

Master Plan compliance with the environmental Norms

A.Environmental Monitoring:

1. Assessment of air
2. Land- soil temperature, humidity, ph, metal content.
3. Water quality(river water, underground water, etc)
4. Conducting field surveys and field work

B.Waste Management in the campus:

1. Waste management of land of the campus- segregation of wastes into Bio-degradable and Non-biodegradable waste bins.
2. Non-biodegradable wastes should be collected in a separate place for recycling.
3. Vermicomposting of the bio-degradable wastes inside the campus.
4. A farm may be constructed at the site near the dustbins, where, different vegetables can be grown using the natural manures or vermicomposted soil.
5. A biogas plant can be constructed.
6. A biofuel plant can be constructed.
7. A recycling unit can be constructed at IIT Kamand campus, where recycling of various types of wastes can be recycled inside the campus-
 - i). There is no recycling centre in Mandi,
 - ii). Cost and trouble of transporting wastes to far recycling centres.
 - iii). Paper, glass and plastic wastes can be recycled easily.
 - iv). Recycled materials can be sold to various shops in Mandi.
8. Disposal of effluents from Institute Laboratories- by the following groups;
 - i). M/s Shivalik Solid Waste Management Ltd.
 - ii). Enviro Engineers Shimla
9. Effluent treatment plants and sewage treatment system is incorporated, where waste water from the entire campus is re-cycled and discharged into the canals and river Uhl.

C.Energy Efficiency and Conservation:

IIT Mandi aims at development of Green Energy technologies — solar, hydro, wind, geothermal and bio-mass in the next five years. Hydro and geothermal are especially relevant in the Himalayan region where IIT Mandi is situated. The Institute interests are on matters relating to multiple dimensions of green energy including energy education, energy conversion, energy policy, energy efficiency, energy conservation and load management, energy storage, renewable energy, distributed generation, protection of environmental resources, and the dissemination of useful information on energy alternatives and sustainability to users and providers of energy.

IIT Mandi is already pursuing the following key research areas.

This is reflected in both research and educational activities.

- Information and communication technologies applications to green energy.
- Integration of green energy with sustainable and intelligent buildings.
- Power electronics applications to green energy.
- Power systems operation with green energy.
- Materials (nano, meta, bio and high energy) applications to green energy.
- Green energy regulatory and policies issues.

D.Beautification and bio-diversity conservation of the campus:

1.Herbal Garden is constructed in Monkey Point South of IIT Kamand Campus.

A good number of medicinal plants are grown in the herbal garden.

Names of the medicinal plants are :

- i. Holy Basil
- ii. Camphor Basil
- iii. Mint
- iv. Peppermint
- v. Toothache Plant
- vi. Rudraksh Plant
- vii. Aloe Vera
- viii. Turmeric Plant
- ix. Lemon grass
- x. Bay Leaf
- xi. Cinnamon

Names of the Ornamental plants are :

- i. Rose
- ii. Wildrose
- iii.Merrygold
- iv. Sunflower

2.Botanical Garden is constructed at a height of 600 meters from the ground.

3.Identification of Flora and Fauna

4.Conservation of greenery.

5.Removal of harmful plants like Parthenium from along the sides of the road and from the campus.

6.Plants, which have medicinal values can be planted in good numbers,viz; Aloe vera,tulsi ,etc.

7.Ornamental and bright flowers is to be planted.Eg;Orchid,Wild Rose,Cherry Blossoms(seasonal), etc.

8.Hervarium can be planned in some free spaces.

9.Beautiful gardens can be constructed with rare and extinct flowers.

10.A museum can be planned with a collection of a variety of insects and butterflies and plants (including the extinct ones).

11.A bird sanctuary may be constructed near the museum.

12.A rock-garden may be constructed with full natural resources,like spring water and rocks(which are generally thrown away or dumped here and there.

13.Rock Bolts installation in future for prevention of landsliding.

14.Herbal Medicines manufacturing.