Table 7-4 Daily Discharge Calculation at Central A. Neto Gauging Station on Do Ouro River

( Period: 1988-1992 )

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= 0.007+4.068*H+4.302*H^2

Daily Discharge Calculation in m^3/ Sec
River: Do Ouro
Gauging Station: C. H.(Central A. Neto)

Year: 1988
Catchment Area : 48.0 Sq.Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.300 | 0.819 | 1.320 | 0.945 | 2.113 | 0.704 |
| 2 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.360 | 1.207 | 1.290 | 0.757 | 2.314 | 0.771 |
| 3 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.360 | 1.207 | 1.290 | 0.757 | 2.314 | 0.771 |
| 4 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.340 | 1.075 | 1.360 | 1.207 | 2.631 | 0.877 |
| 5 | | | | | | | | | | | | | | | | | | | 1.230 | 0.405 | 1.300 | 0.819 | 1.330 | 1.009 | 2.233 | 0.744 |
| 6 | | | | | | | | | | | | | | | | | | | 1.230 | 0.405 | 1.320 | 0.945 | 1.310 | 0.882 | 2.231 | 0.744 |
| 7 | | | | | | | | | | | | | | | | | | | 1.240 | 0.461 | 1.370 | 1.275 | 1.350 | 1.141 | 2.877 | 0.959 |
| 8 | | | | | | | | | | | | | | | | | | | 1.280 | 0.696 | 1.400 | 1.484 | 1.340 | 1.075 | 3.255 | 1.085 |
| 9 | | | | | | | | | | | | | | | | | | | 1.290 | 0.757 | 1.340 | 1.075 | 1.320 | 0.945 | 2.777 | 0.926 |
| 10 | | | | | | | | | | | | | | | | | | | 1.330 | 1.009 | 1.280 | 0.696 | 1.310 | 0.882 | 2.587 | 0.862 |
| 11 | | | | | | | | | | | | | | | | | | | 1.280 | 0.696 | 1.300 | 0.819 | 1.300 | 0.819 | 2.334 | 0.778 |
| 12 | | | | | | | | | | | | | | | | | | | 1.280 | 0.696 | 1.330 | 1.009 | 1.290 | 0.757 | 2.463 | 0.821 |
| 13 | | | | | | | | | | | | | | | | | | | 1.240 | 0.461 | 1.390 | 1.413 | 1.360 | 1.207 | 3.082 | 1.027 |
| 14 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.440 | 1.774 | 1.300 | 0.819 | 2.942 | 0.981 |
| 15 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.470 | 2.000 | 1.300 | 0.819 | 3.168 | 1.056 |
| 16 | | | | | | | | | | | | | | | | | | | 1.220 | 0.349 | 1.520 | 2.395 | 1.290 | 0.757 | 3.501 | 1.167 |
| 17 | | | | | | | | | | | | | | | | | | | 1.300 | 0.819 | 1.420 | 1.627 | 1.270 | 0.636 | 3.082 | 1.027 |
| 18 | | | | | | | | | | | | | | | | | | | 1.390 | 1.413 | 1.360 | 1.207 | 1.260 | 0.577 | 3.198 | 1.066 |
| 19 | | | | | | | | | | | | | | | | | | | 1.310 | 0.882 | 1.330 | 1.009 | 1.260 | 0.577 | 2.468 | 0.823 |
| 20 | | | | | | | | | | | | | | | | | | | 1.300 | 0.819 | 1.320 | 0.945 | 1.250 | 0.577 | 2.341 | 0.780 |
| 21 | | | | | | | | | | | | | | | | | | | 1.290 | 0.757 | 1.350 | 1.141 | 1.260 | 0.577 | 2.475 | 0.825 |
| 22 | | | | | | | | | | | | | | | | | | | 1.290 | 0.757 | 1.420 | 1.627 | 1.300 | 0.819 | 3.203 | 1.068 |
| 23 | | | | | | | | | | | | | | | | | | | 1.330 | 1.009 | 1.360 | 1.207 | 1.340 | 1.075 | 3.291 | 1.097 |
| 24 | | | | | | | | | | | | | | | | | | | 1.400 | 1.484 | 1.380 | 1.344 | 1.340 | 1.075 | 3.902 | 1.301 |
| 25 | | | | | | | | | | | | | | | | | | | 1.330 | 1.009 | 1.380 | 1.344 | 1.330 | 1.009 | 3.363 | 1.121 |
| 26 | | | | | | | | | | | | | | | | | | | 1.320 | 0.945 | 1.370 | 1.275 | 1.310 | 0.882 | 3.102 | 1.034 |
| 27 | | | | | | | | | | | | | | | | | | | 1.310 | 0.882 | 1.370 | 1.275 | 1.310 | 0.882 | 3.038 | 1.013 |
| 28 | | | | | | | | | | | | | | | | | | | 1.310 | 0.882 | 1.370 | 1.275 | 1.310 | 0.882 | 3.038 | 1.013 |
| 29 | | | | | | | | | | | | | | | | | | | 1.330 | 1.009 | 1.360 | 1.207 | 1.320 | 0.945 | 3.162 | 1.054 |
| 30 | | | | | | | | | | | | | | | | | | | 1.320 | 0.945 | 1.330 | 1.009 | 1.280 | 0.696 | 2.651 | 0.884 |
| 31 | | | | | | | | | | | | | | | | | | | 1.310 | 0.882 | | | 1.220 | 0.349 | 1.231 | 0.615 |
| Total | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 22.526 | | 37.508 | | 26.336 | 86.370 | |
| Average(A) | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.727 | | 1.250 | | 0.850 | | 0.939 |
| No. of Days/X | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 31 | | 30 | | 31 | | 92 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= 0.007-4.968*H+4.302*H^2

Daily Discharge Calculation in m^3/ Sec
River: Du Ouro
Gauging Station: C. H. (Central A. Neto)

Year: 1980
Catchment Area : 48.0 Sq. Km

| Day | January H | January Q | February H | February Q | March H | March Q | April H | April Q | May H | May Q | June H | June Q | July H | July Q | August H | August Q | September H | September Q | October H | October Q | November H | November Q | December H | December Q | Total Q | Average Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.200 | 0.240 | 1.200 | 0.240 | | | 1.210 | 0.294 | 1.280 | 0.696 | 1.360 | 1.207 | 1.220 | 0.349 | 1.240 | 0.461 | 1.240 | 0.461 | 1.230 | 0.405 | 1.410 | 1.555 | 1.320 | 0.945 | 6.856 | 0.623 |
| 2 | 1.190 | 0.187 | | | | | 1.200 | 0.240 | 1.280 | 0.696 | 1.320 | 0.945 | 1.230 | 0.405 | 1.240 | 0.461 | 1.230 | 0.405 | 1.240 | 0.461 | 1.410 | 1.555 | 1.320 | 0.945 | 6.301 | 0.630 |
| 3 | 1.260 | 0.577 | | | | | 1.220 | 0.349 | 1.280 | 0.696 | 1.340 | 1.075 | 1.220 | 0.349 | 1.240 | 0.461 | 1.240 | 0.461 | 1.240 | 0.461 | 1.420 | 1.627 | 1.320 | 0.945 | 7.003 | 0.700 |
| 4 | 1.280 | 0.696 | | | | | 1.190 | 0.187 | 1.280 | 0.696 | 1.320 | 0.945 | 1.220 | 0.349 | 1.240 | 0.461 | 1.220 | 0.349 | 1.240 | 0.461 | 1.400 | 1.484 | 1.330 | 1.009 | 6.639 | 0.664 |
| 5 | 1.260 | 0.577 | | | | | 1.200 | 0.240 | 1.420 | 1.627 | 1.320 | 0.945 | 1.220 | 0.349 | 1.240 | 0.461 | 1.230 | 0.405 | 1.240 | 0.461 | 1.390 | 1.413 | 1.320 | 0.945 | 7.425 | 0.742 |
| 6 | 1.210 | 0.294 | | | | | 1.200 | 0.240 | 1.360 | 1.207 | 1.320 | 0.945 | 1.230 | 0.405 | 1.240 | 0.461 | 1.230 | 0.405 | 1.240 | 0.461 | 1.380 | 1.344 | 1.330 | 1.009 | 6.773 | 0.677 |
| 7 | 1.200 | 0.240 | | | | | 1.210 | 0.294 | 1.340 | 1.075 | 1.310 | 0.882 | 1.230 | 0.405 | 1.240 | 0.461 | 1.230 | 0.405 | 1.240 | 0.461 | 1.420 | 1.627 | 1.380 | 1.344 | 7.194 | 0.719 |
| 8 | 1.200 | 0.240 | | | | | 1.200 | 0.240 | 1.320 | 0.945 | 1.300 | 0.819 | 1.230 | 0.405 | 1.240 | 0.461 | 1.220 | 0.349 | 1.240 | 0.461 | 1.520 | 2.395 | 1.360 | 1.207 | 7.524 | 0.752 |
| 9 | 1.200 | 0.240 | | | 1.270 | 0.636 | 1.210 | 0.294 | 1.310 | 0.882 | 1.250 | 0.519 | 1.220 | 0.349 | 1.230 | 0.405 | 1.220 | 0.349 | 1.250 | 0.519 | 1.430 | 1.700 | 1.370 | 1.275 | 7.169 | 0.652 |
| 10 | 1.220 | 0.349 | | | 1.220 | 0.349 | 1.220 | 0.349 | 1.300 | 0.819 | 1.240 | 0.461 | 1.220 | 0.349 | 1.210 | 0.294 | 1.210 | 0.294 | 1.260 | 0.577 | 1.400 | 1.484 | 1.350 | 1.141 | 6.467 | 0.588 |
| 11 | 1.200 | 0.240 | | | 1.220 | 0.349 | 1.220 | 0.349 | 1.330 | 1.009 | 1.240 | 0.461 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.405 | 1.260 | 0.577 | 1.390 | 1.413 | 1.340 | 1.075 | 6.578 | 0.598 |
| 12 | 1.210 | 0.294 | | | 1.220 | 0.349 | 1.210 | 0.294 | 1.320 | 0.945 | 1.240 | 0.461 | 1.210 | 0.294 | 1.260 | 0.577 | 1.220 | 0.349 | 1.240 | 0.461 | 1.380 | 1.344 | 1.540 | 2.559 | 7.929 | 0.721 |
| 13 | 1.200 | 0.240 | | | 1.220 | 0.349 | 1.200 | 0.240 | 1.310 | 0.882 | 1.230 | 0.405 | 1.220 | 0.349 | 1.240 | 0.461 | 1.230 | 0.405 | 1.410 | 1.555 | 1.370 | 1.275 | 1.360 | 1.207 | 7.369 | 0.670 |
| 14 | 1.200 | 0.240 | | | 1.220 | 0.349 | 1.200 | 0.240 | 1.280 | 0.696 | 1.230 | 0.405 | 1.210 | 0.294 | 1.240 | 0.461 | 1.230 | 0.405 | 1.510 | 2.314 | 1.430 | 1.700 | 1.340 | 1.075 | 8.180 | 0.744 |
| 15 | 1.190 | 0.187 | | | 1.270 | 0.636 | 1.220 | 0.349 | 1.260 | 0.577 | 1.240 | 0.461 | 1.210 | 0.294 | 1.240 | 0.461 | 1.230 | 0.405 | 1.460 | 1.924 | 1.420 | 1.627 | 1.340 | 1.075 | 7.997 | 0.727 |
| 16 | 1.200 | 0.240 | | | 1.270 | 0.636 | 1.180 | 0.135 | 1.320 | 0.945 | 1.230 | 0.405 | 1.220 | 0.349 | 1.240 | 0.461 | 1.220 | 0.349 | 1.460 | 1.924 | 1.370 | 1.275 | 1.340 | 1.075 | 7.795 | 0.709 |
| 17 | 1.190 | 0.187 | | | 1.260 | 0.577 | 1.190 | 0.187 | 1.300 | 0.819 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.405 | 1.230 | 0.405 | 1.410 | 1.555 | 1.350 | 1.141 | 1.330 | 1.009 | 6.983 | 0.635 |
| 18 | 1.190 | 0.187 | | | 1.260 | 0.577 | 1.200 | 0.240 | 1.340 | 1.075 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.405 | 1.230 | 0.405 | 1.400 | 1.484 | 1.350 | 1.141 | 1.320 | 0.945 | 7.156 | 0.651 |
| 19 | 1.240 | 0.461 | | | 1.190 | 0.187 | 1.280 | 0.696 | 1.330 | 1.009 | 1.220 | 0.349 | 1.220 | 0.349 | 1.220 | 0.349 | 1.220 | 0.349 | 1.240 | 0.461 | 1.390 | 1.413 | 1.350 | 1.141 | 7.492 | 0.681 |
| 20 | 1.180 | 0.135 | | | 1.200 | 0.240 | 1.260 | 0.577 | 1.320 | 0.945 | 1.220 | 0.349 | 1.220 | 0.349 | 1.220 | 0.349 | 1.240 | 0.461 | 1.420 | 1.627 | 1.360 | 1.207 | 1.260 | 0.577 | 6.818 | 0.620 |
| 21 | 1.160 | 0.033 | | | 1.200 | 0.240 | 1.280 | 0.696 | 1.300 | 0.819 | 1.220 | 0.349 | 1.220 | 0.349 | 1.220 | 0.349 | 1.240 | 0.461 | 1.410 | 1.555 | 1.350 | 1.141 | | | 5.993 | 0.599 |
| 22 | 1.160 | 0.033 | | | 1.200 | 0.240 | 1.200 | 0.240 | 1.400 | 1.484 | 1.260 | 0.577 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.405 | 1.520 | 2.395 | 1.340 | 1.075 | | | 7.147 | 0.715 |
| 23 | 1.180 | 0.135 | | | 1.200 | 0.240 | 1.190 | 0.187 | 1.360 | 1.207 | 1.250 | 0.519 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.405 | 1.460 | 1.924 | 1.330 | 1.009 | | | 6.325 | 0.633 |
| 24 | 1.250 | 0.519 | | | 1.190 | 0.187 | 1.160 | 0.033 | 1.340 | 1.075 | 1.260 | 0.577 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.405 | 1.460 | 1.924 | 1.370 | 1.275 | | | 6.693 | 0.669 |
| 25 | 1.260 | 0.577 | | | 1.200 | 0.240 | 1.160 | 0.033 | 1.330 | 1.009 | 1.240 | 0.461 | 1.220 | 0.349 | 1.220 | 0.349 | 1.240 | 0.405 | 1.410 | 1.555 | 1.320 | 0.945 | | | 5.924 | 0.592 |
| 26 | 1.200 | 0.240 | | | 1.190 | 0.187 | 1.270 | 0.636 | 1.320 | 0.945 | 1.250 | 0.519 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.461 | 1.680 | 3.803 | 1.320 | 0.945 | | | 8.435 | 0.844 |
| 27 | 1.200 | 0.240 | | | 1.200 | 0.240 | 1.260 | 0.577 | 1.300 | 1.207 | 1.250 | 0.519 | 1.230 | 0.405 | 1.210 | 0.294 | 1.240 | 0.405 | 1.450 | 1.848 | 1.310 | 0.882 | | | 6.618 | 0.662 |
| 28 | 1.220 | 0.349 | | | 1.200 | 0.240 | 1.280 | 0.696 | 1.350 | 1.141 | 1.240 | 0.461 | 1.230 | 0.405 | 1.220 | 0.349 | 1.240 | 0.461 | 1.420 | 1.627 | 1.300 | 0.819 | | | 6.549 | 0.655 |
| 29 | 1.260 | 0.577 | | | 1.200 | 0.240 | 1.300 | 0.819 | 1.350 | 1.141 | 1.230 | 0.405 | 1.220 | 0.349 | 1.220 | 0.349 | 1.230 | 0.461 | 1.420 | 1.627 | 1.310 | 0.882 | | | 6.850 | 0.685 |
| 30 | 1.220 | 0.349 | | | 1.200 | 0.240 | 1.240 | 0.461 | 1.420 | 1.627 | 1.230 | 0.405 | 1.220 | 0.349 | 1.230 | 0.405 | 1.230 | 0.576 | 1.300 | 1.413 | 1.280 | 0.696 | | | 6.522 | 0.652 |
| 31 | 1.200 | 0.240 | | | 1.200 | 0.240 | | | 1.370 | 0.844 | | | 1.240 | 0.461 | 1.230 | 0.405 | | | 1.420 | 1.627 | | | | | 3.818 | 0.636 |
| Total | | 0.348 | | 0.240 | | 7.773 | | 10.418 | | 30.741 | | 17.531 | | 11.105 | | 12.568 | | 12.380 | | 40.864 | | 39.116 | | 22.437 | 214.522 | |
| Average | | 0.302 | | 0.240 | | 0.338 | | 0.347 | | 0.992 | | 0.584 | | 0.358 | | 0.405 | | 0.413 | | 1.318 | | 1.304 | | 1.122 | | 0.672 |
| No. of Days/M | | 31 | | 1 | | 23 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 20 | | 319 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -2.712+2.504*H-0.014*H^2

Daily Discharge Calculation in m^3/ Sec

River: Du Ouro
Gauging Station: C. H.(Central A. Neto)

Year: 1990
Catchment Area : 46.0 Sq.Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | | | 1.280 | 0.470 | 1.270 | 0.445 | 1.280 | 0.470 | 1.300 | 0.520 | 1.370 | 0.692 | 1.260 | 0.421 | 1.300 | 0.520 | | | 1.280 | 0.470 | 1.400 | 0.766 | 1.350 | 0.643 | 5.417 | 0.542 |
| 2 | | | 1.260 | 0.421 | 1.260 | 0.421 | 1.270 | 0.445 | 1.310 | 0.544 | 1.330 | 0.594 | 1.260 | 0.421 | 1.290 | 0.495 | | | 1.280 | 0.470 | 1.340 | 0.618 | 1.340 | 0.618 | 5.047 | 0.505 |
| 3 | | | 1.230 | 0.347 | 1.290 | 0.495 | 1.260 | 0.421 | 1.300 | 0.520 | 1.330 | 0.594 | 1.260 | 0.421 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.320 | 0.569 | 1.340 | 0.618 | 4.973 | 0.497 |
| 4 | | | 1.250 | 0.396 | 1.260 | 0.421 | 1.270 | 0.445 | 1.290 | 0.495 | 1.360 | 0.668 | 1.260 | 0.421 | 1.300 | 0.520 | | | 1.290 | 0.495 | 1.300 | 0.520 | 1.340 | 0.618 | 4.998 | 0.500 |
| 5 | | | 1.230 | 0.347 | 1.260 | 0.421 | 1.260 | 0.421 | 1.260 | 0.421 | 1.350 | 0.643 | 1.260 | 0.421 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.280 | 0.470 | 1.340 | 0.618 | 4.751 | 0.475 |
| 6 | | | 1.220 | 0.322 | 1.270 | 0.445 | 1.260 | 0.421 | 1.250 | 0.396 | 1.350 | 0.643 | 1.260 | 0.421 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.290 | 0.495 | 1.340 | 0.618 | 4.751 | 0.475 |
| 7 | | | 1.210 | 0.297 | 1.270 | 0.445 | 1.250 | 0.396 | 1.310 | 0.544 | 1.340 | 0.618 | 1.270 | 0.445 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.280 | 0.470 | 1.340 | 0.618 | 4.825 | 0.483 |
| 8 | | | 1.240 | 0.371 | 1.270 | 0.445 | 1.260 | 0.421 | 1.310 | 0.544 | 1.330 | 0.594 | 1.270 | 0.445 | 1.300 | 0.520 | | | 1.290 | 0.495 | 1.270 | 0.445 | 1.260 | 0.421 | 4.702 | 0.470 |
| 9 | | | 1.260 | 0.421 | 1.380 | 0.717 | 1.250 | 0.396 | 1.300 | 0.520 | 1.330 | 0.594 | 1.270 | 0.445 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.280 | 0.470 | 1.260 | 0.421 | 4.973 | 0.497 |
| 10 | | | 1.260 | 0.421 | 1.380 | 0.717 | 1.250 | 0.396 | 1.310 | 0.544 | 1.320 | 0.569 | 1.270 | 0.445 | 1.290 | 0.495 | | | 1.220 | 0.322 | 1.320 | 0.569 | 1.280 | 0.470 | 4.948 | 0.495 |
| 11 | | | 1.260 | 0.421 | 1.380 | 0.717 | 1.250 | 0.396 | 1.320 | 0.569 | 1.320 | 0.569 | 1.270 | 0.445 | 1.300 | 0.520 | | | 1.220 | 0.322 | 1.420 | 0.815 | 1.340 | 0.618 | 5.392 | 0.539 |
| 12 | | | 1.270 | 0.445 | 1.380 | 0.717 | 1.250 | 0.396 | 1.350 | 0.643 | 1.320 | 0.569 | 1.270 | 0.445 | 1.280 | 0.470 | | | 1.300 | 0.520 | 1.340 | 0.618 | 1.270 | 0.445 | 5.269 | 0.527 |
| 13 | | | 1.280 | 0.470 | 1.280 | 0.470 | 1.250 | 0.396 | 1.320 | 0.569 | 1.310 | 0.544 | 1.280 | 0.470 | 1.300 | 0.520 | | | 1.310 | 0.544 | 1.340 | 0.618 | 1.280 | 0.470 | 5.072 | 0.507 |
| 14 | | | 1.260 | 0.421 | 1.290 | 0.495 | 1.250 | 0.396 | 1.320 | 0.569 | 1.320 | 0.569 | 1.280 | 0.470 | 1.300 | 0.520 | | | 1.270 | 0.445 | 1.360 | 0.668 | 1.280 | 0.470 | 5.023 | 0.502 |
| 15 | | | 1.270 | 0.445 | 1.280 | 0.470 | 1.250 | 0.396 | 1.400 | 0.766 | 1.310 | 0.544 | 1.280 | 0.470 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.340 | 0.618 | 1.300 | 0.520 | 5.220 | 0.522 |
| 16 | | | 1.280 | 0.470 | 1.270 | 0.445 | 1.260 | 0.421 | 1.370 | 0.692 | 1.310 | 0.544 | 1.280 | 0.470 | 1.290 | 0.495 | | | 1.290 | 0.495 | 1.320 | 0.569 | 1.340 | 0.618 | 5.220 | 0.522 |
| 17 | | | 1.270 | 0.445 | 1.270 | 0.445 | 1.260 | 0.421 | 1.340 | 0.618 | 1.280 | 0.470 | 1.280 | 0.470 | 1.270 | 0.445 | | | 1.300 | 0.520 | 1.340 | 0.618 | 1.340 | 0.618 | 5.072 | 0.507 |
| 18 | | | 1.260 | 0.421 | 1.260 | 0.421 | 1.310 | 0.544 | 1.340 | 0.618 | 1.300 | 0.520 | 1.290 | 0.495 | 1.260 | 0.421 | | | 1.260 | 0.421 | 1.320 | 0.569 | 1.340 | 0.618 | 5.047 | 0.505 |
| 19 | | | 1.280 | 0.470 | 1.400 | 0.766 | 1.320 | 0.569 | 1.320 | 0.569 | 1.300 | 0.520 | 1.290 | 0.495 | 1.260 | 0.421 | | | 1.260 | 0.421 | 1.360 | 0.668 | 1.330 | 0.594 | 5.491 | 0.549 |
| 20 | | | 1.280 | 0.470 | 1.300 | 0.520 | 1.330 | 0.594 | 1.310 | 0.544 | 1.300 | 0.520 | 1.290 | 0.495 | 1.270 | 0.445 | | | 1.270 | 0.445 | 1.340 | 0.618 | 1.340 | 0.618 | 5.269 | 0.527 |
| 21 | | | 1.280 | 0.470 | 1.370 | 0.692 | 1.320 | 0.569 | 1.350 | 0.643 | 1.290 | 0.495 | 1.290 | 0.495 | 1.270 | 0.445 | | | 1.290 | 0.495 | 1.330 | 0.594 | 1.320 | 0.569 | 5.467 | 0.547 |
| 22 | | | 1.270 | 0.445 | 1.330 | 0.594 | 1.310 | 0.544 | 1.380 | 0.717 | 1.290 | 0.495 | 1.290 | 0.495 | 1.270 | 0.445 | | | 1.300 | 0.520 | 1.450 | 0.889 | 1.320 | 0.569 | 5.713 | 0.571 |
| 23 | | | 1.270 | 0.445 | 1.310 | 0.544 | 1.290 | 0.495 | 1.340 | 0.618 | 1.290 | 0.495 | 1.290 | 0.495 | 1.270 | 0.445 | | | 1.230 | 0.347 | 1.580 | 1.209 | 1.320 | 0.569 | 5.663 | 0.566 |
| 24 | | | 1.270 | 0.445 | 1.310 | 0.544 | 1.310 | 0.544 | 1.360 | 0.668 | 1.260 | 0.421 | 1.290 | 0.495 | 1.260 | 0.421 | | | 1.250 | 0.396 | 1.360 | 0.668 | 1.300 | 0.520 | 5.121 | 0.512 |
| 25 | | | 1.270 | 0.445 | 1.290 | 0.495 | 1.300 | 0.520 | 1.340 | 0.618 | 1.290 | 0.495 | 1.300 | 0.520 | 1.270 | 0.445 | | | 1.260 | 0.421 | 1.360 | 0.668 | 1.280 | 0.470 | 5.097 | 0.510 |
| 26 | | | 1.300 | 0.520 | 1.290 | 0.495 | 1.290 | 0.495 | 1.410 | 0.791 | 1.300 | 0.520 | 1.300 | 0.520 | 1.260 | 0.421 | | | 1.320 | 0.569 | 1.370 | 0.692 | 1.320 | 0.569 | 5.590 | 0.559 |
| 27 | | | 1.300 | 0.520 | 1.230 | 0.347 | 1.290 | 0.495 | 1.480 | 0.963 | 1.290 | 0.495 | 1.300 | 0.520 | 1.250 | 0.396 | 1.270 | 0.445 | 1.330 | 0.594 | 1.300 | 0.520 | 1.380 | 0.717 | 6.010 | 0.546 |
| 28 | | | 1.280 | 0.470 | 1.300 | 0.520 | 1.270 | 0.445 | 1.420 | 0.815 | 1.270 | 0.445 | 1.300 | 0.520 | 1.280 | 0.470 | 1.270 | 0.445 | 1.340 | 0.618 | 1.340 | 0.618 | 1.380 | 0.717 | 6.085 | 0.553 |
| 29 | | | | | 1.280 | 0.470 | 1.270 | 0.445 | 1.430 | 0.840 | 1.260 | 0.421 | 1.300 | 0.520 | | | 1.330 | 0.594 | 1.330 | 0.594 | 1.360 | 0.668 | 1.400 | 0.766 | 5.317 | 0.591 |
| 30 | | | | | 1.240 | 0.371 | 1.280 | 0.470 | 1.400 | 0.766 | 1.260 | 0.421 | 1.300 | 0.520 | | | 1.280 | 0.470 | 1.330 | 0.594 | 1.350 | 0.643 | 1.340 | 0.618 | 4.873 | 0.541 |
| 31 | | | | | 1.270 | 0.445 | | | 1.380 | 0.717 | | | 1.300 | 0.520 | | | | | 2.220 | 2.778 | | | 1.320 | 0.569 | 5.029 | 1.006 |
| Total | | 0.000 | | 12.054 | | 15.957 | | 13.784 | | 19.361 | | 16.277 | | 14.650 | | 13.264 | | 1.955 | | 17.278 | | 18.940 | | 17.906 | 161.425 | |
| Average | | 0.000 | | 0.431 | | 0.515 | | 0.459 | | 0.625 | | 0.543 | | 0.473 | | 0.474 | | 0.489 | | 0.557 | | 0.631 | | 0.578 | | 0.529 |
| No. of Days/M | | 0 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 28 | | 4 | | 31 | | 30 | | 31 | | 305 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -3.294+3.426*H-0.394*H^2

Daily Discharge Calculation in m^3/ Sec

River: Du Ouro — Year: 1991

Gauging Station: C. H. (Central A. Neto) — Catchment Area : 48.0 Sq. Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | 1.320 | 0.542 | 1.280 | 0.446 | 1.310 | 0.518 | 1.480 | 0.913 | 1.340 | 0.589 | | | | | 1.280 | 0.446 | | | 1.270 | 0.422 | 1.290 | 0.470 | 1.240 | 0.348 | 4.694 | 0.522 |
| 2 | 1.290 | 0.470 | 1.280 | 0.446 | 1.310 | 0.518 | 1.480 | 0.913 | 1.400 | 0.730 | | | | | 1.280 | 0.446 | | | 1.280 | 0.446 | 1.290 | 0.470 | 1.230 | 0.324 | 4.762 | 0.529 |
| 3 | 1.340 | 0.589 | 1.290 | 0.470 | 1.320 | 0.542 | 1.490 | 0.936 | 1.360 | 0.637 | | | | | 1.270 | 0.422 | | | 1.270 | 0.422 | 1.280 | 0.446 | 1.240 | 0.348 | 4.811 | 0.535 |
| 4 | 1.320 | 0.542 | 1.230 | 0.324 | 1.280 | 0.446 | 1.460 | 0.868 | 1.350 | 0.613 | | | | | 1.270 | 0.422 | | | 1.270 | 0.422 | 1.270 | 0.422 | 1.240 | 0.348 | 4.406 | 0.490 |
| 5 | 1.300 | 0.494 | 1.240 | 0.348 | 1.280 | 0.446 | 1.500 | 0.958 | 1.360 | 0.637 | | | | | 1.270 | 0.422 | | | 1.270 | 0.422 | 1.270 | 0.422 | | | 4.148 | 0.518 |
| 6 | 1.300 | 0.494 | 1.250 | 0.373 | 1.280 | 0.446 | 1.460 | 0.868 | 1.340 | 0.589 | | | | | 1.270 | 0.422 | | | 1.270 | 0.422 | 1.280 | 0.446 | | | 4.059 | 0.507 |
| 7 | 1.300 | 0.494 | 1.240 | 0.348 | 1.260 | 0.397 | 1.480 | 0.913 | 1.360 | 0.637 | | | | | 1.270 | 0.422 | | | 1.270 | 0.422 | 1.270 | 0.422 | | | 4.054 | 0.507 |
| 8 | 1.300 | 0.494 | 1.240 | 0.348 | 1.360 | 0.637 | 1.480 | 0.913 | 1.360 | 0.637 | | | | | 1.280 | 0.446 | | | 1.280 | 0.446 | 1.270 | 0.422 | | | 4.342 | 0.543 |
| 9 | 1.300 | 0.494 | 1.240 | 0.348 | 1.280 | 0.446 | | | 1.330 | 0.566 | | | | | 1.270 | 0.422 | | | 1.260 | 0.397 | 1.260 | 0.397 | | | 3.070 | 0.439 |
| 10 | 1.310 | 0.518 | 1.240 | 0.348 | 1.290 | 0.470 | | | 1.340 | 0.589 | | | 1.260 | 0.397 | 1.260 | 0.397 | | | 1.270 | 0.422 | 1.320 | 0.542 | | | 3.683 | 0.460 |
| 11 | 1.320 | 0.542 | 1.250 | 0.373 | 1.280 | 0.446 | | | 1.360 | 0.637 | | | 1.280 | 0.446 | 1.260 | 0.397 | | | 1.270 | 0.422 | 1.300 | 0.494 | | | 3.756 | 0.469 |
| 12 | 1.300 | 0.494 | 1.250 | 0.373 | 1.470 | 0.891 | 1.400 | 0.730 | 1.310 | 0.518 | 1.360 | 0.637 | 1.280 | 0.446 | 1.260 | 0.397 | | | 1.370 | 0.660 | 1.280 | 0.446 | | | 5.591 | 0.559 |
| 13 | 1.260 | 0.397 | 1.250 | 0.373 | 1.330 | 0.566 | 1.400 | 0.730 | 1.380 | 0.684 | 1.350 | 0.613 | 1.280 | 0.446 | 1.280 | 0.446 | | | 1.310 | 0.518 | | | 1.280 | 0.446 | 5.218 | 0.522 |
| 14 | 1.240 | 0.348 | 1.250 | 0.373 | 1.270 | 0.422 | 1.380 | 0.684 | 1.370 | 0.660 | 1.320 | 0.542 | 1.290 | 0.470 | 1.250 | 0.373 | | | 1.300 | 0.494 | | | 1.280 | 0.446 | 4.811 | 0.481 |
| 15 | 1.220 | 0.299 | 1.240 | 0.348 | 1.360 | 0.637 | 1.390 | 0.707 | 1.410 | 0.753 | 1.310 | 0.518 | 1.280 | 0.446 | | | | | 1.520 | 1.003 | | | 1.280 | 0.446 | 5.157 | 0.573 |
| 16 | 1.220 | 0.299 | 1.240 | 0.348 | 1.260 | 0.397 | 1.370 | 0.660 | 1.380 | 0.684 | 1.300 | 0.494 | 1.280 | 0.446 | | | | | 1.390 | 0.707 | | | 1.280 | 0.446 | 4.481 | 0.498 |
| 17 | 1.220 | 0.299 | 1.240 | 0.348 | 1.260 | 0.397 | 1.340 | 0.589 | 1.440 | 0.822 | 1.300 | 0.494 | 1.290 | 0.470 | | | | | 1.350 | 0.613 | | | 1.300 | 0.494 | 4.528 | 0.503 |
| 18 | 1.260 | 0.397 | 1.240 | 0.348 | 1.430 | 0.799 | 1.350 | 0.613 | 1.360 | 0.637 | 1.300 | 0.494 | 1.290 | 0.470 | | | 1.290 | 0.250 | 1.340 | 0.589 | | | 1.280 | 0.446 | 5.044 | 0.504 |
| 19 | 1.300 | 0.494 | 1.230 | 0.324 | 1.390 | 0.707 | 1.310 | 0.518 | 1.420 | 0.776 | 1.300 | 0.494 | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.320 | 0.542 | | | 1.280 | 0.446 | 5.144 | 0.514 |
| 20 | 1.290 | 0.470 | 1.250 | 0.373 | 1.330 | 0.566 | 1.470 | 0.891 | | | 1.300 | 0.494 | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.320 | 0.542 | | | 1.280 | 0.446 | 4.624 | 0.514 |
| 21 | 1.370 | 0.660 | 1.260 | 0.397 | 1.330 | 0.566 | 1.360 | 0.637 | | | | | 1.290 | 0.470 | | | 1.270 | 0.422 | 1.440 | 0.822 | | | 1.300 | 0.494 | 4.467 | 0.558 |
| 22 | 1.120 | 0.049 | 1.260 | 0.397 | 1.400 | 0.730 | 1.350 | 0.613 | | | | | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.360 | 0.637 | | | 1.280 | 0.446 | 3.715 | 0.464 |
| 23 | 1.100 | -0.002 | 1.250 | 0.373 | 1.620 | 1.222 | 1.350 | 0.613 | | | | | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.370 | 0.660 | | | 1.280 | 0.446 | 4.155 | 0.519 |
| 24 | 1.190 | 0.225 | 1.250 | 0.373 | 1.300 | 0.494 | 1.350 | 0.613 | | | | | 1.280 | 0.446 | | | 1.270 | 0.422 | 1.330 | 0.566 | | | 1.320 | 0.542 | 3.680 | 0.460 |
| 25 | 1.140 | 0.100 | 1.210 | 0.275 | 1.300 | 0.494 | 1.340 | 0.589 | | | | | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.340 | 0.589 | | | 1.280 | 0.446 | 3.336 | 0.417 |
| 26 | 1.200 | 0.250 | 1.220 | 0.299 | 1.340 | 0.589 | 1.340 | 0.589 | | | | | 1.280 | 0.446 | | | 1.270 | 0.422 | 1.360 | 0.637 | | | 1.280 | 0.446 | 3.678 | 0.460 |
| 27 | 1.140 | 0.100 | 1.240 | 0.348 | 1.340 | 0.589 | 1.340 | 0.589 | | | | | 1.280 | 0.446 | | | 1.250 | 0.373 | 1.330 | 0.566 | | | 1.280 | 0.446 | 3.457 | 0.432 |
| 28 | 1.190 | 0.225 | 1.360 | 0.637 | 1.380 | 0.684 | 1.350 | 0.613 | | | | | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.320 | 0.542 | | | 1.280 | 0.446 | 3.989 | 0.499 |
| 29 | 1.200 | 0.250 | | | 1.460 | 0.868 | 1.370 | 0.660 | | | | | 1.280 | 0.446 | | | 1.250 | 0.373 | 1.300 | 0.494 | | | 1.280 | 0.446 | 3.536 | 0.505 |
| 30 | 1.140 | 0.100 | | | 1.480 | 0.913 | 1.360 | 0.637 | | | | | 1.280 | 0.446 | | | 1.260 | 0.397 | 1.300 | 0.494 | | | 1.280 | 0.446 | 3.432 | 0.490 |
| 31 | 1.180 | 0.200 | | | 1.480 | 0.913 | | | | | | | 1.280 | 0.446 | | | | | 1.280 | 0.446 | | | 1.280 | 0.446 | 2.451 | 0.490 |
| Total | | 11.325 | | 10.481 | | 18.754 | | 19.560 | | 12.394 | | 4.779 | | 9.855 | | 5.877 | | 5.041 | | 16.781 | | 5.396 | | 10.031 | 120.276 | |
| Average | | 0.365 | | 0.374 | | 0.605 | | 0.724 | | 0.652 | | 0.531 | | 0.469 | | 0.420 | | 0.388 | | 0.541 | | 0.450 | | 0.436 | | 0.503 |
| No. of Days/M | | 31 | | 28 | | 31 | | 27 | | 19 | | 9 | | 21 | | 14 | | 13 | | 31 | | 12 | | 23 | | 259 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -3.294+3.426*H-0.394*H^2

