

TABLE 8.1 LIST OF CONVERSION FACTORS

| Type of goods                   | Conversion Factor |         |          |
|---------------------------------|-------------------|---------|----------|
|                                 | Imports           | Exports | Combined |
| Tradeable goods                 |                   |         |          |
| 1. Petroleum (refined)          | 0.47              | 1.13    | 0.67     |
| 2. Petroleum (crude oil)        | 0.84              | 1.13    | 0.86     |
| 3. Construction material        | 0.82              | 1.12    | 0.88     |
| 4. Investment goods             | 0.82              | 1.12    | 0.85     |
| Non-tradeable goods/<br>service |                   |         |          |
| 5. Construction                 | -                 | -       | 0.77     |
| 6. Government services          | -                 | -       | 0.88     |

Source : National Parameters for Project Appraisal  
Malaysian Data (EPU) 1977

Table 8.2 Economic Construction Cost of the Medamit-2

| Work Item                           | Financial Cost | Economic Cost | Ratio of E/F (%) |
|-------------------------------------|----------------|---------------|------------------|
| 1. Preparatory Works                | 2,326,000      | 1,699,140     | 73               |
| 2. Civil Works                      |                |               |                  |
| 2.1 River diversion                 | 911,070        | 698,540       | 77               |
| 2.2 Intake dam                      | 3,894,650      | 3,022,090     | 78               |
| 2.3 Headrace tunnel                 | 18,464,950     | 14,698,080    | 80               |
| 2.4 Surge tank                      | 1,452,330      | 1,148,550     | 79               |
| 2.5 Penstock line                   | 1,684,680      | 1,323,500     | 79               |
| 2.6 Power house                     | 2,112,670      | 1,658,000     | 78               |
| 2.7 Tailrace                        | 332,020        | 256,060       | 77               |
| 2.8 Drainage channel                | 243,800        | 188,040       | 77               |
| Total of 2                          | 29,096,170     | 22,992,860    | 79               |
| 3. Metal Works                      | 2,990,800      | 2,633,920     | 88               |
| 4. Generating Equipments            | 5,543,000      | 5,406,350     | 98               |
| 5. Transmission Line and Substation | 4,625,760      | 4,401,020     | 95               |
| 6. Land Acquisition                 | -              | -             |                  |
| Direct Cost                         | 44,581,670     | 37,133,290    | 83               |
| 7. Engineering Service              | 4,458,170      | 4,458,170     | 100              |
| 8. Administration                   | 2,229,080      | 1,783,260     | 80               |
| 9. Physical Contingency             | 7,690,340      | 6,506,210     | 85               |
| Total Cost                          | 58,959,260     | 49,880,930    | 85               |

Note: Ratio of E/F indicates the conversion factor from financial to economic cost.

Table 8.3 Installation Programmes with the Medamit-2

(Unit: MW)

| Year | Installation year of the Medamit-2 |       |        |       |        |       |        |       |
|------|------------------------------------|-------|--------|-------|--------|-------|--------|-------|
|      | 1996                               |       | 1997   |       | 1998   |       | 1999   |       |
|      | Diesel                             | Hydro | Diesel | Hydro | Diesel | Hydro | Diesel | Hydro |
| 1988 | 1.60                               |       | 1.60   |       | 1.60   |       | 1.60   |       |
| 1989 |                                    |       |        |       |        |       |        |       |
| 1990 |                                    |       |        |       |        |       |        |       |
| 1991 |                                    |       |        |       |        |       |        |       |
| 1992 | 1.00                               |       | 1.00   |       | 1.00   |       | 1.00   |       |
| 1993 | 1.00                               |       | 1.00   |       | 1.00   |       | 1.00   |       |
| 1994 | 1.00                               |       | 1.00   |       | 1.00   |       | 1.00   |       |
| 1995 |                                    |       |        |       |        |       |        |       |
| 1996 |                                    | 5.10  | 1.00   |       | 1.00   |       | 1.00   |       |
| 1997 |                                    |       |        | 5.10  |        |       |        |       |
| 1998 |                                    |       |        |       | 5.10   |       | 1.00   |       |
| 1999 |                                    |       |        |       |        |       |        | 5.10  |
| 2000 |                                    |       |        |       |        |       |        |       |
| 2001 | 2.00                               |       | 1.00   |       | 1.00   |       |        |       |
| 2002 |                                    |       |        |       |        |       |        |       |
| 2003 | 2.00                               |       | 2.00   |       | 2.00   |       | 2.00   |       |
| 2004 |                                    |       |        |       |        |       |        |       |
| 2005 | 1.00                               |       | 1.00   |       | 1.00   |       | 1.00   |       |
| 2006 |                                    |       |        |       |        |       |        |       |
| 2007 | 1.00                               |       | 1.00   |       | 1.00   |       | 1.00   |       |
| 2008 | 2.00                               |       | 2.00   |       | 2.00   |       | 2.00   |       |
| 2009 | 2.00                               |       | 2.00   |       | 2.00   |       | 2.00   |       |
| 2010 | 1.00                               |       | 1.00   |       | 1.00   |       | 1.00   |       |

Table 8.4 Cash Flow of Benefits and Costs (1/2)

Unit: Million M\$

| Year | Benefit Streams |        |       |        | Cost Streams |       |       |        |
|------|-----------------|--------|-------|--------|--------------|-------|-------|--------|
|      | Capital         | Fuel   | O & M | Total  | Capital      | Fuel  | O & M | Total  |
| 1987 | 3.672           | 1.307  | 0.641 | 5.620  | 3.672        | 1.307 | 0.641 | 5.620  |
| 1988 | -               | 1.456  | 0.807 | 2.263  | -            | 1.456 | 0.807 | 2.263  |
| 1989 | -               | 1.605  | 0.848 | 2.453  | -            | 1.605 | 0.848 | 2.453  |
| 1990 | 0.765           | 1.859  | 0.889 | 3.513  | 0.765        | 1.859 | 0.889 | 3.513  |
| 1991 | 3.060           | 2.133  | 0.887 | 6.080  | 3.788        | 2.133 | 0.887 | 6.808  |
| 1992 | 3.060           | 2.444  | 0.964 | 6.468  | 11.295       | 2.444 | 0.964 | 14.703 |
| 1993 | 2.295           | 2.775  | 1.093 | 6.163  | 15.020       | 2.775 | 1.093 | 18.888 |
| 1994 | 0.765           | 3.124  | 1.187 | 5.076  | 17.438       | 3.124 | 1.187 | 21.749 |
| 1995 | 3.060           | 3.492  | 1.238 | 7.789  | 10.754       | 3.492 | 1.238 | 15.483 |
| 1996 | 2.295           | 4.036  | 1.354 | 7.686  | -            | 0.428 | 0.788 | 1.216  |
| 1997 | 0.765           | 4.637  | 1.443 | 6.845  | -            | 0.677 | 0.850 | 1.527  |
| 1998 | 2.295           | 5.280  | 1.500 | 9.075  | -            | 0.987 | 0.926 | 1.913  |
| 1999 | 1.530           | 5.964  | 1.636 | 9.129  | 1.530        | 1.356 | 1.004 | 3.890  |
| 2000 | 4.590           | 6.690  | 1.693 | 12.927 | 4.590        | 1.777 | 1.084 | 7.451  |
| 2001 | 2.295           | 7.101  | 1.830 | 11.226 | 1.530        | 2.149 | 1.170 | 4.849  |
| 2002 | 6.885           | 7.547  | 1.897 | 16.329 | 4.590        | 2.551 | 1.253 | 8.394  |
| 2003 | 1.530           | 7.993  | 2.074 | 11.597 | 0.765        | 2.962 | 1.343 | 5.071  |
| 2004 | 4.590           | 8.439  | 2.142 | 15.171 | 2.295        | 3.380 | 1.437 | 7.113  |
| 2005 | 1.530           | 8.885  | 2.366 | 12.781 | 0.765        | 3.805 | 1.521 | 6.091  |
| 2006 | 6.120           | 9.392  | 2.443 | 17.955 | 3.825        | 4.293 | 1.628 | 9.747  |
| 2007 | 5.355           | 9.959  | 2.608 | 17.922 | 6.120        | 4.847 | 1.754 | 12.721 |
| 2008 | 3.060           | 10.527 | 2.772 | 16.359 | 5.355        | 5.409 | 1.887 | 12.651 |
| 2009 | 2.984           | 11.095 | 2.858 | 16.247 | 2.295        | 5.976 | 2.030 | 10.301 |
| 2010 | 2.754           | 11.662 | 3.022 | 14.684 | -            | 6.544 | 2.172 | 8.717  |
| 2011 | 2.066           | 11.662 | 3.022 | 16.750 | -            | 6.544 | 2.172 | 8.717  |
| 2012 | 0.688           | 11.662 | 3.022 | 15.373 | -            | 6.544 | 2.172 | 8.717  |
| 2013 | 2.066           | 11.662 | 3.022 | 16.750 | -            | 6.544 | 2.172 | 8.717  |
| 2014 | 1.377           | 11.662 | 3.022 | 16.061 | 1.377        | 6.544 | 2.172 | 10.094 |
| 2015 | 4.131           | 11.662 | 3.022 | 18.815 | 4.131        | 6.544 | 2.172 | 12.848 |

Table 8.4 Cash Flow of Benefits and Costs (2/2)

(Unit: Million M\$)

| Year | Benefit Streams |        |       |        | Cost Streams |       |       |        |
|------|-----------------|--------|-------|--------|--------------|-------|-------|--------|
|      | Capital         | Fuel   | O & M | Total  | Capital      | Fuel  | O & M | Total  |
| 2016 | 2.066           | 11.622 | 3.022 | 16.750 | 1.377        | 6.544 | 2.172 | 10.094 |
| 2017 | 6.197           | 11.662 | 3.022 | 20.881 | 4.131        | 6.544 | 2.172 | 12.848 |
| 2018 | 1.377           | 11.662 | 3.022 | 16.061 | 0.688        | 6.544 | 2.172 | 9.405  |
| 2019 | 4.131           | 11.662 | 3.022 | 18.815 | 2.066        | 6.544 | 2.172 | 10.782 |
| 2020 | 1.377           | 11.662 | 3.022 | 16.061 | 0.688        | 6.544 | 2.172 | 9.405  |
| 2021 | 5.508           | 11.662 | 3.022 | 20.192 | 3.442        | 6.544 | 2.172 | 12.159 |
| 2022 | 4.819           | 11.662 | 3.022 | 19.504 | 5.508        | 6.544 | 2.172 | 14.225 |
| 2023 | 2.754           | 11.662 | 3.022 | 17.438 | 4.819        | 6.544 | 2.172 | 13.536 |
| 2024 | 2.754           | 11.662 | 3.022 | 17.438 | 2.066        | 6.544 | 2.172 | 10.782 |
| 2025 | 2.754           | 11.662 | 3.022 | 17.438 | -            | 6.544 | 2.172 | 8.717  |
| 2026 | 2.066           | 11.662 | 3.022 | 16.750 | -            | 6.544 | 2.172 | 8.717  |
| 2027 | 0.688           | 11.662 | 3.022 | 15.373 | -            | 6.544 | 2.172 | 8.717  |
| 2028 | 2.066           | 11.662 | 3.022 | 16.750 | -            | 6.544 | 2.172 | 8.717  |
| 2029 | 1.377           | 11.662 | 3.022 | 16.061 | 1.377        | 6.544 | 2.172 | 10.094 |
| 2030 | 4.131           | 11.662 | 3.022 | 18.815 | 4.131        | 6.544 | 2.172 | 12.848 |
| 2031 | 2.066           | 11.662 | 3.022 | 16.750 | 1.377        | 6.544 | 2.172 | 10.094 |
| 2032 | 6.197           | 11.662 | 3.022 | 20.881 | 4.131        | 6.544 | 2.172 | 12.848 |
| 2033 | 1.377           | 11.662 | 3.022 | 16.061 | 0.688        | 6.544 | 2.172 | 9.405  |
| 2034 | 4.131           | 11.662 | 3.022 | 18.815 | 2.066        | 6.544 | 2.172 | 10.782 |
| 2035 | -               | 11.662 | 3.022 | 14.684 | -            | 6.544 | 2.172 | 8.717  |
| 2036 | -               | 11.662 | 3.022 | 14.684 | -            | 6.544 | 2.172 | 8.717  |

Table 8.5 Financial Performance of SESCO in the Past and the Year of 1995

| Item                                    | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1995  |
|---|------|------|------|------|------|------|------|------|------|-------|
| Energy sales (GWh)                      | 223  | 275  | 305  | 344  | 383  | 445  | 474  | 535  | 569  | 1,342 |
| Revenue (M\$10 <sup>6</sup> )           | 47   | 57   | 71   | 101  | 112  | 132  | 140  | 159  | 161  | 375   |
| Tariff (M\$/kWh)                        | 0.20 | 0.21 | 0.23 | 0.29 | 0.29 | 0.29 | 0.29 | 0.30 | 0.28 | 0.28  |
| Expenses (M\$10 <sup>6</sup> )          | 33   | 38   | 55   | 79   | 89   | 97   | 103  | 108  | 92   | 220   |
| Net income (M\$10 <sup>6</sup> )        | 14   | 19   | 16   | 22   | 23   | 35   | 37   | 51   | 69   | 155   |
| Fixed assets (M\$10 <sup>6</sup> )      | 168  | 176  | 191  | 210  | 239  | 305  | 326  | 825  | 867  | 2,294 |
| Acc. Depreciation (M\$10 <sup>6</sup> ) | 50   | 58   | 66   | 76   | 86   | 100  | 117  | 144  | 173  | 693   |
| Net assets (M\$10 <sup>6</sup> )        | 118  | 118  | 125  | 134  | 153  | 205  | 209  | 681  | 694  | 1,601 |
| ROR (%)                                 | 12   | 16   | 13   | 16   | 15   | 17   | 18   | 7    | 10   | 9.7   |
| Peak demand (MW)                        | 61   | 69   | 74   | 84   | 101  | 107  | 116  | 133  | 141  | 331   |

Note: Acc. Depreciation means accumulated depreciation  
 Net fixed assets is equal to fixed assets minus accumulated depreciation.

