



ANNUAL REPORT 2019-20



THE PAGDAND BELIEF:

Today, human beings, have without a doubt, established themselves as earth's most dominant species. Down the ages, through our inventions, our actions, and our mere presence, we have been transforming our surroundings, impacting the environment, and slowly but surely leaving a larger than sometimes necessary footprint on the ecosystem. Often forgetting that we are part of the very same system, not above it.

Using the same footprint to signify our efforts to walk a different path is PagDand.

What started as an attempt to rekindle the child-like joy and amazement one gets through losing oneself in the wonders of nature, soon grew into a mission with a conscience.

Today, we are proud to present PagDand as an independent, not-for-profit bio-diversity conservation initiative.



VISION:

To act as an agent for creating an enabling and sustainable environment by creating and encouraging Urban forestry and farming in urban areas of Vadodara and nearby district and to contribute in Environment education and empowerment in rural areas.

MISSION:

To serve as a catalyst and to encourage urban farming and green belt and to cover entire Vadodara with Plantation especially of medical benefits on road side and parks. To expand our eco-club sessions in all the primary schools of Vadodara. To act as a mediator to allocate proper resources to marginalized and financially weak background community.

PAGDAND GOALS:

1. Urban Forestry and farming.
2. Water Bodies Conservation.
3. Education And Awareness.
4. Policy Advocacy.



Scope

- ✓ A well-researched, documented and tailor made effort working on Environment Sustainability and Existence with the objective to maintain eco-consciousness, to highlight co-existence, to Sensitize, Educate and Energize communities and to stimulate public thought, dialogue and action.

Success Factors

- ✓ Ability to do practical execution by different problem solving technique.
- ✓ To deliver data oriented result with before and after condition showcase.
- ✓ Proper utilization of resources and choosing best yet the cheap way of solving the problem.
- ✓ Networking with Local Authorities and other Government bodies to identify and solve the problem related with Environment.
- ✓ Clear Accountability

Objectives

- ✓ Create Sustainable Environment which will benefit the future generation.
- ✓ Encouraging local communities to conserve and preserve Environment.
- ✓ Conservation of Water by storing and increasing ground water level at drought areas.
- ✓ Aware and educate Future generation so as to sustain and rebuilt environment.

Delivarables

- ✓ 70 Environment sessions in 8 NPSS schools in an academic year with 600 beneficiaries.
- ✓ Research on Wildlife and conservation.
- ✓ Matured saplings of 7-8 feet in stock.
- ✓ Recreate waste land in Industrial areas of Nandesari.
- ✓ Showcase videos of different environment techniques.
- ✓ Sangmunch every year for networking.
- ✓ Specialist in Ground water recharge and Plantation.

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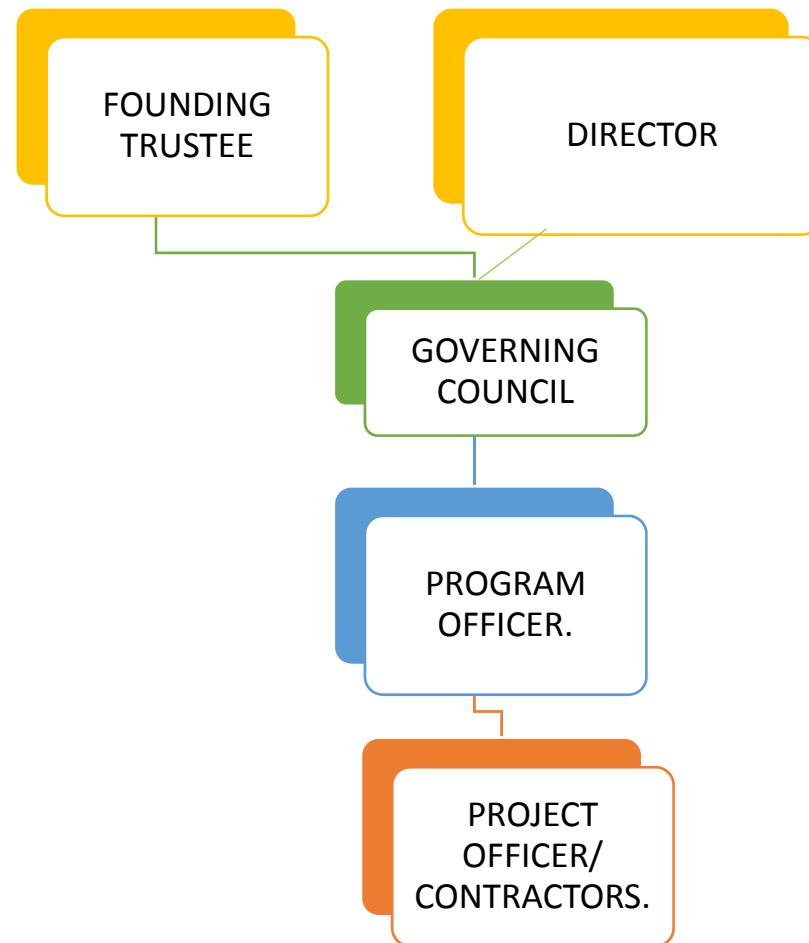
ABOUT PAGDAND

