

The logo for Canopus India is centered in a dark green square. The word "canopus" is in white lowercase letters, and "india" is in green lowercase letters. The letter 'i' in "india" is stylized, with its dot and stem forming a shape that connects to the 'o' in "canopus".

canopus  
india

*we think for YOU everyday*

CANOPUS

PULP AND PAPER CASE STUDY

Indian Institute of Technology, Kharagpur

### **The Pulp and Paper Industry as a sample case study**

In India, around 905.8 million m<sup>3</sup> of water is consumed by the Pulp and Paper industry, out of which around 695.7 million m<sup>3</sup> of wastewater is discharged annually. India's current average fresh specific water consumption of about 150 m<sup>3</sup>/tonne of product is far above the global best specific water consumption of 28.66 m<sup>3</sup>/tonne (for large scale wood based pulp and paper mill) and this large gap is primarily attributed to the use of obsolete technology / equipments and poor water management practices.

India produces 5.96 million tonnes of paper per year (2003 – 2004) through 309 paper manufacturing mills at a capacity utilization of approximately 60 percent. The number of paper manufacturing mills has increased consistently from just 17 in 1951 to around 600 in Year 2002 with an annual installed capacity of 6.2 million to meet the increasing demand. Since 2001 – 02, the number of mills has fallen sharply to 309 in the year 2004 primarily due to increased environmental regulatory pressure, water shortages etc. The environmental problems faced by large and small paper mills are entirely different. Pollution control is more difficult for small and medium sized agro-based units.

Considering our research in this segment, we have identified this huge need for the installation of new facilities and infrastructure to treat wastewater. The markets we are targeting are both the domestic wastewater treatment and the industrial wastewater treatment market.

We have identified our target customer-base to be the newly developing residential facilities and housing complexes, and specific sectors of the industry, like, pulp and paper industries,