ROR is expressed by the ratio of net income to net fixed assets on annual basis.

Table 8.6 Financial Cash Flow of the Medamit-2

| No | Year | Cost       |           | Revenue   |
|----|------|------------|-----------|-----------|
|    |      | Foreign    | Local     |           |
| 1  | 1987 |            |           |           |
| 2  | 1988 |            |           |           |
| 3  | 1989 |            |           |           |
| 4  | 1990 |            |           |           |
| 5  | 1991 | 359,560    | 691,460   |           |
| 6  | 1992 | 7,114,090  | 5,684,660 |           |
| 7  | 1993 | 10,041,390 | 6,374,320 |           |
| 8  | 1994 | 15,028,460 | 7,121,110 |           |
| 9  | 1995 | 9,629,360  | 4,058,830 |           |
| 10 | 1996 |            | 480,060   | 6,491,680 |
| 11 | 1997 |            | 480,060   | 6,653,500 |
| 12 | 1998 |            | 480,060   | 6,764,080 |
| 13 | 1999 |            | 480,060   | 6,836,900 |
| 14 | 2000 |            | 480,060   | 6,885,440 |
| 15 | 2001 |            | 480,060   | 6,942,080 |
| 16 | 2002 |            | 480,060   | 7,004,110 |
| 17 | 2003 |            | 480,060   | 7,052,660 |
| 18 | 2004 |            | 480,060   | 7,090,440 |
| 19 | 2005 |            | 480,060   | 7,122,780 |
| 20 | 2006 |            | 480,060   | 7,147,050 |
| 21 | 2007 |            | 480,060   | 7,165,930 |
| 22 | 2008 |            | 480,060   | 7,174,020 |
| 23 | 2009 |            | 480,060   | 7,174,020 |
| 24 | 2010 |            | 480,060   | 7,174,020 |
| .  | .    |            | .         | .         |
| .  | .    |            | .         | .         |
| .  | .    |            | .         | .         |
| 50 | 2036 |            | 480,060   | 7,174,020 |

Table 8.7 Financial Statement

| No | Year | Local Currency Portion |           | Foreign Portion |           | Revenue   | Balance     | Accumulated Balance |
|----|------|------------------------|-----------|-----------------|-----------|-----------|-------------|---------------------|
|    |      | O & M Cost             | Interest  | Repayment       | Interest  |           |             |                     |
| 1  | 1991 |                        | 510,680   |                 | 14,380    |           | -66,060     | - 66,060            |
| 2  | 1992 |                        | 478,210   |                 | 298,950   |           | -777,160    | - 843,220           |
| 3  | 1993 |                        | 956,280   |                 | 700,600   |           | - 1,656,880 | - 2,500,100         |
| 4  | 1994 |                        | 1,490,370 |                 | 1,301,740 |           | - 2,792,110 | - 5,292,210         |
| 5  | 1995 |                        | 1,830,780 |                 | 1,686,910 |           | - 3,517,690 | - 8,809,900         |
| 6  | 1996 | 480,060                |           | 2,348,050       | 1,686,910 | 6,491,680 | 1,976,660   | - 6,833,240         |
| 7  | 1997 | 480,060                |           | 2,348,050       | 1,686,910 | 6,653,500 | 2,138,480   | - 4,694,760         |
| 8  | 1998 | 480,060                |           | 2,348,050       |           | 6,764,080 | 604,740     | - 4,090,020         |
| 9  | 1999 | 480,060                |           | 2,348,050       |           | 6,836,900 | 677,560     | - 3,412,460         |
| 10 | 2000 | 480,060                |           | 2,348,050       |           | 6,885,440 | 726,100     | - 2,686,360         |
| 11 | 2001 | 480,060                |           | 2,348,050       |           | 6,942,080 | 782,740     | - 1,903,620         |
| 12 | 2002 | 480,060                |           | 2,348,050       |           | 7,004,110 | 844,770     | - 1,058,850         |
| 13 | 2003 | 480,060                |           | 2,348,050       |           | 7,052,660 | 893,320     | - 165,540           |
| 14 | 2004 | 480,060                |           | 2,348,050       |           | 7,090,410 | 931,070     | 765,540             |
| 15 | 2005 | 480,060                |           | 2,348,050       |           | 7,122,780 | 963,440     | 1,728,980           |
| 16 | 2006 | 480,060                |           | 2,348,050       |           | 7,147,050 | 987,710     | 2,716,690           |
| 17 | 2007 | 480,060                |           | 2,348,050       |           | 7,165,930 | 1,006,590   | 3,723,280           |
| 18 | 2008 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 4,737,960           |
| 19 | 2009 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 5,752,640           |
| 20 | 2010 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 6,767,320           |
| 21 | 2011 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 7,782,000           |
| 22 | 2012 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 8,796,680           |
| 23 | 2013 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 9,811,360           |
| 24 | 2014 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 10,826,040          |
| 25 | 2015 | 480,060                |           | 2,348,050       |           | 7,174,020 | 1,014,680   | 11,840,720          |



Table 8.8 Financial Statement

( Unit : M\$ )

| No | Year | Cost      | Interest  | Repayment | Revenue   | Balance    | Accumulation |
|----|------|-----------|-----------|-----------|-----------|------------|--------------|
| 1  | 1991 | 691,460   | 14,380    |           |           | -705,840   | -705,840     |
| 2  | 1992 | 5,684,660 | 293,650   |           |           | -5,983,610 | -6,689,450   |
| 3  | 1993 | 6,374,320 | 700,600   |           |           | -7,074,920 | -13,764,370  |
| 4  | 1994 | 7,121,110 | 1,301,740 |           |           | -8,422,850 | -22,187,220  |
| 5  | 1995 | 4,058,830 | 1,686,910 |           | 6,491,680 | -5,745,740 | -27,932,960  |
| 6  | 1996 | 480,060   | 1,686,910 |           | 6,553,500 | 4,324,710  | -23,608,250  |
| 7  | 1997 | 480,060   | 1,686,910 |           | 6,764,080 | 4,486,530  | -19,121,720  |
| 8  | 1998 | 480,060   |           | 3,331,230 | 6,836,900 | 2,952,790  | -16,168,930  |
| 9  | 1999 | 480,060   |           | 3,331,230 | 6,885,440 | 3,025,610  | -13,143,320  |
| 10 | 2000 | 480,060   |           | 3,331,230 | 6,942,080 | 3,074,150  | -10,069,170  |
| 11 | 2001 | 480,060   |           | 3,331,230 | 7,004,110 | 3,130,790  | -6,938,380   |
| 12 | 2002 | 480,060   |           | 3,331,230 | 7,052,660 | 3,192,820  | -3,745,560   |
| 13 | 2003 | 480,060   |           | 3,331,230 | 7,090,410 | 3,241,370  | -504,190     |
| 14 | 2004 | 480,060   |           | 3,331,230 | 7,090,410 | 3,329,120  | 2,774,930    |
| 15 | 2005 | 480,060   |           | 3,331,230 | 7,122,780 | 3,311,490  | 6,086,420    |
| 16 | 2006 | 480,060   |           | 3,331,230 | 7,147,050 | 3,335,760  | 9,422,180    |
| 17 | 2007 | 480,060   |           | 3,331,230 | 7,165,930 | 3,354,640  | 12,776,820   |
| 18 | 2008 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 16,139,550   |
| 19 | 2009 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 19,502,280   |
| 20 | 2010 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 22,865,010   |
| 21 | 2011 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 26,227,740   |
| 22 | 2012 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 29,590,470   |
| 23 | 2013 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 32,953,200   |
| 24 | 2014 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 36,315,930   |
| 25 | 2015 | 480,060   |           | 3,331,230 | 7,174,020 | 3,362,730  | 39,678,660   |

Table 8.9 Financial Statement

| No | Year | Local Currency Portion |           |           | Foreign Portion |           | Revenue    | Balance     | Accumulated Balance |
|----|------|------------------------|-----------|-----------|-----------------|-----------|------------|-------------|---------------------|
|    |      | O & M Cost             | Interest  | Repayment | Interest        | Repayment |            |             |                     |
| 1  | 1991 |                        | 51,680    |           | 28,760          |           | -80,440    | -80,440     |                     |
| 2  | 1992 |                        | 478,210   |           | 597,890         |           | -1,076,100 | -1,156,540  |                     |
| 3  | 1993 |                        | 956,280   |           | 1,401,190       |           | -2,357,470 | -3,514,010  |                     |
| 4  | 1994 |                        | 1,490,370 |           | 2,603,480       |           | -4,093,850 | -7,607,860  |                     |
| 5  | 1995 |                        | 1,830,780 |           | 3,373,840       |           | -5,204,620 | -12,812,480 |                     |
| 6  | 1996 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -1,263,500 | -14,075,980 |                     |
| 7  | 1997 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -1,101,680 | -15,177,660 |                     |
| 8  | 1998 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -991,100   | -16,168,760 |                     |
| 9  | 1999 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -918,280   | -17,087,040 |                     |
| 10 | 2000 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -869,740   | -17,956,780 |                     |
| 11 | 2001 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -813,100   | -18,769,880 |                     |
| 12 | 2002 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -751,070   | -19,520,950 |                     |
| 13 | 2003 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -702,520   | -20,223,470 |                     |
| 14 | 2004 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -664,770   | -20,888,240 |                     |
| 15 | 2005 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -632,400   | -21,520,640 |                     |
| 16 | 2006 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -608,130   | -22,128,770 |                     |
| 17 | 2007 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -589,250   | -22,718,020 |                     |
| 18 | 2008 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -581,160   | -23,299,180 |                     |
| 19 | 2009 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -581,160   | -23,880,340 |                     |
| 20 | 2010 | 480,060                |           | 2,348,050 |                 | 4,927,070 | -581,160   | -24,461,500 |                     |
| 21 | 2011 | 480,060                |           | 2,348,050 |                 | 4,927,070 | 4,345,910  | -20,115,590 |                     |
| 22 | 2012 | 480,060                |           | 2,348,050 |                 | 4,927,070 | 4,345,910  | -15,769,680 |                     |
| 23 | 2013 | 480,060                |           | 2,348,050 |                 | 4,927,070 | 4,345,910  | -11,423,770 |                     |
| 24 | 2014 | 480,060                |           | 2,348,050 |                 | 4,927,070 | 4,345,910  | -7,077,860  |                     |
| 25 | 2015 | 480,060                |           | 2,348,050 |                 | 4,927,070 | 4,345,910  | -2,731,950  |                     |

Table 8.10 FINANCIAL STATEMENT OF LIMBANG SYSTEM (ALL DIESEL)

