalan	Bullones	71	47.03	0.02099
Wahig	Bugsok	25	33.46	0.0424
Bilar	Owac	92	15.15	0.00522
Loboc	Tigao	618	561.51	0.02879

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Panacasalan	Panacasalan	71	2.21	2.03	1.38	0.94	0.87	1.24	1.17	0.96	1.12	1.79	2.10	2.31	1.51
Bugsok, Bullones	Wahig	25	1.37	1.16	0.83	0.70	0.60	0.80	1.13	0.90	1.02	1.48	1.49	1.21	1.06
Owac, Bilar	Bilar	92	0.78	0.54	0.40	0.27	0.25	0.34	0.54	0.41	0.37	0.65	0.75	0.51	0.48
Tigao, Loboc	Loboc	618	20.46	16.12	13.00	10.78	13.01	16.99	21.93	17.69	18.91	23.14	22.34	19.11	17.79

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.9 lit/sec/ha

(475 mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 47

Region : VII Province : SQUIJOR

Catchment Area : 343.5 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : III

ii) Annual Rainfall : mm from to
 - Rainy season : mm from to
 - Dry season : mm from to

iii) Monthly rainfall at Major Stations

Station Name	Station												Unit : mm	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Annual

iv) Meteorological Features at

Mean temp. (°C)	Station												Annual	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Mean R. humidity (%)														
Pan evaporation (mm)														
Wind Speed (km/day)														
Nos. of Typhoon (Nos.)														
Typhoon frequency (%)														

3. SURFACE RUNOFF

i) Water Region VII

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)

iii) Monthly Runoff at Major Stations

Station	River DA(km ²)												Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		

4. Reference Figures for Planning

i) Irrigation Water Requirement : lit/sec/ha (mm/month)

PROVINCIAL METEORO-HYDROLOGICAL PROFILE

File No. 48

Region: **VIII** Province: **NORTHERN SAMAR**

Catchment Area : 3,947.9 km²

1. STATIONS

i) Rainfall Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Catarman	12° 29' 124° 38'	1949 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

ii) Meteorological Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Catarman, Samar	12° 29' 124° 38'	1971 - 1990

No.	Name of Station/Location	Coordinate	Period of Record

iii) Evaporation Stations

No.	Name of Station/Location	Coordinate	Period of Record
1	Catarman (Penman)	12° 29' 124° 38'	1949 - 1973

No.	Name of Station/Location	Coordinate	Period of Record

iv) Gauging Stations

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record
	San Ramon, San Isidro	Mawo	138	1968 - 1976
	Casulgan, Bobon	Bobon	91	1957 - 1978
	Polangui, Catarman	Catarman	472	1959 - 1980
	Hirawahan, Caubig	Hirawahan	19	1957 - 1979
	San Isidro, Navas	Caubig	252	1955 - 1977

Sta. ID	Name of Station/Location	River	DA(km ²)	Period of Record

2. METEOROLOGY

i) Climate Type : II (No Dry Season)

ii) Annual Rainfall : 3,304.1 mm

- Rainy season : 1,894.8 mm (57%) from November to March

- Dry season : 1,409.3 mm (43%) from April to October

iii) Monthly rainfall at Major Stations

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Catarman	405.1	246.6	223.0	146.7	147.1	178.8	203.9	159.1	203.6	370.1	508.7	511.4	3304.1

Unit : mm

iv) Meteorological Features at Catarman Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean temp. (°C)	25.6	25.6	26.1	27.1	28.0	28.1	27.9	28.4	27.8	27.3	26.7	25.9	27.0
Mean R. humidity (%)	85.9	85.3	83.2	82.9	82.6	83.8	83.5	81.5	84.5	86.6	87.6	88.6	84.7
Pan evaporation (mm)	106.0	102.0	117.0	108.0	122.0	133.0	146.0	151.0	138.0	125.0	110.0	104.0	121.8
Wind Speed (km/day)	259.2	216.0	190.1	129.6	103.7	138.2	129.6	129.6	112.3	129.6	181.4	241.9	163.4
Nos. of Typhoon (Nos.)	3	0	0	4	7	7	6	1	1	8	18	13	68
Typhoon frequency (%)	4	0	0	6	10	10	9	1	1	12	26	19	100

3. SURFACE RUNOFF

i) Water Region VIII

ii) Hydrological Characteristics of Major Rivers

River	Station	Drainage Area (km ²)	Annual Runoff (MCM)	Specific Discharge (m ³ /sec/km ²)
Mawo	San Ramon	138	347.84	0.07993
Bobon	Casulgan	91	250.08	0.08714
Catarman	Polangui	472	966.89	0.06496
Hirawahan	Hirawahan	19	55.03	0.09263
Catubig	San Isidro	252	1237.47	0.15571

iii) Monthly Runoff at Major Stations

Station	River	DA(km ²)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
San Ramon, Sn Isidro	Mawo	138	16.45	12.18	9.50	7.92	8.86	9.65	9.25	8.14	7.91	10.94	14.98	16.53	11.03
Casulgan, Bobon	Bobon	91	16.50	9.92	6.87	2.84	3.11	2.40	3.69	2.30	2.79	6.74	14.37	23.84	7.93
Polangui, Catarman	Catarman	472	57.32	22.71	19.49	12.12	14.51	20.95	16.69	18.53	14.98	31.23	66.44	73.01	30.66
Hirawahan, Catubig	Hirawahan	19	2.60	1.88	0.95	0.37	0.51	0.54	0.81	0.83	0.63	3.07	3.37	5.55	1.76
San Isidro, Navas	Caubig	252	68.81	45.59	34.58	24.06	28.41	25.19	24.67	19.63	17.90	23.58	67.43	91.09	39.25

4. Reference Figures for Planning

i) Irrigation Water Requirement

: 1.75 lit/sec/ha

(437 mm/month)