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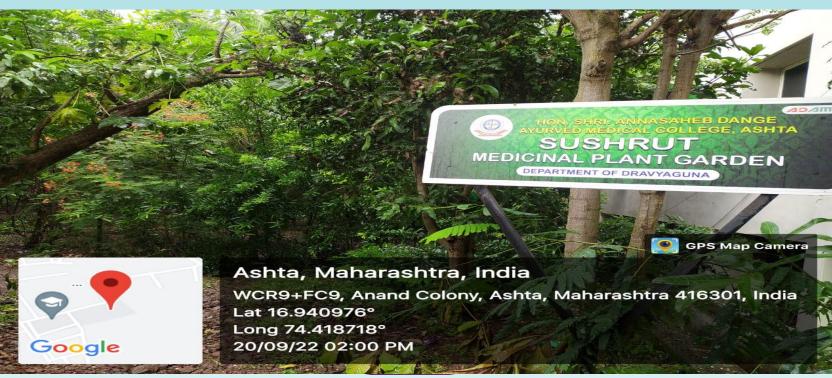


Sant Dnyaneshwar Shikshan Sanstha's

Hon. Shri. Annasaheb Dange Ayurved Medical College & Post Graduate Research Center

A/p: Ashta, Tal.: Walwa, Dist: Sangli - 416 301

Website: www.adamcashta.com E-mail: ashta.adamc@gmail.com





























to save our Environment































Environmental protection is needed for sustainable development of society. It is a moral obligation for humans to protect the environment from pollution and other activities that lead to environmental degradation.

'Green Good Deeds' the societal movement launched by the Hon'ble Minister for Environment, Forest & Climate Change Dr. Harsh Vardhan, to protect environment and promote good living in the country. 'Green Good Deeds' is an idea to take it to the people and get them involved at the ground level to strengthen the cause of environment protection.

In the spirit of saving environment, **CPCB ENVIS** have come up with a list of dos and don'ts that help us....TO SAVE THE ENVIRONMENT!!! There are little things we can do every day to help in protecting environment and make a less harmful impact on the environment. Taking care of the Mother Earth is not just a responsibility – it is an honour.

Dos & Don'ts - to save our environment is an initiative in the direction of environmental concerns that help the overall health of planet. This book has been conceptualized and designed while keeping in view the interests of society. The book compiled various informative dos and don'ts on environmental issues like Water, Noise & Vehicular pollution, Energy Conservation, Municipal Solid Waste, Plastic Waste etc. It is hoped that this book will help to educate people on sustainability and the need to protect the environment.

CPCB ENVIS





A Brief Overview Of Environmental Safeguard Policies in Our Institute

ENVIRONMENTAL SAFEGUARDS

To monitor the possible environmental risks and the impacts of associated development intervention

To define measures and processes to effectively manage risks and reduce negative impacts of development

To prevent and mitigate excessive burden on people and their environment

Safeguards Policies

Since the enforcement of the Environment (Protection) Act in 1986, the Government of India has launched programs for conservation of natural resources and biodiversity. However, the challenges have increased with rapid urbanisation, industrialisation and other destructive human activities leading to climate change.

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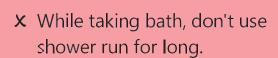
Protecting our Planet is a Moral obligation. To contribute to the mission of environment protection join hands to publicly protest environmental pollution. To save our planet, there are simple things we can start doing at home.

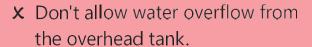


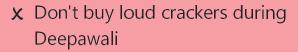


- ✓ Use mug instead of running tap while brushing teeth.
- ✓ While watering plants, instead of running hose, use water can.
- ✓ Use a toilet flush which consumes less water.
- ✓ Carry cloth, jute or paper bag to the market
- ✓ Use dustbin for garbage disposal.
- ✓ Plant a garden. Even in urban settings, you can grow herbs and flowers in pots.
- ✓ Wear extra-layer of clothes at home instead of turning up the heater.
- ✓ While shaving, use mug instead running tap.
- ✓ If you have a choice, pick paper bags over plastic bags at the grocer and elsewhere if you do take plastic bags, wash and reuse them.