Unit: Million M\$

| Year | Fuel  | O&M  | Depre-<br>ciation | Expense | Revenue |       | Balance |        | Accumula-<br>tion |         |
|------|-------|------|-------------------|---------|---------|-------|---------|--------|-------------------|---------|
|      |       |      |                   |         | I       | II    | I       | II     | I                 | II      |
| 1987 | 1.52  | 0.66 | 0.29              | 2.47    | 3.31    | 3.31  | 0.84    | 0.84   | 0.84              | 0.84    |
| 1988 | 1.91  | 0.84 | 0.29              | 3.04    | 3.70    | 3.70  | 0.66    | 0.66   | 1.50              | 1.50    |
| 1989 | 2.09  | 0.89 | 0.29              | 3.27    | 4.07    | 4.07  | 0.80    | 0.80   | 2.30              | 2.30    |
| 1990 | 2.43  | 0.94 | 0.35              | 3.72    | 4.45    | 4.45  | 0.73    | 0.73   | 3.03              | 3.03    |
| 1991 | 2.79  | 0.95 | 0.60              | 4.34    | 4.87    | 4.87  | 0.53    | 0.53   | 3.56              | 3.56    |
| 1992 | 3.20  | 1.04 | 0.86              | 5.10    | 5.35    | 5.35  | 0.25    | 0.25   | 3.81              | 3.81    |
| 1993 | 3.62  | 1.19 | 1.06              | 5.87    | 5.82    | 5.82  | -0.05   | -0.05  | 3.76              | 3.76    |
| 1994 | 4.08  | 1.30 | 1.13              | 6.51    | 6.29    | 6.29  | -0.22   | -0.22  | 3.54              | 3.54    |
| 1995 | 6.35  | 1.37 | 1.40              | 9.12    | 6.76    | 6.76  | -2.36   | -2.36  | 1.18              | 1.18    |
| 1996 | 7.35  | 1.50 | 1.61              | 10.46   | 7.26    | 7.73  | -3.20   | -2.73  | -2.02             | -1.55   |
| 1997 | 8.44  | 1.60 | 1.68              | 11.72   | 7.80    | 8.12  | -3.92   | -3.60  | -5.94             | -5.15   |
| 1998 | 9.60  | 1.67 | 1.89              | 13.16   | 8.32    | 8.85  | -4.84   | -4.31  | -10.78            | -9.46   |
| 1999 | 10.83 | 1.81 | 2.03              | 14.67   | 8.85    | 9.42  | -5.91   | -5.25  | -16.69            | -14.71  |
| 2000 | 19.45 | 1.88 | 2.45              | 23.78   | 9.38    | 9.98  | -14.40  | -13.80 | -31.09            | -28.51  |
| 2001 | 20.65 | 2.04 | 2.66              | 25.35   | 9.95    | 10.60 | -15.40  | -14.75 | -46.49            | -43.26  |
| 2002 | 21.95 | 2.12 | 3.01              | 27.08   | 10.58   | 11.26 | -16.50  | -15.82 | -62.99            | -59.08  |
| 2003 | 23.23 | 2.31 | 3.15              | 28.69   | 11.21   | 11.93 | -17.48  | -16.76 | -80.47            | -75.84  |
| 2004 | 24.53 | 2.40 | 3.57              | 30.50   | 11.83   | 12.59 | -18.67  | -17.91 | -99.14            | -93.75  |
| 2005 | 25.85 | 2.62 | 3.65              | 32.12   | 12.46   | 13.26 | -19.66  | -18.86 | -118.80           | -112.61 |
| 2006 | 27.30 | 2.72 | 3.96              | 33.98   | 13.16   | 14.02 | -20.82  | -19.96 | -139.62           | -132.57 |
| 2007 | 28.95 | 2.91 | 4.19              | 36.05   | 13.96   | 14.86 | -22.09  | -21.19 | -161.71           | -153.76 |
| 2008 | 30.60 | 3.09 | 4.27              | 37.96   | 14.76   | 15.71 | -23.20  | -22.25 | -184.91           | -176.01 |
| 2009 | 32.25 | 3.19 | 4.47              | 39.91   | 15.56   | 16.56 | -24.35  | -23.35 | -209.26           | -199.36 |
| 2010 | 33.90 | 3.36 | 4.31              | 41.57   | 16.35   | 17.40 | -25.22  | -24.17 | -234.48           | -223.53 |

Remarks: Revenue I is calculated based on present tariff (M\$0.32/kWh).  
Revenue II is calculated based on the tariff of M\$0.34/kWh.

Table 8.11 FINANCIAL STATEMENT OF LIMBANG SYSTEM (ALL DIESEL)

Unit: Million M\$

| Year | Fuel  | O&M  | Depre-<br>ciation | Expense | Revenue |       | Balance |       | Accumula-<br>tion |        |
|------|-------|------|-------------------|---------|---------|-------|---------|-------|-------------------|--------|
|      |       |      |                   |         | I       | II    | I       | II    | I                 | II     |
| 1987 | 1.52  | 0.66 | 0.29              | 2.47    | 3.31    | 3.31  | 0.84    | 0.84  | 0.84              | 0.84   |
| 1988 | 1.91  | 0.84 | 0.29              | 3.04    | 3.70    | 3.70  | 0.66    | 0.66  | 1.50              | 1.50   |
| 1989 | 2.09  | 0.89 | 0.29              | 3.27    | 4.07    | 4.07  | 0.80    | 0.80  | 2.30              | 2.30   |
| 1990 | 2.43  | 0.94 | 0.35              | 3.72    | 4.45    | 4.45  | 0.73    | 0.73  | 3.03              | 3.03   |
| 1991 | 2.79  | 0.95 | 0.60              | 4.34    | 4.87    | 4.87  | 0.53    | 0.53  | 3.56              | 3.56   |
| 1992 | 3.20  | 1.04 | 0.86              | 5.10    | 5.35    | 5.35  | 0.25    | 0.25  | 3.81              | 3.81   |
| 1993 | 3.62  | 1.19 | 1.06              | 5.87    | 5.82    | 5.82  | -0.05   | -0.05 | 3.76              | 3.76   |
| 1994 | 4.08  | 1.30 | 1.13              | 6.51    | 6.29    | 6.29  | -0.22   | -0.22 | 3.54              | 3.54   |
| 1995 | 4.57  | 1.37 | 1.40              | 7.34    | 6.76    | 6.76  | -0.58   | -0.58 | 2.96              | 2.96   |
| 1996 | 5.29  | 1.50 | 1.61              | 8.40    | 7.26    | 7.26  | -1.14   | -0.67 | 1.82              | 2.29   |
| 1997 | 6.08  | 1.60 | 1.68              | 9.36    | 7.80    | 7.80  | -1.56   | -1.24 | 0.26              | 1.05   |
| 1998 | 6.91  | 1.67 | 1.89              | 10.47   | 8.32    | 8.85  | -2.15   | -1.62 | -1.89             | -0.57  |
| 1999 | 7.80  | 1.81 | 2.03              | 11.64   | 8.85    | 9.42  | -2.79   | -2.22 | -4.68             | -2.79  |
| 2000 | 8.75  | 1.88 | 2.45              | 13.08   | 9.38    | 9.98  | -3.70   | -3.10 | -8.38             | -5.89  |
| 2001 | 9.29  | 2.04 | 2.66              | 13.99   | 9.95    | 10.60 | -4.04   | -3.39 | -12.42            | -9.28  |
| 2002 | 9.88  | 2.12 | 3.01              | 15.01   | 10.58   | 11.26 | -4.43   | -3.75 | -16.85            | -13.03 |
| 2003 | 10.45 | 2.31 | 3.15              | 15.91   | 11.21   | 11.93 | -4.70   | -3.98 | -21.55            | -17.01 |
| 2004 | 11.04 | 2.40 | 3.57              | 17.01   | 11.83   | 12.59 | -5.18   | -4.42 | -26.73            | -21.43 |
| 2005 | 11.63 | 2.62 | 3.65              | 17.90   | 12.46   | 13.26 | -5.44   | -4.64 | -32.17            | -26.07 |
| 2006 | 12.29 | 2.72 | 3.96              | 18.97   | 13.16   | 14.02 | -5.81   | -4.95 | -37.98            | -31.02 |
| 2007 | 13.03 | 2.91 | 4.19              | 20.13   | 13.96   | 14.86 | -6.17   | -5.27 | -44.15            | -36.29 |
| 2008 | 13.77 | 3.09 | 4.27              | 21.13   | 14.76   | 15.71 | -6.37   | -5.42 | -50.52            | -41.71 |
| 2009 | 14.51 | 3.19 | 4.47              | 22.17   | 15.56   | 16.56 | -6.61   | -5.61 | -57.13            | -47.32 |
| 2010 | 15.26 | 3.36 | 4.31              | 22.93   | 16.35   | 17.40 | -6.58   | -5.53 | -63.71            | -52.85 |

Table 8.12 FINANCIAL STATEMENT OF LIMBANG SYSTEM (HYDRO + DIESEL)

Unit: Million M\$

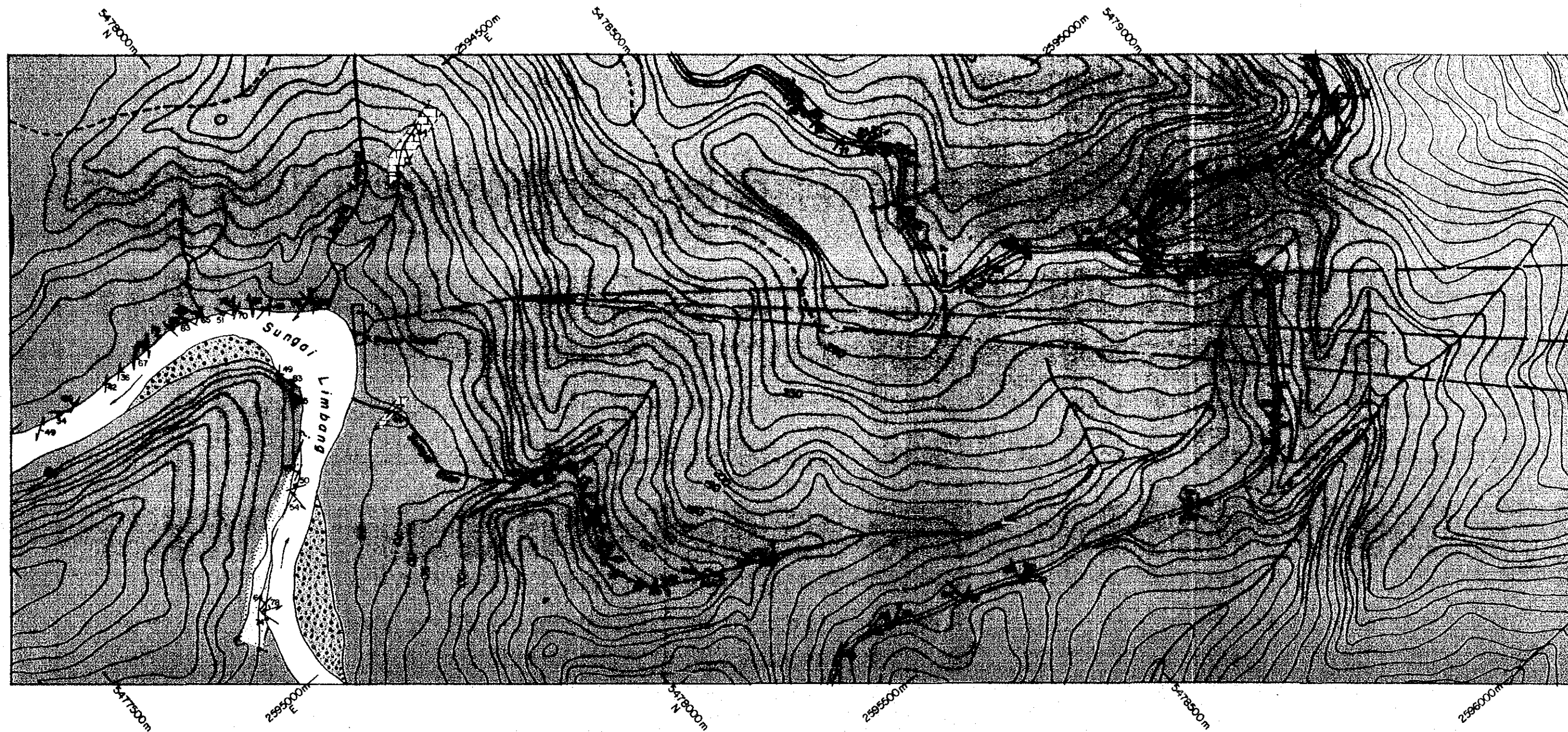
| Year | Fuel  | O&M  | Depreciation<br>Payment | Expense | Revenue |       | Balance |        | Accumula-<br>tion |        |
|------|-------|------|-------------------------|---------|---------|-------|---------|--------|-------------------|--------|
|      |       |      |                         |         | I       | II    | I       | II     | I                 | II     |
| 1987 | 1.52  | 0.66 | 0.29                    | 2.47    | 3.31    | 3.31  | 0.84    | 0.84   | 0.84              | 0.84   |
| 1988 | 1.91  | 0.84 | 0.29                    | 3.04    | 3.70    | 3.70  | 0.66    | 0.66   | 1.50              | 1.50   |
| 1989 | 2.09  | 0.89 | 0.29                    | 3.27    | 4.07    | 4.07  | 0.80    | 0.80   | 2.30              | 2.30   |
| 1990 | 2.43  | 0.94 | 0.35                    | 3.72    | 4.45    | 4.45  | 0.73    | 0.73   | 3.03              | 3.03   |
| 1991 | 2.79  | 0.95 | 1.12                    | 4.86    | 4.87    | 4.87  | 0.01    | 0.01   | 3.04              | 3.04   |
| 1992 | 3.20  | 1.04 | 1.64                    | 5.88    | 5.35    | 5.35  | -0.53   | -0.53  | 2.51              | 2.51   |
| 1993 | 3.62  | 1.19 | 2.71                    | 7.52    | 5.82    | 5.82  | -1.70   | -1.70  | 0.81              | 0.81   |
| 1994 | 4.08  | 1.30 | 3.85                    | 9.23    | 6.29    | 6.29  | -2.94   | -2.94  | -2.13             | -2.13  |
| 1995 | 6.35  | 1.32 | 4.58                    | 12.25   | 6.76    | 6.76  | -5.49   | -5.49  | -7.62             | -7.62  |
| 1996 | 0.78  | 0.86 | 5.10                    | 6.74    | 7.26    | 7.73  | 0.52    | 0.99   | -7.10             | -6.63  |
| 1997 | 1.23  | 0.94 | 5.10                    | 7.27    | 7.80    | 8.12  | 0.53    | 0.85   | -6.57             | -5.78  |
| 1998 | 1.80  | 1.03 | 6.74                    | 9.57    | 8.32    | 8.85  | -1.25   | -0.72  | -7.82             | -6.50  |
| 1999 | 2.47  | 1.11 | 6.88                    | 10.46   | 8.85    | 9.42  | -1.61   | -1.04  | -9.43             | -7.54  |
| 2000 | 5.18  | 1.20 | 7.30                    | 13.68   | 9.38    | 9.98  | -4.30   | -3.70  | -13.73            | -11.24 |
| 2001 | 6.25  | 1.31 | 7.44                    | 15.00   | 9.95    | 10.60 | -5.05   | -4.40  | -18.78            | -15.64 |
| 2002 | 7.43  | 1.39 | 7.57                    | 16.39   | 10.58   | 11.26 | -5.81   | -5.13  | -24.59            | -20.77 |
| 2003 | 8.60  | 1.49 | 7.64                    | 17.73   | 11.21   | 11.93 | -6.52   | -5.80  | -31.11            | -26.57 |
| 2004 | 9.83  | 1.59 | 7.85                    | 19.27   | 11.83   | 12.59 | -7.44   | -6.68  | -38.55            | -33.25 |
| 2005 | 11.05 | 1.70 | 7.86                    | 20.61   | 12.46   | 13.26 | -8.15   | -7.35  | -46.70            | -40.60 |
| 2006 | 12.48 | 1.80 | 7.96                    | 22.24   | 13.16   | 14.02 | -9.08   | -8.22  | -55.78            | -48.82 |
| 2007 | 14.10 | 1.94 | 8.26                    | 24.30   | 13.96   | 14.86 | -10.34  | -9.44  | -66.12            | -58.26 |
| 2008 | 15.73 | 2.10 | 8.55                    | 26.38   | 14.76   | 15.71 | -11.62  | -10.67 | -77.74            | -68.93 |
| 2009 | 17.38 | 2.25 | 8.76                    | 28.39   | 15.56   | 16.56 | -12.83  | -11.83 | -90.57            | -80.76 |
| 2010 | 19.23 | 2.42 | 8.76                    | 30.41   | 16.35   | 17.40 | -14.06  | -13.01 | -104.63           | -93.77 |

