# LHDA's Development and Operations Divisions News

**Water Deliveries and Royalty Revenue**

| Year | Water Deliveries (million cubic metres) | Royalty Payments Million Maluti |
|---|---|---|
| 1996 (Nov-Dec) | - | M130.50 |
| 1997 | - | M81.83 |
| 1998 | 439 | M129.20 |
| 1999 | 540 | M146.93 |
| 2000 | 570 | M153.24 |
| 2001 | 587 | M174.80 |
| 2002 | 611 | M210.50 |
| 2003 | 652 | M204.73 |
| 2004 | 661 | M220.98 |

**Delivery to date : 4062.04 Million cubic metres**
**Revenue to date: M1,452,620,227.32**

**'Muela tail pond on Nqoe river. Receptacle of water from 'Muela Hydropower Plant, back into the tunnel for onward transfer to the Republic of South Africa.**

**Electricity Generation and Sales Revenue**

| Financial Year | Total Planned Generation (GWhrs) | Total Actual Production (GWhrs) | 'Muela Peak Output (MW) | Electricity Sales to LEC (Million Maluti) | Export Energy (GWhrs) | Export Reveue (Million Maluti ) | |
|---|---|---|---|---|---|---|---|
| 2000/01 | 387 | 371.57 | 78.1 | M44.13 | - | - | |
| 2001/02 | 391 | 372.95 | 77.7 | M44.76 | 23.22 | M44.13 | |
| 2002/03 | 389 | 377.93 | 78.5 | M43.25 | 35.32 | M44.76 | |
| 2003/04 | 436 | 428.79 | 77.9 | M48.69 | 40.28 | M43.25 | |

**Note :**

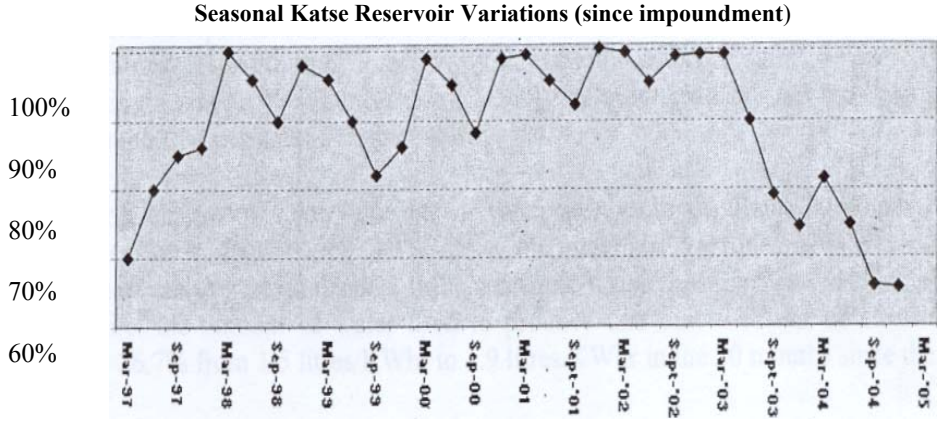
Lesotho Electricity Corporation (LEC) is Lesotho's bulk electricity supplier and distributor and also exports to Eskom, RSA's bulk electricity supplier.


**Inside the power generation house, converting Lesotho's white gold into electricity.**

**<u>Katse Reservoir Management</u>. (Reservoir Level)**

At the end of March, 2005, Katse Reservoir was at elevation 2031.6 masl which represents a storage volume of 1,277.03 cubic million metres or 65.5% of the total reservoir capacity. The lowest draw- down ever reached by the reservoir since impoundment in early 1997 was on the 28th and 29th November 2004 was to 61.9%. Unlike the previous winter season in 2004, there were only slight snowfalls. Thus recharge of the catchment was very low.

**Chart 1:** 7 Year Quarterly Katse Reservoir Variations

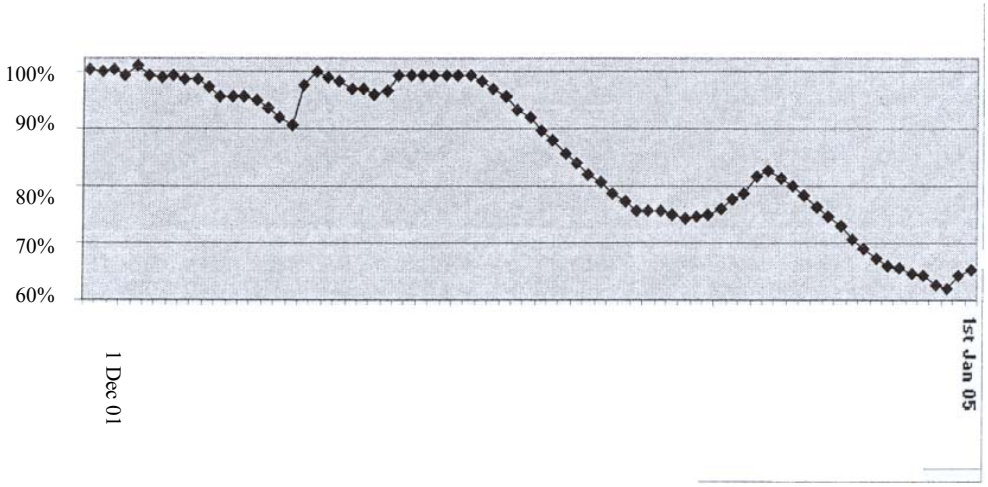



The LHWP catchment areas registered 63% below normal rainfall during the quarter. Since the drought started in April 2003, only 37% of the normal/historical rainfall fell in the LHWP catchments. According to forecasts by the Lesotho Meteorological Services (LMS) as well as the South Africal Weather Service (SAWS), below-normal rainfall has been projected at 60% probability.

For the fourth successive quarter the levels of water storage in the Katse Reservoir remained negative. They declined by 4.3% since the previous quarter. As a consequence of this continued decline, consumption of water for electricity generation at 'Muela hydropower plant, has increased by 26.7% from 1.5litres/KWhr to 1.9litres/KWhr for production of a single unit of electricity KWhr.

**Chart 2: Monthly Katse Reservoir Variations**

**Years 2000 – 2004 monthly Katse Reservoir Variations**




## Mohale Dam Filling (Reservoir Levels)

As at 31 March, 2005, Mohale reservoir reached its highest storage capacity of 47.1 % of the dam's full supply level since the reservoir impoundment in October 2003. The rate of water storage in Mohale reservoir increased by only 3.3% from 31 December, 2004 primarily due to the good rains that fell for 28 days at 3.04 rnm/day on average. At this rate of water storage, it is estimated that it might take at least three (3) years more than the design. Considerations may have to be undertaken to bring the Mohale transfer tunnel into operation before reaching the reservoir's full capacity due to comparisons of the levels in the two Katse and Mohale reservoirs.

**Chart 3: Mohale Dam Filling (since impoundment) 31/10/2002**