- X For washing floor, Don't use running hose, use mop & bucket.
- X Don't junk things which break; rather think to fix them.
- X Avoid unnecessary use of lights and fans.
- X Don't increase the volume of your TV, radio and music system.
- X Never leave food residue in your plate uneaten.
- X Don't over packaged' goods and foods. Containers and packaging make up about a quarter of the waste stream















Vehicular pollution is the release of pollutants into the environment by motor vehicles. The major pollutants emitted by motor vehicles including CO, NOx, sulphur oxides, (SO), HC and Particulate Matter (PM), which have damaging effects on both human health and ecology. The internal combustion engines need a mixture of air and fuel to burn and produce energy to propel the vehicle. These burnt gases which come out of the exhaust are responsible for pollution.

Impacts of Vehicular Pollution

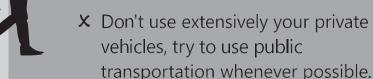
All the major cities of the world, faces problem of air pollution. Vehicular pollution is a prominent source of air pollution which adverse effects not only on the health of living organisms but also degrades the environment. Major pollutants released by motor vehicles comprise of carbon dioxide (CO₂), carbon monoxide (CO),

oxides of nitrogen (NOx), sulphur oxides (SOx), hydrocarbon (HC) and Particulate Matter (PM). Air pollution is a major cause of thousands of deaths and a loss of billions of dollars in medical cost for treating air pollution related diseases.



- ✓ Do you really need to drive a car everywhere? Walk to work, or ride a bicycle
- ✓ Carpool. Two or four can ride as cheaply as one.
- ✓ Get a valid pollution under control certificate from authorized testing centre.
- Clean up your act. Keep automobiles fuel filters clean and save the fuel.
- ✓ Clean the air filter and oil filter regularly.
- Maintain recommended tyre pressure.







- X Avoid congested road and rush hours.
- X Don't idle away energy. Beyond one minute, it is advisable to turn of engine.

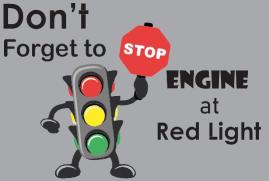


X Don't forget to Keep your vehicle tuned up. When a vehicle is running well, it releases less emissions.









Water pollution is the contamination of natural water bodies (e.g. lakes, rivers, sea, ocean, aguifers, ground water etc.) This form of environmental degradation occurs when pollutants are directly or indirectly added into the water bodies without proper treatment. Pollutants get into water directly or indirectly mainly by various human factors. Water pollution can be a Point-source, Non Point-source, or Transboundary in nature.

Impacts of Water Pollution

Water pollution is very serious problem as it affects all spheres of life of human, animals, and plants.

Effects on human health Without treating waste water, people often get exposed to various water-borne diseases such as cholera, diarrhoea, etc.

Effects on environment & ecosystems

- 1. Nutrient pollution from upstream of land flows down and contaminates the water body and promotes the algae growth which affects the fish and other aquatic organisms by absorbing their oxygen supply.
- 2. The thermal wastewater also reduces the organisms sensitive to high temperature.







- ✓ Reuse of water whenever possible, Kitchen water can be used for watering the plants
- Plan your kitchen activity to avoid wastage of fuel and water.
- ✓ Fix leaks promptly. A dripping joint can waste more than 76 liters of water a day.
- ✓ Take showers instead of baths. Showers use less water - if you limit them to five minutes. Install low-flow shower-heads.
- ✓ Plastic materials can be a murder weapons for wildlife, blown from land and roadsides, they often end up in the water, where they can entangle and kill birds and fishes.
- Use sprinkler for irrigation.
- ✓ Use scientific method of applying fertilizers.
- Run your dishwasher, washing machine, and dryer only when you have full loads. Use an outdoor clothesline instead of a clothes dryer.



washing dishes it wastes about 2 liters of water every minute. X Don't hose down your lawn or

having bath, brushing teeth or

corridor to clean it. Sweep it off.

Pollution

- X Don't wash the clothes and kitchen utensils in the water bodies
- X Don't litter. When camping, keep the areas clean.
- X Avoid throwing flowers, sweets, puja materials into a river. It will degrade the quality of water. The river won't be happy with this.
- X Avoid throwing dead bodies in a river. This will ultimately landing in the mouth of dogs, vultures & other animals. Do you like it to happen with your bodies?
- X Never dump anything into the water bodies.
- X Avoid use of weedicides.







