# 1. Renewable energy - solar panels

The energy requirements of the retreat are met in two ways electricity and fuels. Electricity consumption can be further divided into two segments based on the source, namely solar and grid. The Shillim Estate uses almost 800 KW capacity of solar energy to run its administrative buildings.



# 2. Rainwater harvesting

Rainwater harvesting is done during monsoon - retreat is self-sufficient to serve its water demand during July-October. Rainwater is collected from a roof surface and redirected to a tank, cistern, bottomless pit (well, shaft, or borehole), aquifer, or a reservoir with percolation to seep down restores the groundwater.

# 3. Water bottling

A water bottling plant is installed to replace plastic water bottles in the retreat, which replaces the packaged and bottled plastic water bottles. Water bottling also reduces our carbon footprint since we don't have to transport bottles from Mumbai or Pune.

# 4. Wastewater recycling

Five sewage recycling units are installed across the retreat, and recycled water is discharged in now water stream. The water is recycled through the following process: (1) the sediment: through a refining process of filtration, decantation and lamellar clarification (2) bacteria: by disinfection using ultraviolet light or oxidation. (3) micropollutants: eliminated by filtration or by clarification.

# 5. Food recycling - food waste turning into composts and manure

Organic Waste Converter converts 13000 kgs of food waste into manure, used for landscape and gardening activities.

# 6. Regenerative Farming

- The farm garden produced around 1000 kg of vegetables per year.
- The organic farm uses organic manures like cow dung, cow urine and compost as natural fertilisers.
- Guests from the Hilton Retreat visit the farm garden to understand organic farming.
- The nursery team of 5 members take care of the farm.
- Organic seeds are procured locally and used for cultivation
- Plants have been grown till now
  - 1. Blue beans
  - 2. White beans
  - 3. Iceberg Lettuce
  - 4. Arugula
  - 5. Green Lettuce
  - 6. Red lettuce
  - 7. Romaine Lettuce
  - 8. Italian Basil
  - 9. Purple Basil
  - 10. Mint
  - 11. Spearmint
  - 12. Peppermint
  - 13. Oregano
  - 14. Thyme
  - 15. Yellow zucchini
  - 16. Green zucchini
  - 17. White pumpkin
  - 18. Chinese cabbage
  - 19. Cabbage
  - 20. Cauliflower
  - 21. Brinjal
  - 22. Chilli
  - 23. Cherry tomato
  - 24. Bitter gourd
  - 25. Gourd
  - 26. Cucumber
  - 27. Papaya
  - 28. Thai ginger
  - 29. Bay leaves
  - 30. Ginger
  - 31. Turmeric
  - 32. Lime
  - 33. Strawberry









7. Conservation & Removal of Invasive Species of Trees/Plants



The Shillim Institute had planted thousands of native trees in the past years at the conservation sites, and in addition to that, it continues to conserve millions of trees at Shillim.

The plants Leucaena leucocephala, Chromolaena odorata, and Lantana camera are invasive and nonnative plants. The information is shared with the forest guards, horticulturists, and farm garden staff to remove such plants/trees from the property. Over a few years of systematic removal, the plants would be removed entirely from the estate.



8. Electricity