Daily Discharge Calculation in m^3/ Sec

River: Du Ouro — Year: 1992

Gauging Station: C. H. (Central A. Neto) — Catchment Area : 48.0 Sq.Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | 1.260 | 0.397 | 1.240 | 0.348 | 1.250 | 0.373 | | | 1.380 | 0.684 | 1.260 | 0.397 | | | | | | | | | | | | | 2.812 | 0.562 |
| 2 | 1.280 | 0.446 | 1.240 | 0.348 | 1.340 | 0.589 | | | 1.340 | 0.589 | 1.270 | 0.422 | | | | | | | | | | | | | 3.007 | 0.601 |
| 3 | 1.280 | 0.446 | 1.240 | 0.348 | 1.200 | 0.250 | | | 1.330 | 0.566 | 1.290 | 0.470 | | | | | | | | | | | | | 2.621 | 0.524 |
| 4 | 1.280 | 0.446 | 1.200 | 0.470 | 1.250 | 0.373 | | | 1.360 | 0.637 | 1.290 | 0.470 | | | | | | | | | | | | | 2.937 | 0.587 |
| 5 | 1.280 | 0.446 | 1.290 | 0.470 | 1.260 | 0.397 | | | 1.360 | 0.637 | 1.290 | 0.470 | | | | | | | | | | | | | 3.009 | 0.602 |
| 6 | 1.280 | 0.446 | 1.250 | 0.373 | 1.260 | 0.397 | | | 1.360 | 0.637 | 1.290 | 0.470 | | | | | | | | | | | | | 2.912 | 0.582 |
| 7 | 1.280 | 0.446 | 1.240 | 0.348 | 1.260 | 0.397 | | | 1.340 | 0.589 | 1.290 | 0.470 | | | | | | | | | | | | | 2.792 | 0.558 |
| 8 | 1.280 | 0.446 | 1.240 | 0.348 | 1.260 | 0.397 | | | 1.360 | 0.637 | 1.290 | 0.470 | | | | | | | | | | | | | 2.887 | 0.577 |
| 9 | 1.250 | 0.446 | 1.230 | 0.324 | 1.270 | 0.422 | | | 1.300 | 0.494 | 1.250 | 0.373 | | | | | | | | | | | | | 2.695 | 0.539 |
| 10 | 1.260 | 0.397 | 1.250 | 0.373 | 1.270 | 0.422 | | | 1.290 | 0.470 | 1.250 | 0.373 | | | | | | | | | | | | | 2.500 | 0.520 |
| 11 | 1.270 | 0.422 | 1.250 | 0.373 | 1.390 | 0.707 | | | 1.340 | 0.589 | 1.250 | 0.373 | | | | | | | | | | | | | 3.053 | 0.611 |
| 12 | 1.240 | 0.348 | 1.250 | 0.373 | 1.310 | 0.518 | | | 1.330 | 0.566 | 1.290 | 0.470 | | | | | | | | | | | | | 2.911 | 0.728 |
| 13 | | | 1.260 | 0.397 | 1.350 | 0.613 | | | 1.340 | 0.589 | 1.280 | 0.446 | | | | | | | | | | | | | 2.682 | 0.671 |
| 14 | | | 1.250 | 0.373 | 1.260 | 0.397 | | | 1.330 | 0.566 | 1.280 | 0.446 | | | | | | | | | | | | | 2.305 | 0.509 |
| 15 | | | 1.260 | 0.397 | 1.250 | 0.373 | | | 1.330 | 0.566 | 1.280 | 0.446 | | | | | | | | | | | | | 2.488 | 0.622 |
| 16 | | | 1.240 | 0.348 | 1.380 | 0.684 | 1.350 | 0.613 | 1.320 | 0.542 | 1.280 | 0.446 | | | | | | | | | | | | | 2.020 | 0.404 |
| 17 | 1.280 | 0.446 | 1.250 | 0.373 | 1.320 | 0.542 | 1.350 | 0.613 | 1.270 | 0.422 | 1.280 | 0.446 | | | | | | | | | | | | | 2.228 | 0.371 |
| 18 | 1.280 | 0.446 | 1.260 | 0.397 | 1.300 | 0.494 | 1.320 | 0.542 | 1.270 | 0.422 | 1.250 | 0.373 | | | | | | | | | | | | | 11.136 | 1.856 |
| 19 | 1.250 | 0.373 | 1.260 | 0.397 | 1.320 | 0.542 | 1.320 | 0.542 | 1.320 | 0.542 | 1.250 | 0.373 | | | | | | | | | | | | | 2.827 | 0.471 |
| 20 | 1.250 | 0.373 | 1.270 | 0.422 | 1.370 | 0.660 | 1.340 | 0.589 | 1.300 | 0.494 | 1.250 | 0.373 | | | | | | | | | | | | | 17.321 | 2.887 |
| 21 | 1.260 | 0.397 | 1.260 | 0.397 | 1.330 | 0.566 | 1.340 | 0.589 | 1.300 | 0.494 | 1.270 | 0.422 | | | | | | | | | | | | | 2.276 | 0.379 |
| 22 | 1.260 | 0.397 | 1.260 | 0.397 | 2.040 | 2.055 | 1.320 | 0.542 | 1.260 | 0.397 | 1.270 | 0.422 | | | | | | | | | | | | | 3.669 | 0.611 |
| 23 | 1.270 | 0.422 | 1.250 | 0.373 | | | 1.340 | 0.589 | 1.250 | 0.373 | 1.270 | 0.422 | | | | | | | | | | | | | 1.589 | 0.318 |
| 24 | 1.440 | 0.822 | 1.260 | 0.397 | | | 1.360 | 0.637 | 1.250 | 0.373 | 1.270 | 0.422 | | | | | | | | | | | | | 2.014 | 0.403 |
| 25 | 1.280 | 0.446 | 1.260 | 0.397 | | | 1.330 | 0.566 | 1.320 | 0.542 | 1.250 | 0.373 | | | | | | | | | | | | | 1.758 | 0.352 |
| 26 | 1.260 | 0.397 | 1.260 | 0.397 | | | 1.340 | 0.589 | 1.320 | 0.542 | 1.240 | 0.348 | | | | | | | | | | | | | 1.685 | 0.337 |
| 27 | 1.300 | 0.494 | 1.260 | 0.397 | | | 1.360 | 0.637 | 1.270 | 0.422 | 1.240 | 0.348 | | | | | | | | | | | | | 1.661 | 0.332 |
| 28 | 1.300 | 0.494 | 1.260 | 0.397 | | | 1.360 | 0.637 | 1.250 | 0.373 | 1.240 | 0.348 | | | | | | | | | | | | | 1.612 | 0.322 |
| 29 | 1.290 | 0.470 | 1.260 | 0.397 | | | 1.350 | 0.613 | 1.250 | 0.373 | 1.240 | 0.348 | | | | | | | | | | | | | 1.588 | 0.318 |
| 30 | 1.300 | 0.494 | | | | | 1.390 | 0.707 | 1.250 | 0.373 | 1.240 | 0.348 | | | | | | | | | | | | | 1.215 | 0.304 |
| 31 | 1.290 | 0.470 | | | | | | | 1.250 | 0.373 | | | | | | | | | | | | | | | 0.843 | 0.421 |
| Total | | 12.071 | | 11.153 | | 12.167 | | 9.004 | | 15.868 | | 12.375 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 97.243 | |
| Average | | 0.447 | | 0.385 | | 0.553 | | 0.600 | | 0.512 | | 0.413 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.631 |
| No. of Days/M | | 27 | | 29 | | 22 | | 15 | | 31 | | 30 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 154 |

Table 7-5 Daily Discharge Calculation of Pian Pian (Ponte ) Gauging Station on Manuel Jorge River

( Period: 1990-1991 )

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -0.725+0.860*H+0.015*H^2

Daily Discharge Calculation in m^3/ Sec
River:Kanuni Gorge Year: 1990
Gauging Station: Plan- Plan * Ponte *

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | 1.120 | 0.257 | 1.220 | 0.347 | 1.260 | 0.382 | 1.330 | 0.445 | 1.820 | 0.890 | 1.800 | 0.872 | 1.750 | 0.826 | 1.630 | 0.717 | 1.590 | 0.680 | 1.440 | 0.545 | 1.860 | 0.926 | 1.860 | 0.926 | 7.813 | 0.651 |
| 2 | 1.100 | 0.208 | 1.220 | 0.347 | 1.260 | 0.382 | 1.300 | 0.418 | 1.820 | 0.890 | 1.790 | 0.862 | 1.750 | 0.826 | 1.630 | 0.717 | 1.590 | 0.680 | 1.430 | 0.535 | 1.800 | 0.872 | 1.860 | 0.926 | 7.695 | 0.641 |
| 3 | 1.080 | 0.221 | 1.220 | 0.347 | 1.250 | 0.373 | 1.300 | 0.418 | 1.800 | 0.872 | 1.830 | 0.899 | 1.740 | 0.817 | 1.620 | 0.708 | 1.570 | 0.662 | 1.510 | 0.608 | 1.880 | 0.945 | 1.870 | 0.936 | 7.805 | 0.650 |
| 4 | 1.080 | 0.221 | 1.300 | 0.499 | 1.270 | 0.391 | 1.280 | 0.400 | 1.810 | 0.881 | 2.080 | 1.129 | 1.730 | 0.808 | 1.630 | 0.717 | 1.570 | 0.662 | 1.490 | 0.590 | 1.910 | 0.972 | 1.890 | 0.954 | 8.274 | 0.689 |
| 5 | 1.080 | 0.221 | 1.380 | 0.490 | 1.260 | 0.382 | 1.320 | 0.436 | 1.800 | 0.872 | 1.880 | 0.945 | 1.720 | 0.799 | 1.620 | 0.708 | 1.570 | 0.662 | 1.490 | 0.590 | 1.910 | 0.972 | 1.950 | 1.009 | 8.086 | 0.674 |
| 6 | 1.070 | 0.212 | 1.240 | 0.364 | 1.240 | 0.364 | 1.320 | 0.436 | 1.790 | 0.862 | 1.810 | 0.881 | 1.740 | 0.817 | 1.620 | 0.708 | 1.560 | 0.653 | 1.490 | 0.590 | 1.920 | 0.981 | 1.860 | 0.926 | 7.796 | 0.650 |
| 7 | 1.060 | 0.203 | 1.180 | 0.311 | 1.240 | 0.364 | 1.330 | 0.445 | 1.780 | 0.853 | 1.800 | 0.872 | 1.720 | 0.799 | 1.620 | 0.708 | 1.560 | 0.653 | 1.490 | 0.590 | 1.920 | 0.981 | 1.740 | 0.817 | 7.596 | 0.633 |
| 8 | 1.040 | 0.186 | 1.180 | 0.311 | 1.270 | 0.391 | 1.280 | 0.400 | 1.780 | 0.853 | 1.800 | 0.872 | 1.720 | 0.799 | 1.630 | 0.717 | 1.550 | 0.644 | 1.470 | 0.572 | 1.920 | 0.981 | 1.760 | 0.835 | 7.560 | 0.630 |
| 9 | 1.350 | 0.463 | 1.200 | 0.329 | 1.240 | 0.364 | 1.270 | 0.391 | 2.540 | 1.556 | 1.800 | 0.872 | 1.710 | 0.789 | 1.630 | 0.717 | 1.550 | 0.644 | 1.480 | 0.581 | 1.930 | 0.991 | 1.760 | 0.835 | 8.532 | 0.711 |
| 10 | 1.460 | 0.563 | 1.320 | 0.436 | 1.230 | 0.355 | 1.280 | 0.400 | 1.770 | 0.844 | 1.800 | 0.872 | 1.710 | 0.789 | 1.670 | 0.753 | 1.550 | 0.644 | 1.460 | 0.563 | 1.920 | 0.981 | 1.720 | 0.799 | 8.000 | 0.667 |
| 11 | | | 1.320 | 0.436 | 1.260 | 0.382 | 1.300 | 0.418 | 1.730 | 0.808 | 1.790 | 0.862 | 1.710 | 0.789 | 1.650 | 0.735 | 1.550 | 0.644 | 1.480 | 0.581 | 1.880 | 0.945 | 1.720 | 0.799 | 7.400 | 0.673 |
| 12 | | | 1.260 | 0.382 | 1.500 | 0.599 | 1.840 | 0.908 | 1.560 | 0.653 | 1.830 | 0.899 | 1.710 | 0.789 | 1.650 | 0.735 | 1.550 | 0.644 | 1.630 | 0.717 | 1.820 | 0.890 | 1.750 | 0.826 | 8.042 | 0.731 |
| 13 | | | 1.460 | 0.563 | 1.470 | 0.572 | 1.810 | 0.881 | 1.560 | 0.653 | 1.840 | 0.908 | 1.710 | 0.789 | 1.650 | 0.735 | 1.540 | 0.635 | 1.630 | 0.717 | 1.840 | 0.908 | 1.760 | 0.835 | 8.195 | 0.745 |
| 14 | | | 1.290 | 0.409 | 1.170 | 0.302 | 1.810 | 0.881 | 1.740 | 0.817 | 1.830 | 0.899 | 1.700 | 0.780 | 1.670 | 0.753 | 1.540 | 0.635 | 1.640 | 0.726 | 1.820 | 0.890 | 1.770 | 0.844 | 7.936 | 0.721 |
| 15 | | | 1.280 | 0.400 | 1.160 | 0.293 | 1.800 | 0.872 | 1.970 | 0.936 | 1.830 | 0.899 | 1.710 | 0.789 | 1.690 | 0.771 | 1.530 | 0.626 | 1.630 | 0.717 | 1.780 | 0.853 | 1.770 | 0.844 | 8.000 | 0.727 |
| 16 | | | 1.290 | 0.409 | 1.160 | 0.293 | 1.800 | 0.872 | 1.960 | 1.018 | 1.840 | 0.908 | 1.710 | 0.789 | 1.690 | 0.771 | 1.530 | 0.626 | 1.630 | 0.717 | 1.770 | 0.844 | 1.780 | 0.853 | 8.101 | 0.736 |
| 17 | | | 1.330 | 0.445 | 1.160 | 0.293 | 1.760 | 0.835 | 2.000 | 1.055 | 1.840 | 0.908 | 1.710 | 0.789 | 1.690 | 0.771 | 1.550 | 0.644 | 1.630 | 0.717 | 1.740 | 0.817 | 1.760 | 0.835 | 8.137 | 0.740 |
| 18 | | | 1.260 | 0.382 | 1.160 | 0.293 | 1.700 | 0.780 | 2.000 | 1.055 | 1.850 | 0.917 | 1.710 | 0.789 | 1.690 | 0.771 | 1.530 | 0.626 | 1.640 | 0.726 | 1.750 | 0.826 | 1.780 | 0.853 | 8.010 | 0.728 |
| 19 | | | 1.290 | 0.409 | 2.020 | 1.073 | 1.760 | 0.835 | 2.000 | 1.055 | 1.840 | 0.908 | 1.700 | 0.780 | 1.690 | 0.771 | 1.510 | 0.608 | 1.620 | 0.708 | 1.740 | 0.817 | 1.780 | 0.853 | 8.827 | 0.802 |
| 20 | | | 1.330 | 0.445 | 1.980 | 1.037 | 1.810 | 0.881 | 2.010 | 1.064 | 1.850 | 0.917 | 1.710 | 0.789 | 1.690 | 0.771 | 1.510 | 0.608 | 1.620 | 0.708 | 1.710 | 0.789 | 1.770 | 0.844 | 8.881 | 0.807 |
| 21 | | | 1.300 | 0.418 | 1.450 | 0.554 | 1.800 | 0.872 | 1.970 | 1.027 | 1.840 | 0.908 | 1.660 | 0.744 | 1.660 | 0.744 | 1.500 | 0.599 | 1.630 | 0.717 | 1.760 | 0.835 | 1.770 | 0.844 | 8.216 | 0.747 |
| 22 | | | 1.340 | 0.454 | 1.420 | 0.526 | 1.780 | 0.853 | 1.960 | 1.018 | 1.830 | 0.899 | 1.676 | 0.753 | 1.650 | 0.735 | 1.480 | 0.580 | 1.620 | 0.708 | 1.760 | 0.835 | 1.770 | 0.844 | 8.216 | 0.747 |
| 23 | | | 1.300 | 0.418 | 1.400 | 0.508 | 1.760 | 0.835 | 1.760 | 0.835 | 1.830 | 0.899 | 1.660 | 0.744 | 1.650 | 0.735 | 1.510 | 0.608 | 1.610 | 0.698 | 1.780 | 0.853 | 1.760 | 0.835 | 7.951 | 0.723 |
| 24 | | | 1.330 | 0.445 | 1.400 | 0.508 | 1.760 | 0.835 | 1.770 | 0.844 | 1.830 | 0.899 | 1.660 | 0.744 | 1.650 | 0.735 | 1.490 | 0.590 | 1.610 | 0.698 | 1.700 | 0.780 | 1.670 | 0.708 | 7.860 | 0.715 |
| 25 | | | 1.290 | 0.409 | 1.390 | 0.499 | 1.980 | 1.037 | 1.740 | 0.817 | 1.830 | 0.899 | 1.660 | 0.744 | 1.640 | 0.726 | 1.490 | 0.590 | 1.630 | 0.717 | 1.740 | 0.817 | 1.580 | 0.671 | 7.989 | 0.717 |
| 26 | | | 1.280 | 0.400 | 1.390 | 0.499 | 1.790 | 0.862 | 1.730 | 0.808 | 1.810 | 0.881 | 1.650 | 0.735 | 1.630 | 0.717 | 1.480 | 0.581 | 2.140 | 1.184 | 1.800 | 0.872 | 1.600 | 0.689 | 8.173 | 0.743 |
| 27 | | | 1.240 | 0.364 | 1.330 | 0.490 | 1.740 | 0.817 | 1.800 | 0.872 | 1.790 | 0.862 | 1.640 | 0.726 | 1.630 | 0.717 | 1.470 | 0.572 | 2.100 | 1.147 | 1.740 | 0.817 | 1.610 | 0.698 | 8.137 | 0.740 |
| 28 | | | 1.260 | 0.382 | 0.820 | -0.010 | 1.780 | 0.853 | 1.800 | 0.872 | 1.790 | 0.862 | 1.640 | 0.726 | 1.600 | 0.689 | 1.470 | 0.572 | 2.100 | 1.147 | 1.870 | 0.936 | 1.620 | 0.708 | 7.618 | 0.693 |
| 29 | | | | | 0.820 | -0.010 | 1.790 | 0.862 | 1.800 | 0.872 | 1.730 | 0.808 | 1.640 | 0.726 | 1.600 | 0.689 | 1.470 | 0.572 | 2.110 | 1.156 | 1.830 | 0.899 | 1.640 | 0.726 | 7.337 | 0.734 |
| 30 | | | | | 0.820 | -0.010 | 1.800 | 0.872 | 1.790 | 0.862 | 1.740 | 0.817 | 1.630 | 0.717 | 1.600 | 0.689 | 1.450 | 0.554 | 2.110 | 1.156 | 1.840 | 0.908 | 1.620 | 0.708 | 7.264 | 0.726 |
| 31 | 1.220 | 0.347 | | | | | | | 1.800 | 0.872 | | | 1.630 | 0.717 | 1.590 | 0.680 | | | 2.060 | 1.110 | | | 1.590 | 0.680 | 4.406 | 0.734 |
| Total | | 3.134 | | 11.356 | | 12.445 | | 21.053 | | 28.185 | | 26.835 | | 24.918 | | 22.608 | | 18.706 | | 23.201 | | 20.735 | | 29.467 | 243.705 | |
| Average | | 0.285 | | 0.406 | | 0.415 | | 0.702 | | 0.909 | | 0.895 | | 0.775 | | 0.729 | | 0.624 | | 0.748 | | 0.891 | | 0.871 | | 0.708 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= 5.768+7.800*H+2.802*H^2

Daily Discharge Calculation in m^3/ Sec
River:Manuel Gorge Year: 1991
Gauging Station: Pian- Pian " Ponte "

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | 1.660 | 0.486 | 1.500 | 0.323 | 1.800 | 0.747 | 1.860 | 0.892 | 1.720 | 0.585 | | | | | | | | | | | | | | | 3.034 | 0.607 |
| 2 | 1.680 | 0.517 | 1.510 | 0.329 | 1.800 | 0.747 | 1.860 | 0.892 | 1.960 | 1.179 | | | | | | | | | | | | | | | 3.665 | 0.733 |
| 3 | 1.640 | 0.458 | 1.500 | 0.323 | 1.800 | 0.747 | 1.900 | 1.001 | 1.940 | 1.118 | | | | | | | | | | | | | | | 3.646 | 0.729 |
| 4 | 1.680 | 0.517 | 1.510 | 0.329 | 1.780 | 0.703 | 1.890 | 0.973 | 1.920 | 1.058 | | | | | | | | | | | | | | | 3.580 | 0.716 |
| 5 | 1.670 | 0.501 | 1.500 | 0.323 | 1.770 | 0.682 | 1.860 | 0.892 | 1.920 | 1.058 | | | | | | | | | | | | | | | 3.457 | 0.691 |
| 6 | 1.670 | 0.501 | 1.500 | 0.323 | 1.760 | 0.661 | 1.860 | 0.892 | | | | | | | | | | | | | | | | | 2.378 | 0.595 |
| 7 | 1.660 | 0.486 | 1.500 | 0.323 | 1.750 | 0.641 | 1.850 | 0.867 | | | | | | | | | | | | | | | | | 2.318 | 0.579 |
| 8 | 1.660 | 0.486 | 1.500 | 0.323 | 1.750 | 0.641 | 1.920 | 1.058 | | | | | | | | | | | | | | | | | 2.509 | 0.627 |
| 9 | 1.500 | 0.323 | 1.500 | 0.323 | 1.740 | 0.622 | 1.840 | 0.842 | | | | | | | | | | | | | | | | | 2.110 | 0.527 |
| 10 | 1.480 | 0.313 | 1.500 | 0.323 | 1.740 | 0.622 | 1.890 | 0.973 | | | | | | | | | | | | | | | | | 2.230 | 0.558 |
| 11 | 1.460 | 0.305 | 1.490 | 0.318 | 1.730 | 0.603 | 1.880 | 0.945 | | | | | | | | | | | | | | | | | 2.170 | 0.543 |
| 12 | 1.470 | 0.308 | 1.500 | 0.323 | 1.850 | 0.867 | 1.860 | 0.897 | | | | | | | | | | | | | | | | | 2.391 | 0.598 |
| 13 | 1.480 | 0.313 | 1.500 | 0.323 | 1.820 | 0.793 | 1.770 | 0.682 | | | | | | | | | | | | | | | | | 2.111 | 0.528 |
| 14 | 1.480 | 0.313 | 1.500 | 0.323 | 1.810 | 0.770 | 1.760 | 0.661 | | | | | | | | | | | | | | | | | 2.067 | 0.517 |
| 15 | 1.460 | 0.305 | 1.510 | 0.329 | 1.920 | 1.058 | 1.790 | 0.725 | | | | | | | | | | | | | | | | | 2.416 | 0.604 |
| 16 | 1.470 | 0.308 | 1.500 | 0.323 | 1.830 | 0.817 | 1.760 | 0.661 | | | | | | | | | | | | | | | | | 2.110 | 0.527 |
| 17 | 1.470 | 0.308 | 1.460 | 0.305 | 1.840 | 0.842 | 1.760 | 0.661 | | | | | | | | | | | | | | | | | 2.116 | 0.529 |
| 18 | 1.470 | 0.308 | 1.460 | 0.305 | 2.000 | 1.310 | 1.760 | 0.661 | | | | | | | | | | | | | | | | | 2.584 | 0.646 |
| 19 | 1.470 | 0.308 | 1.450 | 0.301 | 1.920 | 1.058 | 1.760 | 0.661 | | | | | | | | | | | | | | | | | 2.329 | 0.582 |
| 20 | 1.460 | 0.305 | 1.450 | 0.301 | 1.910 | 1.029 | 1.940 | 1.118 | | | | | | | | | | | | | | | | | 2.752 | 0.688 |
| 21 | 1.860 | 0.892 | 1.460 | 0.305 | 1.900 | 1.001 | 1.860 | 0.892 | | | | | | | | | | | | | | | | | 3.090 | 0.772 |
| 22 | 1.570 | 0.377 | 1.770 | 0.682 | 1.730 | 0.603 | 1.860 | 0.892 | | | | | | | | | | | | | | | | | 2.554 | 0.639 |
| 23 | 1.510 | 0.329 | 1.770 | 0.682 | 2.140 | 1.837 | 1.850 | 0.867 | | | | | | | | | | | | | | | | | 3.715 | 0.929 |
| 24 | 1.520 | 0.336 | 1.780 | 0.725 | 1.900 | 1.001 | 1.900 | 1.001 | | | | | | | | | | | | | | | | | 3.061 | 0.765 |
| 25 | 1.500 | 0.323 | 1.790 | 0.725 | 1.870 | 0.919 | 1.720 | 0.585 | | | | | | | | | | | | | | | | | 2.551 | 0.638 |
| 26 | 1.500 | 0.323 | 1.780 | 0.703 | 1.890 | 0.973 | 1.720 | 0.585 | | | | | | | | | | | | | | | | | 2.583 | 0.646 |
| 27 | 1.500 | 0.323 | 1.740 | 0.622 | 1.860 | 0.892 | 1.670 | 0.501 | | | | | | | | | | | | | | | | | 2.339 | 0.585 |
| 28 | 1.500 | 0.323 | 1.880 | 0.945 | 1.860 | 0.892 | 1.670 | 0.501 | | | | | | | | | | | | | | | | | 2.662 | 0.666 |
| 29 | 1.500 | 0.323 | | | 1.860 | 0.892 | 1.660 | 0.486 | | | | | | | | | | | | | | | | | 1.702 | 0.567 |
| 30 | 1.520 | 0.336 | | | 1.860 | 0.892 | 1.760 | 0.661 | | | | | | | | | | | | | | | | | 1.889 | 0.630 |
| 31 | 1.520 | 0.519 | | | 1.860 | 0.892 | | | | | | | | | | | | | | | | | | | 1.411 | 0.706 |
| Total | | 12.970 | | 11.781 | | 26.756 | | 23.920 | | 4.998 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 79.531 | |
| Average | | 0.389 | | 0.421 | | 0.863 | | 0.797 | | 1.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.641 |

Table 7-6 Daily Discharge Calculation of Bombaim Gauging Station on Abade River

( Period: 1989-1993 )

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= 17.393-32.058*H+14.885*H^2

Daily Discharge Calculation in m^3/ Sec
River: Abade Year: 1989
Gauging Station: Boohaie Catchment Area : 12 Sq.Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Total Q | verage Q |
| 1 | | | | | 1.220 | 0.437 | 1.240 | 0.528 | 1.350 | 1.243 | 1.310 | 0.941 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.350 | 1.243 | 1.290 | 0.808 | 5.725 | 0.716 |
| 2 | | | | | 1.310 | 0.941 | 1.330 | 1.086 | 1.400 | 1.686 | 1.280 | 0.746 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.320 | 1.012 | 1.380 | 1.500 | 7.497 | 0.937 |
| 3 | | | | | 1.350 | 1.243 | 1.280 | 0.746 | 1.320 | 1.012 | 1.270 | 0.687 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.310 | 0.941 | 1.290 | 0.808 | 5.963 | 0.745 |
| 4 | | | | | 1.330 | 1.086 | 1.250 | 0.578 | 1.430 | 1.985 | 1.270 | 0.687 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.300 | 0.873 | 1.280 | 0.746 | 6.485 | 0.811 |
| 5 | | | | | 1.300 | 0.873 | 1.230 | 0.481 | 1.380 | 1.500 | 1.260 | 0.631 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.290 | 0.808 | 1.270 | 0.687 | 5.507 | 0.688 |
| 6 | | | | | 1.280 | 0.746 | 1.220 | 0.437 | 1.320 | 1.012 | 1.250 | 0.578 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.280 | 0.746 | 1.360 | 1.325 | 5.371 | 0.671 |
| 7 | | | | | 1.390 | 1.592 | 1.220 | 0.437 | 1.290 | 0.808 | 1.240 | 0.528 | 1.180 | 0.290 | 1.160 | 0.235 | | | | | 1.840 | 8.801 | 1.290 | 0.808 | 13.500 | 1.687 |
| 8 | | | | | 1.370 | 1.411 | 1.200 | 0.358 | 1.270 | 0.687 | 1.240 | 0.528 | 1.200 | 0.358 | 1.160 | 0.235 | | | | | 1.530 | 3.189 | 1.420 | 1.885 | 8.651 | 1.081 |
| 9 | | | | | 1.280 | 0.746 | 1.200 | 0.358 | 1.290 | 0.808 | 1.240 | 0.528 | 1.210 | 0.396 | 1.160 | 0.235 | | | | | 1.400 | 1.686 | 1.310 | 0.941 | 5.699 | 0.712 |
| 10 | | | | | 1.260 | 0.631 | 1.270 | 0.687 | 1.260 | 0.631 | 1.240 | 0.528 | 1.200 | 0.358 | 1.160 | 0.235 | | | | | 1.350 | 1.243 | 1.300 | 0.873 | 5.187 | 0.648 |
| 11 | | | | | 1.240 | 0.528 | 1.220 | 0.437 | 1.250 | 0.578 | 1.220 | 0.437 | 1.190 | 0.323 | 1.160 | 0.235 | | | 1.380 | 1.500 | 1.330 | 1.086 | 1.310 | 0.941 | 5.055 | 0.674 |
| 12 | | | | | 1.370 | 1.411 | 1.210 | 0.396 | 1.270 | 0.687 | 1.220 | 0.437 | 1.180 | 0.290 | 1.160 | 0.235 | | | 1.580 | 3.900 | 1.310 | 0.941 | 1.290 | 0.808 | 9.107 | 1.012 |
| 13 | | | | | 1.290 | 0.808 | 1.200 | 0.358 | 1.260 | 0.631 | 1.220 | 0.437 | 1.180 | 0.290 | 1.160 | 0.235 | | | 1.560 | 3.607 | 1.300 | 0.873 | 1.270 | 0.687 | 7.027 | 0.881 |
| 14 | | | | | 1.280 | 0.746 | 1.200 | 0.358 | 1.250 | 0.578 | 1.220 | 0.437 | 1.180 | 0.290 | 1.160 | 0.235 | | | 1.650 | 5.022 | 1.410 | 1.784 | 1.260 | 0.631 | 10.082 | 1.120 |
| 15 | | | | | 1.270 | 0.687 | 1.240 | 0.528 | 1.250 | 0.578 | 1.220 | 0.437 | 1.180 | 0.290 | 1.160 | 0.235 | | | 1.470 | 2.433 | 1.360 | 1.325 | 1.260 | 0.631 | 7.146 | 0.794 |
| 16 | | | 1.230 | 0.481 | 1.260 | 0.631 | 1.220 | 0.437 | 1.230 | 0.481 | 1.220 | 0.437 | 1.180 | 0.290 | 1.160 | 0.235 | | | 1.420 | 1.985 | 1.330 | 1.086 | 1.260 | 0.631 | 6.505 | 0.660 |
| 17 | | | 1.220 | 0.437 | 1.300 | 0.873 | 1.220 | 0.437 | 1.220 | 0.437 | 1.210 | 0.396 | 1.180 | 0.290 | 1.160 | 0.235 | | | 1.580 | 3.900 | 1.300 | 0.873 | 1.250 | 0.578 | 8.458 | 0.846 |
| 18 | | | 1.220 | 0.437 | 1.240 | 0.528 | 1.220 | 0.437 | 1.250 | 0.578 | 1.200 | 0.358 | 1.180 | 0.290 | 1.140 | 0.191 | | | 1.480 | 2.551 | 1.290 | 0.808 | 1.240 | 0.528 | 6.708 | 0.671 |
| 19 | | | 1.220 | 0.437 | 1.230 | 0.481 | 1.220 | 0.437 | 1.230 | 0.481 | 1.200 | 0.358 | 1.180 | 0.290 | 1.140 | 0.191 | | | 1.420 | 1.885 | 1.310 | 0.941 | 1.240 | 0.528 | 6.030 | 0.603 |
| 20 | | | 1.210 | 0.396 | 1.230 | 0.481 | 1.330 | 1.086 | 1.230 | 0.481 | 1.210 | 0.396 | 1.170 | 0.261 | 1.160 | 0.235 | | | 1.580 | 3.900 | 1.300 | 0.873 | 1.240 | 0.528 | 8.638 | 0.864 |
| 21 | | | 1.200 | 0.358 | 1.220 | 0.437 | 1.250 | 0.578 | 1.260 | 0.631 | 1.200 | 0.358 | 1.170 | 0.261 | 1.160 | 0.235 | | | 1.590 | 4.052 | 1.290 | 0.808 | 1.240 | 0.528 | 8.247 | 0.825 |
| 22 | | | 1.210 | 0.396 | 1.230 | 0.481 | 1.400 | 1.686 | 1.230 | 0.481 | 1.200 | 0.358 | 1.160 | 0.235 | 1.180 | 0.290 | | | 1.540 | 3.325 | 1.290 | 0.808 | 1.230 | 0.481 | 8.542 | 0.854 |
| 23 | | | 1.280 | 0.746 | 1.230 | 0.481 | 1.320 | 1.012 | 1.250 | 0.578 | 1.200 | 0.358 | 1.160 | 0.235 | 1.200 | 0.358 | | | 1.660 | 5.194 | 1.280 | 0.746 | 1.320 | 1.012 | 10.721 | 1.072 |
| 24 | | | 1.250 | 0.578 | 1.240 | 0.528 | 1.270 | 0.687 | 1.230 | 0.481 | 1.200 | 0.358 | 1.160 | 0.235 | 1.200 | 0.358 | | | 1.460 | 2.317 | 1.260 | 0.631 | 1.280 | 0.746 | 6.921 | 0.692 |
| 25 | | | 1.230 | 0.481 | 1.220 | 0.437 | 1.250 | 0.578 | 1.220 | 0.437 | 1.200 | 0.358 | 1.160 | 0.235 | 1.200 | 0.358 | | | 1.410 | 1.784 | 1.260 | 0.631 | 1.560 | 3.607 | 8.906 | 0.891 |
| 26 | | | 1.220 | 0.437 | 1.230 | 0.481 | 1.240 | 0.528 | 1.240 | 0.528 | 1.200 | 0.358 | 1.160 | 0.235 | 1.200 | 0.358 | | | 1.670 | 5.369 | 1.390 | 1.592 | 1.300 | 0.873 | 10.759 | 1.076 |
| 27 | | | 1.220 | 0.437 | 1.230 | 0.481 | 1.240 | 0.528 | 1.230 | 0.481 | 1.190 | 0.323 | 1.160 | 0.235 | 1.270 | 0.687 | | | 1.490 | 2.673 | 1.300 | 0.873 | 1.270 | 0.687 | 7.406 | 0.741 |
| 28 | | | 1.210 | 0.396 | 1.220 | 0.437 | 1.360 | 1.325 | 1.230 | 0.481 | 1.200 | 0.358 | 1.160 | 0.235 | 1.290 | 0.808 | | | 1.480 | 2.551 | 1.400 | 1.686 | 1.260 | 0.631 | 8.910 | 0.891 |
| 29 | | | | | 1.240 | 0.528 | 1.280 | 0.746 | 1.470 | 2.433 | 1.190 | 0.323 | 1.160 | 0.235 | 1.280 | 0.746 | | | 1.410 | 1.784 | 1.350 | 1.243 | 1.250 | 0.578 | 8.616 | 0.957 |
| 30 | | | | | 1.340 | 1.163 | 1.330 | 1.086 | 1.430 | 1.988 | 1.190 | 0.323 | 1.160 | 0.235 | 1.210 | 0.396 | | | 1.380 | 1.500 | 1.300 | 0.873 | 1.240 | 0.528 | 8.092 | 0.899 |
| 31 | | | | | 1.260 | 0.631 | | | 1.340 | 1.163 | | | 1.160 | 0.235 | 1.200 | 0.358 | | | 1.360 | 1.325 | | | 1.240 | 0.528 | 4.241 | 0.707 |
| Total | | 0.000 | | 6.018 | | ****** | | 19.365 | | 26.573 | | 13.987 | | 8.663 | | 9.565 | | 0.000 | | 62.457 | | 41.027 | | 27.078 | 237.703 | |
| Average(A) | | 0.000 | | 0.215 | | 0.741 | | 0.645 | | 0.857 | | 0.466 | | 0.279 | | 0.309 | | 0.000 | | 3.123 | | 1.368 | | 0.873 | | 0.811 |
| No. of Days/M | | 0 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 0 | | 20 | | 30 | | 31 | | 293 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -1.035+1.687*H+0.225*H^2

Daily Discharge Calculation in m^3/ Sec
River: Abade Year: 1990
Gauging Station: Bombaim Catchment Area : 12.0 Sq.Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | verage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | 1.240 | 0.503 | 1.220 | 0.458 | 2.050 | 2.469 | 1.420 | 0.914 | 1.310 | 0.661 | 1.320 | 0.684 | 1.280 | 0.593 | 1.240 | 0.503 | 1.320 | 0.684 | 1.340 | 0.730 | 1.420 | 0.914 | 1.320 | 0.684 | 9.796 | 0.816 |
| 2 | 1.240 | 0.503 | 1.200 | 0.413 | 1.350 | 0.753 | 1.220 | 0.458 | 1.280 | 0.593 | 1.300 | 0.638 | 1.290 | 0.616 | 1.240 | 0.503 | 1.350 | 0.753 | 1.300 | 0.638 | 1.360 | 0.775 | 1.310 | 0.661 | 7.304 | 0.609 |
| 3 | 1.240 | 0.503 | 1.200 | 0.413 | 1.360 | 0.775 | 1.210 | 0.436 | 1.280 | 0.593 | 1.460 | 1.008 | 1.280 | 0.593 | 1.240 | 0.503 | 1.380 | 0.822 | 1.300 | 0.638 | 1.340 | 0.730 | 1.300 | 0.638 | 7.652 | 0.638 |
| 4 | 1.230 | 0.480 | 1.250 | 0.525 | 1.260 | 0.548 | 1.200 | 0.413 | 1.260 | 0.548 | 1.320 | 0.684 | 1.290 | 0.616 | 1.230 | 0.480 | 1.300 | 0.638 | 1.340 | 0.730 | 1.320 | 0.684 | 1.280 | 0.593 | 6.940 | 0.578 |
| 5 | 1.260 | 0.548 | 1.250 | 0.525 | 1.240 | 0.503 | 1.200 | 0.413 | 1.260 | 0.548 | 1.340 | 0.730 | 1.290 | 0.616 | 1.240 | 0.503 | 1.330 | 0.707 | 1.320 | 0.684 | 1.320 | 0.684 | 1.280 | 0.593 | 7.053 | 0.588 |
| 6 | 1.530 | 1.173 | 1.220 | 0.458 | 1.360 | 0.775 | 1.200 | 0.413 | 1.240 | 0.503 | 1.330 | 0.707 | 1.290 | 0.616 | 1.260 | 0.548 | | | 1.300 | 0.638 | 1.300 | 0.638 | 1.280 | 0.593 | 7.062 | 0.642 |
| 7 | 1.240 | 0.503 | 1.220 | 0.458 | 1.240 | 0.503 | 1.340 | 0.730 | 1.280 | 0.593 | 1.300 | 0.638 | 1.280 | 0.593 | 1.280 | 0.593 | | | 1.280 | 0.593 | 1.300 | 0.638 | 1.260 | 0.548 | 6.390 | 0.581 |
| 8 | 1.240 | 0.503 | 1.400 | 1.078 | 2.020 | 2.391 | 1.290 | 0.616 | 1.230 | 0.480 | 1.300 | 0.638 | 1.290 | 0.616 | 1.260 | 0.548 | | | 1.280 | 0.593 | 1.290 | 0.616 | 1.250 | 0.525 | 8.604 | 0.782 |
| 9 | 1.700 | 1.583 | 2.250 | 3.000 | 1.280 | 0.593 | 1.220 | 0.458 | 1.230 | 0.480 | 1.280 | 0.593 | 1.300 | 0.638 | 1.250 | 0.525 | | | 1.270 | 0.570 | 1.320 | 0.684 | 1.250 | 0.525 | 9.651 | 0.877 |
| 10 | 1.600 | 1.340 | 1.760 | 1.731 | 1.390 | 0.845 | 1.200 | 0.413 | 1.320 | 0.684 | 1.280 | 0.593 | 1.280 | 0.593 | 1.240 | 0.503 | | | 1.270 | 0.570 | 1.300 | 0.638 | 1.360 | 0.775 | 8.686 | 0.790 |
| 11 | 1.320 | 0.684 | 1.320 | 0.684 | 1.540 | 1.197 | 1.200 | 0.413 | 1.300 | 0.638 | 1.270 | 0.570 | 1.270 | 0.570 | 1.260 | 0.548 | | | 1.280 | 0.503 | 1.380 | 0.822 | 1.280 | 0.593 | 7.312 | 0.665 |
| 12 | 1.280 | 0.593 | 1.280 | 0.593 | 1.260 | 0.548 | 1.200 | 0.413 | 1.380 | 0.822 | 1.260 | 0.548 | 1.270 | 0.570 | 1.240 | 0.503 | 1.280 | 0.593 | 1.940 | 2.185 | 1.310 | 0.661 | 1.260 | 0.548 | 8.576 | 0.715 |
| 13 | 1.270 | 0.570 | 1.260 | 0.548 | 1.250 | 0.525 | 1.180 | 0.369 | 1.320 | 0.684 | 1.260 | 0.548 | 1.260 | 0.548 | 1.270 | 0.570 | 1.270 | 0.570 | 1.310 | 0.661 | 1.320 | 0.684 | 1.260 | 0.548 | 6.826 | 0.569 |
| 14 | 1.260 | 0.548 | 1.240 | 0.503 | 1.270 | 0.570 | 1.180 | 0.369 | 1.290 | 0.616 | 1.250 | 0.525 | 1.260 | 0.548 | 1.290 | 0.616 | 1.280 | 0.593 | 1.280 | 0.593 | 1.290 | 0.616 | 1.250 | 0.525 | 6.621 | 0.552 |
| 15 | 1.250 | 0.525 | 1.220 | 0.458 | 1.250 | 0.525 | 1.180 | 0.369 | 1.400 | 0.868 | 1.400 | 0.868 | 1.260 | 0.548 | 1.250 | 0.525 | 1.290 | 0.616 | 1.260 | 0.548 | 1.280 | 0.593 | 1.240 | 0.503 | 6.946 | 0.579 |
| 16 | 1.240 | 0.503 | 1.260 | 0.548 | 1.240 | 0.503 | 1.180 | 0.369 | 1.300 | 0.638 | 1.240 | 0.503 | 1.260 | 0.548 | 1.230 | 0.480 | 1.310 | 0.661 | 1.270 | 0.570 | 1.460 | 1.008 | 1.240 | 0.503 | 6.834 | 0.569 |
| 17 | 1.240 | 0.503 | 1.240 | 0.503 | 1.230 | 0.480 | 1.180 | 0.369 | 1.340 | 0.730 | 1.240 | 0.503 | 1.260 | 0.548 | 1.220 | 0.458 | 1.360 | 0.775 | 1.390 | 0.845 | 1.280 | 0.593 | 1.240 | 0.503 | 6.809 | 0.567 |
| 18 | 1.240 | 0.503 | 1.230 | 0.480 | 1.220 | 0.458 | 1.180 | 0.369 | 1.300 | 0.638 | 1.240 | 0.503 | 1.260 | 0.548 | 1.220 | 0.458 | 1.310 | 0.661 | 1.300 | 0.638 | 1.270 | 0.570 | 1.220 | 0.458 | 6.285 | 0.524 |
| 19 | 1.250 | 0.525 | 2.240 | 2.973 | 1.360 | 0.775 | 1.300 | 0.638 | 1.290 | 0.616 | 1.230 | 0.480 | 1.260 | 0.548 | 1.220 | 0.458 | 1.290 | 0.616 | 1.380 | 0.822 | 1.280 | 0.593 | 1.220 | 0.458 | 9.502 | 0.792 |
| 20 | 1.230 | 0.480 | 1.280 | 0.593 | 1.300 | 0.638 | 1.240 | 0.503 | 1.270 | 0.570 | 1.230 | 0.480 | 1.250 | 0.525 | 1.210 | 0.436 | 1.310 | 0.661 | 1.440 | 0.961 | 1.340 | 0.730 | 1.220 | 0.458 | 7.036 | 0.586 |
| 21 | 1.220 | 0.458 | 1.530 | 1.173 | 1.340 | 0.730 | 1.220 | 0.458 | 1.300 | 0.638 | 1.220 | 0.458 | 1.260 | 0.548 | 1.220 | 0.458 | 1.280 | 0.593 | 1.340 | 0.730 | 1.320 | 0.684 | 1.220 | 0.458 | 7.385 | 0.615 |
| 22 | 1.220 | 0.458 | 1.250 | 0.525 | 1.300 | 0.638 | 1.200 | 0.413 | 1.280 | 0.593 | 1.220 | 0.458 | 1.260 | 0.548 | 1.220 | 0.458 | 1.260 | 0.548 | 1.320 | 0.684 | 1.500 | 1.102 | 1.220 | 0.458 | 6.883 | 0.574 |
| 23 | 1.260 | 0.548 | 1.250 | 0.525 | 1.280 | 0.593 | 1.200 | 0.413 | 1.260 | 0.548 | 1.220 | 0.458 | 1.260 | 0.548 | 1.230 | 0.480 | 1.320 | 0.684 | 1.300 | 0.638 | 1.360 | 0.775 | 1.200 | 0.413 | 6.025 | 0.552 |
| 24 | 1.240 | 0.503 | 1.440 | 0.961 | 1.260 | 0.548 | 1.200 | 0.413 | 1.620 | 1.368 | 1.220 | 0.458 | 1.260 | 0.548 | 1.300 | 0.638 | 1.400 | 0.868 | 1.300 | 0.638 | 1.390 | 0.845 | 1.210 | 0.436 | 8.244 | 0.687 |
| 25 | 1.230 | 0.480 | 1.260 | 0.548 | 1.250 | 0.525 | 1.200 | 0.413 | 1.270 | 0.570 | 1.220 | 0.458 | 1.260 | 0.548 | 1.250 | 0.525 | 1.480 | 1.055 | 2.000 | 2.339 | 1.400 | 0.868 | 1.200 | 0.413 | 8.743 | 0.729 |
| 26 | 1.220 | 0.458 | 1.240 | 0.503 | 1.240 | 0.503 | 1.230 | 0.480 | 1.310 | 0.661 | 1.230 | 0.480 | 1.250 | 0.525 | 1.230 | 0.480 | 1.350 | 0.753 | 1.410 | 0.891 | 1.400 | 0.868 | 1.280 | 0.593 | 7.196 | 0.600 |
| 27 | 1.220 | 0.458 | 1.230 | 0.480 | 1.240 | 0.503 | 1.200 | 0.413 | 1.670 | 1.510 | 1.260 | 0.548 | 1.250 | 0.525 | 1.220 | 0.458 | 1.640 | 1.437 | 1.440 | 0.961 | 1.340 | 0.730 | 1.220 | 0.458 | 8.481 | 0.707 |
| 28 | 1.210 | 0.436 | 1.220 | 0.458 | 1.230 | 0.480 | 1.480 | 1.055 | 1.460 | 1.008 | 1.280 | 0.593 | 1.240 | 0.503 | 1.210 | 0.436 | 1.500 | 1.102 | 1.360 | 0.775 | 1.600 | 1.340 | 1.700 | 1.583 | 9.768 | 0.814 |
| 29 | 1.200 | 0.413 | | | 1.220 | 0.458 | 1.240 | 0.503 | 1.380 | 0.822 | 1.280 | 0.593 | 1.240 | 0.503 | 1.210 | 0.436 | 1.440 | 0.961 | 1.390 | 0.845 | 1.360 | 0.775 | 1.300 | 0.638 | 6.947 | 0.632 |
| 30 | 1.200 | 0.413 | | | 1.220 | 0.458 | 1.800 | 1.831 | 1.340 | 0.730 | 1.280 | 0.593 | 1.250 | 0.525 | 1.200 | 0.413 | 1.350 | 0.753 | 1.330 | 0.707 | 1.340 | 0.730 | 1.260 | 0.548 | 7.700 | 0.700 |
| 31 | 1.200 | 0.413 | | | 1.220 | 0.458 | | | 1.320 | 0.684 | | | 1.240 | 0.503 | 1.300 | 0.638 | | | 1.640 | 1.437 | | | 1.240 | 0.503 | 4.636 | 0.662 |
| Total | | 18.112 | | 22.116 | | ****** | | 15.840 | | 21.664 | | 17.539 | | 17.413 | | 15.683 | | 18.101 | | 25.445 | | 22.587 | | 17.735 | 204.494 | |
| Average | | 0.584 | | 0.790 | | 0.718 | | 0.528 | | 0.699 | | 0.585 | | 0.562 | | 0.506 | | 0.000 | | 0.821 | | 0.753 | | 0.572 | | 0.653 |
| No. of Days/M | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 24 | | 31 | | 30 | | 31 | | 359 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -0.002-0.843*H+1.016*H^2