“PAGDAND” is a registered NGO working in field of Environment Conservation and Sustainability formed in the year 2015. Since 2015, “PAGDAND” has been playing an significant role to enable and sustain Natural resources in an efficient manner in urban cities and Rural areas of Vadodara. It has attempted to give Environment Education in a practical manner in 10 primary schools of Urban areas of Vadodara. To fulfill its objective of Conservation, Preservation and Sustainability of Environment has undertaken many projects. They are as follows:

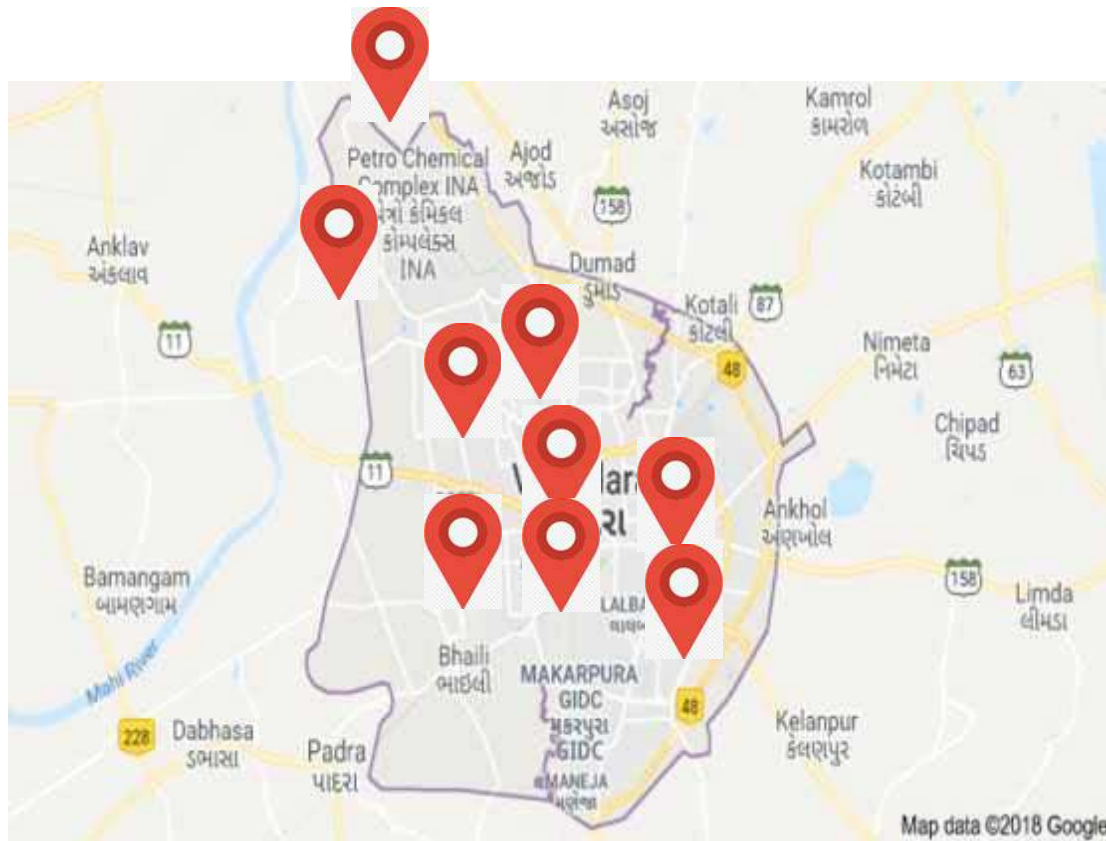
- 1. Education and Awareness-Eco clubs.**
- 2. Plantation, Urban Forestry and Farming.**
- 3. Water Conservation- Rain Water Harvesting.**
- 4. Tree bank.**
- 5. Research on Wildlife & Conservation- Vishwamitri Vadodara Crocodile Census 2019.**
- 6. SAHYOG-COVID 19 Support to BPL residents of Vadodara.**
- 7. Green Ambulance.**



