**AIMS AND AMBITIONS**

**MAINTAINING THE ESSENCE OF A “NATIONAL PARK”**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
<th>Opportunity</th>
<th>Threat</th>
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**Location in the midst of a city**

- Residents encroaching
- Make stringent rules & improve management
- Encroachment Humans vs Wildlife
- Safety to both

<table>
<thead>
<tr>
<th>Flora and Fauna, Lion &amp; Tiger safari</th>
<th>Maintenance</th>
<th>National park employees, visitors, enthusiasts</th>
<th>Creating Activities, Guided Tour</th>
<th>Employment Opportunity</th>
<th>Pollution</th>
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<td>People</td>
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<td>Vehicles</td>
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**Ranheri Caves, Krishna Jani Gopan**
- Lacking in sanitary facilities

**SWOT ANALYSIS**

**PROTECTING THE EXISTING ENVIRONMENT OF THE NATIONAL PARK**

**RESTORATION**

- Restoring the Dahisar River and saving the flora and fauna from destruction
- Creating a special visarjan zone, building check dams in the river.

**CONSERVATION**

- Making the Dahisar river perennial
- Creating rainwater harvesting ponds along the course of the river.

**INTERACTION**

- Promotion of and Education for conservation and reuse, seek to foster the economic and social well-being of local communities within the national park education via informative zones. Using, learning and promoting Indigenous knowledge. (Organic farming, reusing materials)

**AGENTIC**

- Change through empowerment, in terms of economy and resilience
- Income generating activities like restaurants, art gallery.

**ECO-TOURISM**

- Creating awareness about the national park
- Giving opportunities to people to stay within the national park (lodges & camping)

**USE OF SUSTAINABLE MATERIALS TO MAINTAIN THE CONSISTENCY OF THE ENVIRONMENT OF THE NATIONAL PARK**

---

**ECONOMIC VS CULTURAL VS ENVIRONMENTAL**

**CONFLICT OF THE EGO AND ECO**

**HAUS ANSCHUL**

- Observations
  - Basic framework made of “karvi”
  - Plastered with a mixture of cow dung and mud
  - Plastering process needs to be repeated once in two weeks
- Analysis
  - Structure is not raised to sufficient plinth, this is leading to water seepage from the floor

---

**LEARNING THROUGH EXISTING OBSERVATIONS OF THE NATIONAL PARK**

---

**RECUPERATION OF SGNP DESIGN PROPOSAL**

---

**WALK AROUND THROUGH A RAINFOREST IS NOT ECO-TOURISM UNLESS THAT WALK SOMEHOW BENEFITS THE ENVIRONMENT AND PEOPLE. YOU CANNOT PROTECT THE ENVIRONMENT UNLESS YOU EMPOWER PEOPLE, YOU INFORM THEM AND YOU HELP THEM UNDERSTAND THAT THESE RESOURCES ARE THEIR OWN, THAT THEY MUST PROTECT THEM.**

**NATIONAL PARK by definition— a reserve of natural or semi-natural land, open to public & owned by a government, set aside for animal and environmental protection and restricted from most development. It preserves nature, history or science for visitors.**

**NATIONAL PARK – what it means to us?...for the public (“We”),...for the flora and fauna...design with respect to whom?...people...ecology...?**

---

**ECOLOGY**

**PEOPLE**

**HARMONY**

---

**NOT TRYING TO HARM THE NATURE AS FAR AS POSSIBLE TRYING TO REGENERATE SPACES DAMAGED BY “US”**

**TO PROMOTE THE PROTECTION AND CONSERVATION OF NATIONAL PARKS FOR THE BENEFIT OF THE NATION**

**TO PROMOTE THE QUIET ENJOYMENT OF NATIONAL PARKS AND THE APPRECIATION OF THEIR NATURAL BEAUTY BY THE PUBLIC IN AN INFORMED AND UNDERSTANDING MANNER**

**TO ADVANCE PUBLIC EDUCATION AND UNDERSTANDING OF NATIONAL PARKS THROUGH THE PROVISION OF EDUCATION MATERIAL AND OTHER MEANS**

**TO PROMOTE AND UNDERTAKE RESEARCH INTO ISSUES AFFECTING THE CONSERVATION AND ENJOYMENT OF NATIONAL PARKS AND TO MAKE PUBLIC THE USEFUL RESULTS OF ANY SUCH RESEARCH.**

---

**EXAMPLES FROM THE NATIONAL PARK**

<table>
<thead>
<tr>
<th>Bamboo Solar</th>
<th>Recycle Karvi Hawk</th>
<th>Learning Through Existing Observations of the National Park</th>
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**“KUDA CHA GHAR”**

- Observations
  - Basic framework made of “karvi”
  - Plastered with a mixture of cow dung and mud
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- Analysis
  - Structure is not raised to sufficient plinth, this is leading to water seepage from the floor

---

**ENVIROMENTAL DESIGN GROUP**

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CREATING A “VISARJAN ZONE”

- The practice of idol immersion during Ganpati and Navratri festivals has long existed and these traditions cannot be halted.
- This is having an adverse effect on the Dahisar River.
- The design aims to provide a separate zone for Visarjan which would leave the Dahisar River unaffected.
- The zone would be active from September to January.
- No mechanical water treatment is proposed.
- From February to June, the water would dry up and the surface would be cleaned.
- Being a religious practice, using signage as a tool to prevent littering in the area.