Daily Discharge Calculation in m^3/ Sec

River: Abade Year: 1991

Gauging Station: Bombaim Catchment Area : 12.0 Sq.Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | | Total | verage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | | Q | Q |
| 1 | 1.230 | 0.498 | 1.190 | 0.434 | 1.240 | 0.515 | 1.280 | 0.584 | 1.350 | 0.712 | 1.330 | 0.674 | 1.200 | 0.449 | 1.160 | 0.387 | 1.140 | 0.357 | 1.200 | 0.449 | 1.360 | 0.731 | | | | 5.790 | 0.526 |
| 2 | 1.220 | 0.482 | 1.200 | 0.449 | 1.220 | 0.482 | 1.280 | 0.584 | 1.410 | 0.829 | 1.320 | 0.656 | 1.200 | 0.449 | 1.160 | 0.387 | 1.140 | 0.357 | 1.180 | 0.418 | 1.360 | 0.731 | | | | 5.824 | 0.529 |
| 3 | 1.230 | 0.498 | 1.190 | 0.434 | 1.270 | 0.566 | 1.330 | 0.674 | 1.340 | 0.693 | 1.530 | 1.087 | 1.190 | 0.434 | 1.160 | 0.387 | 1.170 | 0.402 | 1.180 | 0.418 | 1.360 | 0.731 | | | | 6.323 | 0.575 |
| 4 | 1.240 | 0.515 | 1.190 | 0.434 | 1.240 | 0.515 | 1.300 | 0.619 | 1.310 | 0.637 | 1.310 | 0.637 | 1.210 | 0.465 | 1.160 | 0.387 | 1.180 | 0.418 | 1.180 | 0.418 | 1.350 | 0.712 | | | | 5.757 | 0.523 |
| 5 | 1.240 | 0.515 | 1.180 | 0.418 | 1.220 | 0.482 | 1.300 | 0.619 | 1.330 | 0.674 | 1.290 | 0.601 | 1.200 | 0.449 | 1.150 | 0.372 | 1.160 | 0.387 | 1.220 | 0.482 | 1.340 | 0.693 | | | | 5.692 | 0.517 |
| 6 | 1.320 | 0.656 | 1.190 | 0.434 | 1.220 | 0.482 | 1.280 | 0.584 | 1.290 | 0.601 | 2.350 | 3.628 | 1.220 | 0.482 | 1.150 | 0.372 | 1.180 | 0.418 | 1.200 | 0.449 | 1.330 | 0.674 | | | | 8.779 | 0.798 |
| 7 | 1.240 | 0.515 | 1.200 | 0.449 | 1.200 | 0.449 | 1.280 | 0.584 | 1.410 | 0.829 | 1.550 | 1.132 | 1.200 | 0.449 | 1.150 | 0.372 | 1.160 | 0.387 | 1.620 | 1.299 | 1.320 | 0.656 | | | | 7.122 | 0.647 |
| 8 | 1.230 | 0.498 | 1.200 | 0.449 | 1.210 | 0.465 | 1.340 | 0.693 | 1.280 | 0.584 | 1.460 | 0.933 | 1.190 | 0.434 | 1.150 | 0.372 | 1.160 | 0.387 | 1.370 | 0.750 | 1.320 | 0.656 | | | | 6.221 | 0.566 |
| 9 | 1.220 | 0.482 | 1.190 | 0.434 | 1.200 | 0.449 | 1.300 | 0.619 | 1.270 | 0.566 | 1.400 | 0.809 | 1.180 | 0.418 | 1.150 | 0.372 | 1.140 | 0.357 | 1.420 | 0.850 | 1.300 | 0.619 | | | | 5.975 | 0.543 |
| 10 | 1.620 | 1.290 | 1.190 | 0.434 | 1.200 | 0.449 | 1.340 | 0.693 | 1.270 | 0.566 | 1.360 | 0.731 | 1.180 | 0.418 | 1.150 | 0.372 | 1.160 | 0.387 | 1.310 | 0.637 | 1.760 | 1.661 | | | | 7.647 | 0.695 |
| 11 | 1.260 | 0.549 | 1.200 | 0.449 | 1.200 | 0.449 | 1.300 | 0.619 | 1.280 | 0.584 | 1.320 | 0.656 | 1.180 | 0.418 | 1.180 | 0.418 | 1.160 | 0.387 | 1.260 | 0.549 | 1.360 | 0.731 | | | | 5.809 | 0.528 |
| 12 | 1.240 | 0.515 | 1.200 | 0.449 | 1.520 | 1.064 | 1.360 | 0.731 | 1.340 | 0.693 | 1.300 | 0.619 | 1.180 | 0.418 | 1.180 | 0.418 | 1.150 | 0.372 | 1.440 | 0.891 | 1.340 | 0.693 | 1.360 | 0.731 | | 7.593 | 0.633 |
| 13 | 1.230 | 0.498 | 1.180 | 0.418 | 1.310 | 0.637 | 1.330 | 0.674 | 1.330 | 0.674 | 1.280 | 0.584 | 1.210 | 0.465 | 1.260 | 0.549 | 1.160 | 0.387 | 1.360 | 0.731 | | | 1.280 | 0.584 | | 6.201 | 0.564 |
| 14 | 1.220 | 0.482 | 1.180 | 0.418 | 1.280 | 0.584 | 1.310 | 0.637 | 1.300 | 0.619 | 1.300 | 0.619 | 1.180 | 0.418 | 1.240 | 0.515 | 1.160 | 0.387 | 1.330 | 0.674 | | | 1.260 | 0.549 | | 5.902 | 0.537 |
| 15 | 1.240 | 0.515 | 1.200 | 0.449 | 1.400 | 0.809 | 1.300 | 0.619 | 1.300 | 0.619 | 1.280 | 0.584 | 1.180 | 0.418 | 1.200 | 0.449 | 1.160 | 0.387 | 2.240 | 3.208 | | | 1.250 | 0.532 | | 8.589 | 0.781 |
| 16 | 1.220 | 0.482 | 1.180 | 0.418 | 1.280 | 0.584 | 1.280 | 0.584 | 1.270 | 0.566 | 1.270 | 0.566 | 1.180 | 0.418 | 1.180 | 0.418 | 1.190 | 0.434 | 1.560 | 1.155 | | | 1.300 | 0.619 | | 6.243 | 0.568 |
| 17 | 1.220 | 0.482 | 1.180 | 0.418 | 1.280 | 0.584 | 1.280 | 0.584 | 1.270 | 0.566 | 1.260 | 0.549 | 1.180 | 0.418 | 1.180 | 0.418 | 1.180 | 0.418 | 1.460 | 0.933 | | | 1.280 | 0.584 | | 5.952 | 0.541 |
| 18 | 1.210 | 0.465 | 1.180 | 0.418 | 1.460 | 0.933 | 1.260 | 0.549 | 1.450 | 0.912 | 1.260 | 0.549 | 1.180 | 0.418 | 1.160 | 0.387 | 1.160 | 0.387 | 1.410 | 0.829 | | | 1.260 | 0.549 | | 6.396 | 0.581 |
| 19 | 1.210 | 0.465 | 1.180 | 0.418 | 1.370 | 0.750 | 1.240 | 0.515 | 1.340 | 0.693 | 1.250 | 0.532 | 1.180 | 0.418 | 1.160 | 0.387 | 1.160 | 0.387 | 1.390 | 0.789 | | | 1.250 | 0.532 | | 5.886 | 0.535 |
| 20 | 1.200 | 0.449 | 1.200 | 0.449 | 1.330 | 0.674 | 1.300 | 0.789 | 1.300 | 0.619 | 1.240 | 0.515 | 1.180 | 0.418 | 1.160 | 0.387 | 1.160 | 0.387 | 1.360 | 0.731 | | | 1.250 | 0.532 | | 5.951 | 0.541 |
| 21 | 1.480 | 0.976 | 1.220 | 0.482 | 1.320 | 0.656 | 1.280 | 0.584 | 1.280 | 0.584 | 1.240 | 0.515 | 1.180 | 0.418 | 1.160 | 0.387 | 1.180 | 0.387 | 1.780 | 1.717 | | | 1.240 | 0.515 | | 7.219 | 0.656 |
| 22 | 1.240 | 0.515 | 1.250 | 0.532 | 1.320 | 0.656 | 1.260 | 0.549 | 1.280 | 0.584 | 1.240 | 0.515 | 1.180 | 0.418 | 1.160 | 0.387 | 1.150 | 0.372 | 1.540 | 1.109 | | | 1.240 | 0.515 | | 6.151 | 0.559 |
| 23 | 1.220 | 0.482 | 1.220 | 0.482 | 1.400 | 0.809 | 1.260 | 0.549 | 1.500 | 1.020 | 1.240 | 0.515 | 1.170 | 0.402 | 1.160 | 0.387 | 1.160 | 0.387 | 1.490 | 0.998 | | | 2.000 | 2.376 | | 8.406 | 0.764 |
| 24 | 1.210 | 0.465 | 1.200 | 0.449 | 1.330 | 0.674 | 1.350 | 0.712 | 1.350 | 0.712 | 1.220 | 0.482 | 1.170 | 0.402 | 1.170 | 0.402 | 1.160 | 0.387 | 1.450 | 0.912 | | | 1.310 | 0.637 | | 6.235 | 0.567 |
| 25 | 1.210 | 0.465 | 1.200 | 0.449 | 1.300 | 0.619 | 1.260 | 0.549 | 1.300 | 0.619 | 1.220 | 0.482 | 1.170 | 0.402 | 1.170 | 0.402 | 1.160 | 0.387 | 1.460 | 0.933 | | | 1.300 | 0.619 | | 5.928 | 0.539 |
| 26 | 1.210 | 0.465 | 1.180 | 0.418 | 1.300 | 0.619 | 1.380 | 0.770 | 1.320 | 0.656 | 1.220 | 0.482 | 1.170 | 0.402 | 1.160 | 0.387 | 1.160 | 0.387 | 1.540 | 1.109 | | | 1.260 | 0.549 | | 6.245 | 0.568 |
| 27 | 1.200 | 0.449 | 1.180 | 0.418 | 1.300 | 0.619 | 1.300 | 0.619 | 1.340 | 0.693 | 1.220 | 0.482 | 1.140 | 0.357 | 1.160 | 0.387 | 1.160 | 0.387 | 1.460 | 0.933 | | | 1.280 | 0.584 | | 5.928 | 0.539 |
| 28 | 1.200 | 0.449 | 1.320 | 0.656 | 1.290 | 0.601 | 1.280 | 0.584 | 1.310 | 0.637 | 1.210 | 0.465 | 1.160 | 0.387 | 1.150 | 0.372 | 1.180 | 0.418 | 1.420 | 0.850 | | | 1.260 | 0.549 | | 5.968 | 0.543 |
| 29 | 1.200 | 0.449 | | | 1.300 | 0.619 | 1.270 | 0.566 | 1.850 | 1.916 | 1.200 | 0.449 | 1.160 | 0.387 | 1.150 | 0.372 | 1.160 | 0.387 | 1.410 | 0.829 | | | 1.270 | 0.566 | | 6.542 | 0.654 |
| 30 | 1.200 | 0.449 | | | 1.200 | 0.601 | 1.420 | 0.850 | 1.320 | 0.656 | 1.200 | 0.449 | 1.170 | 0.402 | 1.150 | 0.372 | 1.160 | 0.387 | 1.390 | 0.789 | | | 1.250 | 0.532 | | 5.488 | 0.549 |
| 31 | 1.200 | 0.449 | | | 1.280 | 0.584 | | | 1.360 | 0.731 | | | 1.160 | 0.387 | 1.150 | 0.372 | | | 1.370 | 0.750 | | | 1.240 | 0.515 | | 3.788 | 0.541 |
| Total | | 16.476 | | 12.559 | | ****** | | 18.881 | | 22.040 | | 21.495 | | 13.042 | | 12.359 | | 11.682 | | 27.588 | | 9.286 | | 13.166 | | 197.553 | |
| Average | | 0.531 | | 0.449 | | 0.612 | | 0.629 | | 0.711 | | 0.716 | | 0.421 | | 0.309 | | 0.389 | | 0.890 | | 0.774 | | 0.658 | | | 0.588 |
| No. of Days/M | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 12 | | 20 | | | 336 |

Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -0.002-0.843*H+1.016*H^2

Daily Discharge Calculation in m^3/ Sec
River: Abana Year: 1992
Gauging Station: Bombaim Catchment Area : 12.0 Sq. Km

| | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | verage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | H | Q | Q | Q |
| 1 | 1.240 | 0.515 | 1.250 | 0.532 | 1.220 | 0.482 | 1.840 | 1.887 | 1.280 | 0.584 | 1.190 | 0.434 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 5.417 | 0.602 |
| 2 | 1.730 | 1.580 | 1.230 | 0.498 | 1.280 | 0.584 | 1.400 | 0.809 | 1.260 | 0.549 | 1.190 | 0.434 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 5.439 | 0.604 |
| 3 | 1.280 | 0.584 | 1.230 | 0.498 | 1.220 | 0.482 | 1.740 | 1.607 | 1.240 | 0.515 | 1.180 | 0.418 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 5.089 | 0.565 |
| 4 | 1.270 | 0.566 | 1.220 | 0.482 | 1.210 | 0.465 | 1.400 | 0.809 | 1.250 | 0.532 | 1.180 | 0.418 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 4.257 | 0.473 |
| 5 | 1.800 | 1.772 | 1.220 | 0.482 | 1.200 | 0.449 | 1.660 | 1.398 | 1.240 | 0.515 | 1.180 | 0.418 | 1.120 | 0.328 | 1.120 | 0.328 | 1.130 | 0.343 | | | | | | | 6.034 | 0.670 |
| 6 | 1.270 | 0.566 | 1.220 | 0.482 | 1.200 | 0.449 | 1.380 | 0.770 | 1.220 | 0.482 | 1.170 | 0.402 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 4.136 | 0.460 |
| 7 | 1.260 | 0.549 | 1.210 | 0.465 | 1.200 | 0.449 | 1.390 | 0.789 | 1.220 | 0.482 | 1.170 | 0.402 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 4.122 | 0.458 |
| 8 | 1.250 | 0.532 | 1.210 | 0.465 | 1.210 | 0.465 | 1.340 | 0.693 | 1.290 | 0.601 | 1.170 | 0.402 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 4.144 | 0.460 |
| 9 | 1.240 | 0.515 | 1.200 | 0.449 | 1.200 | 0.449 | 1.320 | 0.656 | 1.250 | 0.532 | 1.170 | 0.402 | 1.120 | 0.328 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | 3.988 | 0.443 |
| 10 | 1.240 | 0.515 | 1.200 | 0.449 | 1.240 | 0.515 | 1.340 | 0.693 | 1.240 | 0.515 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.130 | 0.343 | | | | | | | 4.058 | 0.451 |
| 11 | 1.240 | 0.515 | 1.220 | 0.482 | 1.400 | 0.809 | 1.420 | 0.850 | 1.240 | 0.515 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.150 | 0.372 | | | | | | | 4.571 | 0.508 |
| 12 | 1.230 | 0.498 | 1.220 | 0.482 | 1.260 | 0.549 | 1.340 | 0.693 | 1.230 | 0.498 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.140 | 0.357 | | | | | | | 4.106 | 0.456 |
| 13 | 1.230 | 0.498 | 1.220 | 0.482 | 1.360 | 0.731 | 1.340 | 0.693 | 1.220 | 0.482 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.140 | 0.357 | | | | | | | 4.271 | 0.475 |
| 14 | 1.220 | 0.482 | 1.220 | 0.482 | 1.260 | 0.549 | 1.310 | 0.637 | 1.220 | 0.482 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.140 | 0.357 | | | | | | | 4.018 | 0.446 |
| 15 | 1.240 | 0.515 | 1.230 | 0.498 | 1.240 | 0.515 | 1.300 | 0.619 | 1.210 | 0.465 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.140 | 0.357 | | | | | | | 3.999 | 0.444 |
| 16 | 1.220 | 0.482 | 1.220 | 0.482 | 1.350 | 0.712 | 1.280 | 0.584 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | 1.140 | 0.357 | | | | | | | 4.094 | 0.455 |
| 17 | 1.280 | 0.584 | 1.220 | 0.482 | 1.280 | 0.584 | 1.360 | 0.731 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 3.858 | 0.482 |
| 18 | 1.260 | 0.549 | 1.210 | 0.465 | 1.260 | 0.549 | 1.260 | 0.549 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 3.590 | 0.440 |
| 19 | 1.240 | 0.515 | 1.230 | 0.498 | 1.290 | 0.601 | 1.260 | 0.549 | 1.220 | 0.482 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 3.674 | 0.459 |
| 20 | 1.400 | 0.809 | 1.220 | 0.482 | 1.360 | 0.731 | 1.260 | 0.549 | 1.210 | 0.465 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 4.065 | 0.508 |
| 21 | 1.260 | 0.549 | 1.220 | 0.482 | 1.310 | 0.637 | 1.260 | 0.549 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.150 | 0.372 | | | | | | | | | 3.739 | 0.467 |
| 22 | 1.240 | 0.515 | 1.220 | 0.482 | 2.570 | 4.542 | 1.240 | 0.515 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.240 | 0.515 | | | | | | | | | 7.718 | 0.965 |
| 23 | 1.240 | 0.515 | 1.210 | 0.465 | 1.440 | 0.891 | 1.240 | 0.515 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.140 | 0.357 | | | | | | | | | 3.893 | 0.487 |
| 24 | 1.360 | 0.731 | 1.210 | 0.465 | 1.730 | 1.580 | 1.280 | 0.584 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.130 | 0.343 | | | | | | | | | 4.853 | 0.607 |
| 25 | 1.260 | 0.549 | 1.210 | 0.465 | 1.400 | 0.809 | 1.600 | 1.250 | 1.190 | 0.434 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 4.536 | 0.567 |
| 26 | 1.250 | 0.532 | 1.200 | 0.449 | 1.370 | 0.750 | 1.300 | 0.619 | 1.400 | 0.809 | 1.150 | 0.372 | 1.120 | 0.328 | 1.150 | 0.372 | | | | | | | | | 4.232 | 0.529 |
| 27 | 1.240 | 0.515 | 1.200 | 0.449 | 1.340 | 0.693 | 1.260 | 0.549 | 1.220 | 0.482 | 1.150 | 0.372 | 1.120 | 0.328 | 1.130 | 0.343 | | | | | | | | | 3.731 | 0.466 |
| 28 | 1.240 | 0.515 | 1.200 | 0.449 | 1.360 | 0.731 | 1.260 | 0.549 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 3.722 | 0.465 |
| 29 | 1.230 | 0.498 | 1.200 | 0.449 | 1.300 | 0.619 | 1.280 | 0.584 | 1.200 | 0.449 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 3.629 | 0.454 |
| 30 | 1.220 | 0.482 | | | 1.290 | 0.601 | 1.240 | 0.515 | 1.190 | 0.434 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 3.060 | 0.437 |
| 31 | 1.240 | 0.515 | | | 1.280 | 0.584 | | | 1.180 | 0.418 | 1.150 | 0.372 | 1.120 | 0.328 | 1.120 | 0.328 | | | | | | | | | 2.545 | 0.424 |
| Total | | 19.054 | | 13.795 | | ****** | | 22.790 | | 15.316 | | 11.920 | | 10.178 | | 10.510 | | 5.471 | | 0.000 | | 0.000 | | 0.000 | 132.590 | |
| Average | | 0.615 | | 0.476 | | 0.760 | | 0.760 | | 0.494 | | 0.397 | | 0.328 | | 0.339 | | 0.342 | | 0.000 | | 0.000 | | 0.000 | | 0.510 |
| No. of Days/M | | 31 | | 29 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 16 | | 0 | | 0 | | 0 | | 260 |

## Calculation of Daily Discharge ( m^3/ Sec ) by The Least Squares Method

Applied Formula: Q= -0.002-0.843*H+1.016*H^2

Daily Discharge Calculation in m^3/ Sec
River: Abade Year: 1993
Gauging Station: Bocbaim Catchment Area : 12.0 Sq.Ke

| Day | January H | January Q | February H | February Q | March H | March Q | April H | April Q | May H | May Q | June H | June Q | July H | July Q | August H | August Q | September H | September Q | October H | October Q | November H | November Q | December H | December Q | Total Q | Average Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 1.200 | 0.449 | 1.240 | 0.515 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | 1.414 | 0.471 |
| 2 | | | 1.200 | 0.449 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.931 | 0.466 |
| 3 | | | 1.240 | 0.515 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.997 | 0.498 |
| 4 | | | 1.200 | 0.449 | 1.240 | 0.515 | | | | | | | | | | | | | | | | | | | 0.964 | 0.482 |
| 5 | | | 1.200 | 0.449 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.931 | 0.466 |
| 6 | | | 1.190 | 0.434 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.915 | 0.458 |
| 7 | | | 1.200 | 0.449 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.931 | 0.466 |
| 8 | | | 1.200 | 0.449 | 1.350 | 0.731 | | | | | | | | | | | | | | | | | | | 1.180 | 0.590 |
| 9 | | | 1.190 | 0.434 | 1.210 | 0.465 | | | | | | | | | | | | | | | | | | | 0.899 | 0.450 |
| 10 | | | 1.190 | 0.434 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.883 | 0.442 |
| 11 | | | 1.190 | 0.434 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.883 | 0.442 |
| 12 | | | 1.190 | 0.434 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.883 | 0.442 |
| 13 | | | 1.200 | 0.449 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.899 | 0.449 |
| 14 | | | 1.190 | 0.434 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.883 | 0.442 |
| 15 | | | 1.190 | 0.434 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.883 | 0.442 |
| 16 | | | 1.290 | 0.601 | 1.240 | 0.515 | | | | | | | | | | | | | | | | | | | 1.116 | 0.558 |
| 17 | | | 1.230 | 0.498 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.948 | 0.474 |
| 18 | | | 1.220 | 0.482 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.931 | 0.466 |
| 19 | | | 1.220 | 0.482 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.931 | 0.466 |
| 20 | | | 1.210 | 0.465 | 1.360 | 0.731 | | | | | | | | | | | | | | | | | | | 1.196 | 0.598 |
| 21 | | | 1.210 | 0.465 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.947 | 0.474 |
| 22 | | | 1.290 | 0.601 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 1.051 | 0.525 |
| 23 | | | 1.210 | 0.465 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.915 | 0.457 |
| 24 | | | 1.200 | 0.449 | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.899 | 0.449 |
| 25 | | | 1.200 | 0.449 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 0.931 | 0.466 |
| 26 | 1.200 | 0.449 | 1.190 | 0.434 | 1.340 | 0.693 | | | | | | | | | | | | | | | | | | | 1.576 | 0.525 |
| 27 | 1.190 | 0.434 | 2.300 | 3.787 | 1.220 | 0.482 | | | | | | | | | | | | | | | | | | | 4.702 | 1.567 |
| 28 | 1.190 | 0.434 | 1.360 | 0.731 | 1.210 | 0.465 | | | | | | | | | | | | | | | | | | | 1.630 | 0.543 |
| 29 | 1.200 | 0.449 | | | 1.540 | 1.109 | | | | | | | | | | | | | | | | | | | 1.559 | 0.779 |
| 30 | 1.210 | 0.465 | | | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.915 | 0.457 |
| 31 | 1.200 | 0.449 | | | 1.200 | 0.449 | | | | | | | | | | | | | | | | | | | 0.899 | 0.449 |
| Total | | 2.681 | | 10.607 | | ****** | | 0.449 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 35.622 | |
| Average | | 0.447 | | 0.503 | | 0.512 | | 0.449 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.540 |
| No. of Days/M | | 6 | | 28 | | 31 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 66 |

## Table 7–7 Calculation of Rating Curve at Pian–Pian " Ponte " G.S.for 1990 on the Manuel Jorge River

Applied Formula: $Q = a + bh + ch^2$

$a = [h^2][h^4][Q]+[h^2][h^3][Qh]+[h][h^3][Qh^2]-[h^3]^2[Q]-[h][h^4][Qh]-[h^2]^2[Qh^2]/n[h^2][h^4]+2[h][h^2][h^3]-n[h^3]^2-[h]^2[h^4]-[h^2]^3$

$b=[h^2][h^3][Q]+n[h^4][Qh]+[h][h^2][Qh^2]-[h][h^4][Q]-[h^2]^2[Qh]-n[h^3][Qh^2]/n[h^2][h^4]+2[h][h^2][h^3]-n[h^3]^2-[h]^2[h^4]-[h^2]^3$

$c=[h][h^3][Q]+[h][h^2][Qh]+n[h^2][Qh^2]-[h^2]^2[Q]-n[h^3][Qh]-[h]^2[Qh^2]/n[h^2][h^4]+2[h][h^2][h^3]-n[h^3]^2-[h]^2[h^4]-[h^2]^3$

n= Numbers of sample observation.
h= Gauge height of water level (m)
Q= Discharge ( m^3/ Sec )observed by MESA

| Year | Date | N | H | Q | H^2 | H^3 | H^4 | [H]^2 | [H^2]^2 | [H^2]^3 | [H^3]^2 | QH | QH^2 | a | b | c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1990 | 30 Jan. | 1 | 1.420 | 0.526 | 2.016 | 2.863 | 4.066 | | | | | 0.747 | 1.061 | | | |
| | 06 Feb | 2 | 1.340 | 0.456 | 1.796 | 2.406 | 3.224 | | | | | 0.611 | 0.819 | | | |
| | 13 Feb | 3 | 1.670 | 0.751 | 2.789 | 4.657 | 7.778 | | | | | 1.254 | 2.094 | | | |
| | 27 Feb | 4 | 1.470 | 0.569 | 2.161 | 3.177 | 4.669 | | | | | 0.836 | 1.230 | | | |
| | 06 Mar | 5 | 1.440 | 0.542 | 2.074 | 2.986 | 4.300 | | | | | 0.780 | 1.124 | | | |
| | 13 Mar | 6 | 1.570 | 0.663 | 2.465 | 3.870 | 6.076 | | | | | 1.041 | 1.634 | | | |
| | 17 Apr | 7 | 1.690 | 0.767 | 2.856 | 4.827 | 8.157 | | | | | 1.296 | 2.191 | | | |
| | 12 May | 8 | 2.120 | 1.164 | 4.494 | 9.528 | 20.200 | | | | | 2.468 | 5.231 | | | |
| | 22 May | 9 | 1.960 | 1.020 | 3.842 | 7.530 | 14.758 | | | | | 1.999 | 3.918 | | | |
| | 12 Jun | 10 | 1.500 | 0.596 | 2.250 | 3.375 | 5.063 | | | | | 0.894 | 1.341 | | | |
| | 26 Jun | 11 | 1.240 | 0.359 | 1.538 | 1.907 | 2.364 | | | | | 0.445 | 0.552 | | | |
| | 07 Aug | 12 | 1.090 | 0.229 | 1.188 | 1.295 | 1.412 | | | | | 0.250 | 0.272 | | | |
| | 14 Aug | 13 | 1.170 | 0.303 | 1.369 | 1.602 | 1.874 | | | | | 0.355 | 0.415 | | | |
| | 28 Aug | 14 | 1.060 | 0.209 | 1.124 | 1.191 | 1.262 | | | | | 0.222 | 0.235 | | | |
| | 02 Oct | 15 | 1.080 | 0.223 | 1.166 | 1.260 | 1.360 | | | | | 0.241 | 0.260 | | | |
| | 11 Oct | 16 | 2.120 | 1.164 | 4.494 | 9.528 | 20.200 | | | | | 2.468 | 5.231 | | | |
| | 30 Oct | 17 | 1.890 | 0.956 | 3.572 | 6.751 | 12.760 | | | | | 1.807 | 3.415 | | | |
| | 06 Nov | 18 | 1.710 | 0.790 | 2.924 | 5.000 | 8.550 | | | | | 1.351 | 2.310 | | | |
| | 14 Nov | 19 | 1.560 | 0.655 | 2.434 | 3.796 | 5.922 | | | | | 1.022 | 1.594 | | | |
| | 20 Nov | 20 | 1.690 | 0.788 | 2.856 | 4.827 | 8.157 | | | | | 1.332 | 2.251 | | | |
| | 06 Dec | 21 | 1.970 | 1.031 | 3.881 | 7.645 | 15.061 | | | | | 2.031 | 4.001 | | | |
| | | 21 | 32.760 | 13.761 | 53.288 | 90.021 | 157.214 | 1073.218 | 2839.632 | 151318.892 | 8103.767 | 23.449 | 41.179 | -0.725 | 0.860 | 0.015 |

Table 7-8 Rating Curve at Pian-Pian ( Ponte )G.S. for 1991 on Manuel Jorge River

| Year | Date | N | H | Q | H^2 | H^3 | H^4 | [H]^2 | [H^2]^2 | [H^2]^3 | [H^3]^2 | QH | QH^2 | a | b | c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1991 | 08 Jan. | 1 | 1.860 | 0.510 | 3.460 | 6.435 | 11.969 | | | | | 0.949 | 1.764 | | | |
| | 24 Jan | 2 | 1.520 | 0.410 | 2.310 | 3.512 | 5.338 | | | | | 0.623 | 0.947 | | | |
| | 29 Jan | 3 | 1.500 | 0.370 | 2.250 | 3.375 | 5.063 | | | | | 0.555 | 0.833 | | | |
| | 15 Feb | 4 | 1.520 | 0.430 | 2.310 | 3.512 | 5.338 | | | | | 0.654 | 0.993 | | | |
| | 19 Feb | 5 | 1.450 | 0.300 | 2.103 | 3.049 | 4.421 | | | | | 0.435 | 0.631 | | | |
| | 21 Mar | 6 | 1.900 | 1.140 | 3.610 | 6.859 | 13.032 | | | | | 2.166 | 4.115 | | | |
| | 12 Apr | 7 | 1.860 | 1.050 | 3.460 | 6.435 | 11.969 | | | | | 1.953 | 3.633 | | | |
| | 25 Apr | 8 | 1.710 | 0.790 | 2.924 | 5.000 | 8.550 | | | | | 1.351 | 2.310 | | | |
| | 13 May | 9 | 1.950 | 1.140 | 3.803 | 7.415 | 14.459 | | | | | 2.223 | 4.335 | | | |
| | 31 May | 10 | 1.800 | 0.890 | 3.240 | 5.832 | 10.498 | | | | | 1.602 | 2.884 | | | |
| | 21 Jun | 11 | 1.820 | 0.690 | 3.312 | 6.029 | 10.972 | | | | | 1.256 | 2.286 | | | |
| | 17 Jul | 12 | 1.650 | 0.300 | 2.723 | 4.492 | 7.412 | | | | | 0.495 | 0.817 | | | |
| | 24 Jul | 13 | 1.590 | 0.290 | 2.528 | 4.020 | 6.391 | | | | | 0.461 | 0.733 | | | |
| | 17 Sep | 14 | 1.490 | 0.200 | 2.220 | 3.308 | 4.929 | | | | | 0.298 | 0.444 | | | |
| | | 14 | 23.620 | 8.510 | 40.252 | 69.271 | 120.340 | 557.904 | 1620.240 | 65218.209 | 4798.521 | 15.020 | 26.724 | 5.768 | -7.833 | 2.802 |

Table 7–9 Daily Discharge Data at Pian–Pian( Ponte ) Gauging Station on the Manuel Jorge River

Table 7-9 Daily Discharge Data at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 1 / 5 )

Year : 1988 Catchment Area: 22.6 Sq. km Unit : m^3 / sec.

| Day | January G. H. | Q | February G. H. | Q | March G. H. | Q | April G. H. | Q | May G. H. | Q | June G. H. | Q | July G. H. | Q | August G. H. | Q | September G. H. | Q | October G. H. | Q | November G. H. | Q | December G. H. | Q | Total Q | Average Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | 0.799 | | 0.932 | | 1.114 | 2.845 | 0.948 |
| 3 | | | | | | | | | | | | | | | | | | | | 0.844 | | 0.888 | | 1.035 | 2.767 | 0.922 |
| 4 | | | | | | | | | | | | | | | | | | | | 0.821 | | 0.994 | | 1.015 | 2.830 | 0.943 |
| 5 | | | | | | | | | | | | | | | | | | | | 0.789 | | 0.932 | | 0.894 | 2.725 | 0.908 |
| 6 | | | | | | | | | | | | | | | | | | | | 0.799 | | 0.910 | | 1.095 | 2.804 | 0.935 |
| 7 | | | | | | | | | | | | | | | | | | | | 0.821 | | 0.910 | | 1.075 | 2.806 | 0.935 |
| 8 | | | | | | | | | | | | | | | | | | | | 0.844 | | 1.015 | | 1.035 | 2.894 | 0.965 |
| 9 | | | | | | | | | | | | | | | | | | | | 0.866 | | 0.994 | | 1.114 | 2.974 | 0.991 |
| 10 | | | | | | | | | | | | | | | | | | | | 0.888 | | 0.994 | | 1.075 | 2.957 | 0.986 |
| 11 | | | | | | | | | | | | | | | | | | | | 0.953 | | 0.994 | | 1.075 | 3.022 | 1.007 |
| 12 | | | | | | | | | | | | | | | | | | | | 0.866 | | 0.994 | | 1.035 | 2.895 | 0.965 |
| 13 | | | | | | | | | | | | | | | | | | | | 0.866 | | 0.994 | | 1.035 | 2.895 | 0.965 |
| 14 | | | | | | | | | | | | | | | | | | | | 0.866 | | 0.953 | | 1.226 | 3.045 | 1.015 |
| 15 | | | | | | | | | | | | | | | | | | | | 0.844 | | 0.953 | | 1.035 | 2.832 | 0.944 |
| 16 | | | | | | | | | | | | | | | | | | | | 0.866 | | 0.974 | | 1.015 | 2.855 | 0.952 |
| 17 | | | | | | | | | | | | | | | | | | | | 0.866 | | 0.994 | | 1.035 | 2.895 | 0.965 |
| 18 | | | | | | | | | | | | | | | | | | | | 0.910 | | 1.207 | | 1.015 | 3.132 | 1.044 |
| 19 | | | | | | | | | | | | | | | | | | | | 0.974 | | 1.134 | | 0.994 | 3.102 | 1.034 |
| 20 | | | | | | | | | | | | | | | | | | | | 0.915 | | 1.056 | | 0.974 | 2.945 | 0.982 |
| 21 | | | | | | | | | | | | | | | | | | | | 0.910 | | 1.035 | | 0.974 | 2.919 | 0.973 |
| 22 | | | | | | | | | | | | | | | | | | | | 0.910 | | 0.994 | | 0.950 | 2.857 | 0.952 |
| 23 | | | | | | | | | | | | | | | | | | | | 0.910 | | 1.015 | | 0.953 | 2.878 | 0.959 |
| 24 | | | | | | | | | | | | | | | | | | | | 0.888 | | 1.170 | | 0.953 | 3.011 | 1.004 |
| 25 | | | | | | | | | | | | | | | | | | | | 0.932 | | 1.134 | | 0.953 | 3.019 | 1.006 |
| 26 | | | | | | | | | | | | | | | | | | | | 0.974 | | 1.114 | | 0.953 | 3.041 | 1.014 |
| 27 | | | | | | | | | | | | | | | | | | | | 0.953 | | 1.095 | | 1.002 | 3.050 | 1.017 |
| 28 | | | | | | | | | | | | | | | | | | | | 0.932 | | 1.075 | | 1.002 | 3.009 | 1.003 |
| 29 | | | | | | | | | | | | | | | | | | | | 0.932 | | 1.035 | | 0.974 | 2.941 | 0.980 |
| 30 | | | | | | | | | | | | | | | | | | | | 1.015 | | 1.015 | | 1.035 | 3.065 | 1.022 |
| 31 | | | | | | | | | | | | | | | | | | | | 0.974 | | 0.994 | | 0.994 | 2.962 | 0.987 |
| | | | | | | | | | | | | | | | | | | | | 0.961 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | 0.953 | | | | 0.953 | 1.906 | 0.953 |
| Total | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 28.651 | | 30.498 | | 31.690 | 89.878 | 30.277 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.924 | | 1.017 | | 1.022 | | 0.746 |

Table 7-9 Daily Discharge Data at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 2/5 )

Year : 1989 Catchment Area: 22.6 Sq. km Unit : m^3 / sec.