Table 8.13 FINANCIAL STATEMENT OF LIMBANKG SYSTEM (HYDRO + DIESEL)




Unit: Million M\$


| Year | Fuel | O&M  | Depreciation | Expense | Revenue |       | Balance |       | Accumula-<br>tion I | Accumula-<br>tion II |
|------|------|------|--------------|---------|---------|-------|---------|-------|---------------------|----------------------|
|      |      |      |              |         | I       | II    | I       | II    |                     |                      |
| 1987 | 1.52 | 0.66 | 0.29         | 2.47    | 3.31    | 3.31  | 0.84    | 0.84  | 0.84                | 0.84                 |
| 1988 | 1.91 | 0.84 | 0.29         | 3.04    | 3.70    | 3.70  | 0.66    | 0.66  | 1.50                | 1.50                 |
| 1989 | 2.09 | 0.89 | 0.29         | 3.27    | 4.07    | 4.07  | 0.80    | 0.80  | 2.30                | 2.30                 |
| 1990 | 2.43 | 0.94 | 0.35         | 3.72    | 4.45    | 4.45  | 0.73    | 0.73  | 3.03                | 3.03                 |
| 1991 | 2.79 | 0.95 | 1.12         | 4.86    | 4.87    | 4.87  | 0.01    | 0.01  | 3.04                | 3.04                 |
| 1992 | 3.20 | 1.04 | 1.64         | 5.88    | 5.35    | 5.35  | -0.53   | -0.53 | 2.51                | 2.51                 |
| 1993 | 3.62 | 1.19 | 2.71         | 7.52    | 5.82    | 5.82  | -1.70   | -1.70 | 0.81                | 0.81                 |
| 1994 | 4.08 | 1.30 | 3.85         | 9.23    | 6.29    | 6.29  | -2.94   | -2.94 | -2.13               | -2.13                |
| 1995 | 4.57 | 1.32 | 4.58         | 10.47   | 6.76    | 6.76  | -3.71   | -3.71 | -5.84               | -5.84                |
| 1996 | 0.56 | 0.86 | 5.10         | 6.52    | 7.26    | 7.73  | 0.74    | 1.21  | -5.10               | -4.63                |
| 1997 | 0.89 | 0.94 | 5.10         | 6.93    | 7.80    | 8.12  | 0.87    | 1.19  | -4.23               | -3.44                |
| 1998 | 1.29 | 1.03 | 6.74         | 9.06    | 8.32    | 8.85  | -0.74   | -0.21 | -4.97               | -3.65                |
| 1999 | 1.78 | 1.11 | 6.88         | 9.77    | 8.85    | 9.42  | -0.92   | -0.35 | -5.89               | -4.00                |
| 2000 | 2.33 | 1.20 | 7.30         | 10.83   | 9.38    | 9.98  | -1.45   | -0.85 | -7.34               | -4.85                |
| 2001 | 2.81 | 1.31 | 7.44         | 11.56   | 9.95    | 10.60 | -1.61   | -0.96 | -8.95               | -5.81                |
| 2002 | 3.34 | 1.39 | 7.57         | 12.30   | 10.58   | 11.26 | -1.72   | -1.04 | -10.67              | -6.85                |
| 2003 | 3.87 | 1.49 | 7.64         | 13.00   | 11.21   | 11.93 | -1.79   | -1.07 | -12.46              | -7.92                |
| 2004 | 4.42 | 1.59 | 7.85         | 13.86   | 11.83   | 12.59 | -2.03   | -1.27 | -14.49              | -9.19                |
| 2005 | 4.97 | 1.70 | 7.86         | 14.53   | 12.46   | 13.26 | -2.07   | -1.27 | -16.56              | -10.46               |
| 2006 | 5.61 | 1.80 | 7.96         | 15.37   | 13.16   | 14.02 | -2.21   | -1.35 | -18.77              | -11.81               |
| 2007 | 6.35 | 1.94 | 8.26         | 16.55   | 13.96   | 14.86 | -2.59   | -1.69 | -21.36              | -13.50               |
| 2008 | 7.08 | 2.10 | 8.55         | 17.73   | 14.76   | 15.71 | -2.97   | -2.02 | -24.33              | -15.52               |
| 2009 | 7.82 | 2.25 | 8.76         | 18.83   | 15.56   | 16.56 | -3.27   | -2.27 | -27.60              | -17.79               |
| 2010 | 8.65 | 2.42 | 8.76         | 19.83   | 16.35   | 17.40 | -3.48   | -2.43 | -31.08              | -20.22               |

**FIGURES**




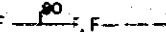
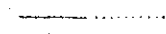


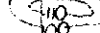
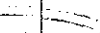


**LEGEND**

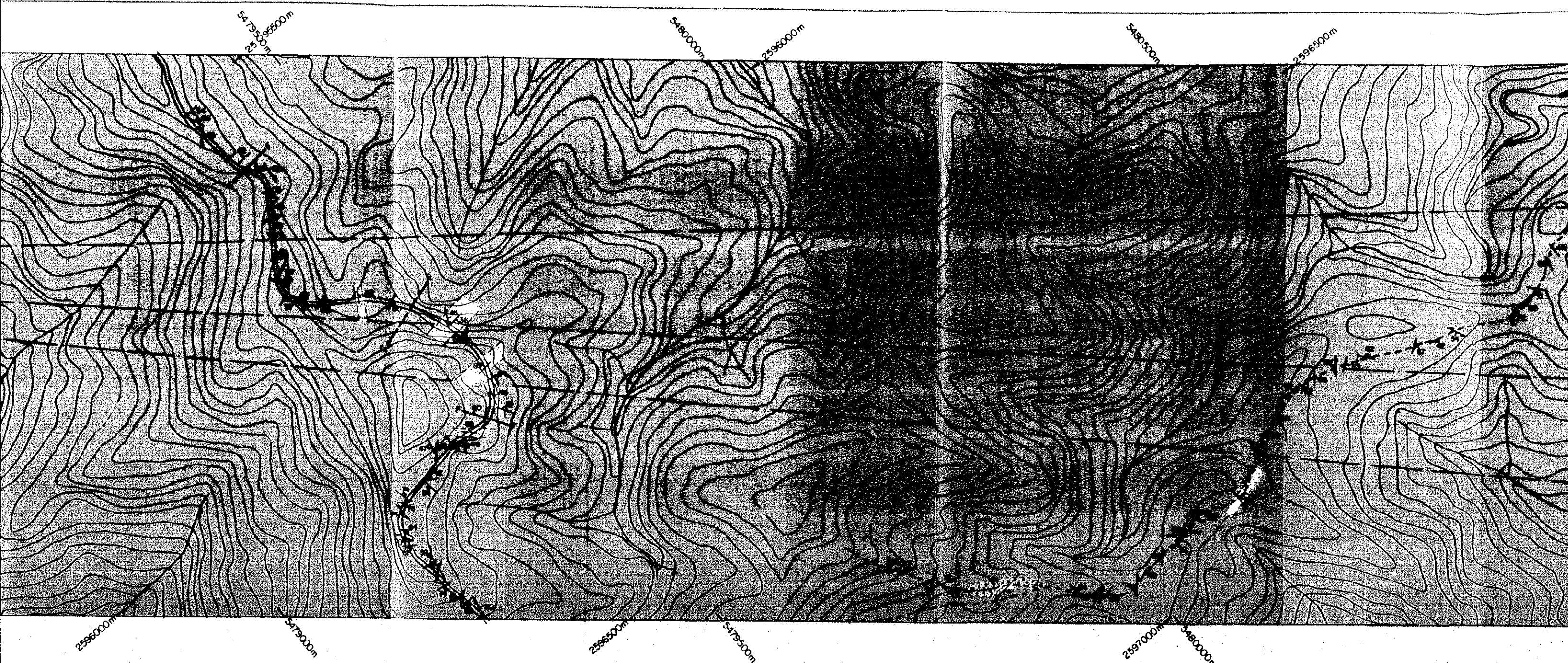
- RECENT**
-  **Riverine Deposit** : Consisting mainly of boulders of fine grained sandstone and shale in a matrix of sand. Found mainly along rivers and side streams.
- OLIGOCENE - MIOCENE**
- Setap Shale**
  -  **Shale Unit** : Consisting mainly slaty hard shale with very little amount of sandstone intercolation (3%). Thinly bedded (2 to 3 cm thick), regionally metamorphosed, folded, faulted and fractured with infilling quartz veins
  -  **Sandstone Unit** : Consisting of hard, fine grained, dark grey sandstone. Thickly bedded, slightly metamorphosed, faulted, fractured and slightly folded. Quartz veins are commonly infill cracks within the

- EOCENE - MIOCENE**
-  **Malinau Limestone** : Argillaceous, fossiliferous, thickly bedded (about 1 m), faulted and fractured with infilling calcite veins.

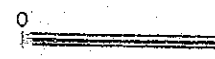
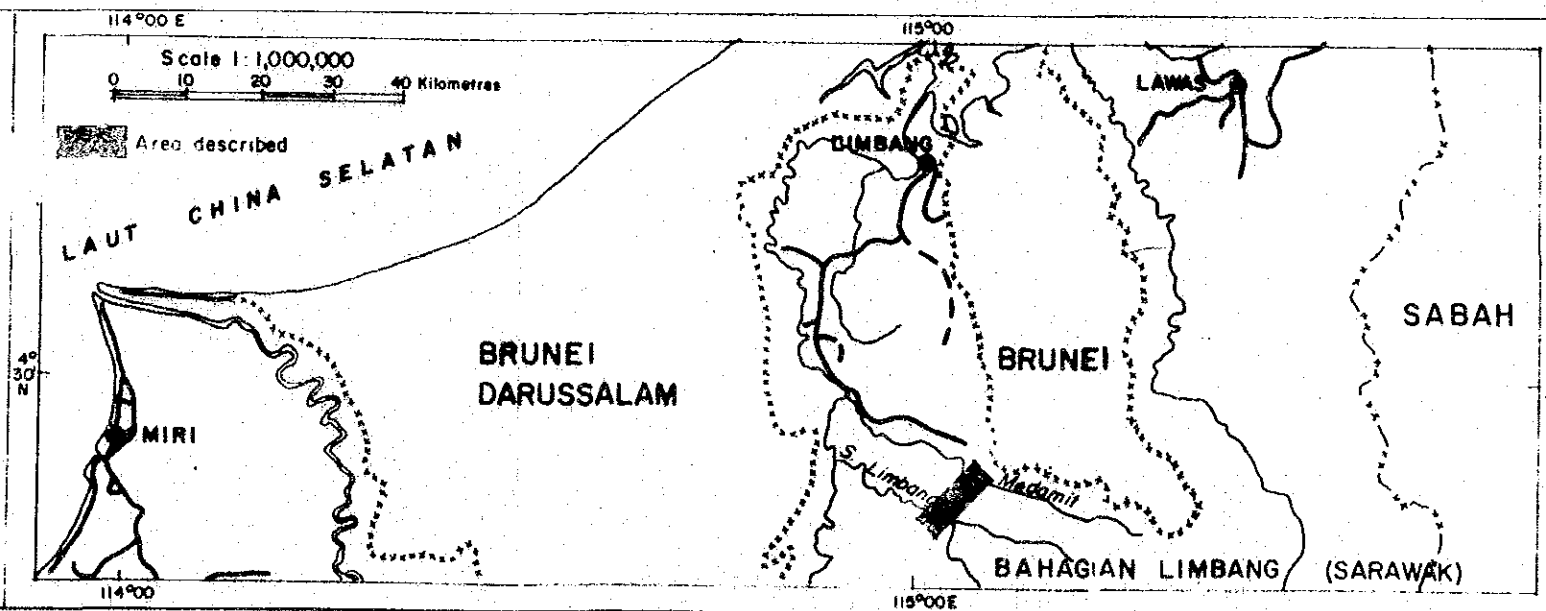
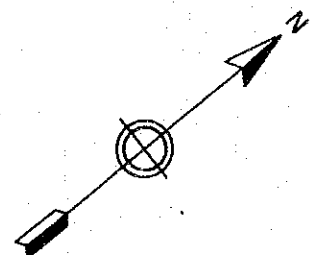
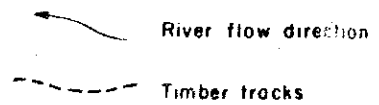
sandstone. Occurs as thick lenses (about 30m) at the proposed dam site. Friable soft, light yellow, fine grained sandstone lenses (10-20m thick) found in the central part of the area.

