# Grape County Eco Resort & Biodiversity Park





# Vasudhaiva Kutumbakam

'The world is one Family' is the philosophy reflected in our Biodiversity Park where innumerable plants, animals, birds and insects coexist peacefully.



### TOP '4' OBJECTIVES GRAPE COUNTY ECO-RESORT



### **Grape County Resort – Project Details**

Total area of the project is 26600 sq. m.

Net area of project (after deductions) and SVAGRIHA project boundary = 21433.00 sq. m.

Total built-up area of the project = 1475.43 sq. m.

For SVAGRIHA certification, building meant for dining and banquet hall and two cottage structures / villas have been considered.



### **Eco-friendly material**



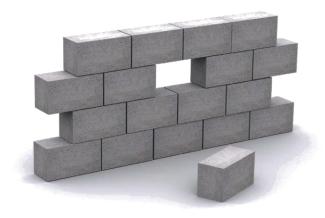
• Godra bricks



• Local Stones



• Shahabad Stones



• Fly ash bricks



• Recycled Wood

### **Eco-friendly material**



• Scrapped Metal



• Thermal glass for weather-proof structures



• Decorative light-weight Paneled wall

### **Smart material selection**







Use of LFF (low flow faucets)

Save 40% of Water Consumption

LFT (low flow toilets)

Save 7ltrs per flush than conventional Closet

### LED Lights & Fixtures

## **Building Design**

- Window contribute 14% of respective carpet area. And they are toward windward side.
- Allow good cross ventilation within the room
- Reduce the usage of air-condition.
- Allow maximum daylights in the common areas and reduce light energy consumption in daytime.



### **Cantilever Structures**

- The Site was a contour land
- Designed Cantilever structures which helped us to retain the contour as it is & it did not disturb the land



### **Our Green Initiatives**

- Approx. 40 50 % of the resort is powered by 40 KW Grid Solar energy power system mounted as shelter for Car Parking.
- Dual Axis Hybrid Solar System Moves according to the Sun's Direction.
- We have total 60 KW power generation plant which generates around 198.4 units per day.
- These 198.4 units saves Rs. 3273.60 /- per day.
- We save approximately amount of Rs. 11.78 Lakhs annually.
- It is anticipated that there is reduction of 120 kg/day of carbon dioxide emission in our area due to installation of solar panels



### **Root Zone System**

All the Kitchen water waste & Grey water naturally gets filtered through plant roots & reused for Landscaping



Infrastructure: Gravity Based Root Zone System

Water Consumption: 30, 000 Liter per day

Recycling and Reuse: 30, 000 Liter per day (100% Reuse)

We save Rs. 2,16,000 /- Yearly, against the water expenses for landscaping.

This also saves 125 units of electricity per day which Approx. saves Rs. 7,32,000/- yearly

### **Root Zone System**



Selected species for plantation on reed bed:

Phragmite sp, Pancratium Sp.Canna Indica (Kardali), Musa Paradisica (Banana), Commelina Nudiflorum, Weddelia Sp, Carica papaya (Papaya), Rosa sp,

Citronella, Jasmine sp, Occimum sp, Tecoma sp

.....



### **Root Zone System**



Before

After

# Vermicompost: All the Garden waste generated goes to Vermicompost, which turns into Natural Manure, which is used in Landscaping .





All the waste is collected to the compost. Approx 200 kgs of Compost generated in one cycle

Compost generated per year – Approx. 2400 Kg

Biogas: All the Kitchen waste is sent to the Biogas, Slurry from bio-gas is manure, so it is used plantation and landscaping.



#### Infrastructure: Biogas Generation Plant

Capacity: 200 Kg

### **Eco Practices at Grape County**

- Strict guideline and sustainable practice for any sort of development with the property
- No use of chemical fertilizer for landscaping & created maximum green spaces in the property
- Promote Organic farming by encouraging local farmers to sell their product at our resort
- All efforts are taken to make the property a "Plastic Free Zone" Operational Measures
- Training Programs for Employees conducted every quarterly for energy conservation and environmental aspects
- Installed Informative board and instrument chart for Guest regarding environmental and energy conservation aspects.
- We promote RO water to avoid the use of the Plastic bottles in the Restaurant





# We have saved 14 Cr. Litres of water in the Dam through the Rain Water Harvesting

### **Green Initiatives by Grape County**



#### **Tree Plantation drive**

Transplantation

**Organic Farming** 

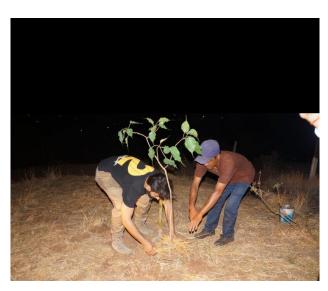
Since 2012, till date we have planted more than 58,500 trees, & have also nurtured them.

