

PART-2: Community Initiatives

The college has started an awareness program among the students and has also petitioned the district administration to manage the solid waste in an environmentally sound manner. Water testing of open bore wells revealed high levels of Coliform bacteria. A Writ Petition was filed by an activist before the Sub-divisional Magistrate against the Mayor, Siliguri Municipal Corporation to restrain dumping of solid waste. The activists in the area have requested the administration to relocate the dumping ground and create clean, healthy, living conditions

PART-3: Novel Initiatives

Samar Thapa of **Salesian College**, Darjeeling discusses a micro-hydel project which taps the energy from the vertical fall of water near the campus. The power generated could be used to supplement grid power. Micro-Hydel projects are a clean source of energy and also do not require submergence of forest area. The economic benefits are estimated to be INR 2,16,000 per year as well as the reduction of 145.8 tonnes of CO₂ emissions. However, for synchronization with grid power, the generated electricity must have equal line voltage, frequency, phase sequences, etc. Permissions from the local authorities also have to be obtained.

Samar Thapa and Sandeep Sundas of **Salesian College** discuss how the Siliguri campus shares a boundary with the dumping ground of Siliguri, which has resulted in the visual pollution and spread of obnoxious smell.

About the United Board

The United Board for Christian Higher Education in Asia (UB), founded in 1922, is a historic Christian Organization with a contemporary mission: to promote education that develops the whole person-intellectually, spiritually and ethically. The United Board is committed to promote academic leadership, faculty development and values such as peace, care for the environment, reconciliation and harmony among ethnic & religious communities and civil society. It operates as both a programmatic and grants making organization in partnership with more than 80 colleges & universities in 14 countries across Asia, responding to their diversity and emerging challenges. Together individuals are prepared for lives of professional and personal fulfillment and meaningful service in community. Programs are funded seeking contributions from individuals, foundations and alumni of Asian institutions to supplement the income from the endowment.



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**ENVIRONMENTAL ACTION
IN SELECTED
INDIAN COLLEGES AND
UNIVERSITIES**

A Compendium



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SOLID WASTE MANAGEMENT BY SALESIAN COLLEGE, SILIGURI CAMPUS

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Abstract

Solid waste and its handling is a burning problem of any urban area especially in developing countries. The principle effects include the degradation of land, ground water contamination and obnoxious smell. This paper discusses about the Solid Waste Management and the efforts made by Salesian College, Siliguri Campus in this respect to deal with the open dumping ground of the Siliguri Municipal Corporation.

Key words: *Solid Waste Management, pollution, awareness programme*

Introduction

The change in the physical and chemical quality of environment has undergone dramatic changes in the world. Even the world community is thinking seriously about it and the environmental concern is global. The condition of the environment and the changes that are taking place because of the anthropogenic activities are quite the same everywhere, irrespective of the country or state we belong to.

Solid wastes are generally all the discarded or useless wastes arising from human and animal activities that are in solid in nature. They are of three broad categories, Municipal waste, Industrial waste and Hazardous waste. Municipal Solid Waste (MSW) contains food wastes (animal, fruit or vegetable residues), rubbish (combustible and noncombustible solid waste including paper, plastics, textiles, rubber, and leather wood), and demolition and construction wastes [1, Peavy et al, 1985].

Salesian college, Siliguri campus is located at the Don Bosco Road, Jyoti Nagar, in the district of Jalpaiguri. It shares a common boundary with the solid waste dumping ground of the Siliguri Municipal Corporation (SMC). In this paper the solid waste management project (SWMP) 2010 – 2011 funded by the United Board is discussed as a model project to show how Christian Higher Education Institutions could possibly promote social concern and civic responsibility through environmental action and activism in academic community.

MICRO-HYDEL PROJECT OF SALESIAN COLLEGE, DARJEELING

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Abstract

Falling water as a source of energy is known from ancient times. Vertical fall of water may be natural due to topographical features or may be artificially prepared by dams. If the available water energy is utilized properly, then the efficiency of hydropower plant would be more or even double than the conventional thermal power plant with an added benefit of being environmentally clean. This paper discusses the 25 kVA micro hydel power plant of Salesian College, Sonada.

Introduction

The major use of energy in a building includes lighting, heating, cooling, ventilation, running of various gadgets, etc. Energy is also consumed for the production of materials used to construct the building which is known as embodied energy and also the energy required to transport the construction materials from where they are produced to where they are used. With the increase in the global concern for energy and environmental issues, the building sector holds a tremendous potential for energy savings [1, Thapa et al, 2015, p. 112].

India's building energy consumption increased by about 13.6 % during the years 2004 – 2010. It was 196.04 million tons of oil equivalents in 2011. In commercial buildings, about 42 – 58 % of the total energy is used for air-conditioning, heaters, fans and air coolers. India has an ever-widening energy supply-demand gap. The national level energy deficit in the year 2014 – 2015 is 5.1 %, while the regional grids are facing a shortage of 3.1 – 17.4 %. This has increased significantly in the last few years [2, Indraganti et al, 2015, p. 284].

About the institution

Salesian College is a minority educational institution of the Catholic Church, run by Salesians of Don Bosco, Kolkata Province and affiliated to the University of North Bengal. The college was established in Shillong, in 1933 and was shifted to its present location in Sonada, Darjeeling in 1938. In 1935, it received affiliation to the Calcutta