-  10, Attitude of beds
-  80, Attitude of cleavages
-  70, Attitude of joints
-  F—F, F—F Attitude of faults, inferred fault
-  ..... Geological boundary; defined, inferred
-  Fault zone
-  Landslide
-  100 Contour at 10m interval
-  Logging road





- Contour interval at 10 m interval
- Logging road
- Landslide
- Fault zone
- Geological boundary; defined, inferred
- Inferred fault
- Joint
- Cleavages
- Bed



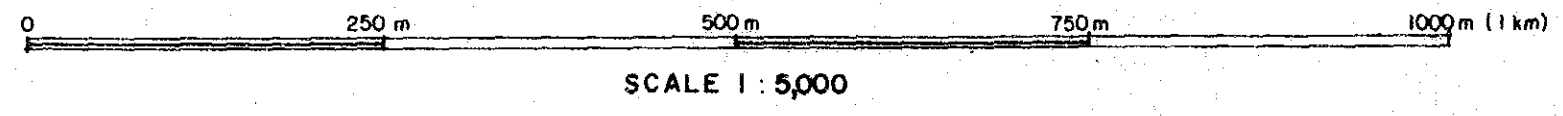
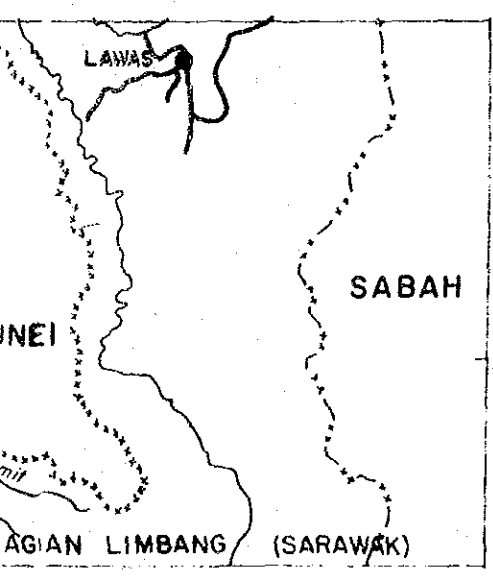
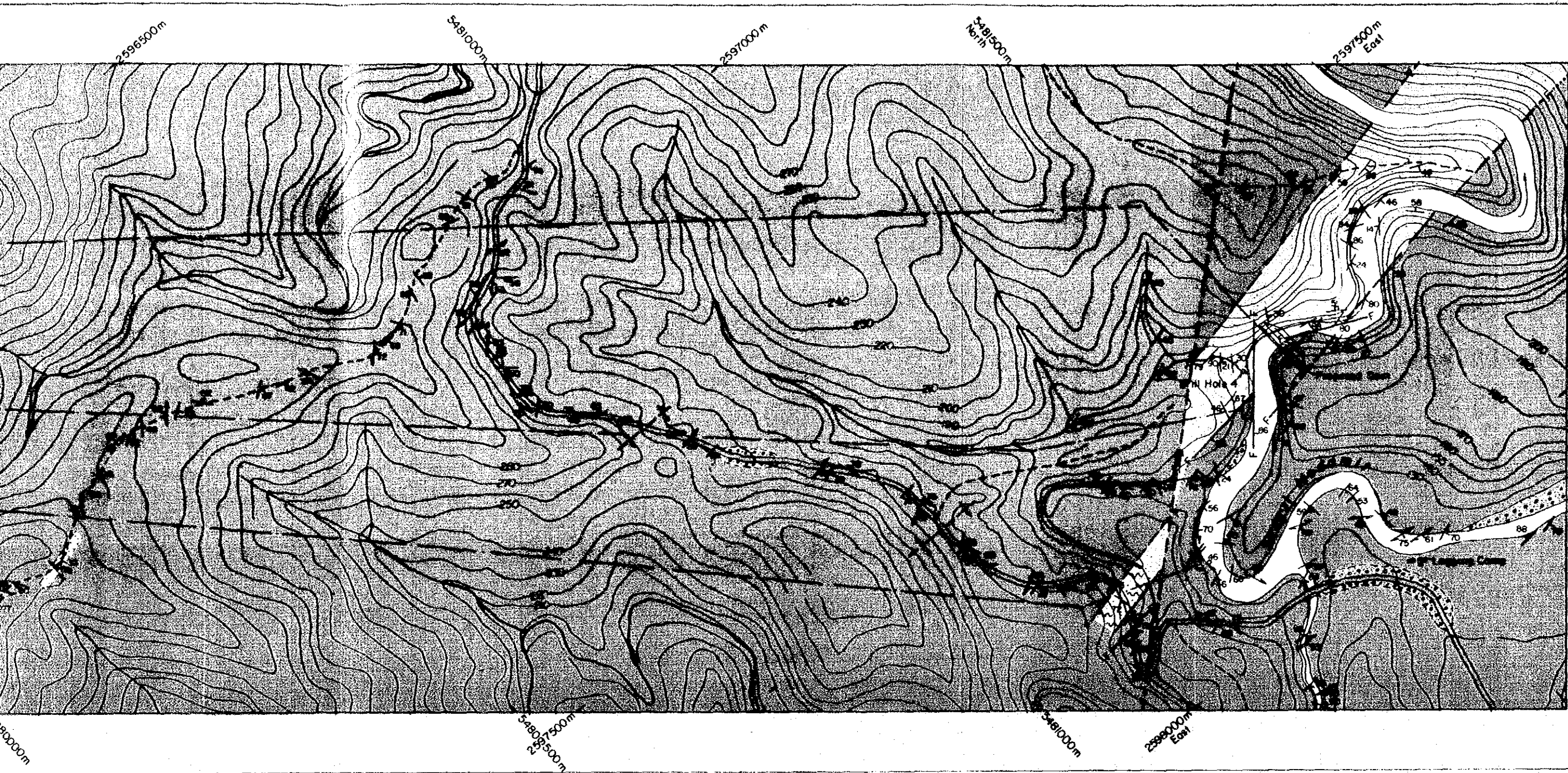


Fig. 3.1 GEOLOGICAL MAP OF MEDAMIT - 2 AREA ,  
PROPOSED SITE FOR SMALL SCALE HYDROELECTRIC  
PROJECT.

GOVERNMENT OF MALAYSIA  
FEASIBILITY STUDY  
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK  
JAPAN INTERNATIONAL COOPERATION AGENCY



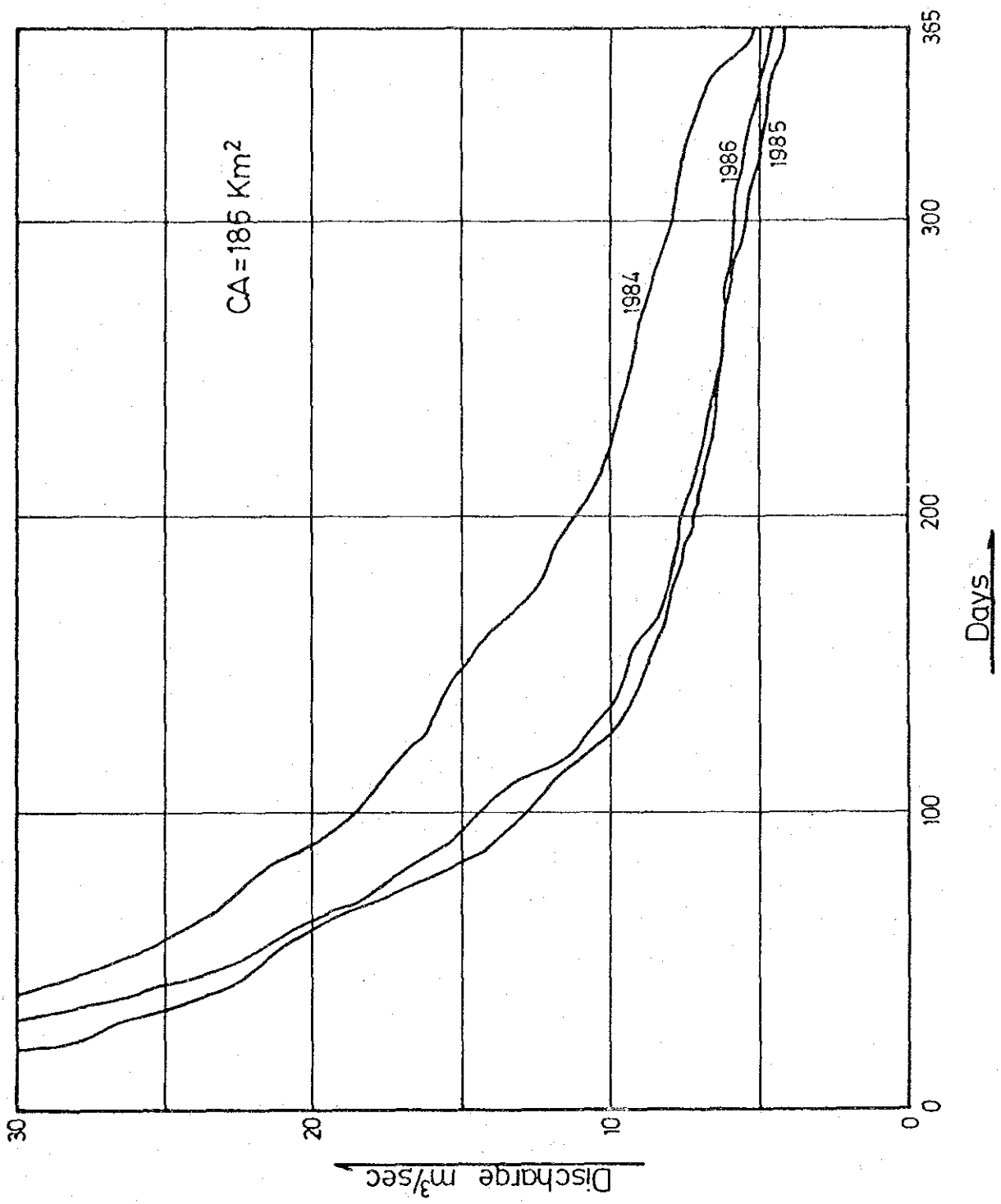
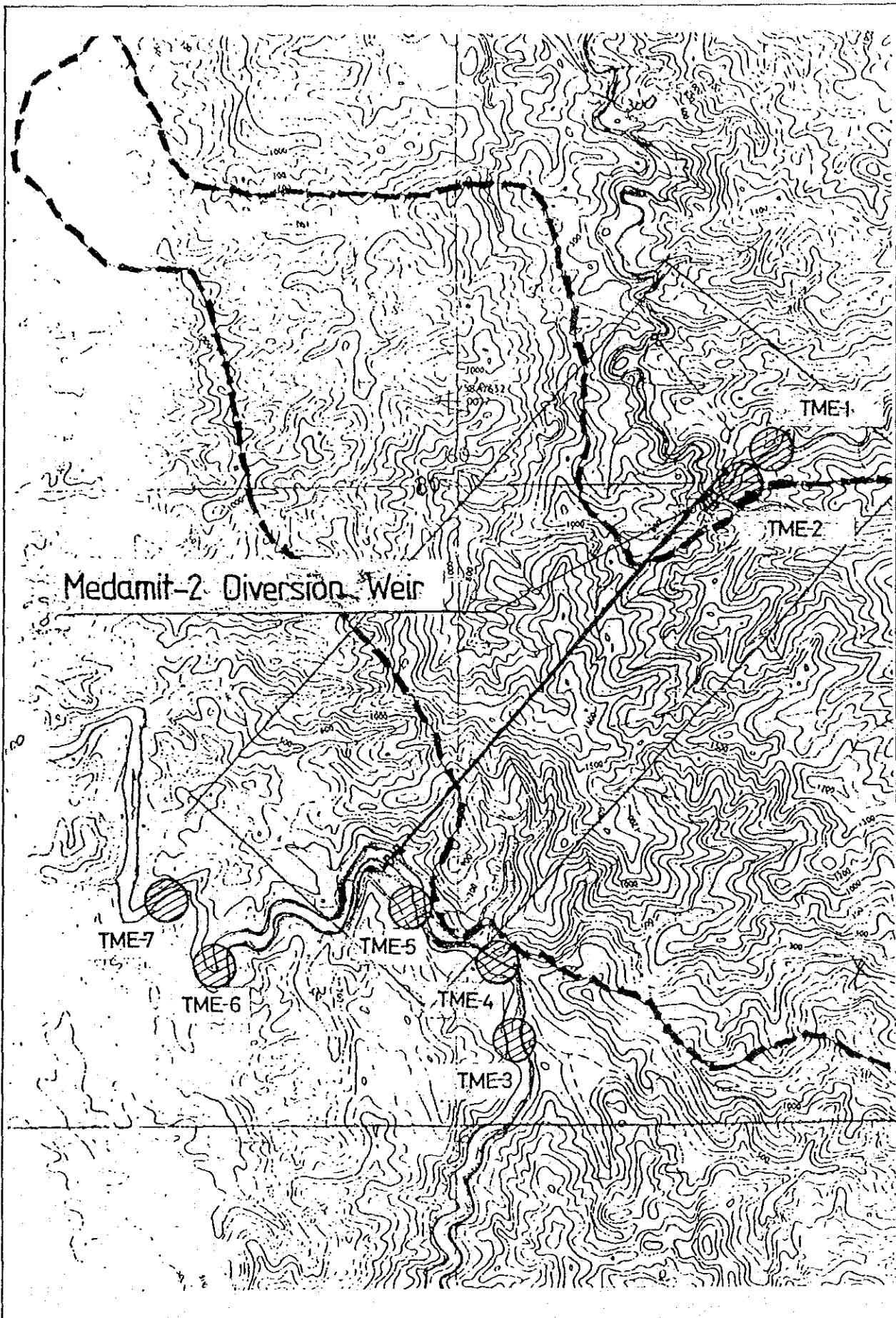