All the Trees which are been planted are the Native trees.

### **Social Initiatives by Grape County**



**Educational Tours** 



Adopt a tree Campaign



India's only Insect Festival

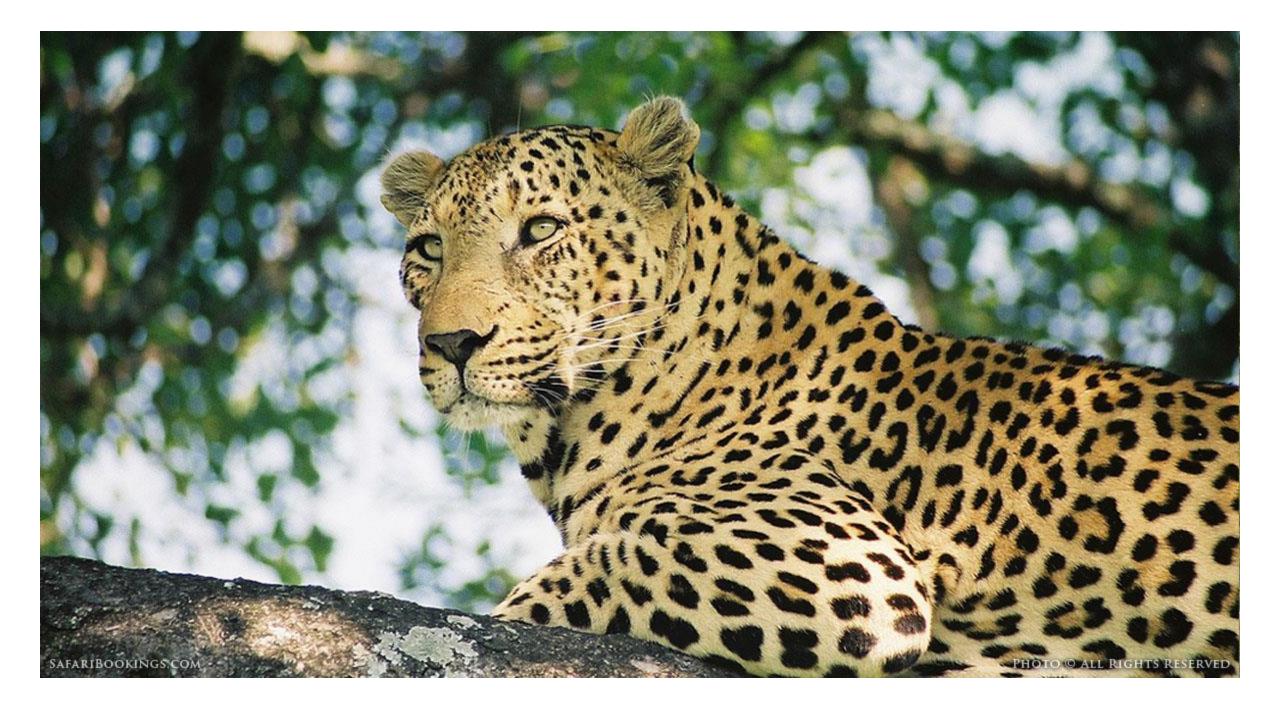
### Flora & Fauna at Grape County

More than 48 different kinds of Birds, 35 Different types of Butterflies & many types of Insects are seen here.











# Awards & Appreciations



Awarded with Integrated Water Management by Griha Council



Awarded with Best 'Renewable Energy Utilization' Award by TERI



# Certified with 5 Star rating under Swagriha

One of the Resort in Maharashtra to Receive 5 Star Rating Award



### **People behind the Project**

#### Ar. Shabbir Unwala

#### Ar. Sanjay Patil

Architect Design work Shop

Architect Environ Planners

#### Mr. Mark Sheehy

Horticulturist Dublin, Ireland

#### Ketaki & Manasi

Environmentalist Oikos

### Ar. Purva Keskar

Architect Vke:environmental





2012

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# 2019

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# Thank You