Noise Pollution

Noise is, typically, defined as unwanted sound. Sound which pleases the listeners is music and which causes pain and annoyance is noise. At times, what is music for some can be noise for others.

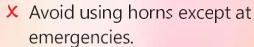
Impacts of Noise Pollution

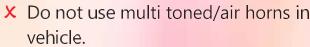
Noise is generally harmful and a serious health hazard. Problems caused by noise pollution include stress related illnesses, speech interference, hearing loss, sleep disruption, and lost productivity. Noise pollution has many physical, physiological effects on both human and animal health.

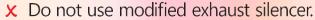


- Always maintain your motor vehicle and its exhaust silencer in proper condition.
- ✓ Ensure that Diesel Generator Set is provided with acoustic enclosure which gives a reduction of noise level by 25 dB(A) (minimum).
- ✓ Ask for valid type approval certificate from the dealer while purchasing portable petrol/kerosene generator sets.
- Keep the volume of the loudspeaker or sound amplification system low so as not to annoy your neighbours.
- Ensure that the sound from music system is played at volume which does not disturb your neighbour.
- ✓ Play fire-crackers only outdoors in designated areas and community level.
- Use only Green fire-crackers that comply with noise standards and emit reduced emmision.









X Do not install Diesel Generator Sets without prior approval of the competent authority, if required by local laws.

X Do not use loudspeaker in the open and without obtaining permission.

 Do not use loudspeaker or any sound amplification system
 between 10:00 P.M. to 6:00 A.M., except in closed premises.

X Do not make your neighbour a captive listener to your music system.

X Do not play fire-crackers beyond 08:00 P.M. to 10:00 P.M.











unicipal Solid Waste (MSW) is a commercial and domestic wastes generated in municipal or notified areas in either solid or semi-solid consists of everyday items such as kitchen waste, bottles, cans, grass clipping clothing newspaper, batteries and paints etc. MSW does not include industrial, hazardous, or construction waste.



Environmental Impacts of Municipal Solid Waste Disposal on Land

Ground and surface water contamination due to generation of leachate

Generation of bad odour, pests and rodents

Generation of toxic gases like H₂S, ammonia, methane and other VOCs

Air pollution due to frequent fires and dust

Green house gas emission & Soil acidity

Spread of epidemics due to stray animals, flies and vectors





- Segregate waste at source and handover on daily basis to authorized waste collectors.
- ✓ Put biodegradable, non-biodegradable and domestic hazardous waste in separate bins.
- ✓ Wrap sanitary wastes with secured pouch and handover to waste collector or deposit at designated bins.
- ✓ Report to municipality for burning, throwing, littering of MSW.
- Compost biodegradable waste at home as far as possible.
- ✓ Pay user fee for waste collection to authorised person.
- ✓ Inform local body for organizing events of more than 100 people gathering so that waste can be collected.
- Discuss about waste management with neighbors and participate in community programs.
- ✓ Minimize MSW generation.



















- Don't Handover garbage to unauthorized person and not to store more than 24 hours.
- × Don't mix garbage in single bin.
- Don't mix sanitary waste and domestic hazardous wastes with other wastes.
- Don't burn, throw, litter and bury MSW.
- × Don't process MSW unscientifically.
- Don't throw garbage from balcony/window.
- Don't organize events more than 100 people without ensuring waste disposal
- Don't avoid participation in community programs



Keep our cities clean, put wastes in right bin



Plastic is a non-biodegradable product, with the potential to cause great harm to the environment. Plastic pollution is occurs when plastic has gathered in an area and has begun to negatively impact the natural environment and create problems for plants, wildlife and even human population. Often this includes killing plant life and posing dangers to local animals.

astic Pollution mpacts of

- Many stray animals end up eating plastic bags and bottles due to improper disposal systems, and this can cause their death.
- During the rainy season, plastic waste gets washed away into the nearby water reservoirs, canals and drains, leading to their choking up. Also, water quality gets spoiled due to addition of these synthetic materials.
- · When dumped in landfills, plastic materials interact with water and form hazardous chemicals. If these compounds seep down which, leading to groundwater pollution.
- Plastic pollution in marine water bodies leads to innumerable deaths of aquatic animals.
- Burning plastic leads to contamination of the atmosphere, due to the release of poisonous chemicals, leading to air pollution.