Fig. 3.2 Flow Duration Curves at the Medamit-2 Intake Site

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY





Medamit-2 Diversion Weir

TME-1

TME-2

TME-7

TME-5

TME-6

TME-4

TME-3

Fig. 3.3 Potential Areas of Concrete Aggregates

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY



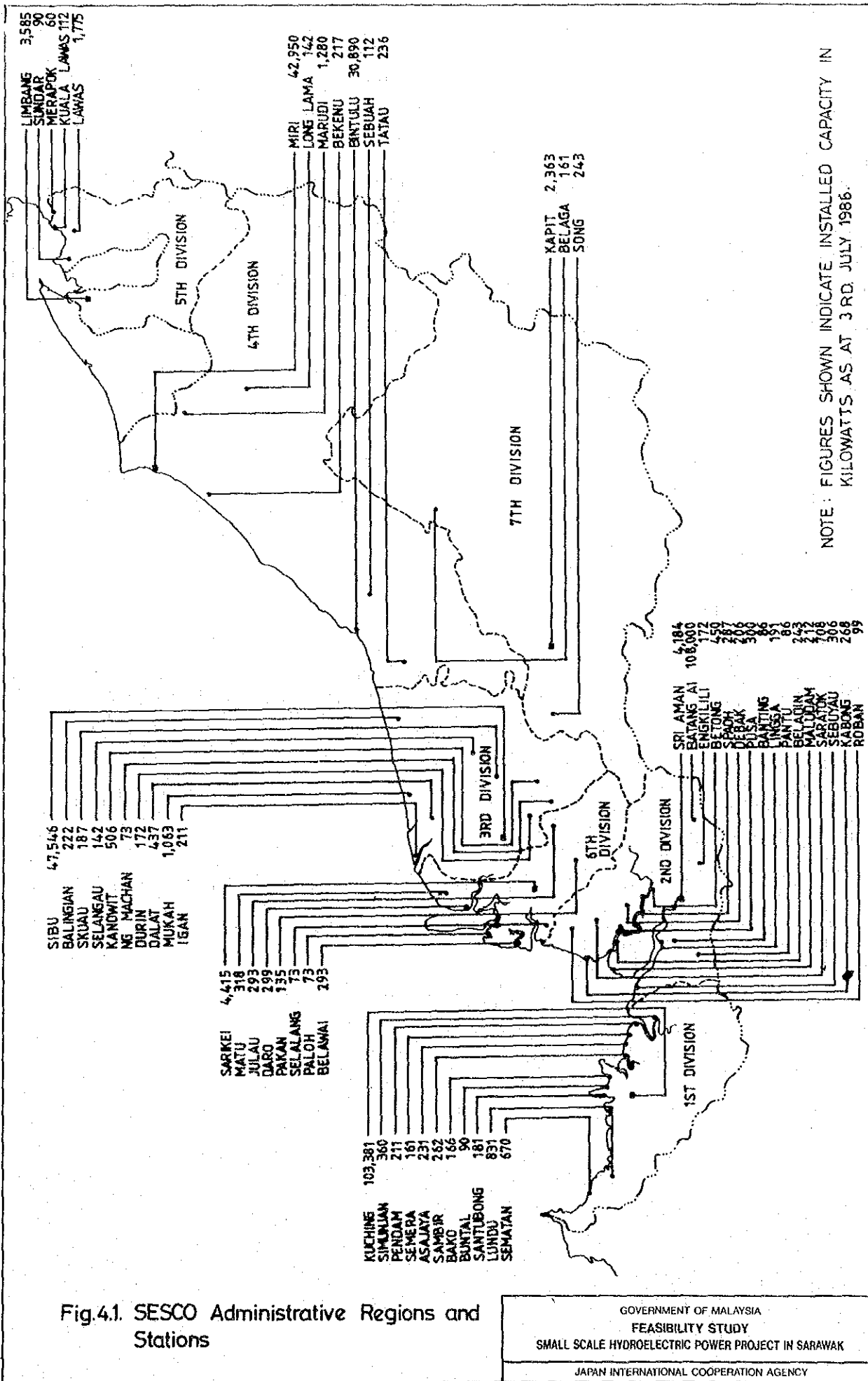


Fig.4.1. SESCO Administrative Regions and Stations

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY





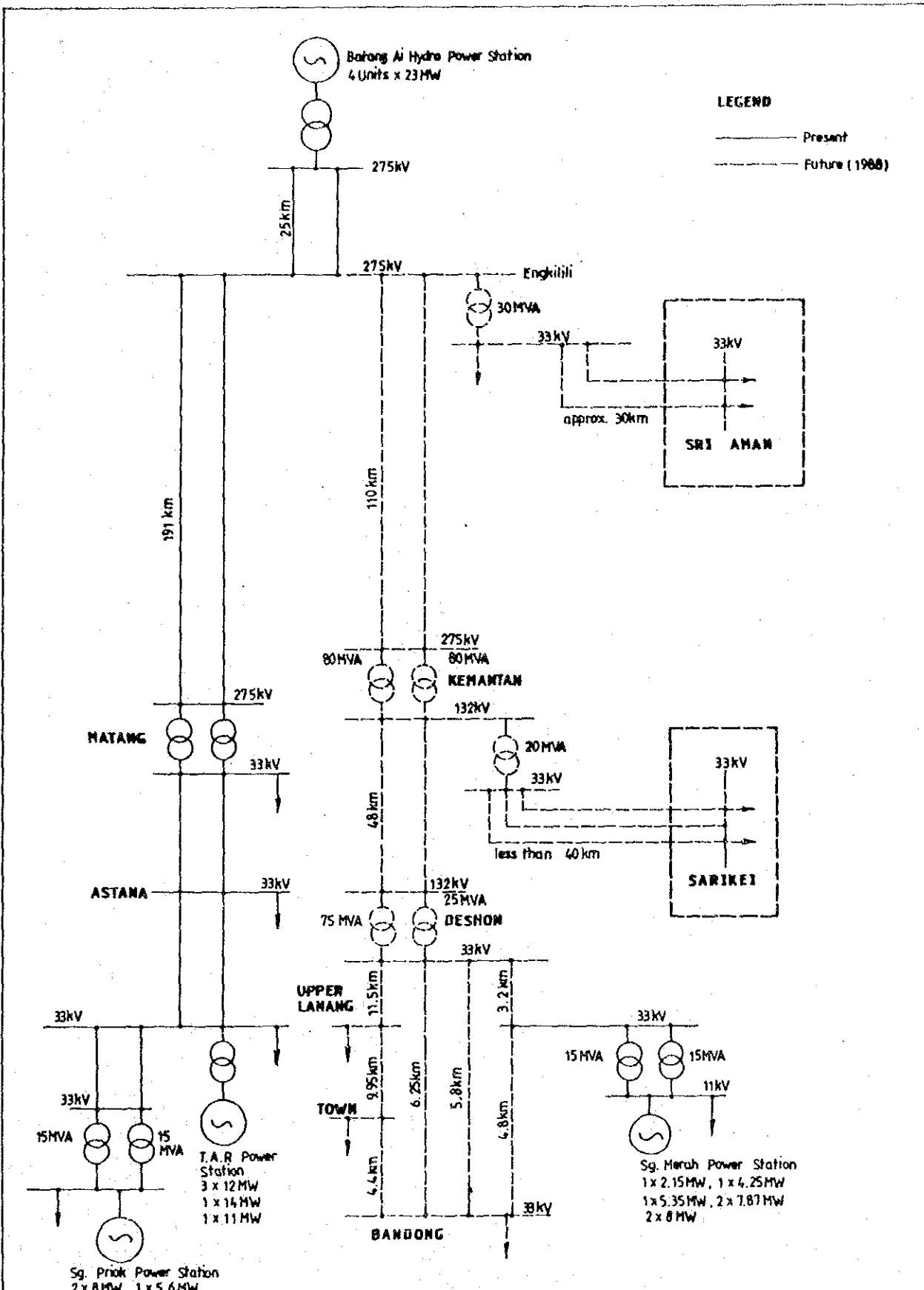


Figure 4.2 Kuching/Sibu System Line Diagram

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY

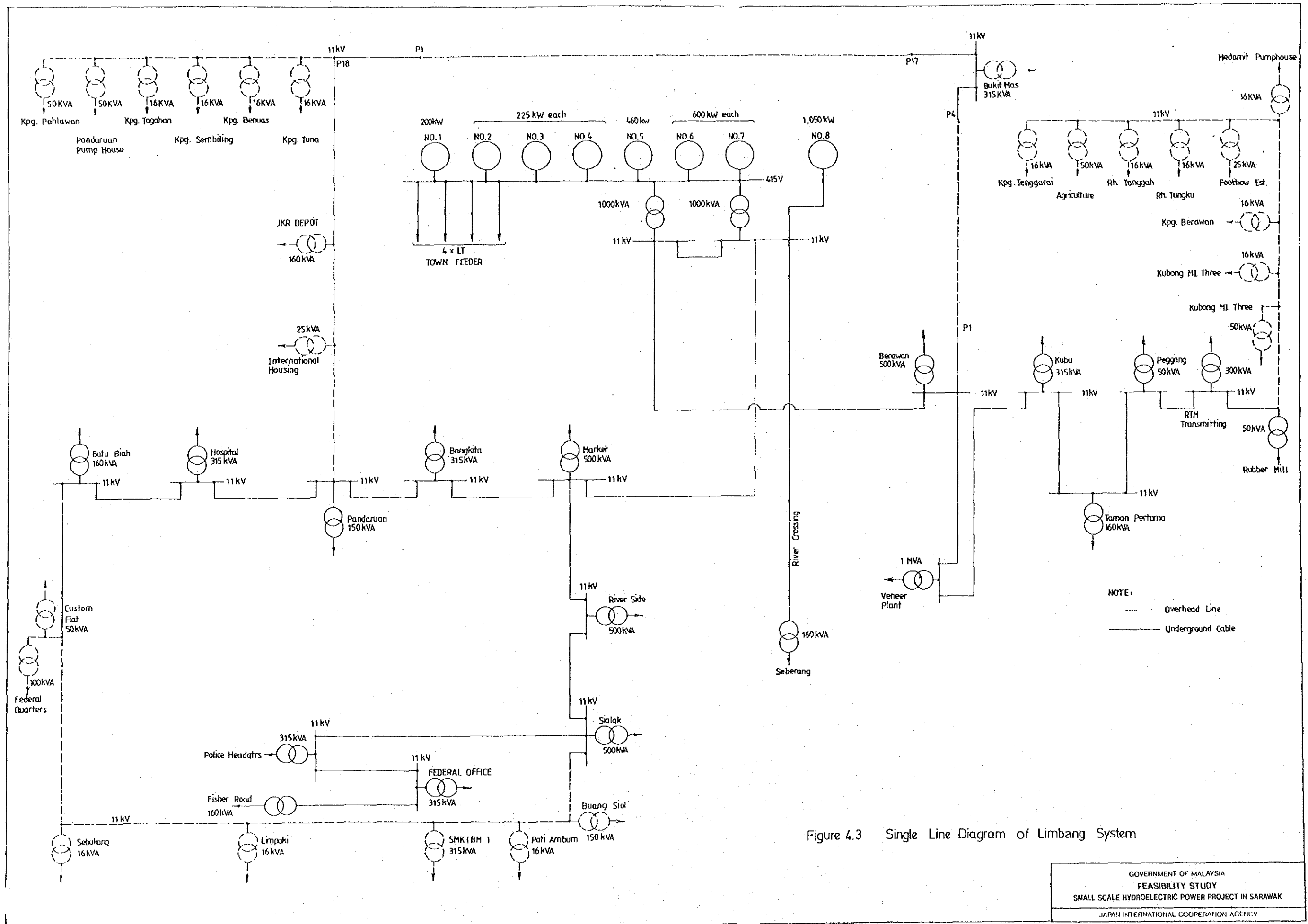


Figure 4.3 Single Line Diagram of Limbang System

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY



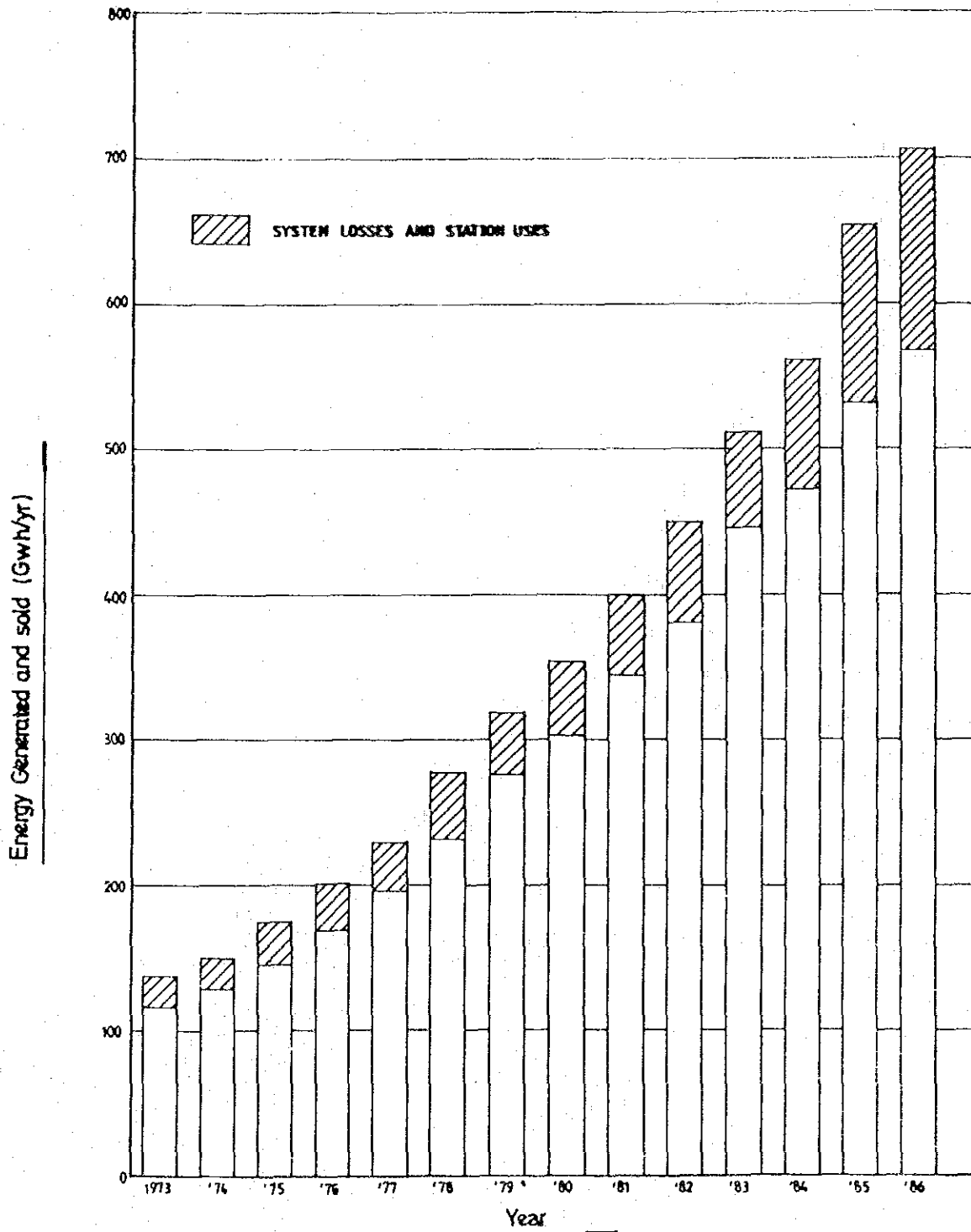


Figure 4.4 Energy Generated and Sold in the Whole of Sarawak

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY



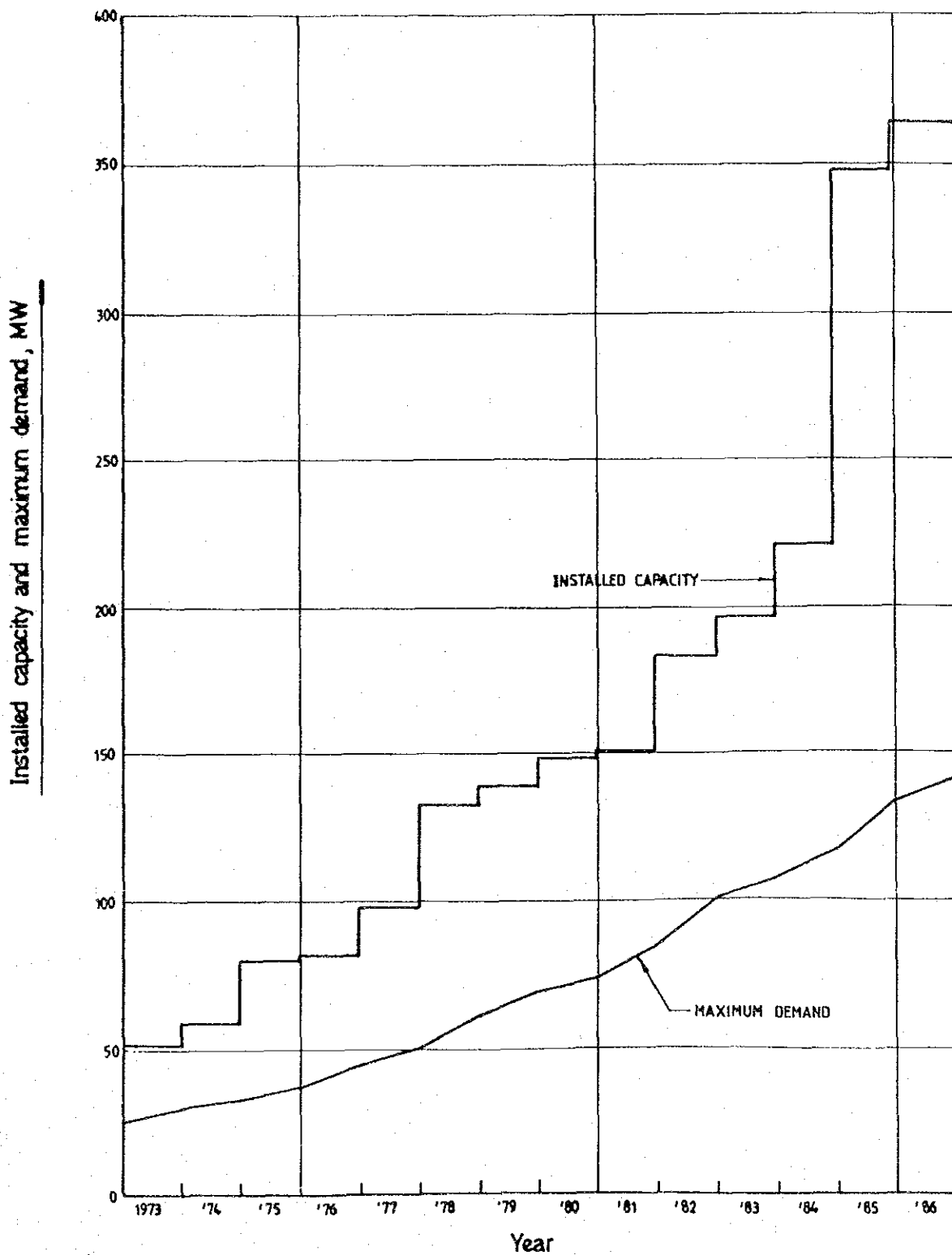


Figure 4.5 Installed Capacity and Maximum Demand In the Whole of Sarawak

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY





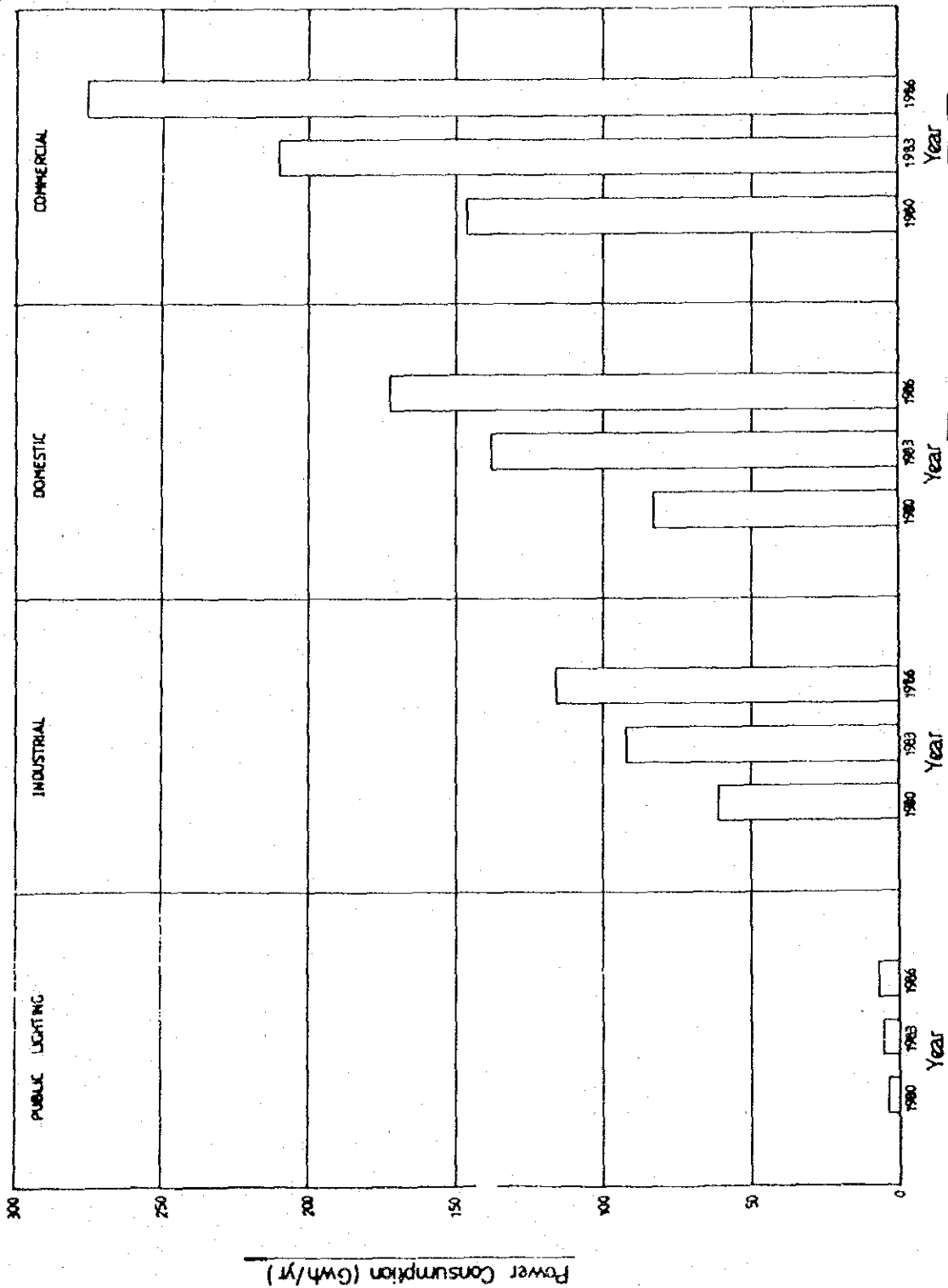


Fig.4.6. Power Consumption by Category in the Whole of Sarawak.