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | Q | Q |
| 1 | | 0.950 | | 0.709 | | 0.621 | | 0.821 | | 0.994 | | 0.950 | | 0.607 | | 0.490 | | 0.480 | | 0.532 | | 0.994 | | 0.728 | 8.882 | 0.740 |
| 2 | | 0.932 | | 0.709 | | 1.184 | | 0.821 | | 0.950 | | 0.932 | | 0.607 | | 0.490 | | 0.480 | | 0.532 | | 1.152 | | 0.821 | 9.613 | 0.801 |
| 3 | | 0.932 | | 0.709 | | 1.521 | | 0.821 | | 0.910 | | 0.910 | | 0.582 | | 0.490 | | 0.506 | | 0.582 | | 1.056 | | 0.728 | 9.748 | 0.812 |
| 4 | | 0.950 | | 0.709 | | 1.346 | | 0.821 | | 0.910 | | 0.866 | | 0.582 | | 0.490 | | 0.506 | | 0.582 | | 0.994 | | 0.728 | 9.488 | 0.791 |
| 5 | | 0.950 | | 0.709 | | 1.108 | | 0.776 | | 1.075 | | 0.866 | | 0.582 | | 0.490 | | 0.506 | | 0.681 | | 0.974 | | 0.657 | 9.377 | 0.781 |
| 6 | | 0.950 | | 0.670 | | 0.966 | | 0.799 | | 0.910 | | 0.844 | | 0.582 | | 0.490 | | 0.506 | | 0.582 | | 0.950 | | 0.637 | 8.888 | 0.741 |
| 7 | | 0.932 | | 0.670 | | 1.910 | | 0.799 | | 0.844 | | 0.821 | | 0.582 | | 0.490 | | 0.506 | | 0.607 | | 1.479 | | 0.821 | 10.461 | 0.872 |
| 8 | | 0.950 | | 0.670 | | 1.708 | | 0.799 | | 0.799 | | 0.974 | | 0.582 | | 0.490 | | 0.506 | | 0.607 | | 1.226 | | 1.189 | 10.504 | 0.875 |
| 9 | | 0.932 | | 0.670 | | 0.966 | | 0.799 | | 0.776 | | 0.950 | | 0.582 | | 0.490 | | 0.480 | | 0.632 | | 1.050 | | 0.799 | 9.136 | 0.761 |
| 10 | | 0.932 | | 0.670 | | 0.838 | | 0.799 | | 0.821 | | 0.950 | | 0.582 | | 0.490 | | 0.480 | | 0.657 | | 0.994 | | 0.728 | 8.945 | 0.745 |
| 11 | | 0.910 | | 0.670 | | 0.723 | | 0.844 | | 0.752 | | 0.950 | | 0.582 | | 0.532 | | 0.532 | | 0.607 | | 0.950 | | 0.705 | 8.763 | 0.730 |
| 12 | | 0.932 | | 0.670 | | 1.708 | | 0.844 | | 0.776 | | 0.950 | | 0.558 | | 0.532 | | 0.532 | | 0.582 | | 0.910 | | 0.910 | 9.906 | 0.826 |
| 13 | | 0.932 | | 0.670 | | 1.035 | | 0.844 | | 0.844 | | 0.932 | | 0.632 | | 0.532 | | 0.532 | | 0.888 | | 0.910 | | 0.799 | 9.449 | 0.787 |
| 14 | | 0.910 | | 0.670 | | 0.966 | | 0.844 | | 0.844 | | 0.888 | | 0.557 | | 0.532 | | 0.532 | | 1.035 | | 0.994 | | 0.776 | 9.548 | 0.796 |
| 15 | | 0.910 | | 0.670 | | 0.900 | | 1.277 | | 0.844 | | 0.910 | | 0.557 | | 0.506 | | 0.480 | | 1.114 | | 0.994 | | 0.752 | 9.914 | 0.826 |
| 16 | | 0.910 | | 0.670 | | 0.932 | | 0.888 | | 0.799 | | 0.888 | | 0.583 | | 0.506 | | 0.480 | | 1.114 | | 0.910 | | 0.752 | 9.432 | 0.786 |
| 17 | | 0.910 | | 0.621 | | 0.910 | | 0.866 | | 0.657 | | 0.866 | | 0.583 | | 0.506 | | 0.480 | | 0.994 | | 0.888 | | 0.728 | 9.009 | 0.751 |
| 18 | | 0.910 | | 0.621 | | 0.910 | | 0.866 | | 0.705 | | 0.728 | | 0.583 | | 0.506 | | 0.506 | | 1.506 | | 0.866 | | 0.728 | 9.434 | 0.786 |
| 19 | | 0.910 | | 0.621 | | 0.910 | | 0.866 | | 0.705 | | 0.632 | | 0.583 | | 0.480 | | 0.506 | | 1.035 | | 0.844 | | 0.728 | 8.820 | 0.735 |
| 20 | | 0.910 | | 0.575 | | 0.932 | | 0.888 | | 0.681 | | 0.632 | | 0.534 | | 0.480 | | 0.506 | | 0.950 | | 0.910 | | 0.705 | 8.706 | 0.725 |
| 21 | | 0.910 | | 0.503 | | 0.910 | | 0.950 | | 0.657 | | 0.632 | | 0.534 | | 0.480 | | 0.506 | | 0.950 | | 0.866 | | 0.748 | 8.682 | 0.723 |
| 22 | | 0.910 | | 0.575 | | 0.910 | | 0.910 | | 0.974 | | 0.632 | | 0.490 | | 0.480 | | 0.506 | | 0.910 | | 0.821 | | 0.693 | 8.811 | 0.734 |
| 23 | | 0.950 | | 0.966 | | 0.910 | | 0.910 | | 0.866 | | 0.632 | | 0.490 | | 0.480 | | 0.480 | | 0.910 | | 0.799 | | 1.311 | 9.707 | 0.809 |
| 24 | | 0.974 | | 0.779 | | 0.910 | | 1.015 | | 0.821 | | 0.632 | | 0.490 | | 0.480 | | 0.480 | | 1.421 | | 0.776 | | 1.002 | 9.780 | 0.815 |
| 25 | | 0.994 | | 0.670 | | 0.910 | | 0.932 | | 0.821 | | 0.632 | | 0.490 | | 0.480 | | 0.506 | | 0.950 | | 0.776 | | 4.330 | 12.494 | 1.041 |
| 26 | | 0.709 | | 0.621 | | 0.888 | | 0.910 | | 0.799 | | 0.607 | | 0.490 | | 0.480 | | 0.506 | | 0.950 | | 0.752 | | 1.149 | 8.864 | 0.739 |
| 27 | | 0.709 | | 0.621 | | 0.888 | | 0.910 | | 0.866 | | 0.607 | | 0.490 | | 0.480 | | 0.506 | | 0.950 | | 0.776 | | 0.933 | 8.739 | 0.728 |
| 28 | | 0.709 | | 0.575 | | 0.888 | | 0.910 | | 0.866 | | 0.607 | | 0.490 | | 0.506 | | 0.506 | | 1.170 | | 0.728 | | 0.868 | 8.854 | 0.738 |
| 29 | | 0.803 | | 0.626 | | 0.866 | | 0.994 | | 0.821 | | 0.607 | | 0.490 | | 0.506 | | 0.506 | | 0.910 | | 0.799 | | 0.806 | 8.733 | 0.728 |
| 30 | | 0.739 | | | | 0.866 | | 0.932 | | 1.114 | | 0.607 | | 0.490 | | 0.506 | | 0.506 | | 0.888 | | 0.776 | | 0.748 | 8.172 | 0.681 |
| 31 | | 0.709 | | | | 0.844 | | | | 0.994 | | | | 0.490 | | 0.480 | | | | 0.866 | | | | 0.748 | 5.131 | 0.428 |
| Total | | 27.718 | | 19.319 | | 31.884 | | 26.458 | | 26.198 | | 23.649 | | 16.960 | | 15.368 | | 15.043 | | 26.715 | | 27.927 | | 31.690 | 285.992 | 23.833 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.894 | | 0.690 | | 1.029 | | 0.882 | | 0.845 | | 0.788 | | 0.547 | | 0.496 | | 0.501 | | 0.862 | | 0.931 | | 1.022 | | 0.784 |

Table 7-9 Daily Discharge Data at Pian-Pian ( Ponte ) G.S. on the Manuel Jorge River ( 3 / 5 )

Year : 1990 Catchment Area: 22.6 Sq. km Unit : m^3 / sec.

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | Q | Q |
| 1 | 1.120 | 0.257 | 1.220 | 0.347 | 1.260 | 0.382 | 1.330 | 0.445 | 1.820 | 0.890 | 1.800 | 0.872 | 1.750 | 0.826 | 1.630 | 0.717 | 1.590 | 0.680 | 1.440 | 0.545 | 1.860 | 0.926 | 1.860 | 0.926 | 7.810 | 0.651 |
| 2 | 1.100 | 0.239 | 1.220 | 0.347 | 1.260 | 0.382 | 1.300 | 0.418 | 1.820 | 0.890 | 1.790 | 0.862 | 1.750 | 0.826 | 1.630 | 0.717 | 1.590 | 0.680 | 1.430 | 0.535 | 1.800 | 0.872 | 1.860 | 0.926 | 7.695 | 0.641 |
| 3 | 1.080 | 0.221 | 1.220 | 0.347 | 1.250 | 0.373 | 1.300 | 0.418 | 1.800 | 0.872 | 1.830 | 0.899 | 1.740 | 0.817 | 1.620 | 0.708 | 1.570 | 0.662 | 1.510 | 0.608 | 1.880 | 0.945 | 1.870 | 0.936 | 7.805 | 0.650 |
| 4 | 1.080 | 0.221 | 1.390 | 0.499 | 1.270 | 0.391 | 1.280 | 0.400 | 1.810 | 0.881 | 2.080 | 1.129 | 1.730 | 0.808 | 1.630 | 0.717 | 1.570 | 0.662 | 1.490 | 0.590 | 1.910 | 0.972 | 1.890 | 0.954 | 8.224 | 0.685 |
| 5 | 1.080 | 0.221 | 1.380 | 0.490 | 1.260 | 0.382 | 1.320 | 0.436 | 1.800 | 0.872 | 1.880 | 0.945 | 1.720 | 0.799 | 1.620 | 0.708 | 1.570 | 0.662 | 1.490 | 0.590 | 1.910 | 0.972 | 1.950 | 1.009 | 8.086 | 0.674 |
| 6 | 1.070 | 0.212 | 1.240 | 0.364 | 1.240 | 0.364 | 1.320 | 0.436 | 1.790 | 0.862 | 1.810 | 0.881 | 1.740 | 0.817 | 1.620 | 0.708 | 1.560 | 0.653 | 1.490 | 0.590 | 1.920 | 0.981 | 1.860 | 0.926 | 7.786 | 0.650 |
| 7 | 1.060 | 0.203 | 1.180 | 0.311 | 1.240 | 0.364 | 1.300 | 0.445 | 1.780 | 0.853 | 1.800 | 0.872 | 1.720 | 0.799 | 1.620 | 0.708 | 1.560 | 0.653 | 1.490 | 0.590 | 1.920 | 0.981 | 1.740 | 0.817 | 7.586 | 0.633 |
| 8 | 1.040 | 0.186 | 1.180 | 0.311 | 1.270 | 0.391 | 1.280 | 0.400 | 1.780 | 0.853 | 1.800 | 0.872 | 1.720 | 0.799 | 1.620 | 0.717 | 1.550 | 0.644 | 1.470 | 0.572 | 1.920 | 0.981 | 1.760 | 0.835 | 7.560 | 0.630 |
| 9 | 1.350 | 0.463 | 1.200 | 0.329 | 1.240 | 0.364 | 1.270 | 0.391 | 2.540 | 1.556 | 1.800 | 0.872 | 1.710 | 0.789 | 1.630 | 0.717 | 1.550 | 0.644 | 1.480 | 0.581 | 1.930 | 0.991 | 1.760 | 0.835 | 8.532 | 0.711 |
| 10 | 1.460 | 0.563 | 1.320 | 0.436 | 1.230 | 0.355 | 1.280 | 0.400 | 1.770 | 0.844 | 1.800 | 0.872 | 1.710 | 0.789 | 1.670 | 0.753 | 1.550 | 0.644 | 1.460 | 0.563 | 1.920 | 0.981 | 1.720 | 0.799 | 8.000 | 0.667 |
| 11 | | 0.929 | 1.300 | 0.436 | 1.260 | 0.382 | 1.300 | 0.418 | 1.730 | 0.808 | 1.790 | 0.862 | 1.710 | 0.789 | 1.650 | 0.735 | 1.550 | 0.644 | 1.480 | 0.581 | 1.880 | 0.945 | 1.720 | 0.799 | 8.329 | 0.757 |
| 12 | | 0.853 | 1.260 | 0.382 | 1.500 | 0.509 | 1.840 | 0.908 | 1.560 | 0.653 | 1.830 | 0.899 | 1.710 | 0.789 | 1.650 | 0.735 | 1.550 | 0.644 | 1.600 | 0.717 | 1.820 | 0.890 | 1.750 | 0.926 | 8.866 | 0.806 |
| 13 | | 0.797 | 1.460 | 0.563 | 1.470 | 0.572 | 1.810 | 0.881 | 1.560 | 0.653 | 1.840 | 0.908 | 1.710 | 0.789 | 1.650 | 0.735 | 1.540 | 0.635 | 1.600 | 0.717 | 1.840 | 0.908 | 1.760 | 0.835 | 8.992 | 0.817 |
| 14 | | 0.771 | 1.290 | 0.409 | 1.170 | 0.302 | 1.810 | 0.881 | 1.740 | 0.817 | 1.830 | 0.899 | 1.700 | 0.780 | 1.670 | 0.753 | 1.540 | 0.635 | 1.640 | 0.726 | 1.820 | 0.890 | 1.770 | 0.844 | 8.707 | 0.792 |
| 15 | | 0.744 | 1.280 | 0.400 | 1.160 | 0.293 | 1.800 | 0.872 | 1.870 | 0.936 | 1.830 | 0.899 | 1.710 | 0.789 | 1.690 | 0.771 | 1.530 | 0.626 | 1.600 | 0.717 | 1.780 | 0.853 | 1.770 | 0.844 | 8.745 | 0.795 |
| 16 | | 0.719 | 1.290 | 0.409 | 1.160 | 0.293 | 1.800 | 0.872 | 1.960 | 1.018 | 1.840 | 0.908 | 1.710 | 0.789 | 1.690 | 0.771 | 1.530 | 0.626 | 1.600 | 0.717 | 1.770 | 0.844 | 1.780 | 0.853 | 8.820 | 0.802 |
| 17 | | 0.719 | 1.330 | 0.445 | 1.160 | 0.293 | 1.760 | 0.835 | 2.000 | 1.055 | 1.840 | 0.908 | 1.710 | 0.789 | 1.690 | 0.771 | 1.550 | 0.644 | 1.600 | 0.717 | 1.740 | 0.817 | 1.760 | 0.835 | 8.856 | 0.805 |
| 18 | | 0.719 | 1.260 | 0.382 | 1.160 | 0.293 | 1.700 | 0.780 | 2.000 | 1.055 | 1.850 | 0.917 | 1.710 | 0.789 | 1.690 | 0.771 | 1.530 | 0.626 | 1.640 | 0.726 | 1.750 | 0.826 | 1.780 | 0.853 | 8.729 | 0.794 |
| 19 | | 0.744 | 1.290 | 0.409 | 2.020 | 1.070 | 1.760 | 0.835 | 2.000 | 1.055 | 1.840 | 0.908 | 1.700 | 0.780 | 1.690 | 0.771 | 1.510 | 0.608 | 1.620 | 0.708 | 1.740 | 0.817 | 1.780 | 0.853 | 9.572 | 0.870 |
| 20 | | 0.692 | 1.330 | 0.445 | 1.980 | 1.037 | 1.810 | 0.881 | 2.010 | 1.064 | 1.850 | 0.917 | 1.710 | 0.789 | 1.690 | 0.771 | 1.510 | 0.608 | 1.620 | 0.708 | 1.710 | 0.789 | 1.770 | 0.844 | 9.573 | 0.870 |
| 21 | | 0.666 | 1.300 | 0.418 | 1.450 | 0.554 | 1.800 | 0.872 | 1.970 | 1.027 | 1.840 | 0.908 | 1.660 | 0.744 | 1.660 | 0.744 | 1.500 | 0.599 | 1.630 | 0.717 | 1.760 | 0.835 | 1.770 | 0.844 | 8.882 | 0.807 |
| 22 | | 0.666 | 1.340 | 0.454 | 1.420 | 0.526 | 1.780 | 0.853 | 1.960 | 1.018 | 1.830 | 0.899 | 1.670 | 0.753 | 1.650 | 0.735 | 1.490 | 0.590 | 1.620 | 0.708 | 1.760 | 0.835 | 1.770 | 0.844 | 8.882 | 0.807 |
| 23 | | 0.771 | 1.300 | 0.418 | 1.400 | 0.508 | 1.760 | 0.835 | 1.760 | 0.835 | 1.830 | 0.899 | 1.660 | 0.744 | 1.650 | 0.735 | 1.510 | 0.608 | 1.670 | 0.698 | 1.780 | 0.853 | 1.760 | 0.835 | 8.722 | 0.793 |
| 24 | | 0.719 | 1.330 | 0.445 | 1.400 | 0.508 | 1.760 | 0.835 | 1.770 | 0.844 | 1.830 | 0.899 | 1.660 | 0.744 | 1.650 | 0.735 | 1.490 | 0.590 | 1.610 | 0.698 | 1.700 | 0.780 | 1.620 | 0.708 | 8.579 | 0.780 |
| 25 | | 0.692 | 1.290 | 0.409 | 1.390 | 0.499 | 1.980 | 1.037 | 1.740 | 0.817 | 1.830 | 0.899 | 1.660 | 0.744 | 1.640 | 0.726 | 1.490 | 0.590 | 1.630 | 0.717 | 1.740 | 0.817 | 1.580 | 0.671 | 8.581 | 0.780 |
| 26 | | 0.666 | 1.280 | 0.400 | 1.390 | 0.499 | 1.790 | 0.862 | 1.730 | 0.808 | 1.810 | 0.881 | 1.650 | 0.735 | 1.630 | 0.717 | 1.480 | 0.581 | 2.140 | 1.184 | 1.800 | 0.872 | 1.690 | 0.689 | 8.839 | 0.804 |
| 27 | | 0.666 | 1.240 | 0.364 | 1.380 | 0.490 | 1.740 | 0.817 | 1.800 | 0.872 | 1.790 | 0.862 | 1.640 | 0.726 | 1.630 | 0.717 | 1.470 | 0.572 | 2.100 | 1.147 | 1.740 | 0.817 | 1.610 | 0.698 | 8.803 | 0.800 |
| 28 | | 0.641 | 1.260 | 0.382 | 0.920 | 0.079 | 1.780 | 0.853 | 1.800 | 0.872 | 1.790 | 0.862 | 1.640 | 0.726 | 1.600 | 0.689 | 1.470 | 0.572 | 2.100 | 1.147 | 1.870 | 0.936 | 1.620 | 0.708 | 8.348 | 0.759 |
| 29 | | 0.614 | | | 0.920 | 0.079 | 1.790 | 0.862 | 1.800 | 0.872 | 1.730 | 0.808 | 1.640 | 0.726 | 1.600 | 0.689 | 1.470 | 0.572 | 2.110 | 1.156 | 1.830 | 0.899 | 1.640 | 0.726 | 8.029 | 0.804 |
| 30 | | 0.614 | | | 0.920 | 0.079 | 1.800 | 0.872 | 1.790 | 0.862 | 1.740 | 0.817 | 1.630 | 0.717 | 1.600 | 0.689 | 1.450 | 0.554 | 2.110 | 1.156 | 1.840 | 0.908 | 1.620 | 0.708 | 7.966 | 0.797 |
| 31 | 1.220 | 0.347 | | | | | | | 1.800 | 0.872 | | | 1.630 | 0.717 | 1.590 | 0.680 | | | 2.000 | 1.110 | | | 1.590 | 0.680 | 4.406 | 0.734 |
| Total | | 17.507 | | 11.356 | | 12.711 | | 21.053 | | 28.185 | | 26.835 | | 24.018 | | 22.608 | | 18.706 | | 23.231 | | 26.735 | | 25.462 | 258.344 | 20.366 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.565 | | 0.406 | | 0.410 | | 0.702 | | 0.909 | | 0.895 | | 0.775 | | 0.729 | | 0.624 | | 0.749 | | 0.891 | | 0.821 | | 0.708 |

## Table 7-9 Daily Discharge Data at Pian-Pian ( Ponte ) G.S. on the Manuel Jorge River ( 4/5 )

Year : 1991 Catchment Area : 22.6 Sq. km Unit : m^3 / sec.

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | G.H. | Q | | |
| 1 | 1.660 | 0.486 | 1.500 | 0.323 | 1.800 | 0.747 | 1.860 | 0.892 | 1.720 | 0.585 | 1.134 | | 0.821 | | 0.705 | | 0.632 | | 0.607 | | 0.910 | | 0.728 | | 7.661 | 0.638 |
| 2 | 1.680 | 0.517 | 1.510 | 0.329 | 1.800 | 0.747 | 1.860 | 0.892 | 1.960 | 1.179 | 1.075 | | 0.821 | | 0.705 | | 0.632 | | 0.582 | | 0.888 | | 0.728 | | 9.119 | 0.760 |
| 3 | 1.640 | 0.458 | 1.500 | 0.323 | 1.800 | 0.747 | 1.900 | 1.001 | 1.940 | 1.118 | 1.260 | | 0.821 | | 0.705 | | 0.632 | | 0.607 | | 0.866 | | 0.728 | | 9.289 | 0.774 |
| 4 | 1.680 | 0.517 | 1.510 | 0.329 | 1.780 | 0.703 | 1.890 | 0.973 | 1.920 | 1.058 | 1.056 | | 0.821 | | 0.705 | | 0.681 | | 0.632 | | 0.866 | | 0.728 | | 9.069 | 0.756 |
| 5 | 1.670 | 0.501 | 1.500 | 0.323 | 1.770 | 0.682 | 1.860 | 0.892 | 1.920 | 1.058 | 1.015 | | 0.821 | | 0.705 | | 0.632 | | 0.607 | | 0.844 | | 0.728 | | 8.801 | 0.736 |
| 6 | 1.670 | 0.501 | 1.500 | 0.323 | 1.760 | 0.661 | 1.860 | 0.892 | | 0.994 | 1.075 | | 0.799 | | 0.705 | | 0.632 | | 0.607 | | 0.844 | | 0.728 | | 7.919 | 0.660 |
| 7 | 1.660 | 0.486 | 1.500 | 0.323 | 1.750 | 0.641 | 1.850 | 0.867 | | 1.035 | 1.134 | | 0.799 | | 0.681 | | 0.632 | | 0.632 | | 0.821 | | 0.752 | | 8.827 | 0.736 |
| 8 | 1.660 | 0.486 | 1.500 | 0.323 | 1.750 | 0.641 | 1.920 | 1.058 | | 0.994 | 1.015 | | 0.799 | | 0.681 | | 0.607 | | 0.776 | | 0.821 | | 0.728 | | 8.930 | 0.744 |
| 9 | 1.500 | 0.323 | 1.500 | 0.323 | 1.740 | 0.622 | 1.840 | 0.842 | | 0.974 | 1.035 | | 0.799 | | 0.681 | | 0.607 | | 0.752 | | 0.844 | | 0.705 | | 8.484 | 0.707 |
| 10 | 1.480 | 0.313 | 1.500 | 0.323 | 1.740 | 0.622 | 1.880 | 0.973 | | 0.953 | 1.015 | | 0.776 | | 0.681 | | 0.607 | | 0.632 | | 0.994 | | 0.728 | | 8.467 | 0.706 |
| 11 | 1.460 | 0.305 | 1.490 | 0.318 | 1.730 | 0.603 | 1.880 | 0.945 | | 0.778 | 0.994 | | 0.776 | | 0.681 | | 0.607 | | 0.607 | | 0.910 | | 0.681 | | 7.295 | 0.608 |
| 12 | 1.470 | 0.308 | 1.500 | 0.323 | 1.850 | 0.867 | 1.860 | 0.892 | | 0.953 | 0.994 | | 0.776 | | 0.681 | | 0.607 | | 0.932 | | 0.776 | | 0.728 | | 8.972 | 0.748 |
| 13 | 1.480 | 0.313 | 1.500 | 0.323 | 1.820 | 0.793 | 1.770 | 0.682 | | 1.075 | 0.994 | | 0.776 | | 0.728 | | 0.607 | | 0.705 | | 0.844 | | 0.821 | | 8.594 | 0.716 |
| 14 | 1.480 | 0.313 | 1.500 | 0.323 | 1.810 | 0.776 | 1.760 | 0.661 | | 1.095 | 0.994 | | 0.776 | | 0.681 | | 0.607 | | 0.681 | | 0.821 | | 0.728 | | 8.474 | 0.706 |
| 15 | 1.460 | 0.305 | 1.510 | 0.329 | 1.920 | 1.058 | 1.790 | 0.725 | | 1.152 | 0.953 | | 0.752 | | 0.681 | | 0.607 | | 1.479 | | 0.799 | | 0.728 | | 9.590 | 0.799 |
| 16 | 1.470 | 0.308 | 1.500 | 0.323 | 1.830 | 0.817 | 1.760 | 0.661 | | 1.035 | 0.932 | | 0.752 | | 0.681 | | 0.632 | | 1.035 | | 0.799 | | 0.728 | | 7.906 | 0.659 |
| 17 | 1.470 | 0.308 | 1.460 | 0.305 | 1.840 | 0.842 | 1.760 | 0.661 | | 1.243 | 0.932 | | 0.752 | | 0.681 | | 0.607 | | 0.910 | | 0.776 | | 0.728 | | 8.768 | 0.731 |
| 18 | 1.470 | 0.308 | 1.460 | 0.305 | 2.000 | 1.310 | 1.760 | 0.661 | | 1.056 | 0.910 | | 0.752 | | 0.681 | | 0.607 | | 0.844 | | 0.776 | | 0.728 | | 8.939 | 0.745 |
| 19 | 1.470 | 0.308 | 1.450 | 0.301 | 1.920 | 1.058 | 1.760 | 0.661 | | 1.095 | 0.910 | | 0.752 | | 0.681 | | 0.607 | | 0.799 | | 0.776 | | 0.728 | | 8.677 | 0.723 |
| 20 | 1.460 | 0.305 | 1.450 | 0.301 | 1.910 | 1.029 | 1.940 | 1.118 | | 1.035 | 0.910 | | 0.728 | | 0.681 | | 0.607 | | 0.752 | | 0.776 | | 0.752 | | 8.995 | 0.750 |
| 21 | 1.860 | 0.892 | 1.460 | 0.305 | 1.900 | 1.001 | 1.860 | 0.892 | | 0.994 | 0.910 | | 0.728 | | 0.657 | | 0.582 | | 1.114 | | 0.776 | | 0.705 | | 8.781 | 0.732 |
| 22 | 1.570 | 0.377 | 1.770 | 0.682 | 1.730 | 0.603 | 1.860 | 0.892 | | 1.015 | 0.910 | | 0.728 | | 0.657 | | 0.582 | | 1.095 | | 0.752 | | 0.681 | | 8.999 | 0.750 |
| 23 | 1.510 | 0.329 | 1.770 | 0.682 | 2.140 | 1.837 | 1.850 | 0.867 | | 1.035 | 0.838 | | 0.728 | | 0.632 | | 0.582 | | 1.095 | | 0.752 | | 0.681 | | 10.110 | 0.842 |
| 24 | 1.520 | 0.336 | 1.790 | 0.725 | 1.900 | 1.001 | 1.900 | 1.001 | | 1.035 | 0.888 | | 0.728 | | 0.632 | | 0.582 | | 1.075 | | 0.728 | | 0.799 | | 9.555 | 0.796 |
| 25 | 1.500 | 0.323 | 1.790 | 0.725 | 1.870 | 0.919 | 1.720 | 0.585 | | 0.994 | 0.866 | | 0.728 | | 0.632 | | 0.607 | | 1.095 | | 0.728 | | 0.728 | | 8.931 | 0.744 |
| 26 | 1.500 | 0.323 | 1.780 | 0.703 | 1.890 | 0.973 | 1.720 | 0.585 | | 0.994 | 0.866 | | 0.728 | | 0.632 | | 0.582 | | 1.152 | | 0.776 | | 0.728 | | 8.767 | 0.688 |
| 27 | 1.500 | 0.323 | 1.740 | 0.622 | 1.860 | 0.892 | 1.670 | 0.501 | | 1.015 | 0.866 | | 0.728 | | 0.632 | | 0.582 | | 1.075 | | 0.728 | | 0.866 | | 8.879 | 0.740 |
| 28 | 1.500 | 0.323 | 1.880 | 0.945 | 1.860 | 0.892 | 1.670 | 0.501 | | 0.994 | 0.844 | | 0.728 | | 0.632 | | 0.582 | | 1.015 | | 0.728 | | 0.705 | | 8.892 | 0.741 |
| 29 | 1.500 | 0.323 | | | 1.860 | 0.892 | 1.660 | 0.486 | | 1.544 | 0.844 | | 0.728 | | 0.637 | | 0.582 | | 0.974 | | 1.075 | | 0.728 | | 8.464 | 0.705 |
| 30 | 1.520 | 0.336 | | | 1.860 | 0.892 | 1.760 | 0.661 | | 1.056 | 0.844 | | 0.705 | | 0.632 | | 0.582 | | 0.953 | | 1.075 | | 0.681 | | 8.418 | 0.702 |
| 31 | 1.520 | 0.519 | | | 1.860 | 0.892 | | | | 1.134 | | | 0.705 | | 0.632 | | | | 0.932 | | | | 0.681 | | 5.494 | 0.458 |
| Total | | 12.073 | | 11.781 | | 26.756 | | 23.920 | | 32.278 | | 29.004 | | 23.636 | | 20.811 | | 18.244 | | 26.755 | | 24.872 | | 27.620 | 267.597 | 22.300 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.389 | | 0.421 | | 0.863 | | 0.797 | | 1.041 | | 0.969 | | 0.762 | | 0.671 | | 0.608 | | 0.863 | | 0.829 | | 0.730 | | 0.733 |

Table 7-9 Daily Discharge Data at Pian-Pian ( Ponte ) G.S. on the Manuel Jorge River ( S / S )

Year : 1992 Catchment Area: 22.6 Sq. km Unit : m^3 / sec.

| Day | January G.H. | Q | February G.H. | Q | March G.H. | Q | April G.H. | Q | May G.H. | Q | June G.H. | Q | July G.H. | Q | August G.H. | Q | September G.H. | Q | October G.H. | Q | November G.H. | Q | December G.H. | Q | Total Q | Average Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 0.681 | | 0.705 | | 0.558 | | 1.421 | | 0.821 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | | |
| 2 | | 0.821 | | 0.681 | | 0.799 | | 0.932 | | 0.776 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.786 | 0.617 |
| 3 | | 0.728 | | 0.681 | | 0.582 | | 1.506 | | 0.799 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.608 | 0.601 |
| 4 | | 0.705 | | 0.681 | | 0.558 | | 1.035 | | 0.776 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.895 | 0.627 |
| 5 | | 0.705 | | 0.681 | | 0.558 | | 1.707 | | 0.776 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.354 | 0.578 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 7.026 | 0.639 |
| 6 | | 0.681 | | 0.681 | | 0.558 | | 1.075 | | 0.776 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | | |
| 7 | | 0.681 | | 0.657 | | 0.558 | | 1.035 | | 0.752 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.371 | 0.579 |
| 8 | | 0.681 | | 0.657 | | 0.558 | | 0.974 | | 0.844 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.283 | 0.571 |
| 9 | | 0.657 | | 0.657 | | 0.558 | | 0.953 | | 0.776 | | 0.752 | | 0.616 | | 0.616 | | 0.616 | | | | | | | 6.313 | 0.574 |
| 10 | | 0.657 | | 0.632 | | 0.532 | | 0.932 | | 0.752 | | 0.752 | | 0.616 | | 0.616 | | 0.630 | | | | | | | 6.201 | 0.564 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 6.118 | 0.556 |
| 11 | | 0.657 | | 0.632 | | 1.015 | | 1.015 | | 0.752 | | 0.728 | | 0.616 | | 0.616 | | 0.656 | | | | | | | 6.688 | 0.608 |
| 12 | | 0.705 | | 0.632 | | 0.752 | | 1.740 | | 0.728 | | 0.728 | | 0.616 | | 0.616 | | 0.642 | | | | | | | 6.663 | 0.606 |
| 13 | | 0.681 | | 0.632 | | 0.866 | | 0.994 | | 0.799 | | 0.728 | | 0.616 | | 0.616 | | 0.642 | | | | | | | 6.574 | 0.598 |
| 14 | | 0.657 | | 0.632 | | 0.776 | | 0.910 | | 0.728 | | 0.728 | | 0.616 | | 0.616 | | 0.642 | | | | | | | 6.306 | 0.573 |
| 15 | | 0.681 | | 0.681 | | 0.776 | | 0.910 | | 0.866 | | 0.728 | | 0.616 | | 0.616 | | 0.642 | | | | | | | 6.516 | 0.592 |
| 16 | | 0.657 | | 0.607 | | 0.994 | | 0.866 | | 0.866 | | 0.705 | | 0.616 | | 0.616 | | | | | | | | | 5.927 | 0.539 |
| 17 | | 0.728 | | 0.582 | | 0.866 | | 0.866 | | 0.844 | | 0.705 | | 0.616 | | 0.616 | | | | | | | | | 5.823 | 0.529 |
| 18 | | 0.681 | | 0.582 | | 0.799 | | 0.866 | | 0.844 | | 0.705 | | 0.616 | | 0.616 | | | | | | | | | 5.708 | 0.519 |
| 19 | | 0.681 | | 0.728 | | 1.075 | | 0.866 | | 0.844 | | 0.705 | | 0.616 | | 0.616 | | | | | | | | | 6.131 | 0.557 |
| 20 | | 0.681 | | 0.607 | | 0.994 | | 0.866 | | 0.821 | | 0.681 | | 0.616 | | 0.616 | | | | | | | | | 5.882 | 0.535 |
| 21 | | 0.799 | | 0.607 | | 0.888 | | 0.821 | | 0.821 | | 0.681 | | 0.616 | | 0.656 | | | | | | | | | 5.890 | 0.535 |
| 22 | | 0.728 | | 0.582 | | 1.741 | | 0.821 | | 0.821 | | 0.681 | | 0.616 | | 0.787 | | | | | | | | | 6.779 | 0.616 |
| 23 | | 0.728 | | 0.582 | | 1.134 | | 0.799 | | 0.821 | | 0.681 | | 0.616 | | 0.642 | | | | | | | | | 6.004 | 0.546 |
| 24 | | 1.189 | | 0.582 | | 1.134 | | 0.799 | | 0.799 | | 0.681 | | 0.616 | | 0.630 | | | | | | | | | 6.429 | 0.584 |
| 25 | | 0.752 | | 0.558 | | 1.075 | | 0.799 | | 0.799 | | 0.681 | | 0.616 | | | | | | | | | | | 5.895 | 0.536 |
| 26 | | 0.728 | | 0.558 | | 1.035 | | 0.799 | | 0.910 | | 0.681 | | 0.616 | | 0.656 | | | | | | | | | 5.983 | 0.544 |
| 27 | | 0.705 | | 0.752 | | 0.974 | | 0.776 | | 0.844 | | 0.681 | | 0.616 | | 0.630 | | | | | | | | | 5.977 | 0.543 |
| 28 | | 0.752 | | 0.582 | | 0.953 | | 0.776 | | 0.821 | | 0.681 | | 0.616 | | 0.616 | | | | | | | | | 5.798 | 0.527 |
| 29 | | 0.681 | | 0.558 | | 0.888 | | 0.752 | | 0.799 | | 0.681 | | 0.616 | | 0.616 | | | | | | | | | 5.590 | 0.508 |
| 30 | | 0.681 | | | | 0.866 | | 0.888 | | 0.776 | | 0.681 | | 0.616 | | 0.616 | | | | | | | | | 5.174 | 0.466 |
| 31 | | 0.728 | | | | 0.844 | | | | 0.776 | | | | 0.616 | | 0.616 | | | | | | | | | 3.580 | 0.325 |
| Total | | 22.277 | | 18.392 | | 26.262 | | 29.000 | | 24.928 | | 21.472 | | 19.094 | | 19.400 | | 9.399 | | 0.000 | | 0.000 | | 0.000 | 190.724 | 17.293 |
| Days | | 31 | | 29 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 15 | | 0 | | 0 | | 0 | 259 | |
| Average | | 0.719 | | 0.634 | | 0.847 | | 0.967 | | 0.804 | | 0.716 | | 0.616 | | 0.626 | | 0.627 | | | | | | | | 0.734 |

Table 7-10 Specific Daily Discharge per 10 Sq. Km at Pian-Pian( Ponte ) Gauging Station on the Manuel Jorge River

Table 7-10 Specific Daily Discharge per 10 Sq. km at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 1 / 5 )

Year : 1988

Unit : m^3 / sec.
DQ:Daily Discharge SDQ: Specific Daily Discharge

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | SDQ | SDQ |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | 0.799 | 0.354 | 0.932 | 0.412 | 1.114 | 0.493 | 1.259 | 0.420 |
| 3 | | | | | | | | | | | | | | | | | | | 0.844 | 0.373 | 0.888 | 0.393 | 1.035 | 0.458 | 1.724 | 0.408 |
| 4 | | | | | | | | | | | | | | | | | | | 0.821 | 0.363 | 0.994 | 0.440 | 1.015 | 0.449 | 1.252 | 0.417 |
| 5 | | | | | | | | | | | | | | | | | | | 0.799 | 0.354 | 0.932 | 0.412 | 0.994 | 0.440 | 1.206 | 0.402 |
| | | | | | | | | | | | | | | | | | | | 0.799 | 0.354 | 0.910 | 0.403 | 1.095 | 0.485 | 1.241 | 0.414 |
| 6 | | | | | | | | | | | | | | | | | | | 0.812 | 0.359 | 0.951 | 0.412 | 1.051 | 0.465 | 1.226 | 0.412 |
| 7 | | | | | | | | | | | | | | | | | | | 0.821 | 0.363 | 0.910 | 0.403 | 1.075 | 0.476 | 1.242 | 0.414 |
| 8 | | | | | | | | | | | | | | | | | | | 0.844 | 0.373 | 1.015 | 0.449 | 1.035 | 0.458 | 1.281 | 0.427 |
| 9 | | | | | | | | | | | | | | | | | | | 0.866 | 0.383 | 0.994 | 0.440 | 1.114 | 0.493 | 1.316 | 0.439 |
| 10 | | | | | | | | | | | | | | | | | | | 0.888 | 0.393 | 0.994 | 0.440 | 1.075 | 0.476 | 1.308 | 0.436 |
| | | | | | | | | | | | | | | | | | | | 0.953 | 0.422 | 0.994 | 0.440 | 1.075 | 0.476 | 1.337 | 0.446 |
| 11 | | | | | | | | | | | | | | | | | | | 0.874 | 0.387 | 0.981 | 0.434 | 1.075 | 0.476 | 1.297 | 0.432 |
| 12 | | | | | | | | | | | | | | | | | | | 0.866 | 0.383 | 0.994 | 0.440 | 1.035 | 0.458 | 1.281 | 0.427 |
| 13 | | | | | | | | | | | | | | | | | | | 0.866 | 0.383 | 0.994 | 0.440 | 1.035 | 0.458 | 1.281 | 0.427 |
| 14 | | | | | | | | | | | | | | | | | | | 0.866 | 0.383 | 0.953 | 0.422 | 1.226 | 0.542 | 1.347 | 0.449 |
| 15 | | | | | | | | | | | | | | | | | | | 0.844 | 0.373 | 0.953 | 0.422 | 1.035 | 0.458 | 1.253 | 0.418 |
| | | | | | | | | | | | | | | | | | | | 0.866 | 0.383 | 0.974 | 0.431 | 1.015 | 0.449 | 1.263 | 0.421 |
| 16 | | | | | | | | | | | | | | | | | | | 0.862 | 0.381 | 0.974 | 0.431 | 1.069 | 0.473 | 1.285 | 0.428 |
| 17 | | | | | | | | | | | | | | | | | | | 0.866 | 0.383 | 0.994 | 0.440 | 1.035 | 0.458 | 1.281 | 0.427 |
| 18 | | | | | | | | | | | | | | | | | | | 0.910 | 0.403 | 1.207 | 0.534 | 1.015 | 0.449 | 1.386 | 0.462 |
| 19 | | | | | | | | | | | | | | | | | | | 0.974 | 0.431 | 1.134 | 0.502 | 0.994 | 0.440 | 1.373 | 0.458 |
| 20 | | | | | | | | | | | | | | | | | | | 0.915 | 0.405 | 1.056 | 0.467 | 0.974 | 0.431 | 1.303 | 0.434 |
| | | | | | | | | | | | | | | | | | | | 0.910 | 0.403 | 1.035 | 0.458 | 0.974 | 0.431 | 1.292 | 0.431 |
| 21 | | | | | | | | | | | | | | | | | | | 0.915 | 0.405 | 1.085 | 0.480 | 0.998 | 0.442 | 1.327 | 0.442 |
| 22 | | | | | | | | | | | | | | | | | | | 0.910 | 0.403 | 0.994 | 0.440 | 0.953 | 0.422 | 1.264 | 0.421 |
| 23 | | | | | | | | | | | | | | | | | | | 0.910 | 0.403 | 1.015 | 0.449 | 0.953 | 0.422 | 1.273 | 0.424 |
| 24 | | | | | | | | | | | | | | | | | | | 0.888 | 0.393 | 1.170 | 0.518 | 0.953 | 0.422 | 1.332 | 0.444 |
| 25 | | | | | | | | | | | | | | | | | | | 0.932 | 0.412 | 1.134 | 0.502 | 0.953 | 0.422 | 1.326 | 0.445 |
| | | | | | | | | | | | | | | | | | | | 0.974 | 0.431 | 1.114 | 0.493 | 0.953 | 0.422 | 1.346 | 0.449 |
| 26 | | | | | | | | | | | | | | | | | | | 0.923 | 0.408 | 1.085 | 0.480 | 0.953 | 0.422 | 1.310 | 0.437 |
| 27 | | | | | | | | | | | | | | | | | | | 0.953 | 0.422 | 1.095 | 0.485 | 1.002 | 0.443 | 1.350 | 0.450 |
| 28 | | | | | | | | | | | | | | | | | | | 0.932 | 0.412 | 1.075 | 0.476 | 1.002 | 0.443 | 1.331 | 0.444 |
| 29 | | | | | | | | | | | | | | | | | | | 0.932 | 0.412 | 1.035 | 0.458 | 0.974 | 0.431 | 1.301 | 0.434 |
| 30 | | | | | | | | | | | | | | | | | | | 1.015 | 0.449 | 1.015 | 0.449 | 1.035 | 0.458 | 1.366 | 0.452 |
| | | | | | | | | | | | | | | | | | | | 0.974 | 0.431 | 0.994 | 0.440 | 0.994 | 0.440 | 1.311 | 0.437 |
| 31 | | | | | | | | | | | | | | | | | | | 0.961 | 0.425 | 1.043 | 0.461 | 1.001 | 0.443 | 1.330 | 0.443 |
| | | | | | | | | | | | | | | | | | | | 0.953 | 0.422 | | | 0.953 | 0.422 | 0.843 | 0.422 |
| Total | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 12.252 | | 13.495 | | 14.022 | 39.769 | 13.397 |
| Days | | | | | | | | | | | | | | | | | | | | 31 | | 30 | | 31 | 92 | |
| Average | | | | | | | | | | | | | | | | | | | | 0.395 | | 0.450 | | 0.452 | | 0.432 |

Table 7-10 Specific Daily Discharge per 10 Sq. km at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 2 / 5 )

Year : 1989 Unit : m^3 / sec.