- ✓ Use >50um plastic carry bags, Films/sheet/or like.
- ✓ Use Virgin plastic carry bags for storing, dispensing, selling food-stuffs.
- ✓ Plastic can be recycled to 2-3 times & then disposed or dumped on landfill cause environmental nuisance.
- ✓ Collect MSW in 3 Bins
 - DRY Plastic, Papers etc
 - WET Kitchen Waste etc
 - Domestic Hazards Battery, CFL, LED, Electronic waste, Sanitary pads etc.
- ✓ Plastic can be processed in cement kilns, Road construction, waste to energy plant & RDF etc.
- ✓ Carry a compost-able, jute, paper or cloth bag while going for purchasing.
- ✓ Buy food in glass jars, paper bags, compost-able material etc.
- ✓ Compost-able bags and product's life cycle is complete & eco-friendly.
- ✓ Minimize use of plastic carry bags, cups plastic spoons etc.





- bags/sheet or like. X Don't use coloured & recycled for
- storing, dispensing Food-stuffs.
- X Dumping/Littering cause infertility of soil, contaminate underground water, quality burning plastic waste releases toxic gasses.



- X Don't litter may be engulfed by cattle's/animals which are leading to death.
- X Burning of plastic waste may contaminate air quality & cause Pulmonary cancer, Asthma etc.



- X Avoid buying items in packaged plastic & multi-layered films.
- X Petro-chemical based bags and product's life cycle is not complete, hence dumped to landfill, rivers drains, oceans etc.



>50u



Bio-medical waste is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals. It include wastes like human anatomical waste, animal waste, microbiology & biotechnology waste, waste sharps, discarded medicines& cytotoxic drugs, soiled waste, solid waste, liquid waste, incineration ash, chemical wastes.



Impacts of Bio-medical Waste

- Bio-medical waste if not disposed properly, it can cause adverse effect to human health and environment.
- Foul odour is emitted at the disposal site due to the continuous decomposition of organic matter and emission of harmful gases like methane, hydrogen sulphide, ammonia, etc. The problem is intensified if proper mitigation measures are not adopted.
- Domestic rats, birds and other scavenging animals besides being aesthetically unpleasant, also act as reservoirs for many organisms transmissible to people, including plague, forms of typhus, leptospirosis, trichinosis, psittacosis and salmonella infection.
- Indiscriminate disposal of pharmaceutical products and discharge of untreated wastewater generated from the health care facilities could have disastrous ecological effects.

D0's

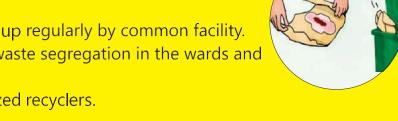
- ✓ Segregate biomedical waste at the source of generation itself in colour coded containers / bags as per the BMWM Rules, 2016.
- ✓ Use same coloured container as that of colour coded bags according to waste category.
- ✓ Pre-treat only the infectious microbiology, biotechnology and other clinically laboratory waste.
- ✓ Use separate yellow coloured bag with Cyctotoxic symbol for disposal vials, ampoules, gloves, IV sets etc. contaminated with cytotoxic drugs.
- ✓ Disinfect the bins with detergent or soap and water periodically.
- ✓ Collect the organic waste such as leftover food, fruit peels, etc., in green coloured wet bin, meant for general solid waste.
- ✓ Collect the dry solid waste such as papers, wrappers, plastic bottles, etc. in blue coloured dry bin, meant for general waste.
- ✓ Transport the bio-medical waste from source of generation to Central collection Room in closed trolleys provided with bio-hazarad symbol.
- ✓ Transport waste through a pre- defined route within the hospital.
- ✓ Ensure that entire biomedical waste is handed over to common facility for necessary treatment and disposal.
- ✓ Maintain records with regard to bio-medical waste management vis-à-vis waste generation, storage, treatment & disposal.







