

Exercise 1

Aim

To describe the environmental problems of your locality and suggest a remedy.

Environmental problems differ from one area to another. Problems of pollution may be in the form of air pollution, water pollution, or noise pollution. Garbage accumulation, soil erosion, loss of biodiversity are some other environmental problems that have reached an enormous proportion and need to be investigated to find solutions.

Objectives

After performing this exercise, you will be able to:

- Identify specific environmental problems associated with a particular locality.
- Locate the cause of the environmental problem of a locality as an environmentalist.
- Suggest remedies that may be simple and inexpensive.
- Harmful effects of the existing environmental problems we currently face.

What You Should Know

You should be able to identify the major environmental

problem of your locality. Some environmental problems are mentioned below. One of them may be a problem of your locality or it may be one not mentioned here.

a) Noise and Air Pollution

- In case you live in a crowded urban area, you are certain to face air pollution and noise pollution.

b) Problems of Drinking Water and Sanitation

- If you live in rural areas, you may face the crisis of clean drinking water and problems of smoke from burning coal as also sanitary problems.

- In semi-urban highly populated slum areas, one might face the scarcity of clean drinking water and open drains with sewage disposal problems and other sanitary problems.

c) Garbage accumulation

- This includes the collection of garbage in a landfill and trash being peppered across the city. This can create problems in the cities, like the landfills acting as a breeding ground for vectors of common diseases, toxins leaching into the underground water table, the release of large volumes of greenhouse gases, and compostable materials taking ten times as much time to decompose.

Material Required

- Reliable data on the carbon impact of each product produced by each company.
- A notebook and pen will be required.

Method

- Air pollution by dust and fuel smoke can be dealt with by contacting the authorities who are authorized to take steps to control it. Like for example, if the soil is dug by water, electricity, telephone, or sewage departments creating dust problems, they can be asked to repair the dug-up roads.
- Similarly, industrial pollution can be handled by contacting the authorities.
- To control and resolve the problem of garbage accumulation, we should realize that one use items hold little to no place in society. Companies should be held responsible for the trash their products generate and the damage caused by an industry to the environment must be objectified and highly regulated in terms of damage caused to the environment through their operations as well as through what they produce.

Observations

a) Environmental problems of my locality.

- Accumulation of garbage in every street corner and the trash being peppered across the city makes the city a visually unpleasant place to live in.
- The landfills, that hold a huge amount of the city's trash, are not only a source of odor to the surrounding communities but are also a major source of methane emissions.
- The toxins from the trash eventually also leach into the ground not only polluting the soil but also contaminating the underground water table that many people rely upon as their primary water supply.
- Landfills are also prone to catching fires due to the flammability of the materials they hold and pockets of methane they might contain which are difficult to manage and control.
- The spots of garbage act as breeding grounds for vectors of diseases like dengue and malaria. Thus, leading to the spread of diseases.
- During the monsoon, the flowing water carries the trash towards the drains leading to severe waterlogging and damage to vehicles and city infrastructure.

- The rain also washes the trash into the rivers, which leads plastics and other non-degradable materials to the oceans, where they are slowly broken into tiny microplastics by the UV rays radiated upon them by the sun. These microplastics are consumed by planktons and then lead their way up the food chain. This is not only hazardous to the countless birds and fishes but also to us humans than consume a great number of fish and crustaceans

b) The primary environmental problem

- The primary problem that we face is the humongous amount of trash humans generate.

- The cause of this problem is the industries that are not held accountable for the trash and environmental harm their products and activities bring about.

c) Names of people who can be contacted to rectify the problem.

- State Legislative Assembly (Vidhan Sabha)

d) Form a welfare association or in case there is already one, force them to take steps to check the environmental problem.

e) Educate your neighbor in your locality to collect the biodegradable garbage and convert it by

vermicomposting method into compost or manure. The manure can be sold to individuals for their kitchen gardens or may be used in the community parks and gardens.

Discussion

Discuss the source/ cause of the problem, its harmful impact, and how it can be tackled to prevent further degradation.

Plastics and other polymers are designed to be very stable and impervious to decomposition. They are easy to mold, durable, and sterile. Hence, industries have taken advantage of these properties and have used them in the making of almost all the products we use and to package goods. But due to its durability, it is not a very good choice for single-use products. This is because its stable nature can enable it to maintain its structure for centuries. The durability along with our heavy use of it, causes it to be a major constituent of our trash.

This also highlights a broader theme of us as a society enabling manufacturers to sell goods whose wastes, we cannot handle or recycle. A manufacturer should not be able to sell for example a glass bottle of a beverage unless there is a system in place, which does not include piling it up in a landfill, to deal with the glass bottle after it is done being used.

Hence, we must put in place a robust incentive-based structure at a national level, which rates the net environmental damage caused by a company on a positive-negative scale. Based on this scale companies with a net positive should be proportionally penalized. And companies with a net negative damage, when measured with this scale, should be proportionally rewarded. For example, a company that mainly recycles glass should reap the benefits, of cleaning our environment up and reducing the load on our landfills, with things like a tax break. On the other hand, a company that pumps carbon into the atmosphere should be taxed proportionally.

This will enable companies to shift to a more sustainable model rather than outright banning companies from continuing their practices. This structure when put in place will tip the scales of society to a cleaner and sustainable one.

Precautions

- The incentive structure put in place should be flexible, to not disincentive good practices and enable bad ones.
- Take the help of your teacher in locating or identifying the real environmental problem.
- You should know your limitation and not annoy

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anyone to solve your environmental problem.