DQ:Daily Discharg SDQ: Specific Daily Discharge

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | SDQ | SDQ |
| 1 | 0.953 | 0.422 | 0.709 | 0.314 | 0.621 | 0.275 | 0.821 | 0.363 | 0.994 | 0.440 | 0.953 | 0.422 | 0.607 | 0.269 | 0.490 | 0.217 | 0.480 | 0.212 | 0.532 | 0.235 | 0.994 | 0.440 | 0.728 | 0.322 | 3.930 | 0.328 |
| 2 | 0.932 | 0.412 | 0.709 | 0.314 | 1.184 | 0.524 | 0.821 | 0.363 | 0.953 | 0.422 | 0.932 | 0.412 | 0.607 | 0.269 | 0.490 | 0.217 | 0.480 | 0.212 | 0.507 | 0.225 | 1.152 | 0.510 | 0.821 | 0.363 | 4.254 | 0.354 |
| 3 | 0.932 | 0.412 | 0.709 | 0.314 | 1.521 | 0.673 | 0.821 | 0.363 | 0.910 | 0.403 | 0.910 | 0.403 | 0.582 | 0.258 | 0.490 | 0.217 | 0.506 | 0.224 | 0.582 | 0.258 | 1.056 | 0.467 | 0.728 | 0.322 | 4.313 | 0.359 |
| 4 | 0.953 | 0.422 | 0.709 | 0.314 | 1.346 | 0.596 | 0.821 | 0.363 | 0.910 | 0.403 | 0.866 | 0.383 | 0.582 | 0.258 | 0.490 | 0.217 | 0.506 | 0.224 | 0.582 | 0.258 | 0.994 | 0.440 | 0.778 | 0.322 | 4.198 | 0.350 |
| 5 | 0.953 | 0.422 | 0.709 | 0.314 | 1.108 | 0.490 | 0.776 | 0.343 | 1.075 | 0.476 | 0.866 | 0.383 | 0.582 | 0.258 | 0.490 | 0.217 | 0.506 | 0.224 | 0.681 | 0.301 | 0.974 | 0.431 | 0.657 | 0.291 | 4.149 | 0.346 |
| | 0.945 | 0.418 | 0.709 | 0.314 | 1.156 | 0.512 | 0.812 | 0.359 | 0.968 | 0.428 | 0.905 | 0.401 | 0.592 | 0.262 | 0.490 | 0.217 | 0.495 | 0.219 | 0.582 | 0.257 | 1.074 | 0.458 | 0.732 | 0.324 | 4.169 | 0.347 |
| 6 | 0.953 | 0.422 | 0.670 | 0.296 | 0.966 | 0.427 | 0.798 | 0.354 | 0.910 | 0.403 | 0.844 | 0.373 | 0.582 | 0.258 | 0.490 | 0.217 | 0.506 | 0.224 | 0.582 | 0.258 | 0.953 | 0.422 | 0.632 | 0.280 | 3.933 | 0.328 |
| 7 | 0.932 | 0.412 | 0.670 | 0.296 | 1.910 | 0.845 | 0.798 | 0.354 | 0.844 | 0.373 | 0.821 | 0.363 | 0.582 | 0.258 | 0.490 | 0.217 | 0.506 | 0.224 | 0.607 | 0.269 | 1.479 | 0.654 | 0.821 | 0.363 | 4.629 | 0.386 |
| 8 | 0.953 | 0.422 | 0.670 | 0.296 | 1.708 | 0.756 | 0.798 | 0.354 | 0.798 | 0.354 | 0.874 | 0.431 | 0.582 | 0.258 | 0.490 | 0.217 | 0.506 | 0.224 | 0.607 | 0.269 | 1.226 | 0.542 | 1.189 | 0.526 | 4.648 | 0.387 |
| 9 | 0.932 | 0.412 | 0.670 | 0.296 | 0.966 | 0.427 | 0.798 | 0.354 | 0.776 | 0.343 | 0.953 | 0.422 | 0.582 | 0.258 | 0.490 | 0.217 | 0.480 | 0.212 | 0.632 | 0.280 | 1.056 | 0.467 | 0.798 | 0.354 | 4.042 | 0.337 |
| 10 | 0.932 | 0.412 | 0.670 | 0.296 | 0.828 | 0.371 | 0.798 | 0.354 | 0.821 | 0.363 | 0.953 | 0.422 | 0.582 | 0.258 | 0.490 | 0.217 | 0.480 | 0.212 | 0.657 | 0.291 | 0.994 | 0.440 | 0.728 | 0.322 | 3.958 | 0.330 |
| | 0.940 | 0.416 | 0.670 | 0.296 | 1.278 | 0.565 | 0.799 | 0.354 | 0.830 | 0.367 | 0.909 | 0.402 | 0.582 | 0.258 | 0.490 | 0.217 | 0.495 | 0.219 | 0.617 | 0.273 | 1.142 | 0.505 | 0.834 | 0.369 | 4.242 | 0.353 |
| 11 | 0.910 | 0.403 | 0.670 | 0.296 | 0.723 | 0.320 | 0.844 | 0.373 | 0.752 | 0.333 | 0.953 | 0.422 | 0.582 | 0.258 | 0.532 | 0.235 | 0.532 | 0.235 | 0.607 | 0.269 | 0.953 | 0.422 | 0.705 | 0.312 | 3.878 | 0.323 |
| 12 | 0.932 | 0.412 | 0.670 | 0.296 | 1.708 | 0.756 | 0.844 | 0.373 | 0.776 | 0.343 | 0.953 | 0.422 | 0.558 | 0.247 | 0.532 | 0.235 | 0.532 | 0.235 | 0.582 | 0.258 | 0.910 | 0.403 | 0.910 | 0.403 | 4.383 | 0.365 |
| 13 | 0.932 | 0.412 | 0.670 | 0.296 | 1.035 | 0.458 | 0.844 | 0.373 | 0.844 | 0.373 | 0.932 | 0.412 | 0.532 | 0.235 | 0.532 | 0.235 | 0.532 | 0.235 | 0.888 | 0.393 | 0.910 | 0.403 | 0.799 | 0.354 | 4.181 | 0.348 |
| 14 | 0.910 | 0.403 | 0.670 | 0.296 | 0.966 | 0.427 | 0.844 | 0.373 | 0.844 | 0.373 | 0.888 | 0.393 | 0.557 | 0.246 | 0.532 | 0.235 | 0.532 | 0.235 | 1.035 | 0.458 | 0.994 | 0.440 | 0.776 | 0.343 | 4.225 | 0.352 |
| 15 | 0.910 | 0.403 | 0.670 | 0.296 | 0.900 | 0.398 | 1.277 | 0.565 | 0.844 | 0.373 | 0.910 | 0.403 | 0.557 | 0.246 | 0.506 | 0.224 | 0.480 | 0.212 | 1.114 | 0.493 | 0.994 | 0.440 | 0.752 | 0.333 | 4.387 | 0.366 |
| | 0.919 | 0.407 | 0.670 | 0.296 | 1.066 | 0.472 | 0.931 | 0.412 | 0.812 | 0.359 | 0.927 | 0.410 | 0.557 | 0.246 | 0.527 | 0.233 | 0.521 | 0.231 | 0.846 | 0.374 | 0.952 | 0.421 | 0.788 | 0.349 | 4.211 | 0.351 |
| 16 | 0.910 | 0.403 | 0.670 | 0.296 | 0.932 | 0.412 | 0.888 | 0.393 | 0.799 | 0.354 | 0.888 | 0.393 | 0.583 | 0.258 | 0.506 | 0.224 | 0.480 | 0.212 | 1.114 | 0.493 | 0.910 | 0.403 | 0.752 | 0.333 | 4.173 | 0.348 |
| 17 | 0.910 | 0.403 | 0.621 | 0.275 | 0.910 | 0.403 | 0.866 | 0.383 | 0.657 | 0.291 | 0.866 | 0.383 | 0.583 | 0.258 | 0.506 | 0.224 | 0.480 | 0.212 | 0.994 | 0.440 | 0.888 | 0.393 | 0.728 | 0.322 | 3.986 | 0.332 |
| 18 | 0.910 | 0.403 | 0.621 | 0.275 | 0.910 | 0.403 | 0.866 | 0.383 | 0.705 | 0.312 | 0.778 | 0.322 | 0.583 | 0.258 | 0.506 | 0.224 | 0.506 | 0.224 | 1.506 | 0.666 | 0.866 | 0.383 | 0.728 | 0.322 | 4.174 | 0.348 |
| 19 | 0.910 | 0.403 | 0.621 | 0.275 | 0.910 | 0.403 | 0.866 | 0.383 | 0.705 | 0.312 | 0.632 | 0.280 | 0.583 | 0.258 | 0.480 | 0.212 | 0.506 | 0.224 | 1.035 | 0.458 | 0.844 | 0.373 | 0.728 | 0.322 | 3.903 | 0.325 |
| 20 | 0.910 | 0.403 | 0.575 | 0.254 | 0.932 | 0.412 | 0.888 | 0.393 | 0.681 | 0.301 | 0.632 | 0.280 | 0.534 | 0.236 | 0.480 | 0.212 | 0.506 | 0.224 | 0.953 | 0.422 | 0.910 | 0.403 | 0.705 | 0.312 | 3.852 | 0.321 |
| | 0.910 | 0.403 | 0.622 | 0.275 | 0.919 | 0.407 | 0.875 | 0.387 | 0.709 | 0.314 | 0.749 | 0.332 | 0.573 | 0.254 | 0.495 | 0.219 | 0.495 | 0.219 | 1.121 | 0.496 | 0.884 | 0.391 | 0.728 | 0.322 | 4.018 | 0.335 |
| 21 | 0.910 | 0.403 | 0.533 | 0.236 | 0.910 | 0.403 | 0.953 | 0.422 | 0.657 | 0.291 | 0.632 | 0.280 | 0.534 | 0.236 | 0.480 | 0.212 | 0.506 | 0.224 | 0.953 | 0.422 | 0.866 | 0.383 | 0.748 | 0.331 | 3.841 | 0.320 |
| 22 | 0.910 | 0.403 | 0.575 | 0.254 | 0.910 | 0.403 | 0.910 | 0.403 | 0.974 | 0.431 | 0.632 | 0.280 | 0.490 | 0.217 | 0.480 | 0.212 | 0.506 | 0.224 | 0.910 | 0.403 | 0.821 | 0.363 | 0.693 | 0.307 | 3.899 | 0.325 |
| 23 | 0.953 | 0.422 | 0.966 | 0.427 | 0.910 | 0.403 | 0.910 | 0.403 | 0.866 | 0.383 | 0.632 | 0.280 | 0.490 | 0.217 | 0.480 | 0.212 | 0.480 | 0.212 | 0.910 | 0.403 | 0.799 | 0.353 | 1.311 | 0.580 | 4.295 | 0.358 |
| 24 | 0.974 | 0.431 | 0.779 | 0.345 | 0.910 | 0.403 | 1.015 | 0.449 | 0.821 | 0.363 | 0.632 | 0.280 | 0.490 | 0.217 | 0.480 | 0.212 | 0.480 | 0.212 | 1.421 | 0.629 | 0.776 | 0.343 | 1.002 | 0.443 | 4.327 | 0.361 |
| 25 | 0.994 | 0.440 | 0.670 | 0.296 | 0.910 | 0.403 | 0.932 | 0.412 | 0.821 | 0.363 | 0.632 | 0.280 | 0.490 | 0.217 | 0.480 | 0.212 | 0.506 | 0.224 | 0.953 | 0.422 | 0.776 | 0.343 | 4.330 | 1.916 | 5.528 | 0.461 |
| | 0.948 | 0.420 | 0.705 | 0.312 | 0.910 | 0.403 | 0.944 | 0.418 | 0.828 | 0.366 | 0.632 | 0.280 | 0.499 | 0.221 | 0.480 | 0.212 | 0.495 | 0.219 | 1.030 | 0.456 | 0.908 | 0.257 | 1.617 | 0.715 | 4.278 | 0.365 |
| 26 | 0.709 | 0.314 | 0.621 | 0.275 | 0.888 | 0.393 | 0.910 | 0.403 | 0.799 | 0.354 | 0.607 | 0.269 | 0.490 | 0.217 | 0.480 | 0.212 | 0.506 | 0.224 | 0.953 | 0.422 | 0.752 | 0.333 | 1.149 | 0.508 | 3.922 | 0.327 |
| 27 | 0.709 | 0.314 | 0.621 | 0.275 | 0.888 | 0.393 | 0.910 | 0.403 | 0.866 | 0.383 | 0.607 | 0.269 | 0.490 | 0.217 | 0.480 | 0.212 | 0.506 | 0.224 | 0.953 | 0.422 | 0.776 | 0.343 | 0.933 | 0.413 | 3.867 | 0.322 |
| 28 | 0.709 | 0.327 | 0.575 | 0.254 | 0.888 | 0.393 | 0.910 | 0.403 | 0.866 | 0.383 | 0.607 | 0.269 | 0.490 | 0.217 | 0.506 | 0.224 | 0.506 | 0.224 | 1.170 | 0.518 | 0.728 | 0.322 | 0.868 | 0.384 | 3.918 | 0.326 |
| 29 | 0.803 | 0.355 | | | 0.866 | 0.383 | 0.994 | 0.440 | 0.821 | 0.363 | 0.607 | 0.269 | 0.490 | 0.217 | 0.506 | 0.224 | 0.506 | 0.224 | 0.910 | 0.403 | 0.799 | 0.353 | 0.806 | 0.357 | 3.587 | 0.299 |
| 30 | 0.739 | 0.327 | | | 0.866 | 0.383 | 0.932 | 0.412 | 1.114 | 0.493 | 0.607 | 0.269 | 0.490 | 0.217 | 0.506 | 0.224 | 0.506 | 0.224 | 0.888 | 0.393 | 0.776 | 0.343 | 0.748 | 0.331 | 3.616 | 0.301 |
| | 0.740 | 0.327 | 0.606 | 0.268 | 0.879 | 0.389 | 0.931 | 0.412 | 0.893 | 0.395 | 0.607 | 0.269 | 0.490 | 0.217 | 0.495 | 0.219 | 0.506 | 0.224 | 0.975 | 0.431 | 0.766 | 0.339 | 0.901 | 0.399 | 3.889 | 0.345 |
| 31 | 0.709 | 0.314 | | | 0.844 | 0.373 | | | 0.994 | 0.440 | | | 0.490 | 0.217 | 0.480 | 0.212 | | | 0.866 | 0.383 | | | 0.748 | 0.331 | 2.770 | 0.189 |
| Total | | 12.265 | | 8.271 | | 14.108 | | 11.707 | | 11.582 | | 10.464 | | 7.500 | | 6.800 | | 6.656 | | 11.921 | | 12.357 | | 12.771 | 126.268 | 10.522 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.396 | | 0.295 | | 0.455 | | 0.390 | | 0.374 | | 0.349 | | 0.242 | | 0.219 | | 0.222 | | 0.381 | | 0.412 | | 0.410 | | 0.346 |

Table 7-10 Specific Daily Discharge per 10 Sq. km at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 3 / 5 )

Year : 1990

Unit : m^3 / sec.

DQ:Daily Discharg SDQ: Specific Daily Discharge

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | SDQ | SDQ |
| 1 | 0.257 | 0.114 | 0.347 | 0.153 | 0.387 | 0.169 | 0.445 | 0.197 | 0.890 | 0.394 | 0.872 | 0.386 | 0.826 | 0.365 | 0.717 | 0.317 | 0.680 | 0.301 | 0.545 | 0.241 | 0.926 | 0.410 | 0.926 | 0.410 | 3.457 | 0.288 |
| 2 | 0.238 | 0.106 | 0.347 | 0.153 | 0.382 | 0.169 | 0.418 | 0.185 | 0.890 | 0.394 | 0.862 | 0.382 | 0.826 | 0.365 | 0.717 | 0.317 | 0.680 | 0.301 | 0.535 | 0.237 | 0.872 | 0.386 | 0.926 | 0.410 | 3.405 | 0.284 |
| 3 | 0.221 | 0.098 | 0.347 | 0.153 | 0.373 | 0.165 | 0.418 | 0.185 | 0.872 | 0.386 | 0.899 | 0.398 | 0.817 | 0.361 | 0.708 | 0.313 | 0.662 | 0.293 | 0.608 | 0.269 | 0.945 | 0.418 | 0.936 | 0.414 | 3.454 | 0.288 |
| 4 | 0.221 | 0.098 | 0.499 | 0.221 | 0.391 | 0.173 | 0.400 | 0.177 | 0.881 | 0.390 | 1.129 | 0.499 | 0.808 | 0.357 | 0.717 | 0.317 | 0.662 | 0.293 | 0.590 | 0.261 | 0.972 | 0.430 | 0.954 | 0.422 | 3.639 | 0.303 |
| 5 | 0.221 | 0.098 | 0.499 | 0.217 | 0.382 | 0.169 | 0.436 | 0.193 | 0.872 | 0.386 | 0.945 | 0.418 | 0.799 | 0.353 | 0.708 | 0.313 | 0.662 | 0.293 | 0.590 | 0.261 | 0.972 | 0.430 | 1.009 | 0.446 | 3.578 | 0.298 |
| | 0.232 | 0.102 | 0.406 | 0.180 | 0.382 | 0.169 | 0.424 | 0.187 | 0.881 | 0.390 | 0.941 | 0.417 | 0.815 | 0.361 | 0.713 | 0.315 | 0.669 | 0.296 | 0.573 | 0.254 | 0.938 | 0.415 | 0.950 | 0.421 | 3.507 | 0.292 |
| 6 | 0.212 | 0.094 | 0.364 | 0.161 | 0.364 | 0.161 | 0.436 | 0.193 | 0.862 | 0.382 | 0.881 | 0.390 | 0.817 | 0.361 | 0.708 | 0.313 | 0.653 | 0.289 | 0.590 | 0.261 | 0.981 | 0.434 | 0.926 | 0.410 | 3.450 | 0.287 |
| 7 | 0.203 | 0.090 | 0.311 | 0.137 | 0.364 | 0.161 | 0.445 | 0.197 | 0.853 | 0.378 | 0.872 | 0.386 | 0.799 | 0.353 | 0.708 | 0.313 | 0.653 | 0.289 | 0.590 | 0.261 | 0.981 | 0.434 | 0.817 | 0.361 | 3.361 | 0.280 |
| 8 | 0.186 | 0.082 | 0.311 | 0.137 | 0.391 | 0.173 | 0.400 | 0.177 | 0.853 | 0.378 | 0.872 | 0.386 | 0.799 | 0.353 | 0.717 | 0.317 | 0.644 | 0.285 | 0.572 | 0.253 | 0.981 | 0.434 | 0.835 | 0.369 | 3.345 | 0.279 |
| 9 | 0.463 | 0.205 | 0.329 | 0.145 | 0.364 | 0.161 | 0.391 | 0.173 | 1.256 | 0.689 | 0.872 | 0.386 | 0.789 | 0.349 | 0.717 | 0.317 | 0.644 | 0.285 | 0.581 | 0.257 | 0.981 | 0.434 | 0.835 | 0.369 | 3.775 | 0.315 |
| 10 | 0.563 | 0.249 | 0.436 | 0.193 | 0.355 | 0.157 | 0.400 | 0.177 | 0.844 | 0.374 | 0.872 | 0.386 | 0.789 | 0.349 | 0.753 | 0.333 | 0.644 | 0.285 | 0.563 | 0.249 | 0.981 | 0.434 | 0.799 | 0.353 | 3.540 | 0.295 |
| | 0.325 | 0.144 | 0.350 | 0.155 | 0.368 | 0.163 | 0.415 | 0.184 | 0.994 | 0.440 | 0.873 | 0.386 | 0.799 | 0.353 | 0.720 | 0.319 | 0.648 | 0.287 | 0.579 | 0.256 | 0.980 | 0.435 | 0.842 | 0.373 | 3.494 | 0.291 |
| 11 | 0.929 | 0.411 | 0.436 | 0.193 | 0.382 | 0.169 | 0.418 | 0.185 | 0.808 | 0.357 | 0.862 | 0.382 | 0.789 | 0.349 | 0.735 | 0.325 | 0.644 | 0.285 | 0.581 | 0.257 | 0.945 | 0.418 | 0.799 | 0.353 | 3.685 | 0.307 |
| 12 | 0.823 | 0.364 | 0.382 | 0.169 | 0.599 | 0.265 | 0.908 | 0.401 | 0.653 | 0.289 | 0.899 | 0.398 | 0.789 | 0.349 | 0.735 | 0.325 | 0.644 | 0.285 | 0.717 | 0.317 | 0.899 | 0.398 | 0.826 | 0.365 | 3.923 | 0.327 |
| 13 | 0.797 | 0.352 | 0.563 | 0.249 | 0.572 | 0.253 | 0.881 | 0.390 | 0.653 | 0.289 | 0.908 | 0.402 | 0.789 | 0.349 | 0.735 | 0.325 | 0.635 | 0.281 | 0.717 | 0.317 | 0.908 | 0.402 | 0.835 | 0.369 | 3.979 | 0.332 |
| 14 | 0.771 | 0.341 | 0.409 | 0.181 | 0.302 | 0.134 | 0.881 | 0.390 | 0.817 | 0.361 | 0.899 | 0.398 | 0.780 | 0.345 | 0.753 | 0.333 | 0.635 | 0.281 | 0.726 | 0.321 | 0.899 | 0.398 | 0.844 | 0.374 | 3.853 | 0.321 |
| 15 | 0.744 | 0.329 | 0.400 | 0.177 | 0.293 | 0.130 | 0.872 | 0.386 | 0.930 | 0.414 | 0.899 | 0.398 | 0.789 | 0.349 | 0.771 | 0.341 | 0.626 | 0.277 | 0.717 | 0.317 | 0.853 | 0.378 | 0.844 | 0.374 | 3.869 | 0.322 |
| | 0.812 | 0.360 | 0.438 | 0.194 | 0.429 | 0.190 | 0.792 | 0.350 | 0.773 | 0.342 | 0.894 | 0.395 | 0.788 | 0.349 | 0.746 | 0.330 | 0.637 | 0.282 | 0.691 | 0.306 | 0.897 | 0.397 | 0.830 | 0.367 | 3.862 | 0.322 |
| 16 | 0.719 | 0.318 | 0.409 | 0.181 | 0.293 | 0.130 | 0.872 | 0.386 | 1.018 | 0.451 | 0.908 | 0.402 | 0.789 | 0.349 | 0.771 | 0.341 | 0.626 | 0.277 | 0.717 | 0.317 | 0.844 | 0.374 | 0.853 | 0.378 | 3.902 | 0.325 |
| 17 | 0.719 | 0.318 | 0.445 | 0.197 | 0.293 | 0.130 | 0.835 | 0.369 | 1.055 | 0.467 | 0.908 | 0.402 | 0.789 | 0.349 | 0.771 | 0.341 | 0.644 | 0.285 | 0.717 | 0.317 | 0.817 | 0.361 | 0.835 | 0.369 | 3.906 | 0.326 |
| 18 | 0.719 | 0.318 | 0.382 | 0.169 | 0.293 | 0.130 | 0.780 | 0.345 | 1.055 | 0.467 | 0.917 | 0.406 | 0.789 | 0.349 | 0.771 | 0.341 | 0.626 | 0.277 | 0.726 | 0.321 | 0.826 | 0.365 | 0.853 | 0.378 | 3.866 | 0.322 |
| 19 | 0.744 | 0.329 | 0.409 | 0.181 | 1.073 | 0.475 | 0.835 | 0.369 | 1.055 | 0.467 | 0.908 | 0.402 | 0.780 | 0.345 | 0.771 | 0.341 | 0.608 | 0.269 | 0.708 | 0.313 | 0.817 | 0.361 | 0.853 | 0.378 | 4.231 | 0.353 |
| 20 | 0.692 | 0.306 | 0.445 | 0.197 | 1.037 | 0.459 | 0.881 | 0.390 | 1.064 | 0.471 | 0.917 | 0.406 | 0.789 | 0.349 | 0.771 | 0.341 | 0.608 | 0.269 | 0.708 | 0.313 | 0.789 | 0.349 | 0.844 | 0.374 | 4.224 | 0.352 |
| | 0.718 | 0.318 | 0.418 | 0.185 | 0.598 | 0.264 | 0.841 | 0.372 | 1.049 | 0.464 | 0.912 | 0.403 | 0.788 | 0.349 | 0.771 | 0.341 | 0.622 | 0.275 | 0.715 | 0.316 | 0.819 | 0.362 | 0.848 | 0.375 | 4.026 | 0.336 |
| 21 | 0.666 | 0.295 | 0.418 | 0.185 | 0.554 | 0.245 | 0.872 | 0.386 | 1.027 | 0.455 | 0.908 | 0.402 | 0.744 | 0.329 | 0.744 | 0.329 | 0.599 | 0.265 | 0.717 | 0.317 | 0.835 | 0.369 | 0.844 | 0.374 | 3.950 | 0.329 |
| 22 | 0.666 | 0.295 | 0.454 | 0.201 | 0.526 | 0.233 | 0.853 | 0.378 | 1.018 | 0.451 | 0.899 | 0.398 | 0.753 | 0.333 | 0.735 | 0.325 | 0.590 | 0.261 | 0.708 | 0.313 | 0.835 | 0.369 | 0.844 | 0.374 | 3.930 | 0.328 |
| 23 | 0.771 | 0.341 | 0.418 | 0.185 | 0.508 | 0.225 | 0.835 | 0.369 | 0.835 | 0.369 | 0.899 | 0.398 | 0.744 | 0.329 | 0.735 | 0.325 | 0.608 | 0.269 | 0.698 | 0.309 | 0.853 | 0.378 | 0.835 | 0.369 | 3.867 | 0.322 |
| 24 | 0.719 | 0.318 | 0.445 | 0.197 | 0.508 | 0.225 | 0.835 | 0.369 | 0.844 | 0.374 | 0.899 | 0.398 | 0.744 | 0.329 | 0.735 | 0.325 | 0.590 | 0.261 | 0.698 | 0.309 | 0.780 | 0.345 | 0.708 | 0.313 | 3.764 | 0.314 |
| 25 | 0.692 | 0.306 | 0.409 | 0.181 | 0.499 | 0.221 | 1.037 | 0.459 | 0.817 | 0.361 | 0.899 | 0.398 | 0.744 | 0.329 | 0.776 | 0.321 | 0.590 | 0.261 | 0.717 | 0.317 | 0.817 | 0.361 | 0.671 | 0.297 | 3.813 | 0.318 |
| | 0.703 | 0.311 | 0.429 | 0.190 | 0.519 | 0.230 | 0.886 | 0.392 | 0.908 | 0.402 | 0.901 | 0.399 | 0.746 | 0.330 | 0.775 | 0.325 | 0.595 | 0.263 | 0.708 | 0.313 | 0.824 | 0.365 | 0.780 | 0.345 | 3.865 | 0.322 |
| 26 | 0.666 | 0.295 | 0.400 | 0.177 | 0.499 | 0.221 | 0.862 | 0.382 | 0.808 | 0.357 | 0.881 | 0.390 | 0.735 | 0.325 | 0.717 | 0.317 | 0.581 | 0.257 | 1.184 | 0.524 | 0.872 | 0.386 | 0.689 | 0.305 | 3.935 | 0.328 |
| 27 | 0.666 | 0.295 | 0.364 | 0.161 | 0.490 | 0.217 | 0.817 | 0.361 | 0.872 | 0.386 | 0.862 | 0.382 | 0.726 | 0.321 | 0.717 | 0.317 | 0.572 | 0.253 | 1.147 | 0.508 | 0.817 | 0.361 | 0.698 | 0.309 | 3.871 | 0.323 |
| 28 | 0.641 | 0.284 | 0.382 | 0.169 | 0.079 | 0.035 | 0.853 | 0.378 | 0.872 | 0.386 | 0.862 | 0.382 | 0.726 | 0.321 | 0.689 | 0.305 | 0.572 | 0.253 | 1.147 | 0.508 | 0.936 | 0.414 | 0.708 | 0.313 | 3.746 | 0.312 |
| 29 | 0.614 | 0.272 | | | 0.079 | 0.035 | 0.862 | 0.382 | 0.872 | 0.386 | 0.808 | 0.357 | 0.726 | 0.321 | 0.689 | 0.305 | 0.572 | 0.253 | 1.156 | 0.512 | 0.899 | 0.398 | 0.726 | 0.321 | 3.541 | 0.295 |
| 30 | 0.614 | 0.272 | | | 0.079 | 0.035 | 0.872 | 0.386 | 0.862 | 0.382 | 0.817 | 0.361 | 0.717 | 0.317 | 0.689 | 0.305 | 0.554 | 0.245 | 1.156 | 0.512 | 0.908 | 0.402 | 0.708 | 0.313 | 3.529 | 0.294 |
| | 0.640 | 0.283 | 0.382 | 0.169 | 0.245 | 0.109 | 0.853 | 0.378 | 0.857 | 0.379 | 0.846 | 0.374 | 0.726 | 0.321 | 0.700 | 0.310 | 0.570 | 0.252 | 1.158 | 0.512 | 0.886 | 0.392 | 0.706 | 0.312 | 3.725 | 0.310 |
| 31 | 0.347 | 0.154 | | | 0.608 | 0.269 | | | 0.872 | 0.386 | | | 0.717 | 0.317 | 0.680 | 0.301 | | | 1.110 | 0.491 | | | 0.680 | 0.301 | 2.219 | 0.185 |
| Total | | 7.746 | | 5.025 | | 5.893 | | 9.316 | | 12.471 | | 11.874 | | 10.628 | | 10.003 | | 8.277 | | 10.279 | | 11.830 | | 11.266 | 114.609 | 9.551 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.250 | | 0.179 | | 0.190 | | 0.311 | | 0.402 | | 0.396 | | 0.343 | | 0.323 | | 0.276 | | 0.332 | | 0.394 | | 0.363 | | 0.314 |

Table 7-10 Specific Daily Discharge per 10 Sq. km at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 4 / 5 )

Year : 1991 Unit : m^3 / sec.

DQ:Daily Discharg SDQ: Specific Daily Discharge

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | D. Q. | SDQ | SDQ | SDQ |
| 1 | 0.486 | 0.215 | 0.323 | 0.143 | 0.747 | 0.331 | 0.892 | 0.395 | 0.585 | 0.259 | 1.134 | 0.502 | 0.821 | 0.363 | 0.705 | 0.312 | 0.632 | 0.280 | 0.607 | 0.269 | 0.910 | 0.403 | 0.728 | 0.322 | 3.790 | 0.316 |
| 2 | 0.517 | 0.229 | 0.378 | 0.146 | 0.747 | 0.331 | 0.892 | 0.395 | 1.179 | 0.522 | 1.075 | 0.476 | 0.821 | 0.363 | 0.705 | 0.312 | 0.632 | 0.280 | 0.582 | 0.258 | 0.888 | 0.393 | 0.728 | 0.322 | 4.026 | 0.335 |
| 3 | 0.458 | 0.203 | 0.323 | 0.143 | 0.747 | 0.331 | 1.001 | 0.443 | 1.118 | 0.495 | 1.260 | 0.558 | 0.821 | 0.363 | 0.705 | 0.312 | 0.632 | 0.280 | 0.607 | 0.269 | 0.866 | 0.383 | 0.728 | 0.322 | 4.100 | 0.342 |
| 4 | 0.517 | 0.229 | 0.329 | 0.146 | 0.703 | 0.311 | 0.973 | 0.430 | 1.058 | 0.468 | 1.056 | 0.467 | 0.821 | 0.363 | 0.705 | 0.312 | 0.681 | 0.301 | 0.632 | 0.280 | 0.866 | 0.383 | 0.728 | 0.322 | 4.013 | 0.334 |
| 5 | 0.501 | 0.222 | 0.323 | 0.143 | 0.682 | 0.302 | 0.892 | 0.395 | 1.058 | 0.468 | 1.015 | 0.449 | 0.821 | 0.363 | 0.705 | 0.312 | 0.632 | 0.280 | 0.607 | 0.269 | 0.844 | 0.373 | 0.728 | 0.322 | 3.898 | 0.325 |
| | 0.496 | 0.219 | 0.325 | 0.144 | 0.725 | 0.321 | 0.930 | 0.412 | 1.000 | 0.442 | 1.108 | 0.490 | 0.821 | 0.363 | 0.705 | 0.312 | 0.642 | 0.284 | 0.607 | 0.269 | 0.875 | 0.387 | 0.728 | 0.322 | 3.966 | 0.330 |
| 6 | 0.501 | 0.222 | 0.323 | 0.143 | 0.661 | 0.293 | 0.892 | 0.395 | 0.994 | 0.440 | 1.075 | 0.476 | 0.799 | 0.353 | 0.705 | 0.312 | 0.632 | 0.280 | 0.607 | 0.269 | 0.844 | 0.373 | 0.728 | 0.322 | 3.878 | 0.323 |
| 7 | 0.486 | 0.215 | 0.323 | 0.143 | 0.641 | 0.284 | 0.867 | 0.384 | 1.035 | 0.458 | 1.134 | 0.502 | 0.799 | 0.353 | 0.681 | 0.301 | 0.632 | 0.280 | 0.632 | 0.280 | 0.821 | 0.363 | 0.752 | 0.333 | 3.896 | 0.325 |
| 8 | 0.486 | 0.215 | 0.323 | 0.143 | 0.641 | 0.284 | 1.058 | 0.468 | 0.994 | 0.440 | 1.015 | 0.449 | 0.799 | 0.353 | 0.681 | 0.301 | 0.607 | 0.269 | 0.776 | 0.343 | 0.821 | 0.363 | 0.728 | 0.322 | 3.952 | 0.329 |
| 9 | 0.323 | 0.143 | 0.323 | 0.143 | 0.632 | 0.279 | 0.842 | 0.372 | 0.974 | 0.431 | 1.035 | 0.458 | 0.799 | 0.353 | 0.681 | 0.301 | 0.607 | 0.269 | 0.752 | 0.333 | 0.844 | 0.373 | 0.705 | 0.312 | 3.764 | 0.314 |
| 10 | 0.313 | 0.138 | 0.323 | 0.143 | 0.642 | 0.275 | 0.973 | 0.430 | 0.953 | 0.422 | 1.015 | 0.449 | 0.776 | 0.343 | 0.681 | 0.301 | 0.607 | 0.269 | 0.632 | 0.280 | 0.994 | 0.440 | 0.728 | 0.322 | 3.813 | 0.318 |
| | 0.422 | 0.187 | 0.323 | 0.143 | 0.638 | 0.282 | 0.926 | 0.410 | 0.990 | 0.438 | 1.055 | 0.467 | 0.794 | 0.351 | 0.686 | 0.303 | 0.617 | 0.273 | 0.680 | 0.301 | 0.865 | 0.383 | 0.728 | 0.322 | 3.960 | 0.330 |
| 11 | 0.305 | 0.135 | 0.318 | 0.141 | 0.603 | 0.267 | 0.945 | 0.418 | 0.778 | 0.344 | 0.994 | 0.440 | 0.776 | 0.343 | 0.681 | 0.301 | 0.607 | 0.269 | 0.607 | 0.269 | 0.910 | 0.403 | 0.681 | 0.301 | 3.631 | 0.303 |
| 12 | 0.308 | 0.136 | 0.329 | 0.146 | 0.867 | 0.384 | 0.892 | 0.395 | 0.953 | 0.422 | 0.994 | 0.440 | 0.776 | 0.343 | 0.681 | 0.301 | 0.607 | 0.269 | 0.932 | 0.412 | 0.776 | 0.343 | 0.728 | 0.322 | 3.911 | 0.326 |
| 13 | 0.313 | 0.138 | 0.329 | 0.146 | 0.790 | 0.351 | 0.682 | 0.302 | 1.075 | 0.476 | 0.994 | 0.440 | 0.776 | 0.343 | 0.728 | 0.322 | 0.607 | 0.269 | 0.705 | 0.312 | 0.844 | 0.373 | 0.821 | 0.363 | 3.853 | 0.319 |
| 14 | 0.313 | 0.138 | 0.323 | 0.143 | 0.770 | 0.341 | 0.661 | 0.293 | 1.095 | 0.484 | 0.994 | 0.440 | 0.776 | 0.343 | 0.681 | 0.301 | 0.607 | 0.269 | 0.681 | 0.301 | 0.821 | 0.363 | 0.728 | 0.322 | 3.739 | 0.312 |
| 15 | 0.305 | 0.135 | 0.329 | 0.146 | 1.058 | 0.468 | 0.725 | 0.321 | 1.152 | 0.510 | 0.953 | 0.422 | 0.752 | 0.333 | 0.681 | 0.301 | 0.607 | 0.269 | 1.479 | 0.654 | 0.798 | 0.353 | 0.728 | 0.322 | 4.288 | 0.353 |
| | 0.309 | 0.137 | 0.323 | 0.143 | 0.818 | 0.362 | 0.781 | 0.346 | 1.011 | 0.447 | 0.986 | 0.436 | 0.771 | 0.341 | 0.690 | 0.305 | 0.607 | 0.269 | 0.881 | 0.390 | 0.830 | 0.367 | 0.737 | 0.326 | 3.869 | 0.322 |
| 16 | 0.308 | 0.136 | 0.323 | 0.143 | 0.817 | 0.362 | 0.661 | 0.293 | 1.035 | 0.458 | 0.932 | 0.412 | 0.752 | 0.333 | 0.681 | 0.301 | 0.632 | 0.280 | 1.039 | 0.458 | 0.798 | 0.353 | 0.728 | 0.322 | 3.857 | 0.321 |
| 17 | 0.308 | 0.136 | 0.305 | 0.135 | 0.842 | 0.372 | 0.661 | 0.293 | 1.240 | 0.550 | 0.932 | 0.412 | 0.752 | 0.333 | 0.681 | 0.301 | 0.607 | 0.269 | 0.910 | 0.403 | 0.776 | 0.343 | 0.728 | 0.322 | 3.870 | 0.322 |
| 18 | 0.308 | 0.136 | 0.305 | 0.135 | 1.310 | 0.580 | 0.661 | 0.293 | 1.056 | 0.467 | 0.910 | 0.403 | 0.752 | 0.333 | 0.681 | 0.301 | 0.607 | 0.269 | 0.844 | 0.373 | 0.776 | 0.343 | 0.728 | 0.322 | 3.955 | 0.330 |
| 19 | 0.308 | 0.136 | 0.301 | 0.133 | 1.058 | 0.468 | 0.661 | 0.293 | 1.095 | 0.484 | 0.910 | 0.403 | 0.752 | 0.333 | 0.681 | 0.301 | 0.607 | 0.269 | 0.798 | 0.353 | 0.776 | 0.343 | 0.728 | 0.322 | 3.839 | 0.320 |
| 20 | 0.305 | 0.135 | 0.301 | 0.133 | 1.029 | 0.455 | 1.118 | 0.495 | 1.035 | 0.458 | 0.910 | 0.403 | 0.728 | 0.322 | 0.681 | 0.301 | 0.607 | 0.269 | 0.752 | 0.333 | 0.776 | 0.343 | 0.752 | 0.333 | 3.980 | 0.332 |
| | 0.308 | 0.136 | 0.307 | 0.136 | 1.011 | 0.447 | 0.793 | 0.333 | 1.093 | 0.484 | 0.919 | 0.406 | 0.747 | 0.331 | 0.681 | 0.301 | 0.612 | 0.271 | 0.868 | 0.384 | 0.781 | 0.345 | 0.733 | 0.324 | 3.899 | 0.325 |
| 21 | 0.892 | 0.395 | 0.305 | 0.135 | 1.001 | 0.443 | 0.892 | 0.395 | 0.994 | 0.440 | 0.910 | 0.403 | 0.728 | 0.322 | 0.657 | 0.291 | 0.582 | 0.258 | 1.114 | 0.493 | 0.776 | 0.343 | 0.705 | 0.312 | 4.229 | 0.352 |
| 22 | 0.377 | 0.167 | 0.682 | 0.302 | 0.603 | 0.267 | 0.892 | 0.395 | 1.015 | 0.449 | 0.910 | 0.403 | 0.728 | 0.322 | 0.657 | 0.291 | 0.582 | 0.258 | 1.095 | 0.484 | 0.752 | 0.333 | 0.681 | 0.301 | 3.971 | 0.331 |
| 23 | 0.329 | 0.146 | 0.682 | 0.302 | 1.807 | 0.810 | 0.867 | 0.384 | 1.035 | 0.458 | 0.888 | 0.393 | 0.728 | 0.322 | 0.632 | 0.280 | 0.582 | 0.258 | 1.095 | 0.484 | 0.752 | 0.333 | 0.681 | 0.301 | 4.473 | 0.373 |
| 24 | 0.336 | 0.148 | 0.725 | 0.321 | 1.001 | 0.443 | 1.001 | 0.443 | 1.035 | 0.458 | 0.888 | 0.393 | 0.728 | 0.322 | 0.632 | 0.280 | 0.582 | 0.258 | 1.075 | 0.476 | 0.728 | 0.322 | 0.799 | 0.353 | 4.217 | 0.351 |
| 25 | 0.323 | 0.142 | 0.725 | 0.321 | 0.919 | 0.406 | 0.585 | 0.259 | 0.994 | 0.440 | 0.866 | 0.383 | 0.728 | 0.322 | 0.632 | 0.280 | 0.607 | 0.269 | 1.095 | 0.484 | 0.728 | 0.322 | 0.728 | 0.322 | 3.952 | 0.329 |
| | 0.451 | 0.200 | 0.624 | 0.276 | 1.072 | 0.474 | 0.847 | 0.375 | 1.015 | 0.449 | 0.892 | 0.395 | 0.728 | 0.322 | 0.642 | 0.284 | 0.587 | 0.260 | 1.095 | 0.484 | 0.747 | 0.331 | 0.719 | 0.318 | 4.168 | 0.347 |
| 26 | 0.323 | 0.143 | 0.703 | 0.311 | 0.973 | 0.430 | 0.585 | 0.259 | 0.994 | 0.440 | 0.866 | 0.383 | 0.728 | 0.322 | 0.632 | 0.280 | 0.582 | 0.258 | 1.152 | 0.510 | 0.776 | 0.343 | 0.728 | 0.322 | 4.001 | 0.333 |
| 27 | 0.323 | 0.143 | 0.622 | 0.275 | 0.892 | 0.395 | 0.501 | 0.222 | 1.015 | 0.449 | 0.866 | 0.383 | 0.728 | 0.322 | 0.632 | 0.280 | 0.582 | 0.258 | 1.075 | 0.476 | 0.728 | 0.322 | 0.866 | 0.383 | 3.908 | 0.326 |
| 28 | 0.323 | 0.143 | 0.945 | 0.418 | 0.892 | 0.395 | 0.501 | 0.222 | 0.994 | 0.440 | 0.844 | 0.373 | 0.728 | 0.322 | 0.632 | 0.280 | 0.582 | 0.258 | 1.015 | 0.449 | 0.728 | 0.322 | 0.705 | 0.312 | 3.934 | 0.328 |
| 29 | 0.323 | 0.143 | | | 0.892 | 0.395 | 0.486 | 0.215 | 1.544 | 0.683 | 0.844 | 0.373 | 0.728 | 0.322 | 0.632 | 0.280 | 0.582 | 0.258 | 0.974 | 0.431 | 1.075 | 0.476 | 0.728 | 0.322 | 3.899 | 0.325 |
| 30 | 0.336 | 0.148 | | | 0.892 | 0.395 | 0.661 | 0.293 | 1.056 | 0.467 | 0.844 | 0.373 | 0.705 | 0.312 | 0.632 | 0.280 | 0.582 | 0.258 | 0.953 | 0.422 | 1.075 | 0.476 | 0.681 | 0.301 | 3.725 | 0.310 |
| | 0.326 | 0.144 | 0.757 | 0.335 | 0.908 | 0.402 | 0.547 | 0.242 | 1.121 | 0.496 | 0.853 | 0.377 | 0.724 | 0.320 | 0.632 | 0.280 | 0.582 | 0.258 | 1.034 | 0.457 | 0.877 | 0.388 | 0.742 | 0.328 | 3.893 | 0.324 |
| 31 | 0.519 | 0.229 | | | 0.892 | 0.395 | | | 1.134 | 0.502 | | | 0.705 | 0.312 | 0.632 | 0.280 | | | 0.932 | 0.412 | | | 0.681 | 0.301 | 2.431 | 0.203 |
| Total | | 5.342 | | 5.213 | | 11.839 | | 10.585 | | 14.282 | | 12.860 | | 10.458 | | 9.209 | | 8.873 | | 11.838 | | 11.005 | | 10.009 | 120.714 | 10.059 |
| Days | | 31 | | 28 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 30 | | 31 | | 30 | | 31 | 365 | |
| Average | | 0.172 | | 0.186 | | 0.382 | | 0.353 | | 0.461 | | 0.429 | | 0.337 | | 0.297 | | 0.269 | | 0.382 | | 0.367 | | 0.323 | | 0.331 |