SECTION AA

- Existing slope of land leading to pond formation.
- This direction is opposite to the direction of river flow.
- Using a Gabion wall to prevent the mixing of river water and the Visarjan water.
- The whole system is cost-effective.

PLAN SHOWING PROPOSED VISARJAN ZONE

- The pond will serve as a Visarjan zone in the months of September-October & January.
- In case of insufficiency of water the flanges would be opened up to fill the pond with water.
- The natural slope of land would enable the water to flow at the same time the Gabion wall would ensure that the contaminated water does not mix with the river.

ADDRESSING THE SOCIO-CULTURAL ASPECT

MAKING THE DAHISAR RIVER PERENNIAL

BUILDING CHECK DAMS AND CREATING RAINWATER HARVESTING PONDS

Check dam is a small, temporary or permanent dam constructed across the water stream to lower the speed of water flow. Check dam can be implemented as a system, consisting of several check dams situated at regular intervals.

Advantages

- Reduced run-off speed, which reduces erosion.
- Allows sediments & other pollutants to settle out.
- Allows ground water recharge, recharge of shallow ponds.
- Reduces salinity in ground water.
- Cost-effective - locally available materials.

Recuperation of water bodies by adopting rainwater harvesting & ground water recharging practices in catchment areas.

Rainwater harvesting, essentially means storing water in days of abundance, for use in lean days. Storing of rainwater can be done in the following ways via ponds:

- The water will soak into the ground & form aquifers.
- In the soil will remain as ground water.
- Utilize pond water directly for use.

RAINWATER HARVESTING CAN BE IMPLEMENTED AS A VAILABLE ALTERNATIVE TO CONVENTIONAL WATER SUPPLY

PLAN SHOWING CHECK DAMS AND RAINWATER HARVESTING PONDS

SECTION BB

RECUERATION OF SGNP DESIGN PROPOSAL
DUAL LAYER
1ST LAYER - NYLON MESH
2ND LAYER - HOOD

HOOD OVER THE NET TO PROTECT FROM HEAT & RAIN

REAR VIEW

TYRES USED FOR CYCLE PARKING

FRONT VIEW

ALUMINIUM POLE INSERTED INTO THE TYVEK SHEET

SITE PLAN

ORGANIC FARMING

CYCLE PARKING

TENT MATERIAL
1) NYLON
   USED FOR THE NET
2) TYVEK SHEET
   FOR THE HOOD
   LIGHT WEIGHT
   BREATHABLE MATERIAL
   TEAR RESISTANT
   CHEMICAL RESISTANT
3) ALUMINIUM POLES
   TEND TO BEND RATHER THAN BREAK
   STRONGER THAN FIBERGLASS
   RENT ALUMINIUM PIPE CAN BE

PLAN
SCALE 1:5

ELEVATION
SCALE 1:5

KEY PLAN

RECUPEERATION OF SGNP
DESIGN PROPOSAL

CAMPING SITE
ENVIRONMENTAL DESIGN GROUP
TO EDUCATE PEOPLE ABOUT REUSING MATERIALS
CREATING AWARENESS BY WAY
OF MURALS ON THE WALL

SEATING SPACE
CHINA MOSAIC PLATFORM
FOR SEATING
PATHWAY
12 M WIDE ROAD
ROAD TO LION SAFARI

EXISTING SPOT
TYRES USED AS
PLANTERS

CHINA MOSAIC ON
STREET FURNITURE
GLASS BOTTLE WALL

AIR GAP
ACTS AS INSULATION
15MM MORTAR

CHINA MOSAIC MURAL

CONCEPT SKETCHES
USE OF CYCLE TYRE AS
LANDSCAPE ELEMENT
SEATING AREA BELOW
TREE
USING TYRES FOR
PLANTS

KEY PLAN

INFORMATION ZONE
ENVIRONMENTAL DESIGN
GROUP E

RECUPERATION OF
SGNP
DESIGN PROPOSAL
COMPOST TOILET

COMPOST PIT DETAIL

CENTRALIZED WASTE WATER COLLECTION AND TREATMENT SYSTEMS ARE NOT THE MOST COST-EFFECTIVE OR ENVIRONMENALLY SOUND OPTION FOR ALL SITUATIONS. REED BED SYSTEM WILL BE AN IDEAL WAY TO RECYCLE THE WATER OF THE NATIONAL PARK.

SOME OF ITS ADVANTAGES ARE:
1) REQUIRED SLOPE IS IDEAL ON THE SITE
2) NO ENERGY REQUIRED
3) VERY LITTLE MAINTENANCE
4) LIMITED SLUDGE PRODUCTION
5) DOES NOT REQUIRE HIGHLY SKILLED PERSONNEL
6) VERY LOW OPERATIONAL AND MAINTENANCE COST
7) WATER RECYCLED WILL OVERALL REDUCE THE WATER CONSUMPTION OF THE PARK
8) CREATES NATURAL SETTING, WITHOUT ANY ODOR
9) INCREASES WASTE WATER REUSE OPPORTUNITIES.

Recuperation of SGNP Design Proposal