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY



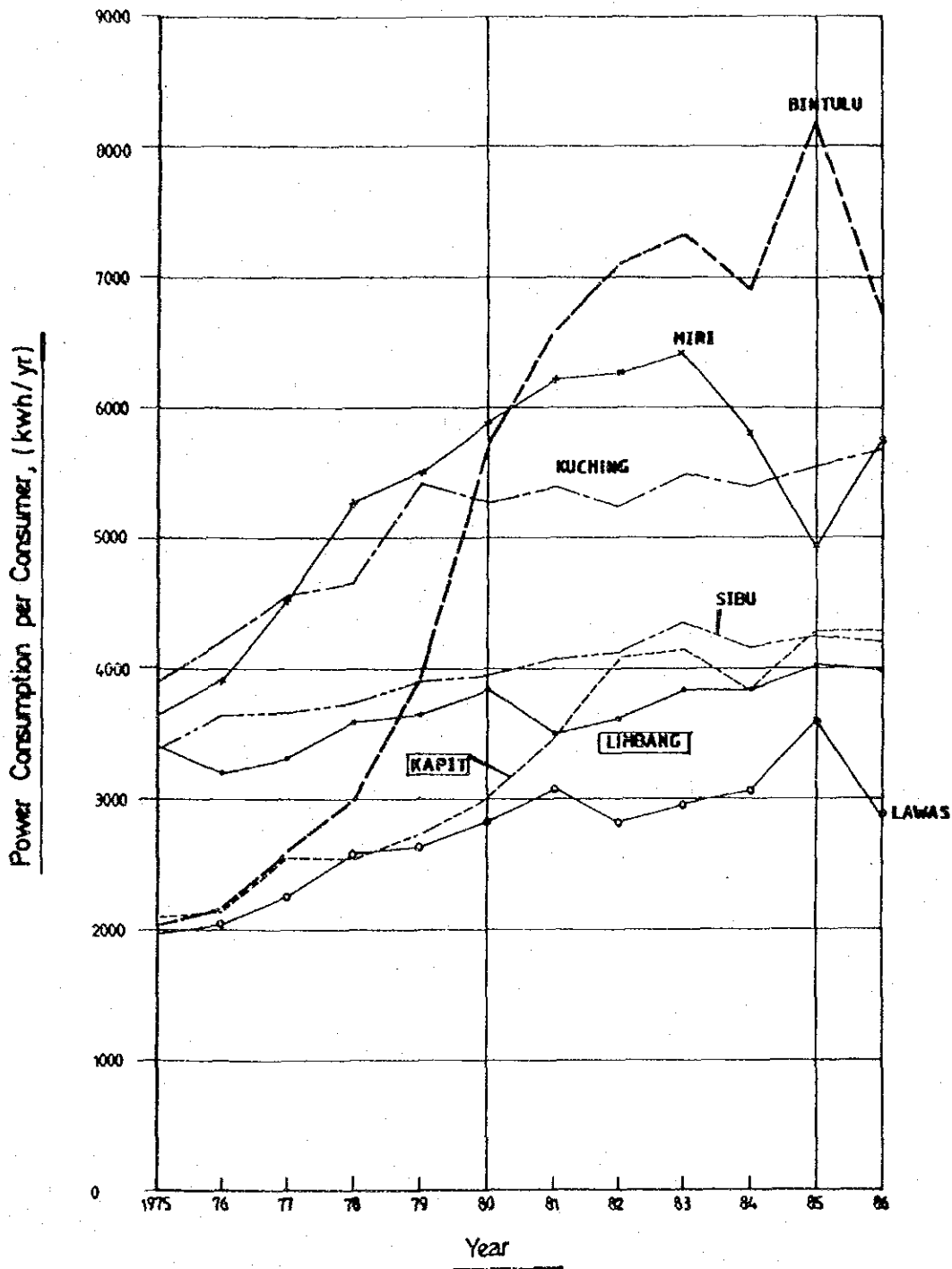


Figure 4.7 Annual Power Consumption per Consumer in Sarawak

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY



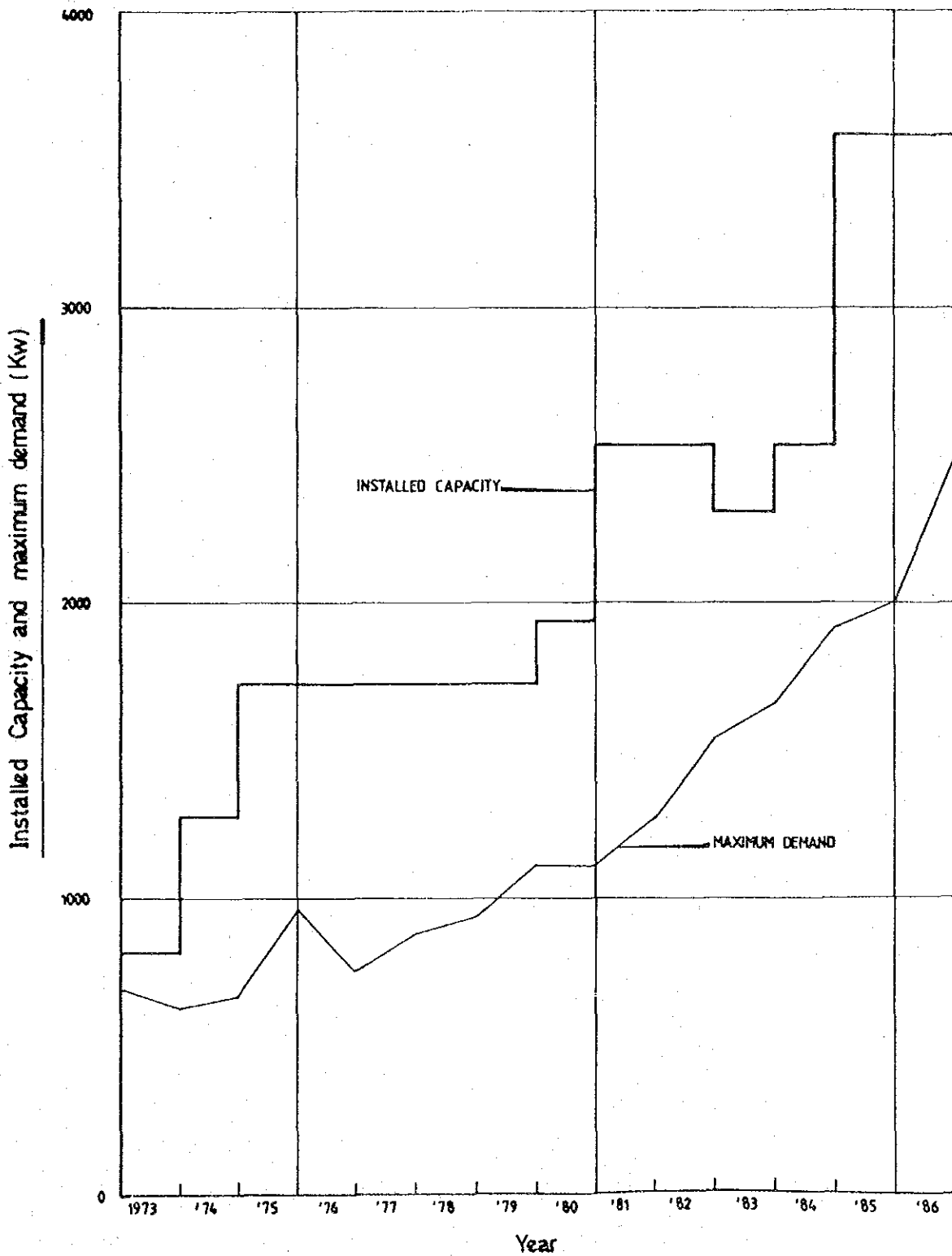


Figure 4.8 Installed Capacity and Maximum Demand in Limbang

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY



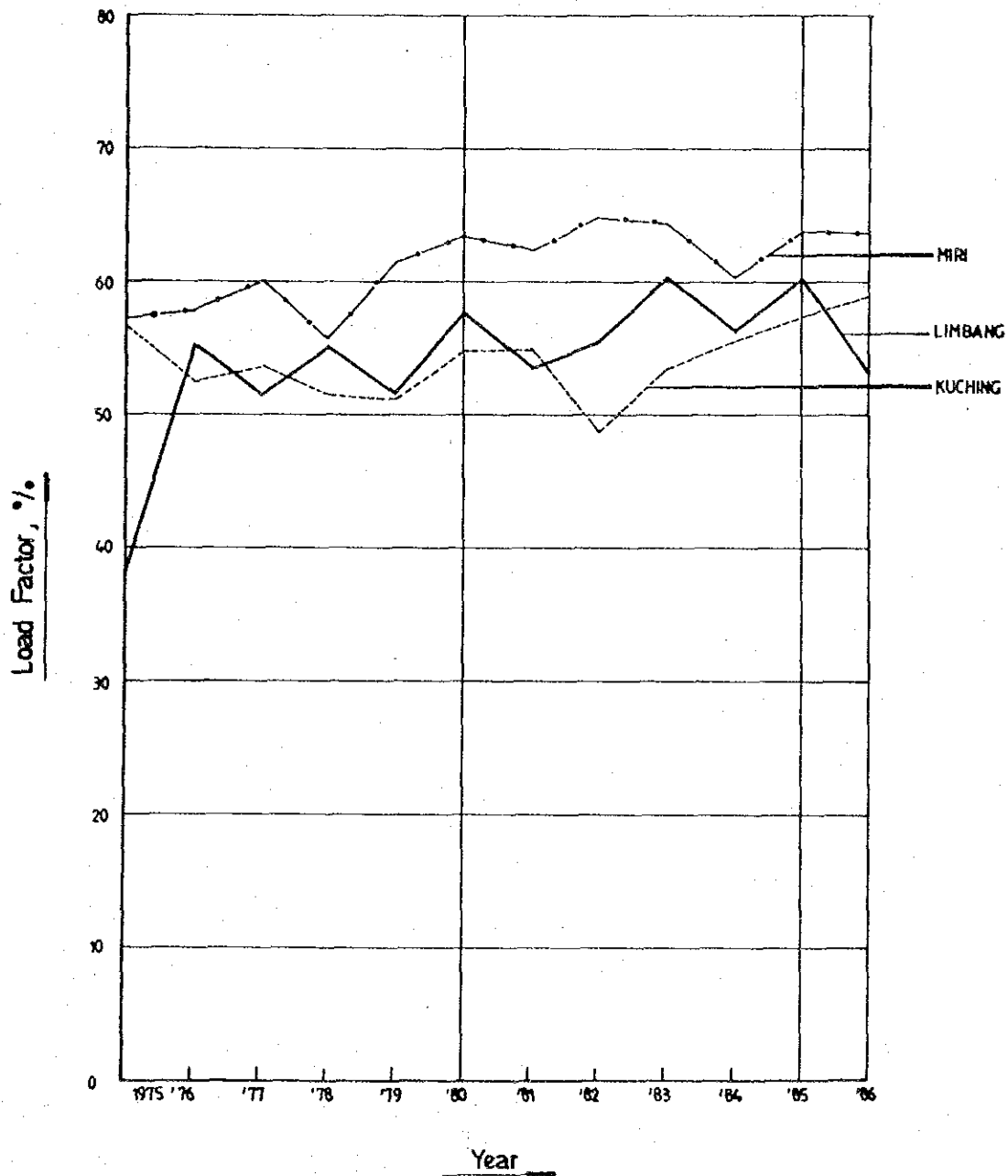


Figure 4.9 Variation of Annual Load Factor in Limbang

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK  
 JAPAN INTERNATIONAL COOPERATION AGENCY





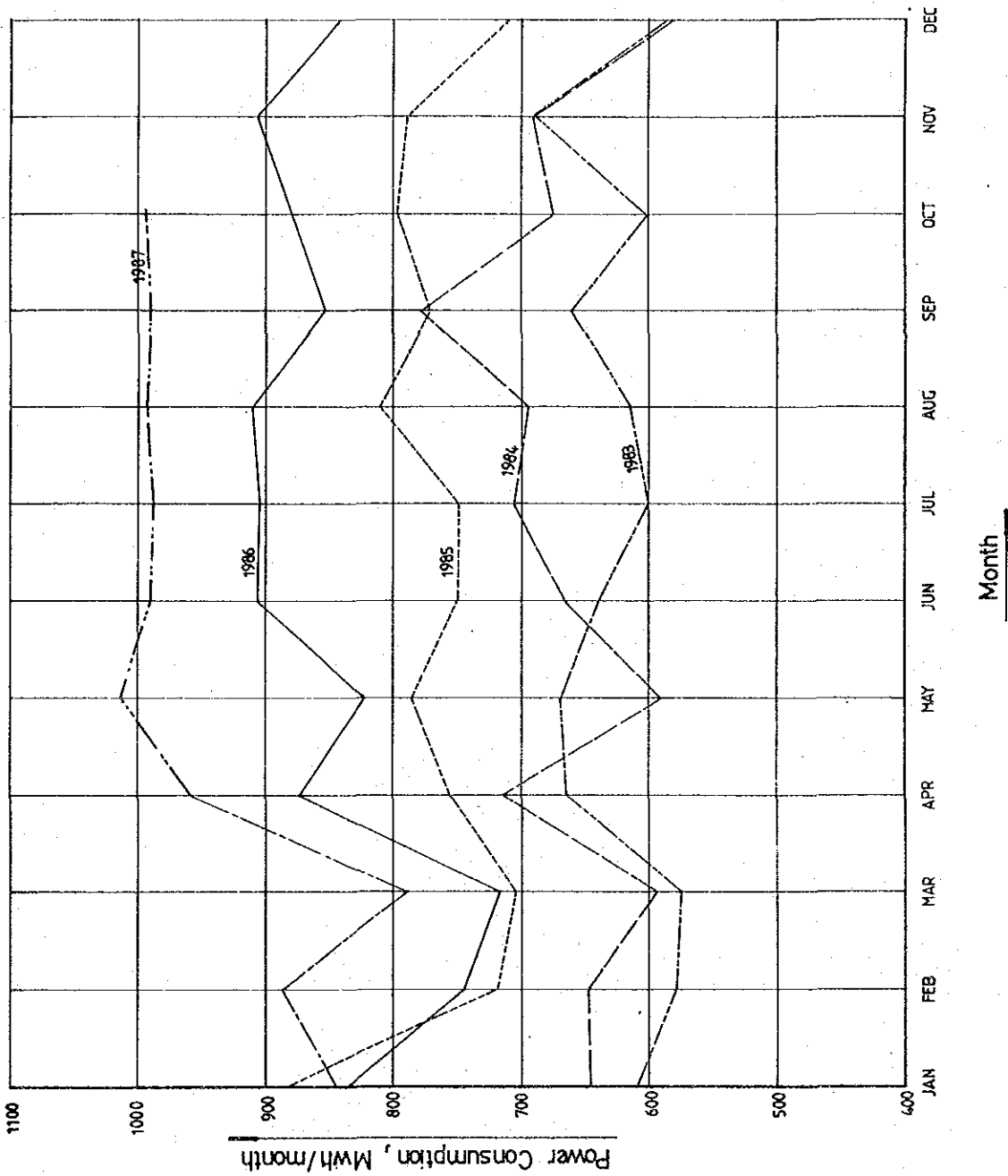


Fig.4.10. Variation of Monthly Power Consumption in Limbang.

GOVERNMENT OF MALAYSIA  
 FEASIBILITY STUDY  
 SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK

JAPAN INTERNATIONAL COOPERATION AGENCY