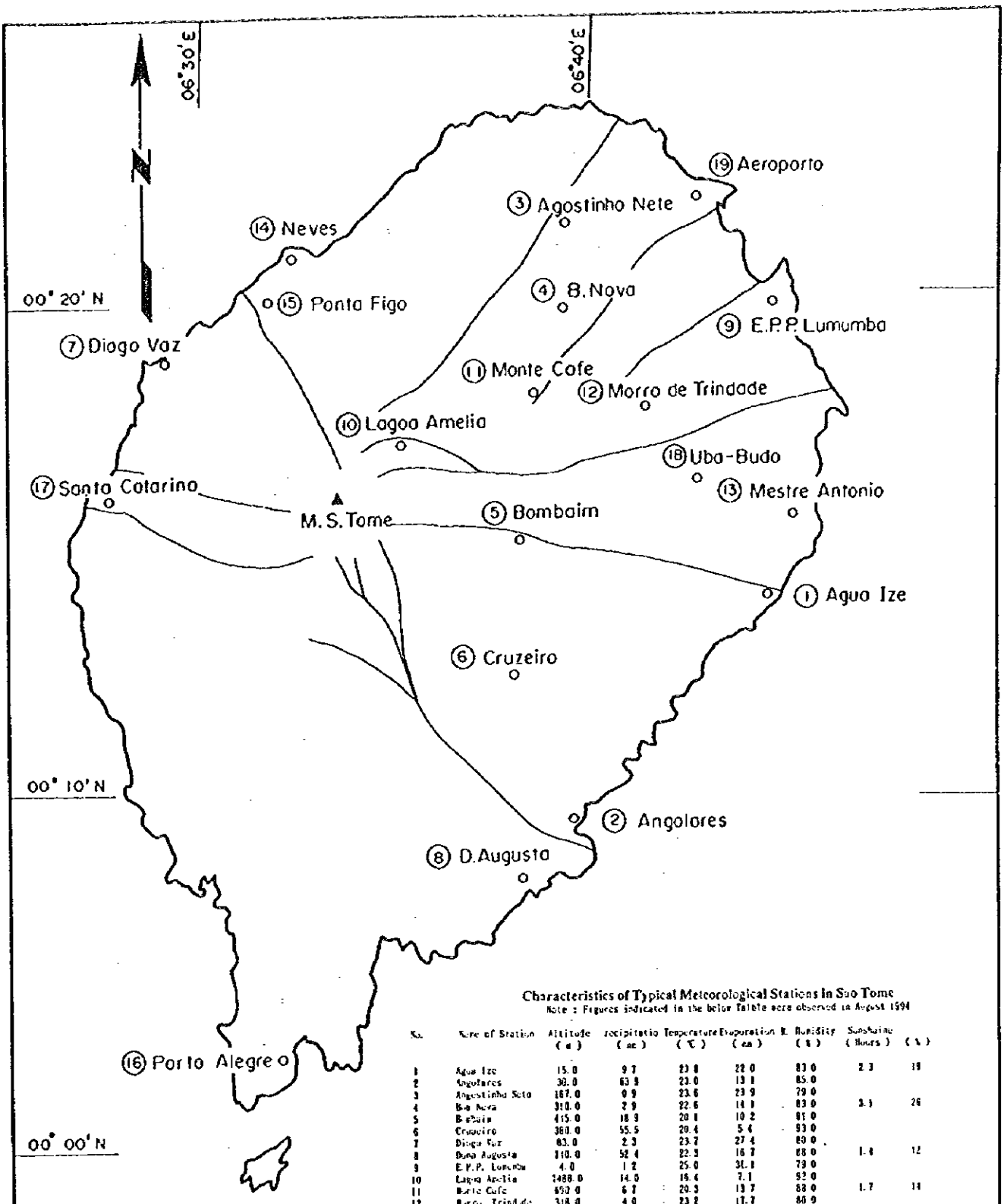
Table 7-10 Specific Daily Discharge per 10 Sq. km at Pian-Pian(Ponte) G.S. on the Manuel Jorge River ( 5 / 5 )

Year : 1992

Unit : m^3 / sec.

DQ:Daily Discharg SDQ: Specific Daily Discharge

| Day | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | D.Q. | SDQ | SDQ | SDQ |
| 1 | 0.681 | 0.301 | 0.705 | 0.312 | 0.558 | 0.247 | 1.421 | 0.629 | 0.821 | 0.363 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 3.003 | 0.334 |
| 2 | 0.821 | 0.363 | 0.681 | 0.301 | 0.799 | 0.353 | 0.932 | 0.412 | 0.776 | 0.343 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.924 | 0.325 |
| 3 | 0.728 | 0.322 | 0.681 | 0.301 | 0.582 | 0.258 | 1.506 | 0.666 | 0.799 | 0.353 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 3.051 | 0.339 |
| 4 | 0.705 | 0.312 | 0.681 | 0.301 | 0.558 | 0.247 | 1.035 | 0.458 | 0.776 | 0.343 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.812 | 0.312 |
| 5 | 0.705 | 0.312 | 0.681 | 0.301 | 0.558 | 0.247 | 1.707 | 0.755 | 0.776 | 0.343 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 3.109 | 0.345 |
| | 0.728 | 0.322 | 0.686 | 0.303 | 0.611 | 0.270 | 1.020 | 0.584 | 0.790 | 0.349 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.980 | 0.331 |
| 6 | 0.681 | 0.301 | 0.681 | 0.301 | 0.558 | 0.247 | 1.075 | 0.476 | 0.776 | 0.343 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.819 | 0.313 |
| 7 | 0.681 | 0.301 | 0.657 | 0.291 | 0.558 | 0.247 | 1.035 | 0.458 | 0.752 | 0.333 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.819 | 0.313 |
| 8 | 0.681 | 0.301 | 0.657 | 0.291 | 0.558 | 0.247 | 0.974 | 0.431 | 0.844 | 0.373 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.780 | 0.309 |
| 9 | 0.657 | 0.291 | 0.657 | 0.291 | 0.558 | 0.247 | 0.953 | 0.422 | 0.776 | 0.343 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | 2.794 | 0.310 |
| 10 | 0.657 | 0.291 | 0.632 | 0.280 | 0.532 | 0.235 | 0.932 | 0.412 | 0.752 | 0.333 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.630 | 0.279 | | | | | | | 2.750 | 0.306 |
| | 0.671 | 0.297 | 0.657 | 0.291 | 0.552 | 0.244 | 0.994 | 0.440 | 0.780 | 0.345 | 0.752 | 0.333 | 0.616 | 0.273 | 0.616 | 0.273 | 0.619 | 0.274 | | | | | | | 2.792 | 0.310 |
| 11 | 0.657 | 0.291 | 0.632 | 0.280 | 1.015 | 0.449 | 1.015 | 0.449 | 0.752 | 0.333 | 0.728 | 0.322 | 0.616 | 0.273 | 0.616 | 0.273 | 0.656 | 0.290 | | | | | | | 2.785 | 0.309 |
| 12 | 0.705 | 0.312 | 0.632 | 0.280 | 0.752 | 0.333 | 1.243 | 0.550 | 0.728 | 0.322 | 0.728 | 0.322 | 0.616 | 0.273 | 0.616 | 0.273 | 0.642 | 0.284 | | | | | | | 2.953 | 0.328 |
| 13 | 0.681 | 0.301 | 0.632 | 0.280 | 0.866 | 0.383 | 0.994 | 0.440 | 0.799 | 0.353 | 0.728 | 0.322 | 0.616 | 0.273 | 0.616 | 0.273 | 0.642 | 0.284 | | | | | | | 2.948 | 0.328 |
| 14 | 0.657 | 0.291 | 0.632 | 0.280 | 0.776 | 0.343 | 0.910 | 0.403 | 0.728 | 0.322 | 0.728 | 0.322 | 0.616 | 0.273 | 0.616 | 0.273 | 0.642 | 0.284 | | | | | | | 2.909 | 0.323 |
| 15 | 0.681 | 0.301 | 0.681 | 0.301 | 0.776 | 0.343 | 0.910 | 0.403 | 0.866 | 0.383 | 0.728 | 0.322 | 0.616 | 0.273 | 0.616 | 0.273 | 0.642 | 0.284 | | | | | | | 2.790 | 0.310 |
| | 0.676 | 0.299 | 0.642 | 0.284 | 0.827 | 0.370 | 1.014 | 0.449 | 0.775 | 0.343 | 0.728 | 0.322 | 0.616 | 0.273 | 0.616 | 0.273 | 0.645 | | | | | | | | 2.877 | 0.320 |
| 16 | 0.657 | 0.291 | 0.607 | 0.269 | 0.994 | 0.440 | 0.866 | 0.383 | 0.866 | 0.383 | 0.705 | 0.312 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.613 | 0.327 |
| 17 | 0.728 | 0.322 | 0.582 | 0.258 | 0.866 | 0.383 | 0.866 | 0.383 | 0.844 | 0.373 | 0.705 | 0.312 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.622 | 0.328 |
| 18 | 0.681 | 0.301 | 0.582 | 0.258 | 0.799 | 0.353 | 0.866 | 0.383 | 0.844 | 0.373 | 0.705 | 0.312 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.576 | 0.322 |
| 19 | 0.681 | 0.301 | 0.728 | 0.322 | 1.075 | 0.476 | 0.866 | 0.383 | 0.844 | 0.373 | 0.705 | 0.312 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.526 | 0.316 |
| 20 | 0.681 | 0.301 | 0.607 | 0.269 | 0.994 | 0.440 | 0.866 | 0.383 | 0.821 | 0.363 | 0.681 | 0.301 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.713 | 0.339 |
| | 0.686 | 0.303 | 0.622 | 0.275 | 0.946 | 0.418 | 0.866 | 0.383 | 0.844 | 0.373 | 0.700 | 0.310 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.610 | 0.326 |
| 21 | 0.799 | 0.353 | 0.607 | 0.269 | 0.888 | 0.393 | 0.821 | 0.363 | 0.821 | 0.363 | 0.681 | 0.301 | 0.616 | 0.273 | 0.656 | 0.290 | | | | | | | | | 2.608 | 0.326 |
| 22 | 0.728 | 0.322 | 0.582 | 0.258 | 1.741 | 0.770 | 0.821 | 0.363 | 0.821 | 0.363 | 0.681 | 0.301 | 0.616 | 0.273 | 0.787 | 0.348 | | | | | | | | | 2.606 | 0.326 |
| 23 | 0.728 | 0.322 | 0.582 | 0.258 | 1.134 | 0.502 | 0.799 | 0.353 | 0.821 | 0.363 | 0.681 | 0.301 | 0.616 | 0.273 | 0.642 | 0.284 | | | | | | | | | 2.999 | 0.375 |
| 24 | 1.189 | 0.526 | 0.582 | 0.258 | 1.134 | 0.502 | 0.799 | 0.353 | 0.799 | 0.353 | 0.681 | 0.301 | 0.616 | 0.273 | 0.630 | 0.279 | | | | | | | | | 2.657 | 0.332 |
| 25 | 0.752 | 0.333 | 0.558 | 0.247 | 1.075 | 0.476 | 0.799 | 0.353 | 0.799 | 0.353 | 0.681 | 0.301 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.845 | 0.356 |
| | 0.809 | 0.371 | 0.582 | 0.258 | 1.194 | 0.529 | 0.808 | 0.357 | 0.812 | 0.359 | 0.681 | 0.301 | 0.616 | 0.273 | 0.666 | 0.295 | | | | | | | | | 2.743 | 0.343 |
| 26 | 0.728 | 0.322 | 0.558 | 0.247 | 1.035 | 0.458 | 0.799 | 0.353 | 0.910 | 0.403 | 0.681 | 0.301 | 0.616 | 0.273 | 0.656 | 0.290 | | | | | | | | | 2.743 | 0.343 |
| 27 | 0.705 | 0.312 | 0.752 | 0.333 | 0.974 | 0.431 | 0.776 | 0.343 | 0.844 | 0.373 | 0.681 | 0.301 | 0.616 | 0.273 | 0.630 | 0.279 | | | | | | | | | 2.647 | 0.331 |
| 28 | 0.752 | 0.333 | 0.582 | 0.258 | 0.953 | 0.422 | 0.776 | 0.343 | 0.821 | 0.363 | 0.681 | 0.301 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.645 | 0.331 |
| 29 | 0.681 | 0.301 | 0.558 | 0.247 | 0.888 | 0.393 | 0.752 | 0.333 | 0.799 | 0.353 | 0.681 | 0.301 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.565 | 0.321 |
| 30 | 0.681 | 0.301 | | | 0.866 | 0.383 | 0.888 | 0.393 | 0.776 | 0.343 | 0.681 | 0.301 | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.474 | 0.309 |
| | 0.709 | 0.314 | 0.612 | 0.271 | 0.943 | 0.417 | 0.798 | 0.353 | 0.830 | 0.367 | 0.681 | 0.301 | 0.616 | 0.273 | 0.627 | 0.277 | | | | | | | | | 2.615 | 0.327 |
| 31 | 0.728 | 0.322 | | | 0.844 | 0.373 | | | 0.776 | 0.343 | | | 0.616 | 0.273 | 0.616 | 0.273 | | | | | | | | | 2.574 | 0.322 |
| Total | | 9.857 | | 8.138 | | 11.628 | | 12.832 | | 11.030 | | 9.501 | | 8.449 | | 8.584 | | 4.159 | | 0.000 | | 0.000 | | 0.000 | 85.059 | 10.107 |
| Days | | 31 | | 29 | | 31 | | 30 | | 31 | | 30 | | 31 | | 31 | | 15 | | 0 | | 0 | | 0 | 259 | |
| Average | | 0.318 | | 0.281 | | 0.375 | | 0.428 | | 0.356 | | 0.317 | | 0.273 | | 0.277 | | 0.277 | | | | | | | | 0.331 |




**Characteristics of Typical Meteorological Stations in Sao Tome**

Note : Figures indicated in the below table were observed in August 1994

| No. | Name of Station | Altitude (m) | Precipitation (mm) | Temperature (°C) | Evaporation (mm) | R. Humidity (%) | Sunshine (Hours) | (%) |
|---|---|---|---|---|---|---|---|---|
| 1 | Agua Ize | 15.0 | 9.7 | 23.8 | 22.0 | 83.0 | 2.3 | 18 |
| 2 | Angolares | 30.0 | 63.8 | 23.0 | 13.1 | 85.0 | | |
| 3 | Agostinho Neto | 167.0 | 9.9 | 23.6 | 23.9 | 79.0 | | |
| 4 | Boa Nova | 310.0 | 2.9 | 22.6 | 14.3 | 83.0 | 3.3 | 26 |
| 5 | Bombaim | 415.0 | 18.9 | 20.1 | 10.2 | 91.0 | | |
| 6 | Cruzeiro | 360.0 | 55.5 | 20.4 | 5.6 | 93.0 | | |
| 7 | Diogo Vaz | 83.0 | 2.3 | 23.7 | 27.4 | 89.0 | | |
| 8 | Dona Augusta | 310.0 | 52.4 | 22.3 | 16.7 | 88.0 | 1.8 | 12 |
| 9 | E.P.P. Lumumba | 4.0 | 1.2 | 25.0 | 31.8 | 79.0 | | |
| 10 | Lagoa Amelia | 1488.0 | 14.0 | 16.6 | 7.1 | 92.0 | | |
| 11 | Monte Cafe | 650.0 | 6.2 | 20.3 | 13.7 | 88.0 | 1.7 | 14 |
| 12 | Morro Trindade | 318.0 | 4.0 | 23.2 | 17.7 | 86.0 | | |
| 13 | Mestre Antonio | 74.0 | 18.8 | 23.8 | 21.4 | 83.0 | | |
| 14 | Neves | 7.0 | 1.2 | 24.6 | 31.0 | 78.0 | 5.1 | 42 |
| 15 | Ponta Figo | 100.0 | 0.3 | 24.2 | 29.0 | 79.0 | | |
| 16 | Porto Alegre | 9.0 | 10.8 | 23.8 | 22.7 | 85.0 | 2.0 | 17 |
| 17 | Santa Catarina | 42.0 | 13.1 | 24.0 | 23.9 | 83.0 | 4.1 | 31 |
| 18 | Uba Budo | 243.0 | 4.1 | 22.7 | 18.6 | 82.0 | | |
| 19 | Air Port | 8.0 | 1.8 | 24.3 | 31.9 | 76.0 | 5.0 | 42 |

Data source: Instituto National de Meteorologia

Fig. 7-1 Typical Meteorological Stations in Sao Tome Island

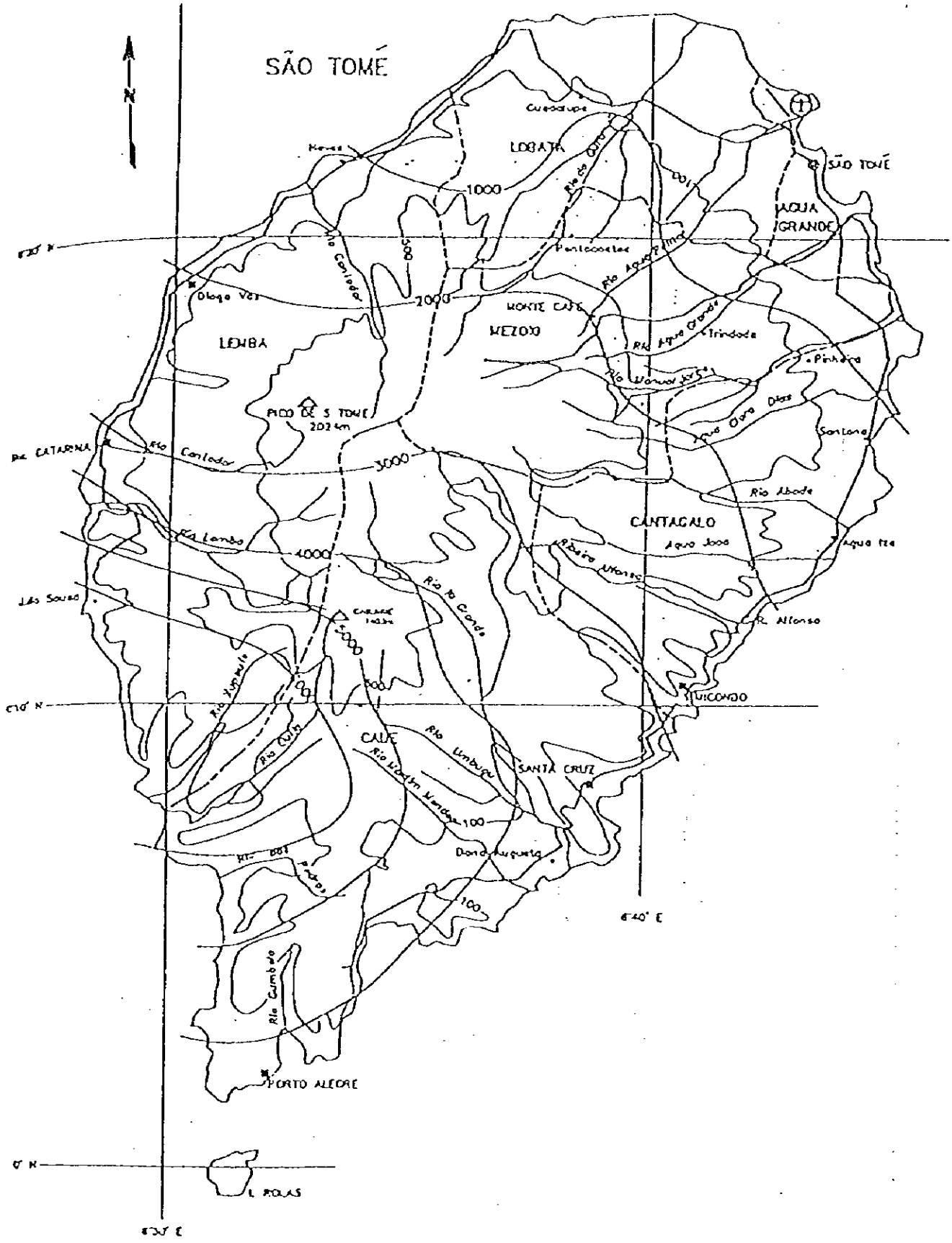



Fig. 7-2 Isohyetal Map of Sao Tome Island

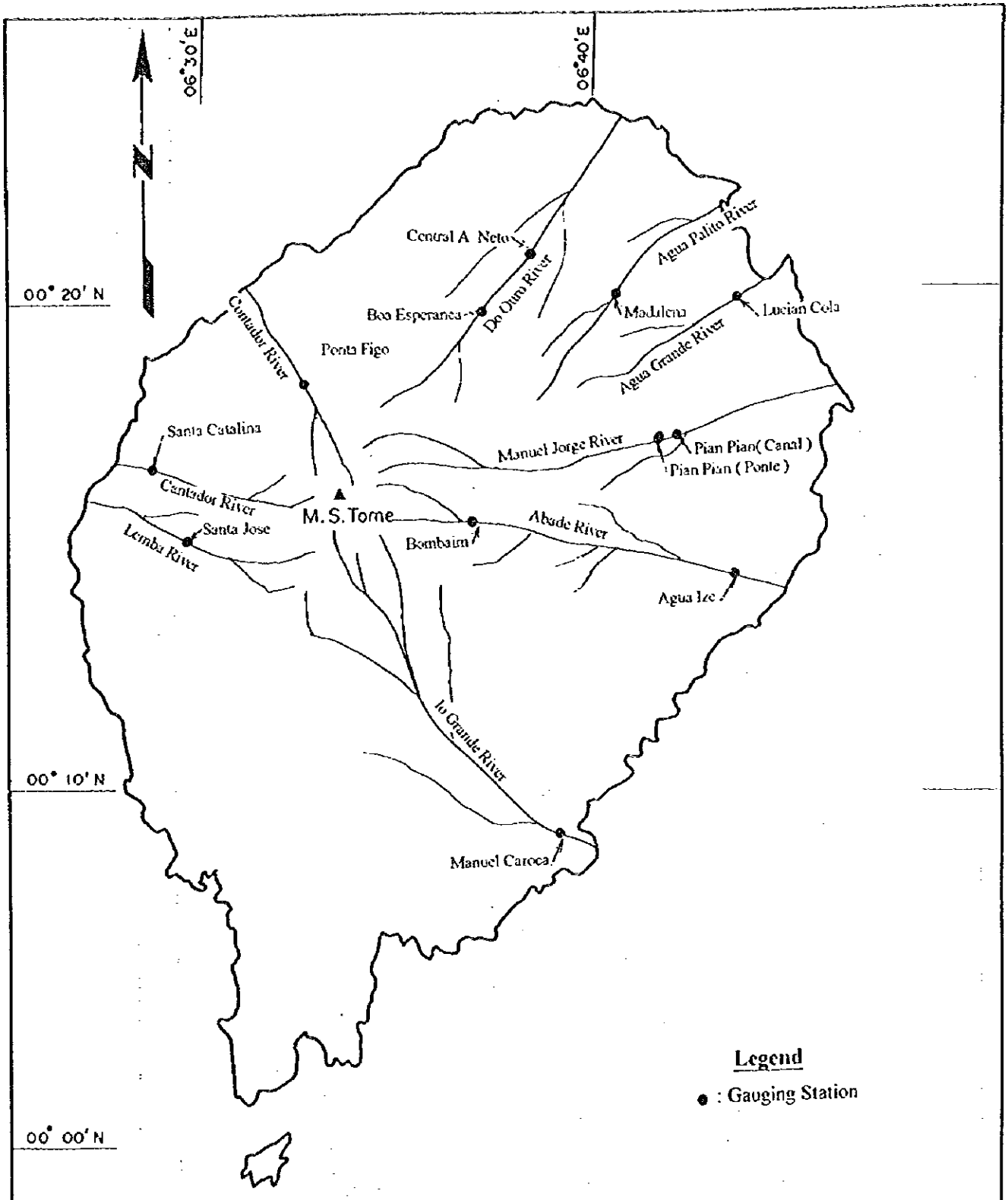



Fig. 7-3 Location Maps of Typical Rivers and Gauging Stations in Sao Tome Island

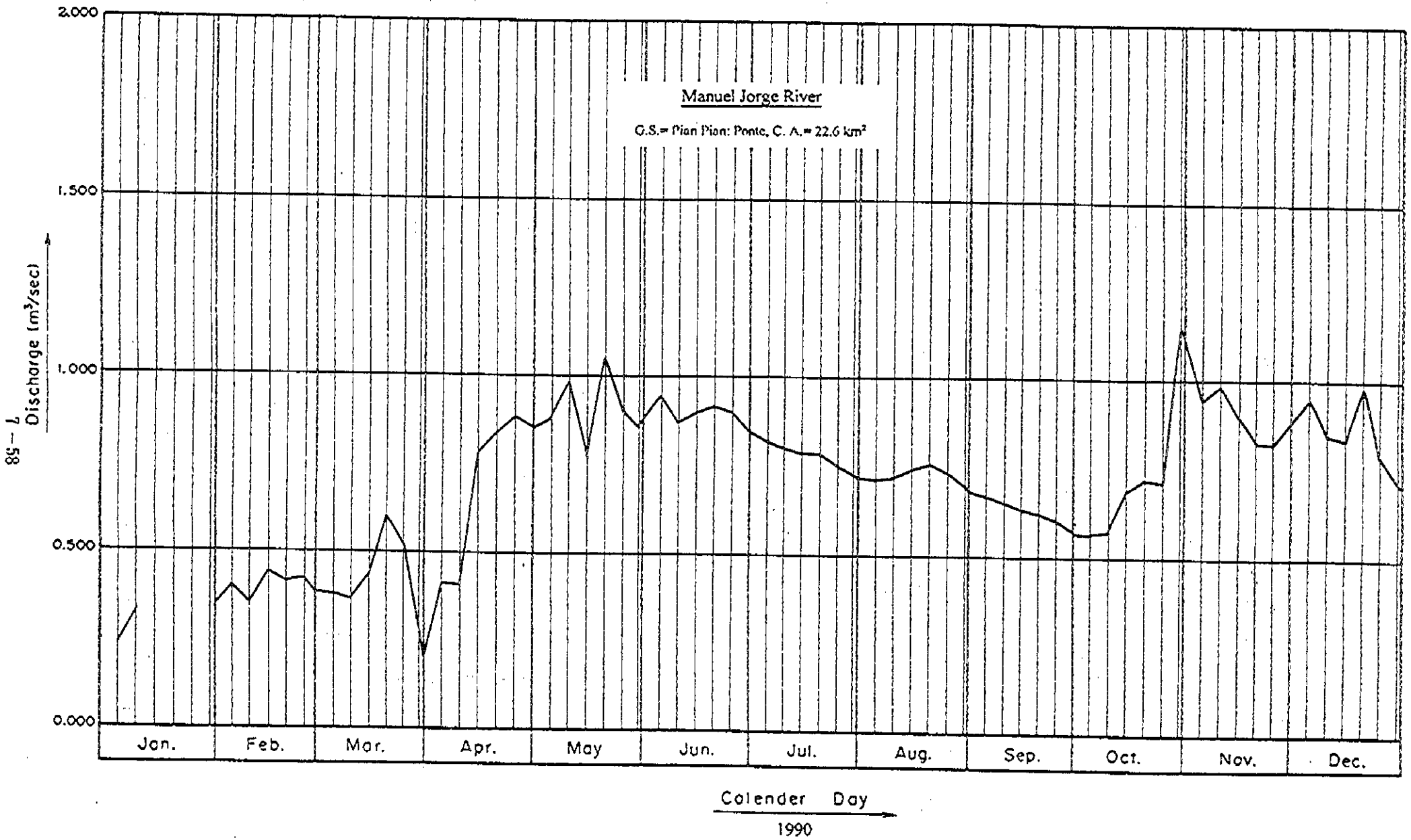



Fig. 7-4 Daily Discharge at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River (1/2)

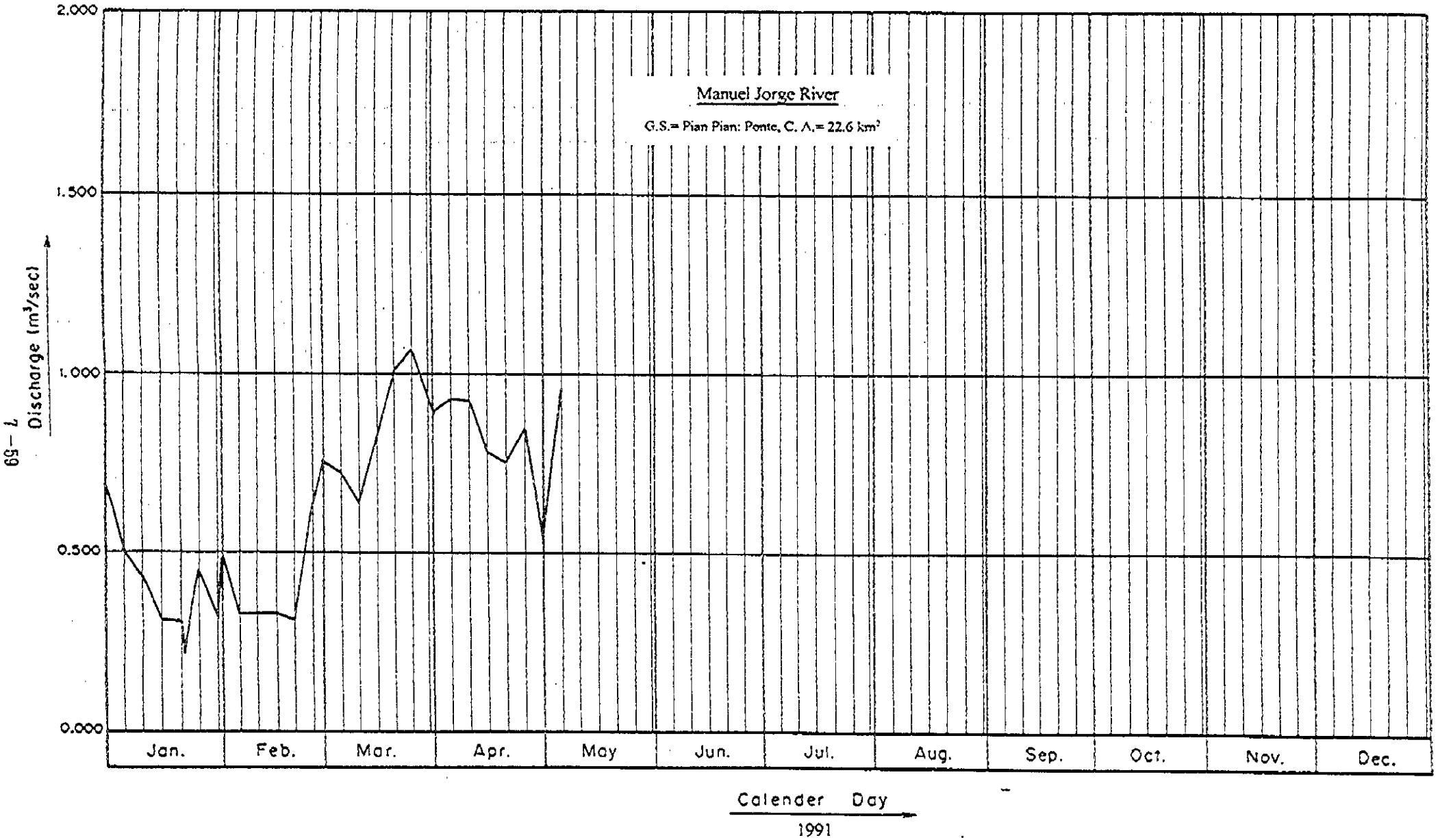



Fig. 7-4 Daily Discharge at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River (2/2 )

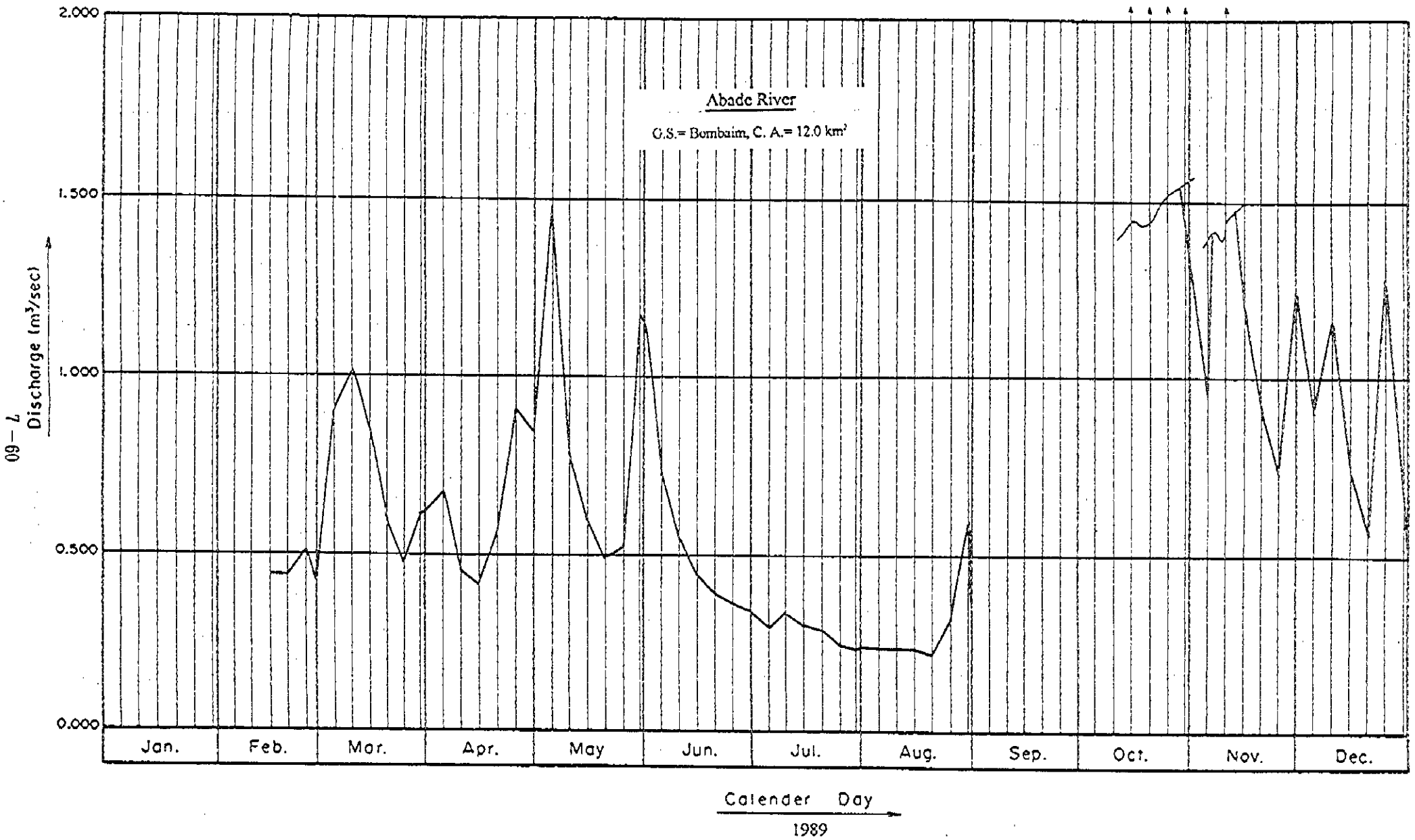



Fig. 7-5 Daily Discharge at Bombaim Gauging Station on the Abade River ( 1/5 )

