

**“Green Belt development for safeguarding our tomorrow”**

*‘A step towards sustainable development’*



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## What is Green Belt ?

Green belt land refers to an area that is kept in reserve for an open space, most often around larger cities. The main purpose of the green belt policy is to protect the land around larger urban centres from urban sprawl, and maintain the designated area for forestry and agriculture as well as to provide habitat to wildlife.

## Advantages of Green Belt

- **Air Pollution control:** Trees help in removing carbon dioxide and other pollutants from air and by release of oxygen into the air thereby improving air quality. A green belt development can also help in removing particulate matter from the air by trapping such particulate matter.



- **Noise control:** A green belt reduces the intensity of sound. Function as a barrier. Trees can either deflect, refract or may absorb sound to reduce its intensity. The intensity reduction depends on the distance sound has to travel from source. Trees can also modify suitably the humidity and climate which affects sound intensity.



- **Helps in soil erosion control:** through improvement of soil quality and bind soil particles.

- **Helps in containing water run offs**



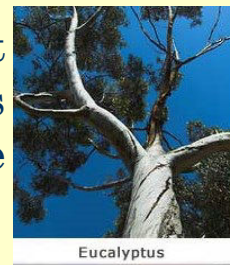
## Factors which influence the design of green belts

- Climatic factors such as: Wind Velocity
- Assimilation capacity of the ecosystem
- Height and canopy of trees
- Topography
- Size of land available
- Distance from source
- Soil and Water quality
- Nature and extend of pollutants

## Particular species used in green belt

### Plants which counteract odour are:

- Bushes with mild but active fragrance.
- **Acacia farnesiana (Mexican plant):** It is a type of bush with yellow coloured fragrant flowers. It does not have rich canopy but very effective for counteracting smell. Its limitation is seasonality and thorny nature.
- **Melaleuca species:** It has sweet fragrance and thin canopy in India.
- **Pine, Cedar, Junipers:** They have excellent canopy and protection. Its limitation is site specificity.
- **Eucalyptus:** It can be used as very good belt and can also be used as per odour source. Its limitation is site specificity and height in the urban neighbourhood.
- Hedges, Herbs (Tulsi, Turmeric etc.) can also be used for counteracting odour.
- **Vetiver :** This plant is a king of perfumes for inactivating other odours. It affects the nervous system and relieves fatigue. It is used as key species in aromatherapy.
- **Plants which tolerate pollution**
  - Nerium (Kanar), this plant may or may not have a thick canopy but has excellent results with vehicular pollution experimented at National Botanical Research Institute, Lucknow.
  - other than these plants species used for green belt are as under: Acacia auriculiformis, Bamboo, Pongamia pininata, Neem and Casuarina etc.



## Green belt development regulations in India

In India, we do not have any exclusive green belt policy or green belt regulation, as available in other countries. However, on the basis of other environmental policies and Acts, we do have certain areas of land as green belts where no industrial and residential projects is encouraged. The Ministry of Environment & Forests (MoEF) has taken up different initiatives and has always promoted integration of environmental issues in developmental projects. We do have the Environmental Impact Assessment (EIA) of developmental projects, issued in 1994 and then revised in 2006. The EIA has come up with a guided manual where building, construction, townships, industries and area development projects must conform to certain rules and regulations that do

**Following are the key points of the manual which need to be followed by all industries before establishing their units in certain areas:**

- No forest land shall be converted.
- No agricultural land shall be converted into industrial area.
- Any industry established nearer to a green belt should be concealed from general sight.
- Land taken for development projects should provide space for appropriate waste water treatment.
- Treated waste water shall be used to raise green belt.
- The green belt between two adjoining large industries shall be one km.
- Space should be made available for storage of solid wastes so that these could be reused if required.
- Lay-out of a project must conform to the landscape of the area
- Planting of trees alongside of roads is mandatory.