- ✓ Ensure that the colour coded bag has bio-hazard symbol, label and bar coded label.
- ✓ Remove plastic bags when ¾ full, tie the bags properly. Ensure bag is properly tied / sealed to avoid spillage.
- ✓ Provide Personal Protective Equipment to housekeeping staff handling biomedical waste.
- ✓ Disinfect and cut the waste mattresses into 4 to 6 pieces prior to disposal.
- ✓ Collect needles / syringes with fixed needles in white coloured containers.
- ✓ Collect empty glass vials or empty glass ampoules in puncture proof, leakproof boxes or containers with blue colour marking and handover the box to CBMWTF.
- ✓ Disinfect the liquid waste from laboratory prior to mixing the same with hospital effluent.
- ✓ Collect used sanitary waste like diapers or sanitary napkins generated from wards (patient area) into yellow coloured bag.
- ✓ Collect sanitary waste wrapped (in pouches or suitable wrapping material) generated from public toilets in dry solid waste bins (blue bins) as part of general waste.
- ✓ Report to SPCBs in case waste is not picked up regularly by common facility.
- ✓ Paste placards or postures for bio-medical waste segregation in the wards and collection centres.
- ✓ Sell X-ray hypo solution to only the authorized recyclers.





- Never mix bio-medical waste with general waste.
- × Don't use chlorinated plastic bags for collection of bio-medical waste.
- Never store human anatomical, animal anatomical waste, solid waste and bio technology waste beyond 48 hrs.
- ➤ Don't set-up on-site or captive treatment facility in case a common facility exists at a distance of 75Km.
- Don't dispose sharps (used syringes with needles, broken glass, scalpels etc.) into yellow or red coloured bags.
- × Don't dispose plastic waste into yellow coloured bags.
- Don't fill the bags till neck.
- Don't handle waste without Personal Protective Equipment such as protective clothing, gloves, mask. shoe etc.
- Don't drag the bags after removal. (Bags can burst and the site could be repulsive.)
- ➤ Don't fill more than 20kg of biomedical waste in a bag.
- ➤ Don't sell/dispose/auction used linen / bed-sheets without disinfection.
- Don't handover plastic waste to un-authorized persons.
- Don't keep lid of the waste bins in open condition.
- Don't use the lift meant for patients for intra-mural transportation of biomedical waste.







Construction and demolition wastes (CDW) are comprising of building materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure. Indiscriminate dumping and improper management of C&D wastes cause serious environmental problem.

Impacts of C&D Waste

- Indiscriminate dumping of C & D wastes impose strain on landfills sites and unsustainable situation.
- Potential high value of recyclable material not tapped and gets buried in illegal dumps lead to economic loss.
- Indiscriminate disposal of C&D wastes along river banks or dumped in drains hamper flow thereby.
- In case of dumping on river beds, drains, the water flow carries soluble materials to the lower stretch polluting entire water bodies.
- The key pollutants that impact environment are dust and noise besides other issues.



- ✓ Adhere to dust mitigation measures in case of any Construction and Demolition.
- Road to construction site must be paved.
- Excavate soil with adequate dust mitigation measure.
- Cover all construction & demolition waste and construction material while in store or transportation
- ✓ Install wind breakers to restrict movement of dust.
- ✓ Install water sprinkling system.
- ✓ Display dust mitigation measures at site.
- ✓ Grind and cut the building material in closed premise.
- ✓ Send C&D waste material to identified disposal site for processing.











- Leave open soil unattended.
- Wait to construct paved and blacktopped road till project is completed.
 - Excavate soil without any dust mitigation measure.
- Leave the unused construction material
 C&D waste as it is.
- Allow dust to become air-borne at your site.
- Use drinking water for suppressing dust.
- Wait for public to ask for dust control if it is affecting them.
 - Grind and cut in open space leading to dust accumulation and noise.
 - Allow construction material and C&D waste material to be transported uncovered.
 - Avoid processing cost of C&D waste and dump in road/canal side.

Energy conservation means avoiding using energy and avoiding wasting energy. Conservation measures generally cost very little because they involve changes to our behaviour. An example would be turning off your television after you've finished watching it rather than leaving it switched on in standby mode.



What if we do not conserve Energy?

- Stripping the planet of its natural resources, our energy consumption is also drastically affecting its climate patterns.
- Major floods may now start to happen every 10 or 20 years rather than once or twice a century.
- Global sea levels could rise by almost a meter by 2100.
- Coastal areas around sea will be at a greater risk of flooding.
- Most of the energy sources we depend on, like coal and natural gas, can't be replaced once we use them up, they're gone forever. Another problem is that most forms of energy can cause pollution.

Be with Us !!! "VASUNDHARA" Green Club



Green Skill Development Programme (GSDP)

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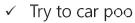




Turn off the

leave a room.





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