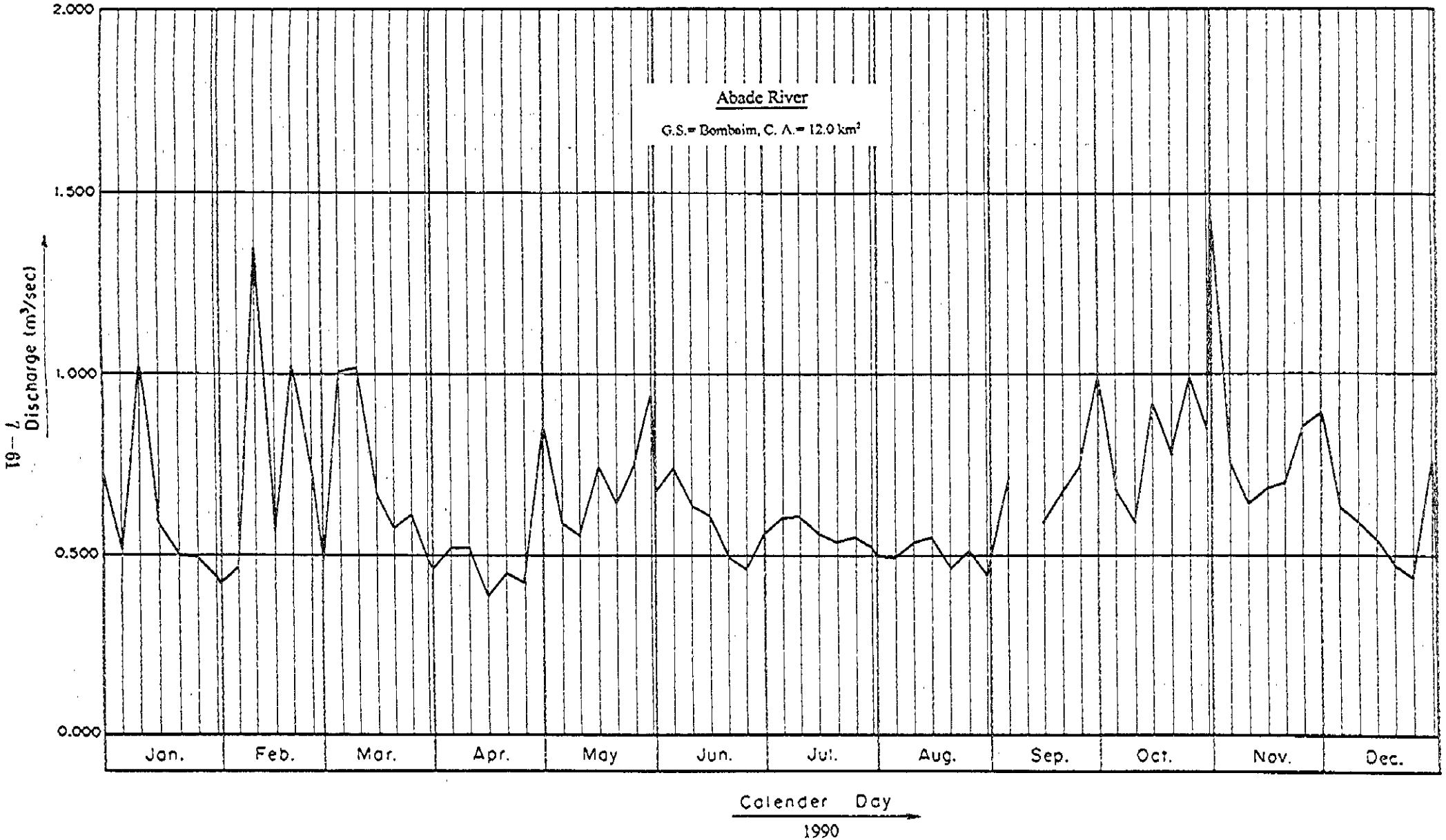



Fig. 7-5 Daily Discharge at Bombaim Gauging Station on the Abade River ( 2/5 )

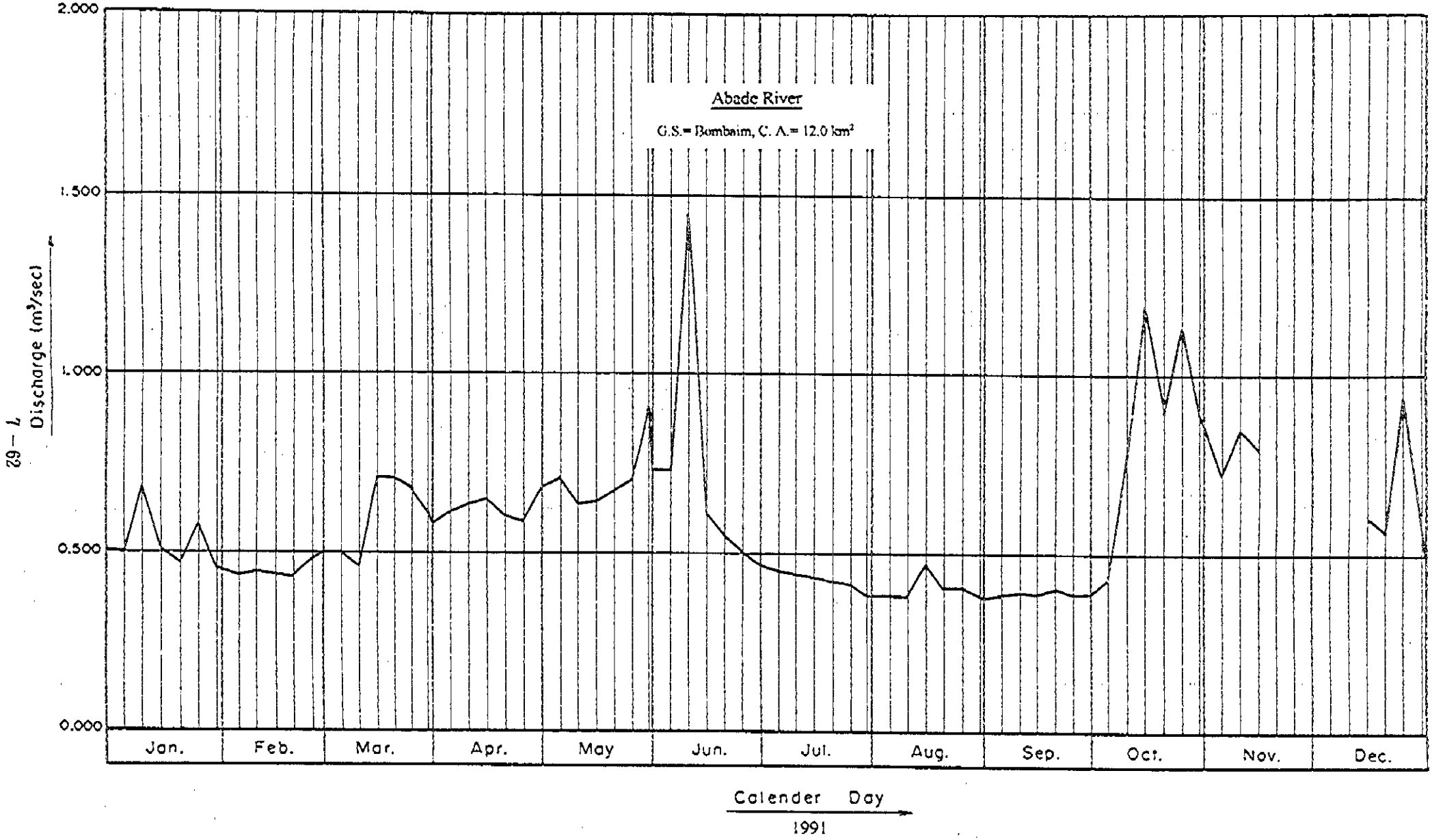



Fig. 7-5 Daily Discharge at Bombaim Gauging Station on the Abade River ( 3/5 )

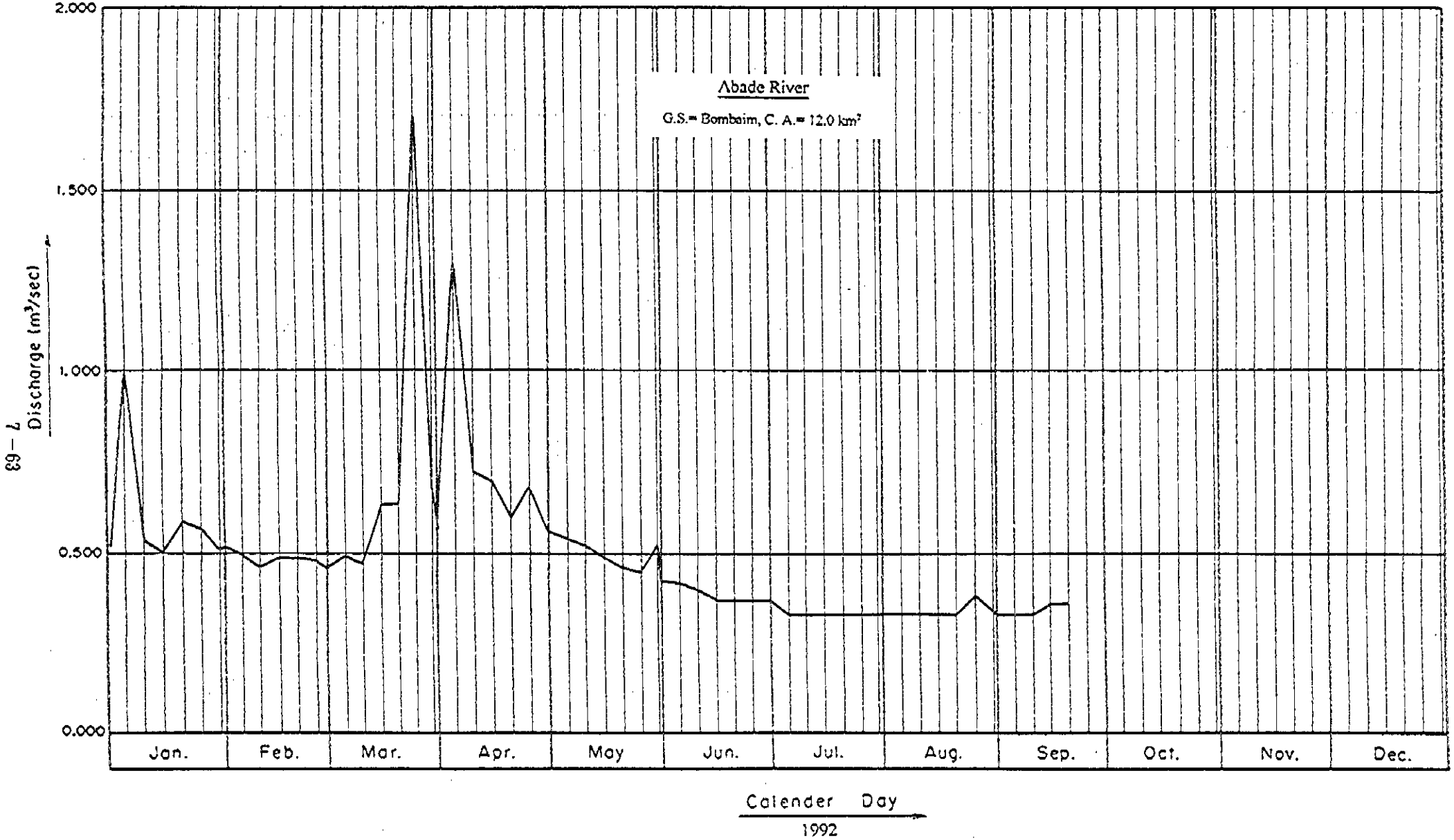



Fig. 7-5 Daily Discharge at Bombaim Gauging Station on the Abade River ( 4/5 )

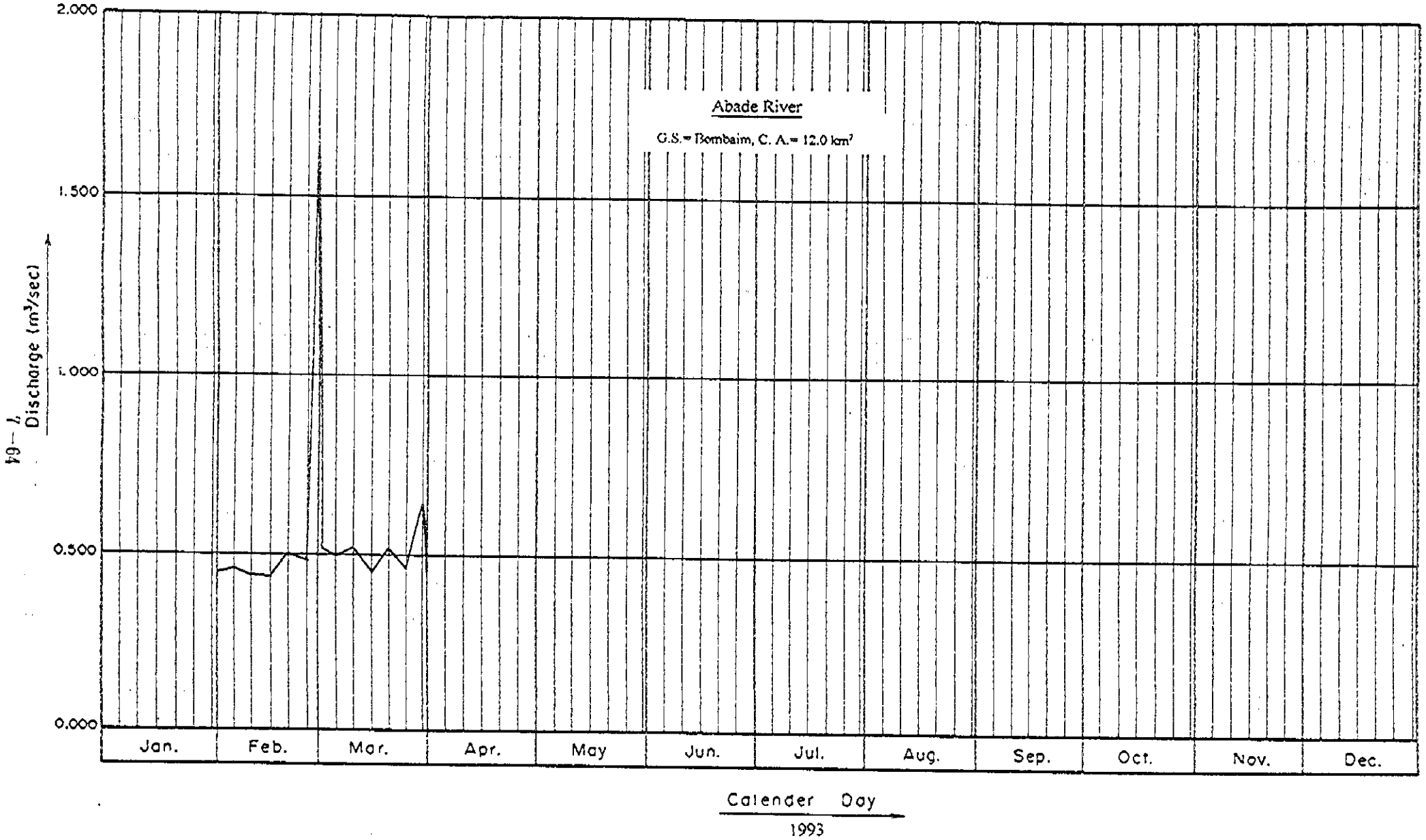



Fig. 7-5 Daily Discharge at Bombaim Gauging Station on the Abade River ( 5/5 )

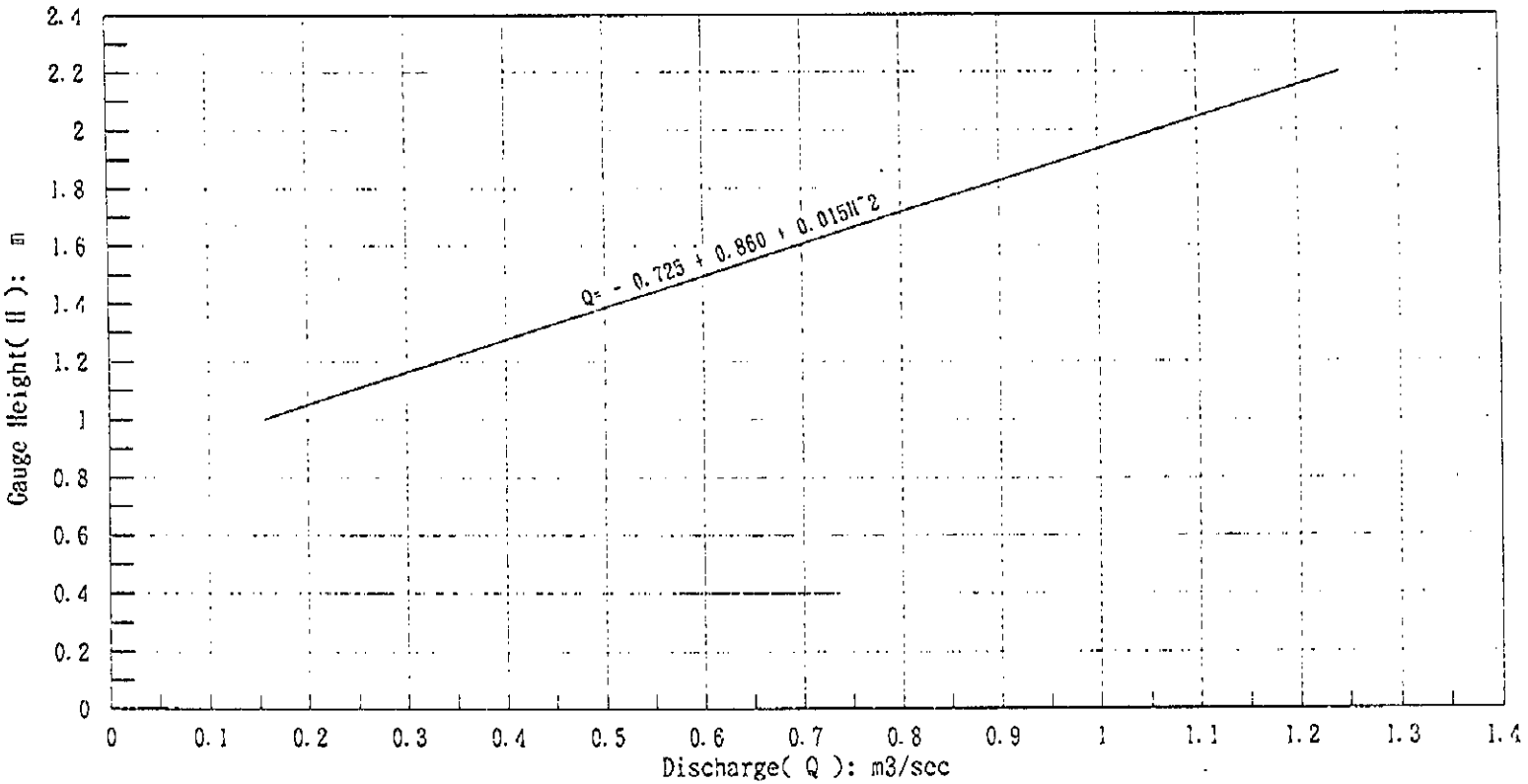



Fig. 7-6 Q-H Curve at Pian Pian ( Ponte ) G.S. for 1990 on the Manuel Jorge River

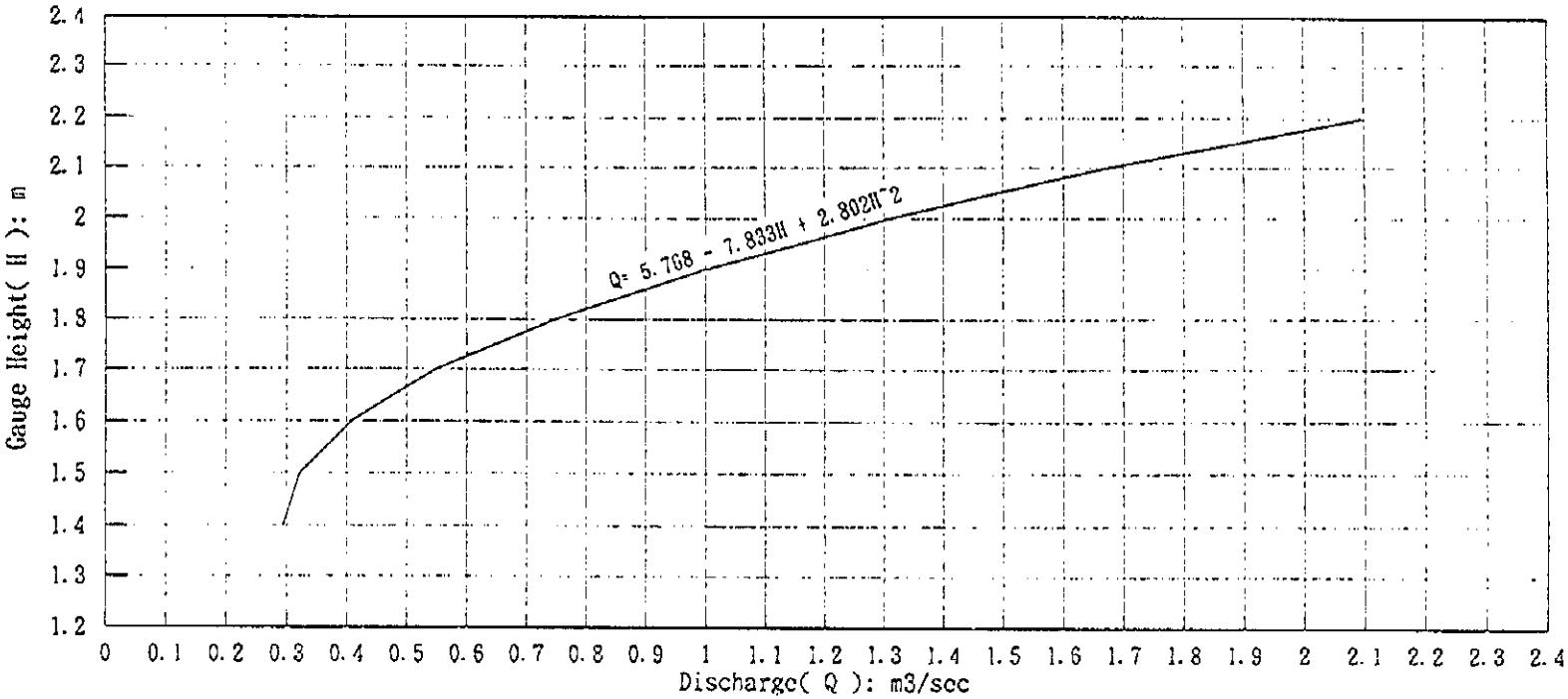



Fig. 7-7 Q-H Curve at Pian Pian ( Ponte ) G. S. for 1991 on the Manuel Jorge River

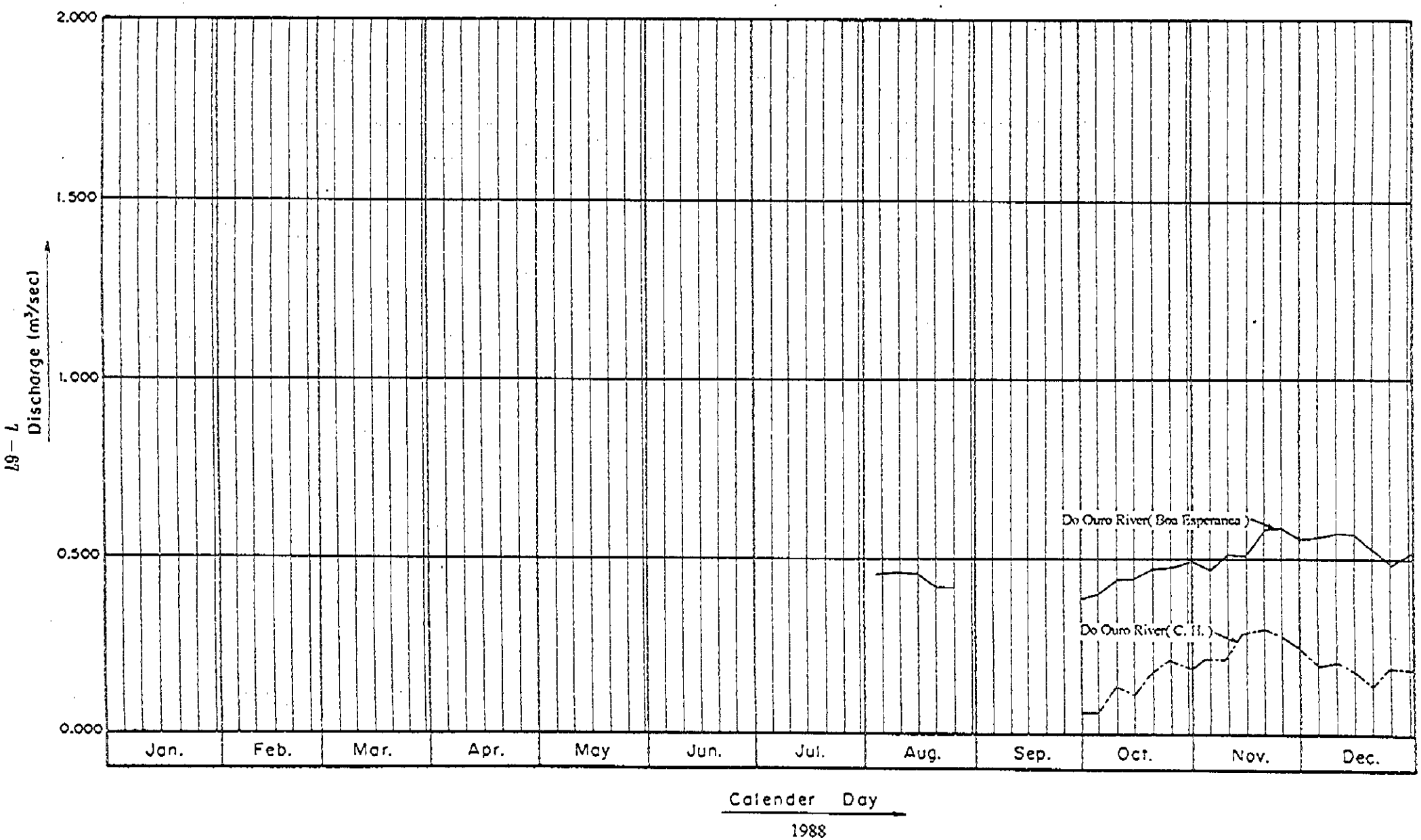



Fig. 7-8 Specific 5-Day Average Discharge of Typical Rivers in Sao Tome ( 1/6 )

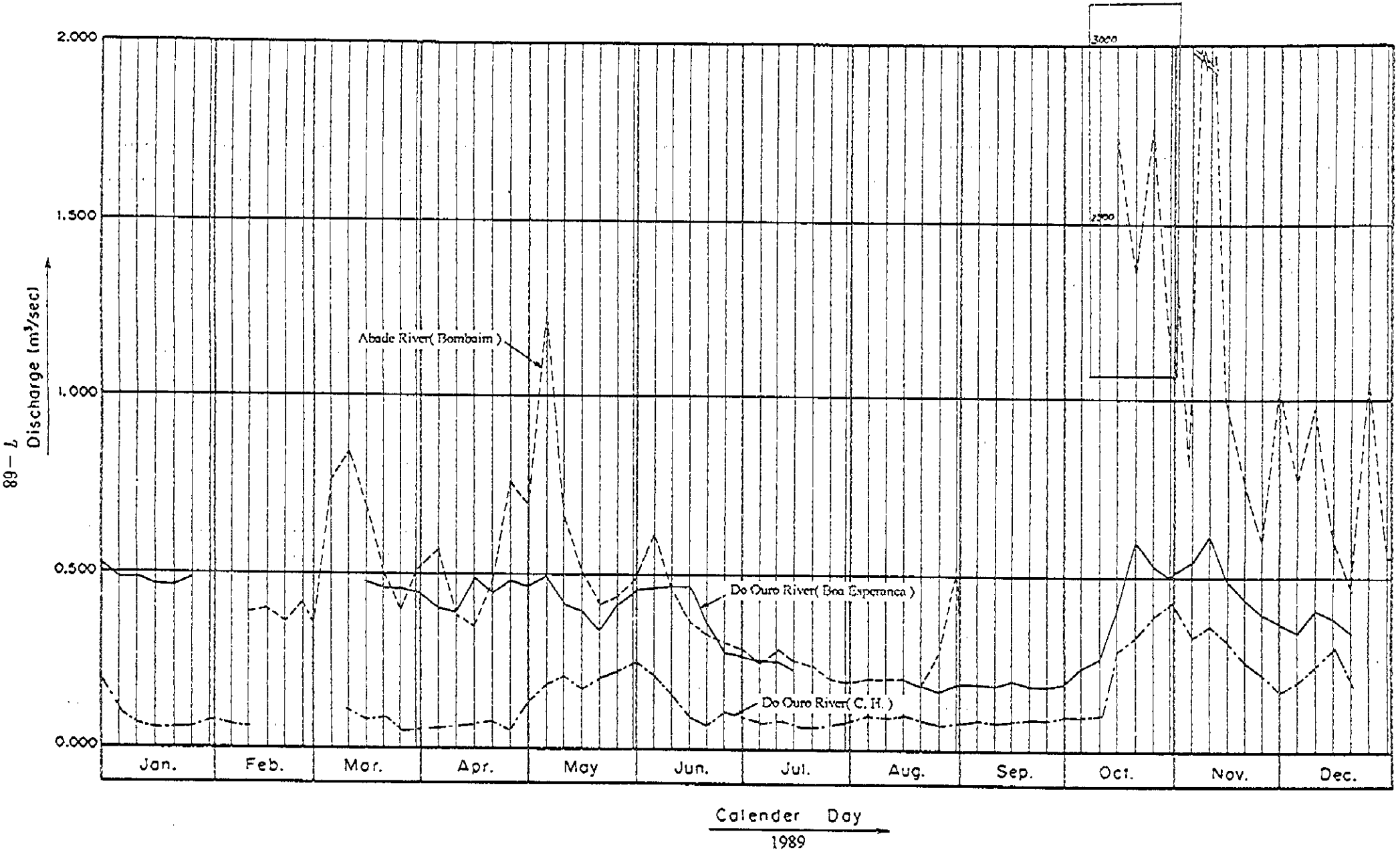



Fig. 7-8 Specific 5-Day Average Discharge of Typical Rivers in Sao Tome ( 2/6 )

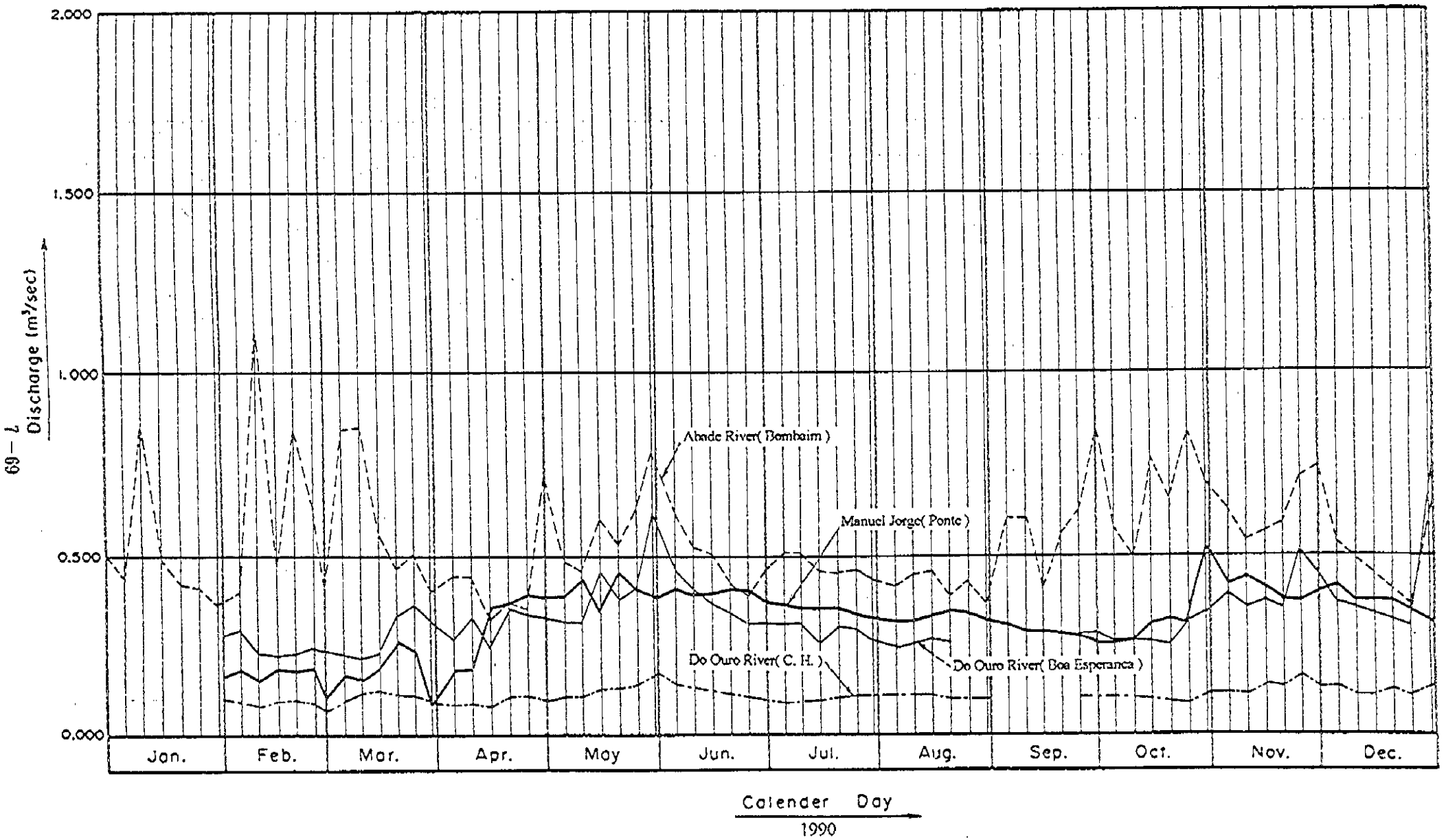



Fig. 7-8 Specific 5-Day Average Discharge of Typical Rivers in Sao Tome ( 3/6 )

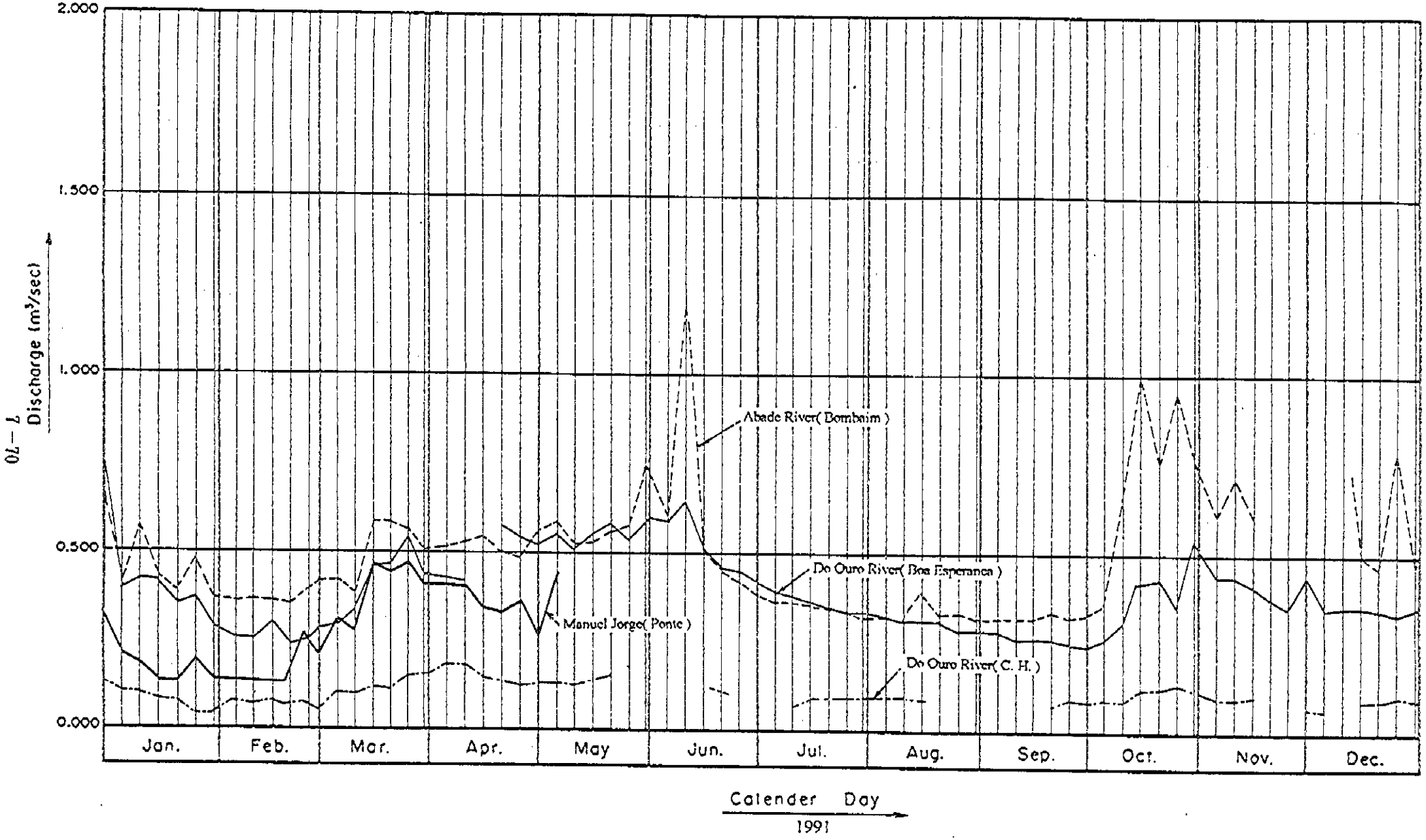



Fig. 7-8 Specific 5-Day Average Discharge of Typical Rivers in Sao Tome ( 4/6 )

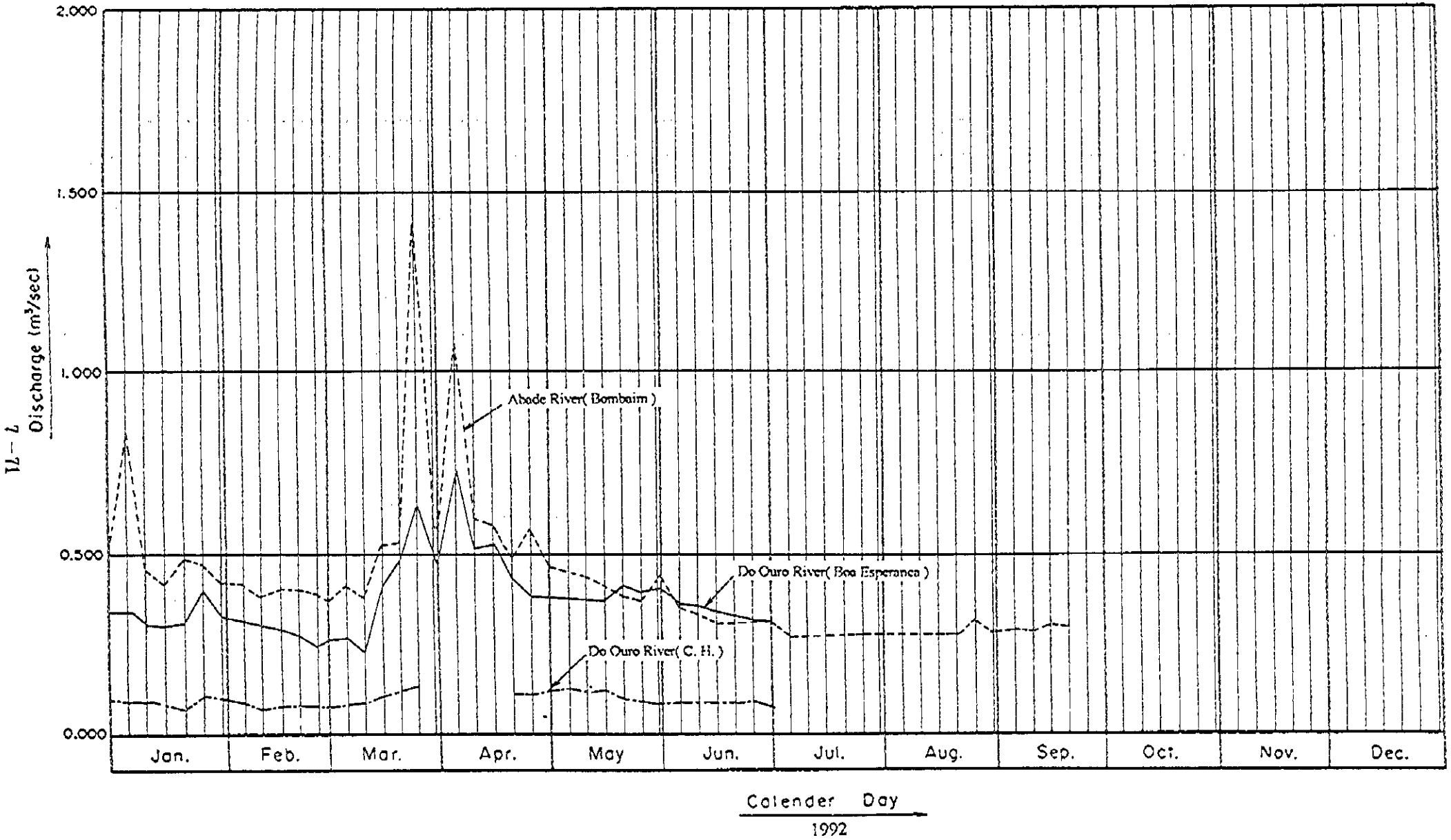



Fig. 7-8 Specific 5-Day Average Discharge of Typical Rivers in Sao Tome ( 5/6 )

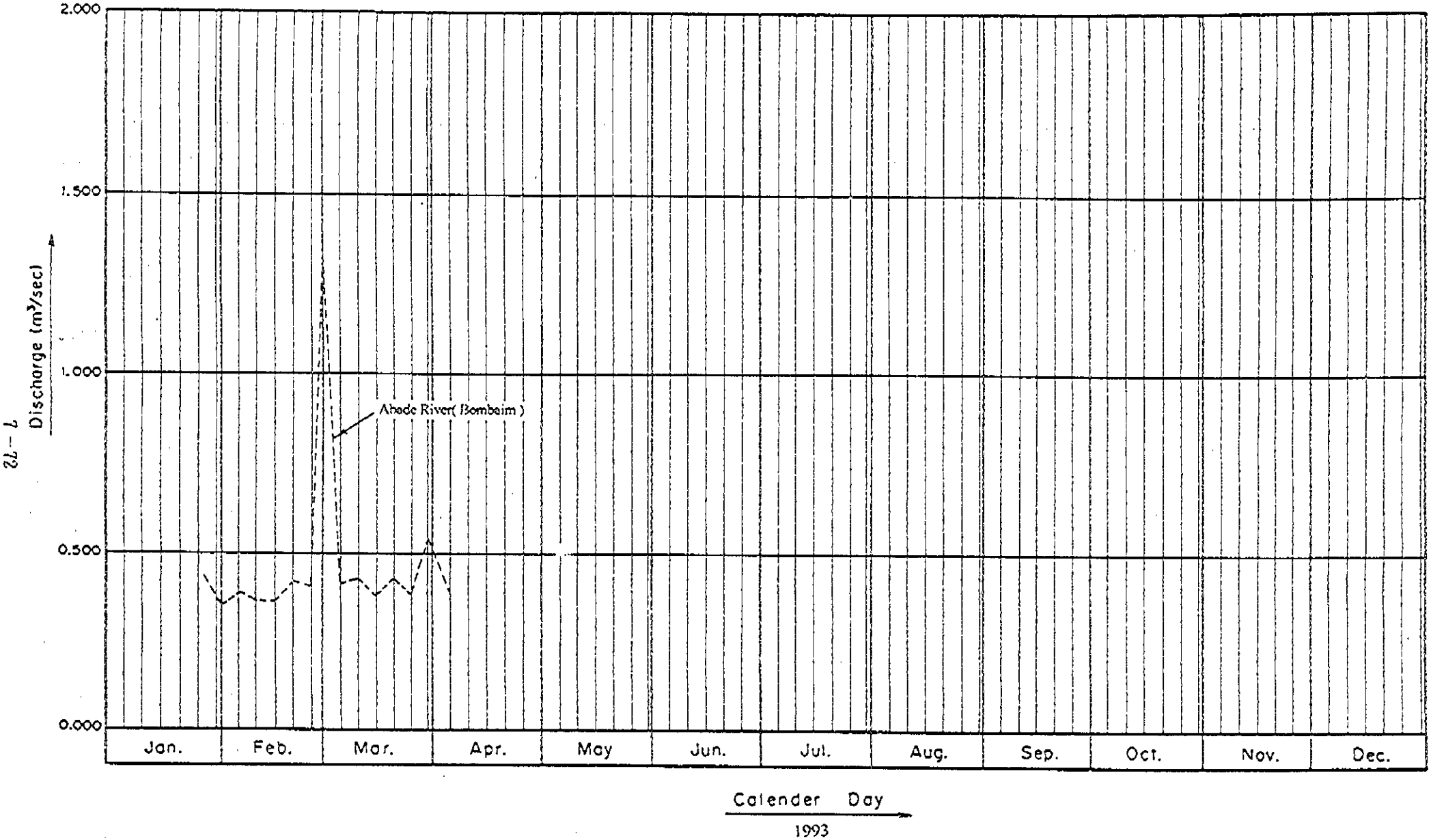



Fig. 7-8 Specific 5-Day Average Discharge of Typical Rivers in Sao Tome ( 6/6 )

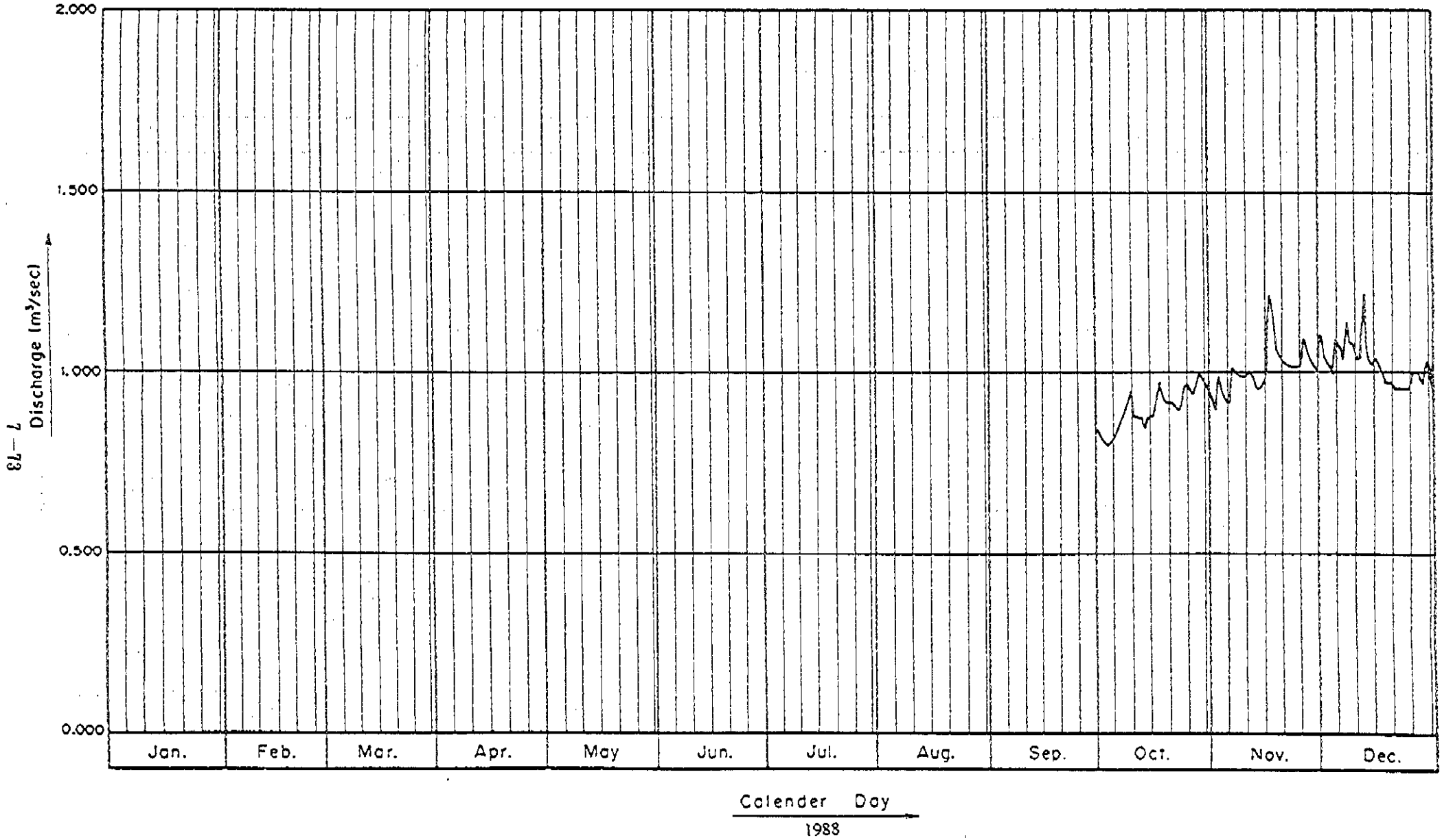



Fig. 7-9 Daily Discharge Curve at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River ( 1/5 )

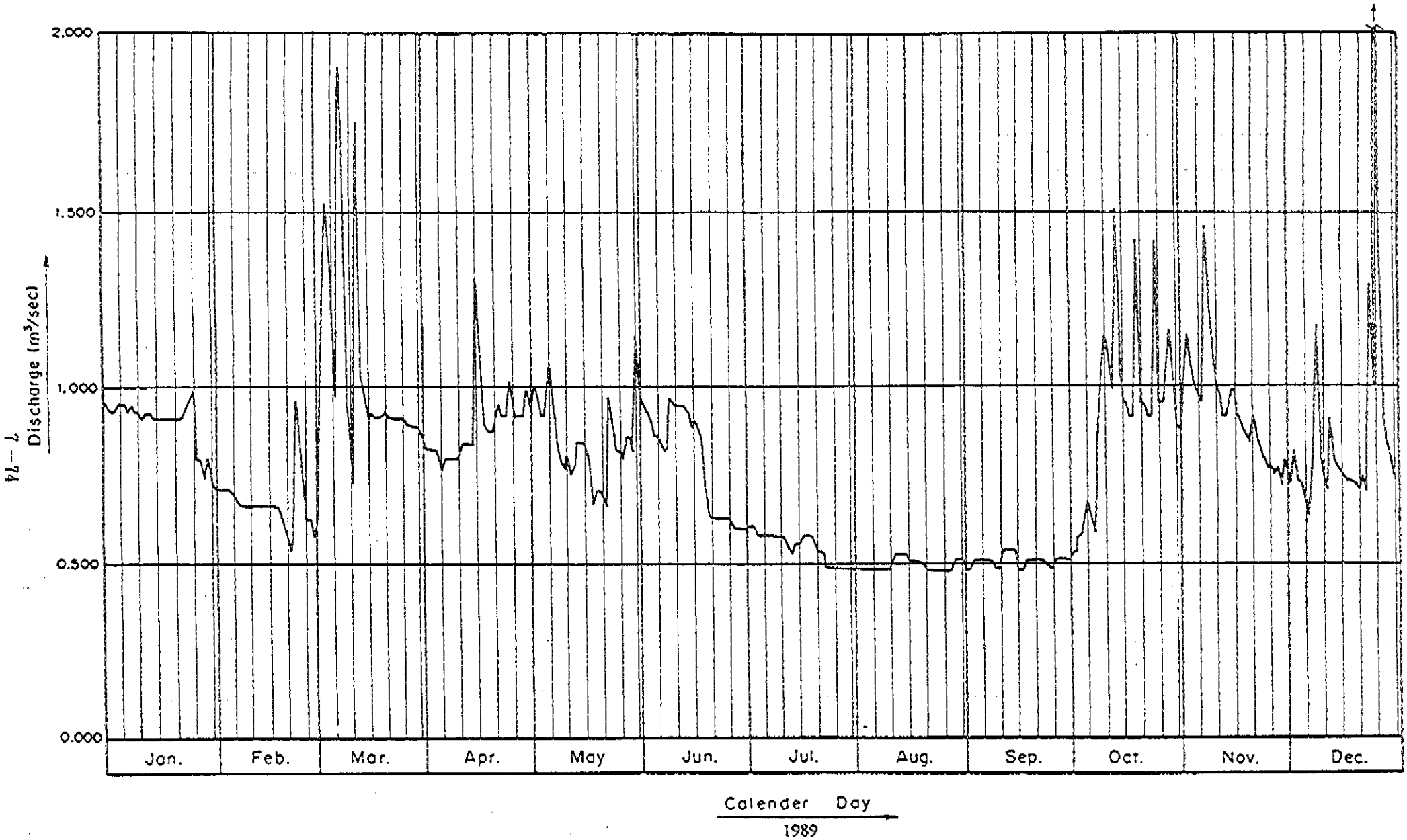



Fig. 7-9 Daily Discharge Curve at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River ( 2/5 )

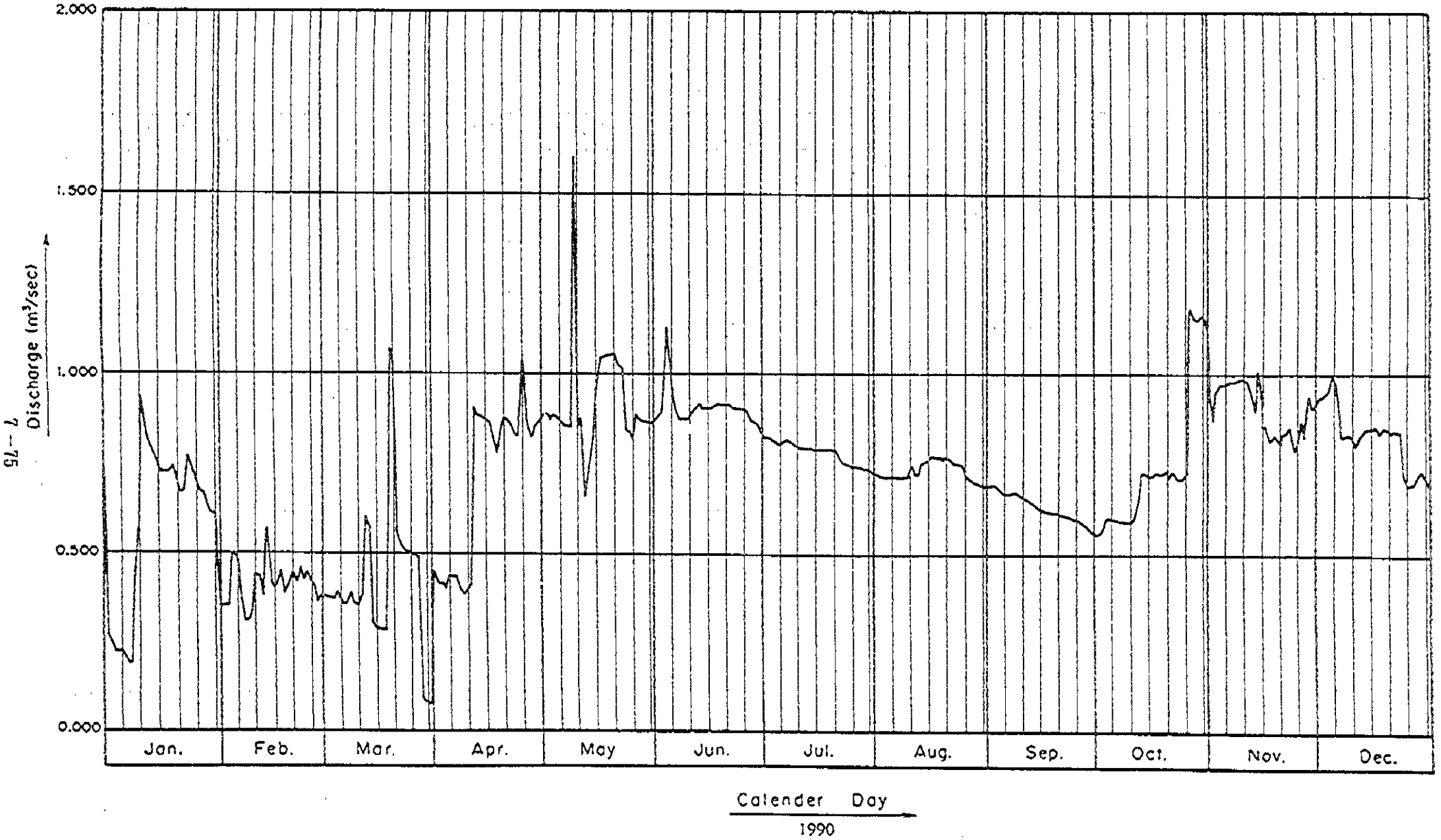



Fig. 7-9 Daily Discharge Curve at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River ( 3/5 )

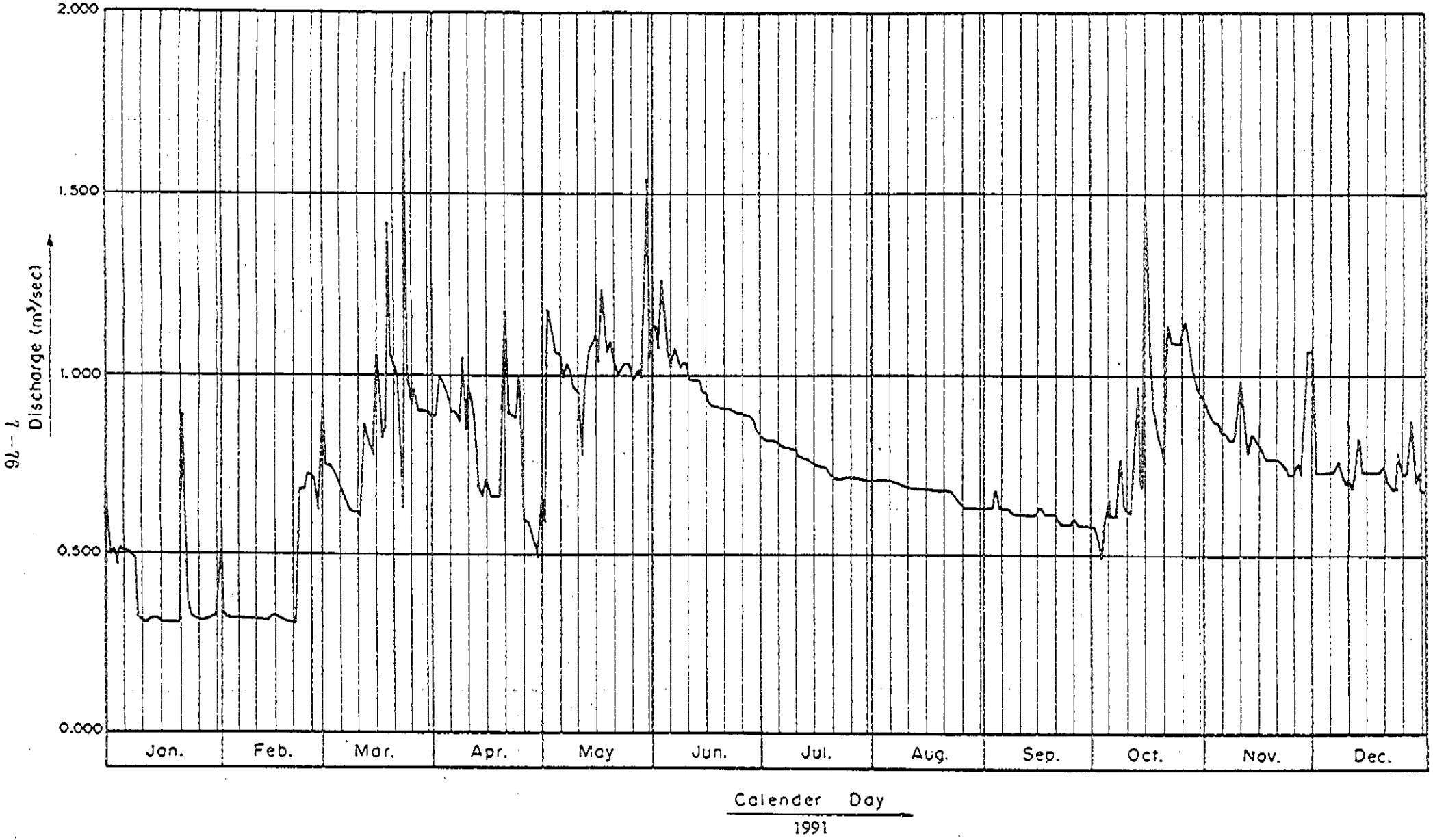



Fig. 7-9 Daily Discharge Curve at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River ( 4/5 )

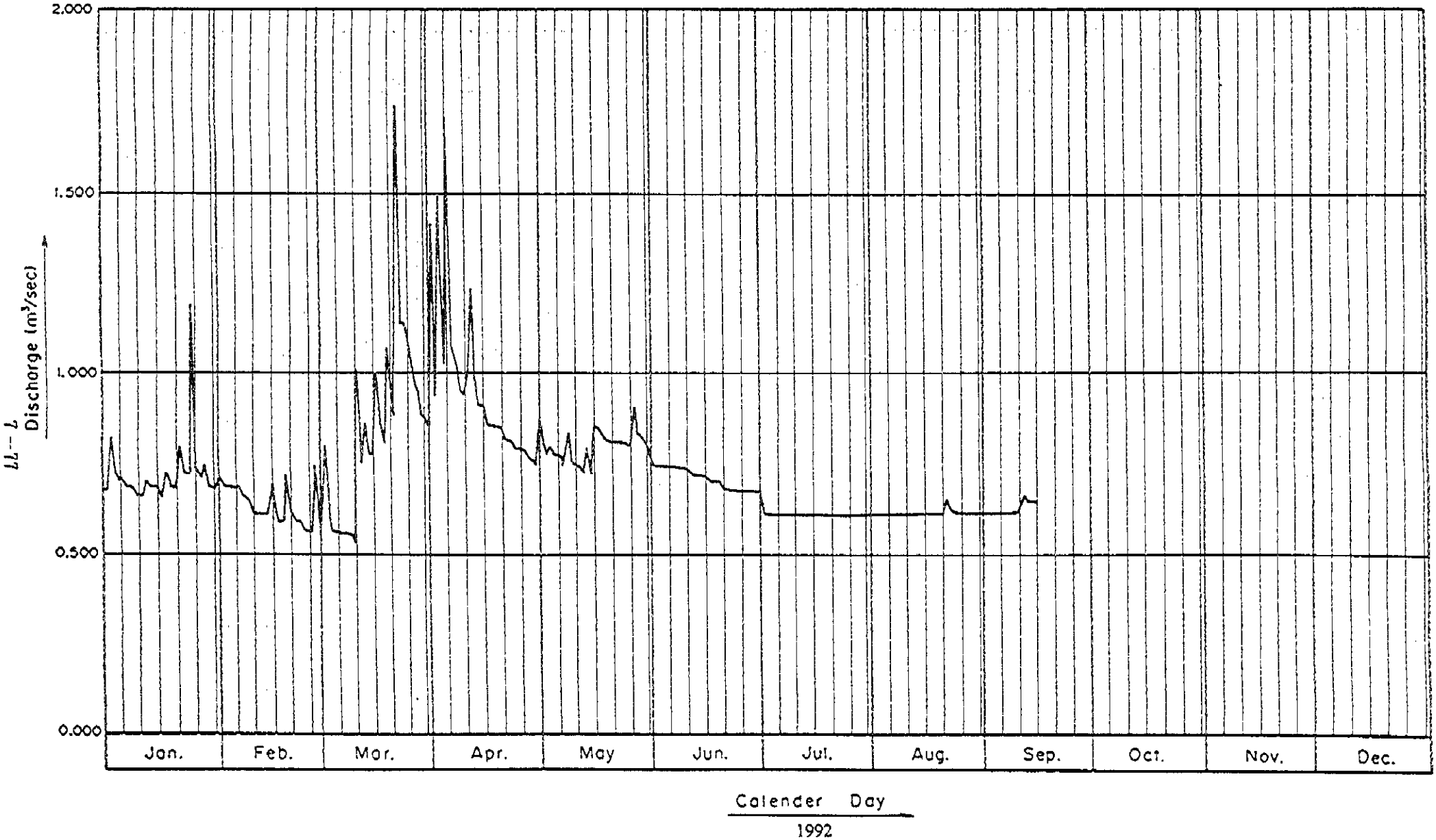



Fig. 7-9 Daily Discharge Curve at Pian Pian ( Ponte ) Gauging Station on the Manuel Jorge River ( 5/5 )

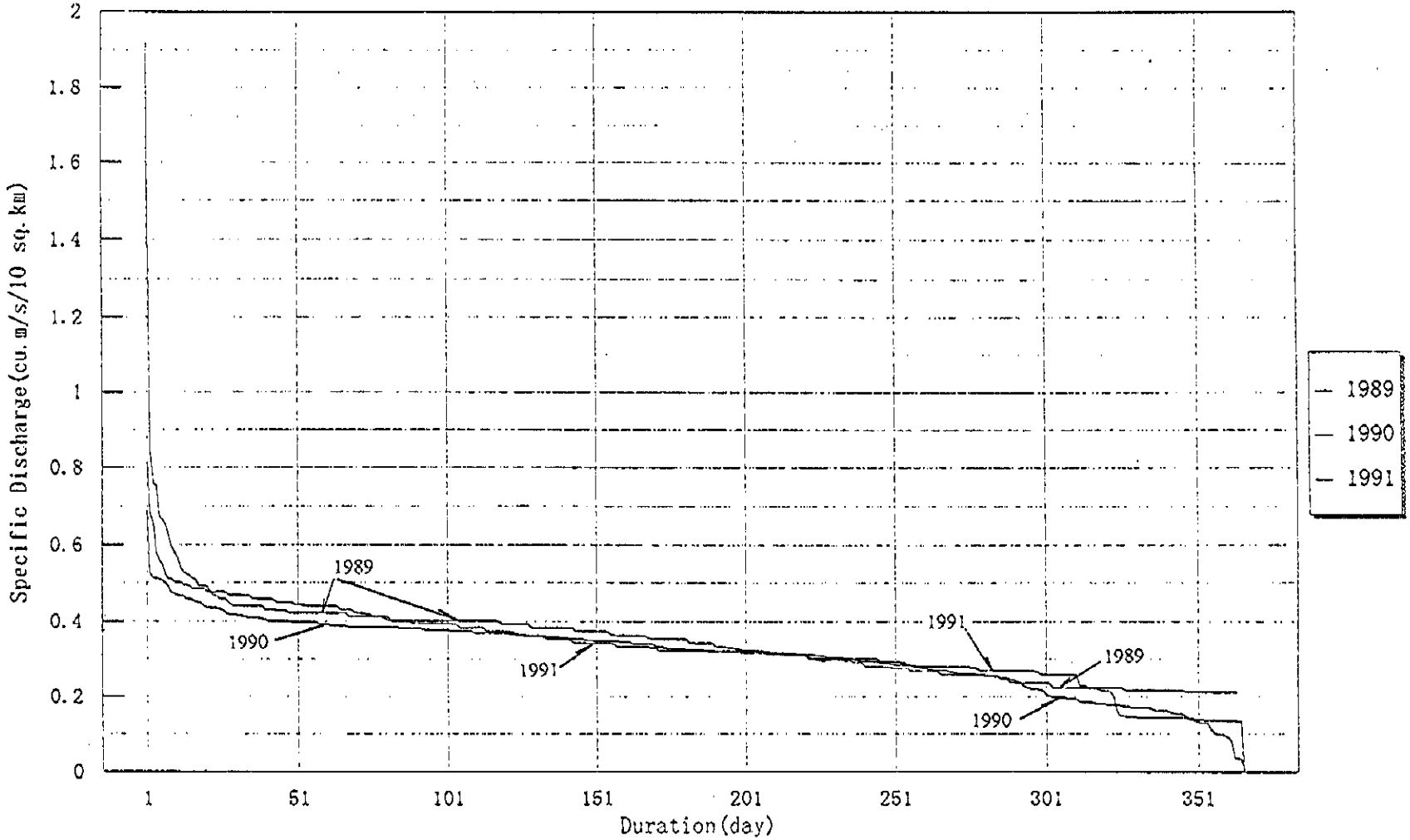



**Fig. 7-10 Duration Curve of Specific Daily Discharge at Pian-Pian G.S.on the Manuel Jorge River**
**Year:1989-1991 (1/4)**

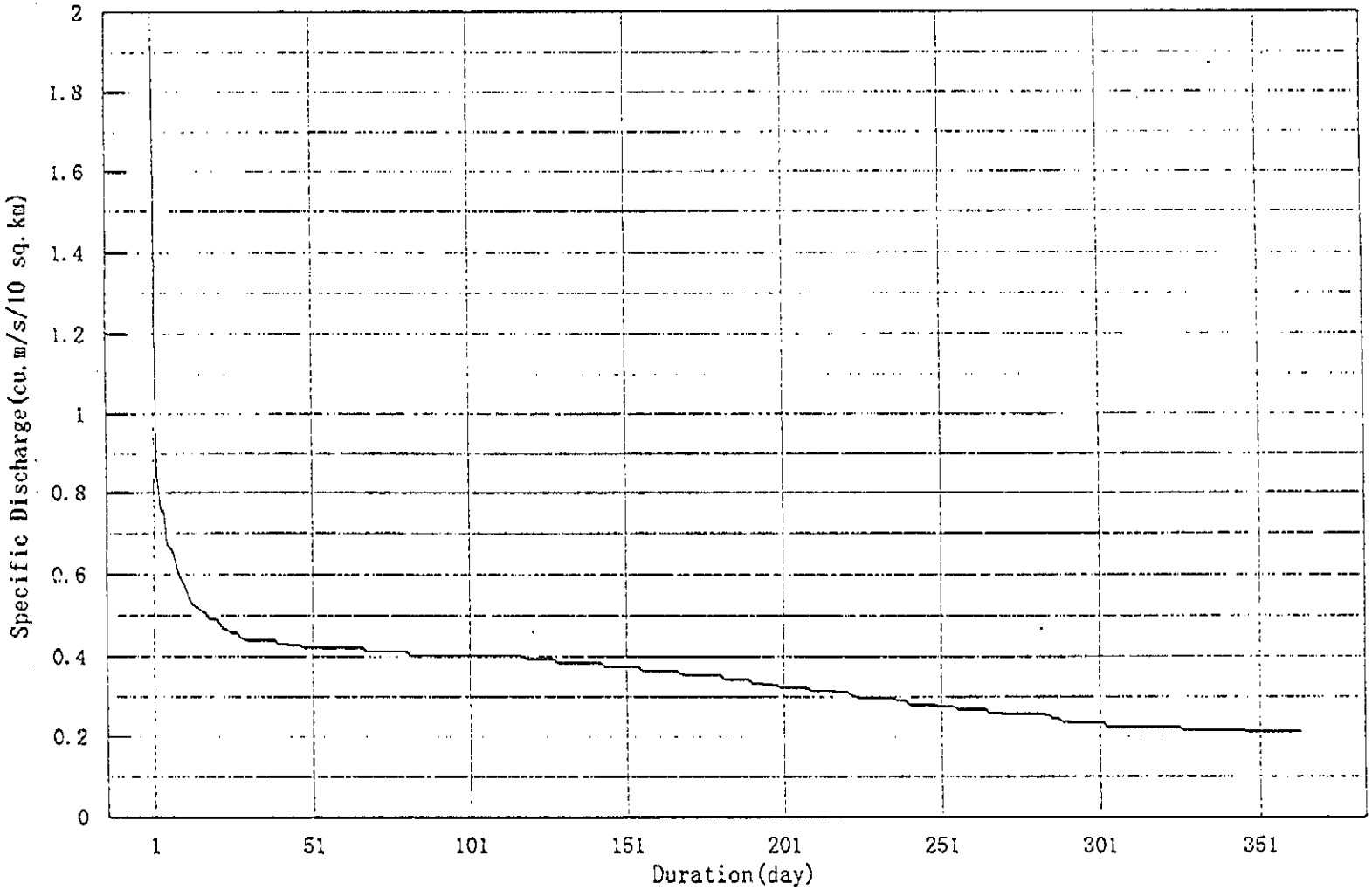



Fig. 7-10 Duration Curve of Specific Daily Discharge at Pian-Pian G.S.on the Manuel Jorge River
Year:1989 (2/4)

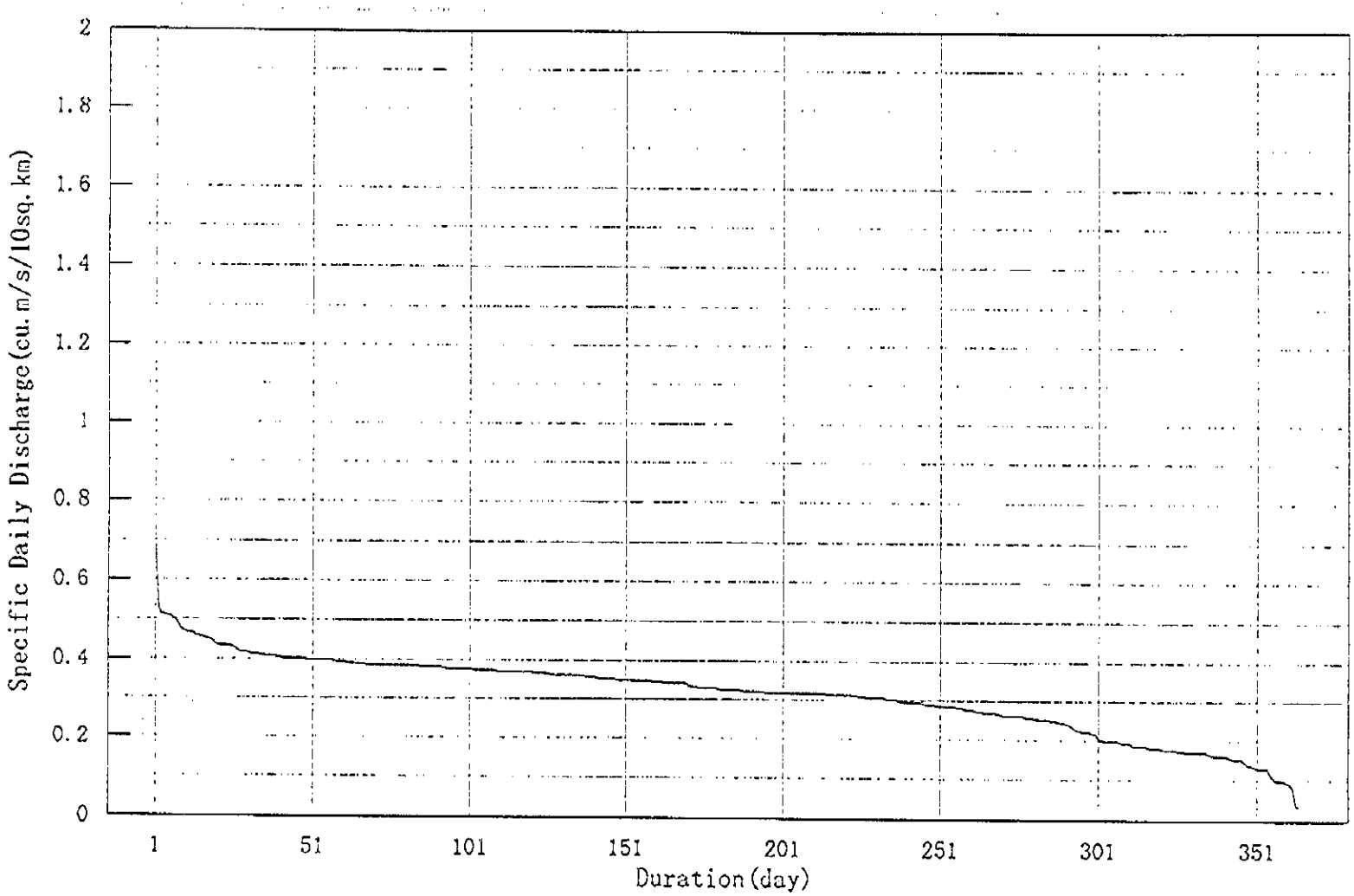



Fig. 7-10 Duration Curve of Specific Daily Discharge at Pian-Pian G.S. on the Manuel Jorge River

Year:1990

(3/4)

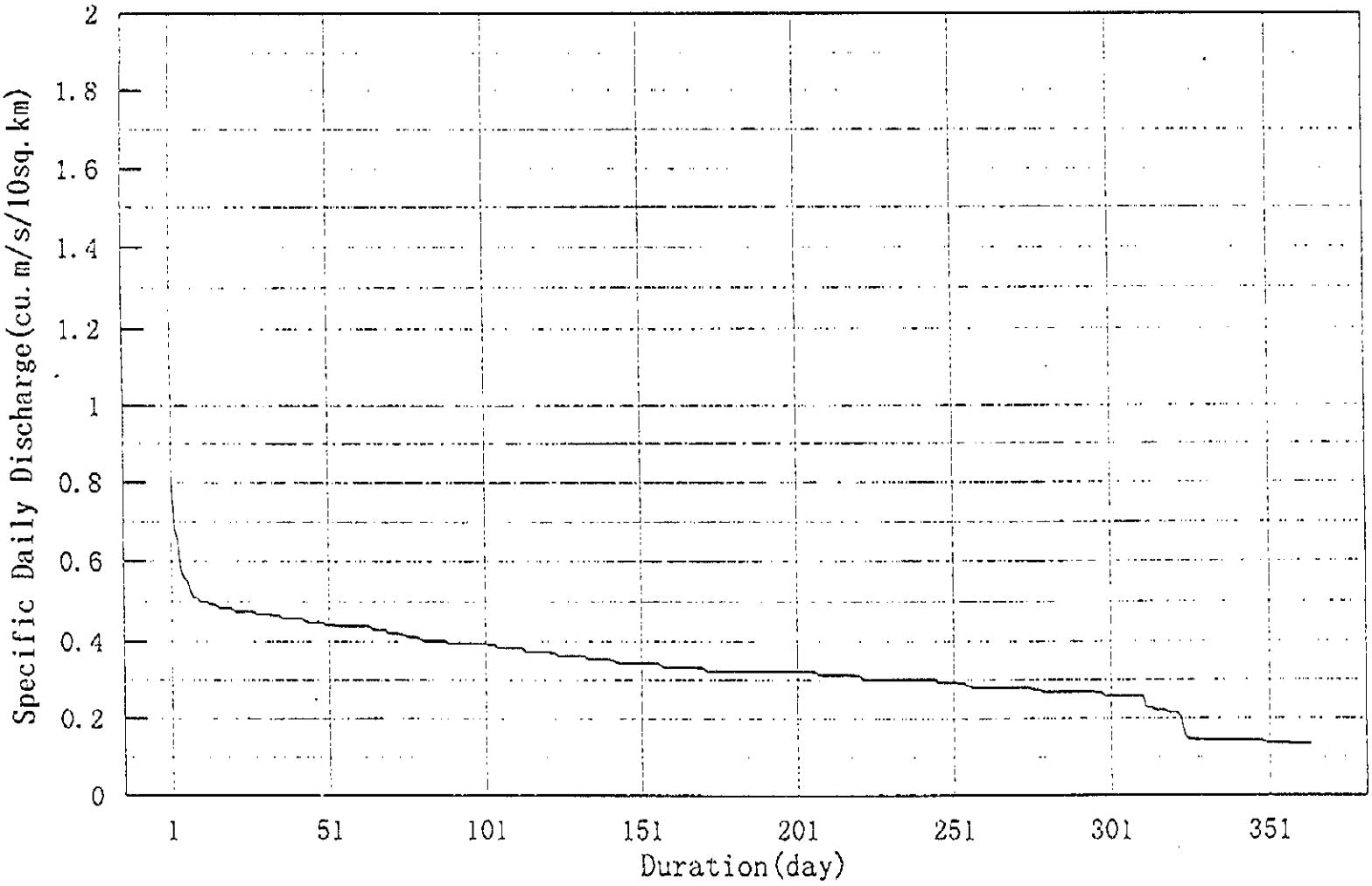



Fig. 7-10 Duration Curve of Specific Daily Discharge at Pian-Pian G.S. on the Manuel Jorge River
Year:1991 (4/4)