HIERARCHY TREE CHART OF PAGDAND



AREA OF WORK



Area of work:

1. Overall Urban areas of Vadodra. –Plantation and Eco club Sessions in 8 Primary Govt. Schools.
2. Recreation of waste land at Industrial Areas of Nandesari and Moxi.

GOVERNING COUNCIL AND TEAM MEMBERS.



1. Mr Bhavesh Lodaya:

Director of dot2dot Advertising Private Limited, Vadodara, Gujarat, a flourishing advertising company catering to a large Industrial and Private Clientele in the country. He is extremely passionate about nature, conservation and sustainability and his enthusiasm led him to jointly lay the foundation of 'Pagdand' to enliven the City of Vadodara and the state of Gujarat by his ideas and contribution.



2. Dr. R.V. Devkar:

Expert in zoology with 15 years' worth of research experience under his belt. His research interests include micro chiropteran ecology, conservation breeding & reproductive biology of birds, ethno biology and Nano biology. He has been teaching for 20 years and is currently an assistant professor at department of Zoology at the Faculty of Science, MS University of Baroda.



3. Ms. Anuprita Dand.

The Director of Sure Safety Pvt Ltd., one of the main guiding forces for Pagdand, Mrs Dand is a passionate advocate for conservation. She strongly believes in serving the larger community through preservation of the environment and educating children for the same.



4. Mr Chetan Joshi

Training Manager in LIC. Secretary of Pagdand, Mr Chetan is a passionate advocate for conservation. he strongly believes in serving the larger community through preservation of the environment.

KEY HIGHLIGHTS

1

Distributed 40,000 masks to BPL residency of Rural and Urban areas of Vadodara.

2

A Census on Vishwamitri Vadodara Crocodile count 2019.

3

Plantation with more than 10,000 trees at various societies and public places in Vadodara.

4

Successfully Developed and Maintained Roof top Rain Harvesting with storage tank recharge at Dodka primary school, Vadodara

5

3 Tree banks with more than 5000 matured saplings with a height of 7-8 feet.

6

Successfully Advocated and Educated primary students by running 72 Eco-clubs in 8 NPSS School in urban areas of Vadodara.

7

Successfully recreated wasteland and maintained flora in Industrial areas of Nandesari I.e. (2,50,000 Sq. Ft).

EXPENDITURE ALLOCATION.

- 1. TREE BANK: 2,00,000
- 2. ECO CLUB:
- 3. GREEN BELT DEVELOPMENT: 37,11,114
- 4. RESEARCH ON WILDLIFE:
- 5. WATER CONSERVATION: 4,20,000
- 6. SAHYOG:



EDUCATION AND AWARENESS- ECO CLUBS
An initiative to conserve Environment by educating
Primary school students.





Employees and Volunteers Involved: 14.
Funded By: Sure Safety, PAGDAND.
Tenure of Project: One year, repetitiveTarget.
Beneficiaries: 1st to 8th STD Primary students.
Number of Sessions in a year: 72.
Number of Beneficiaries: 650.

ECO CLUB

An Environment conservation initiative with primary school students.

PROJECT DESCRIPTION:

- Eco clubs can provide children with the opportunity to learn and explore about their world in an engaging and stimulating environment.
- Children not confined by conventional classroom lectures, show more creativity when they are given the freedom to create solutions to problems through activity-based programs.

Aims and Objectives:

1. To provide environment education to primary school students.
2. To conduct practical base sessions with equal participation of all students.
3. To educate future generations about different Environment Conservation techniques and models.
4. To involve students in field base sessions such as exploring botanical park, plantation, seed ball making and throwing event.

Plantation of 10 medical value plants (e.g. tulsi, Ajwain). Importance of medicinal trees/plants, Seed ball making.

Food chain.

Food pyramid.

Awareness on animals, and bird's food. (What they eat).

Sessions/model/group discussion/ advantages on Solar energy.

Revision of syllabus via Play/bhavai.

Rain water Harvesting model. Hydro-electricity.

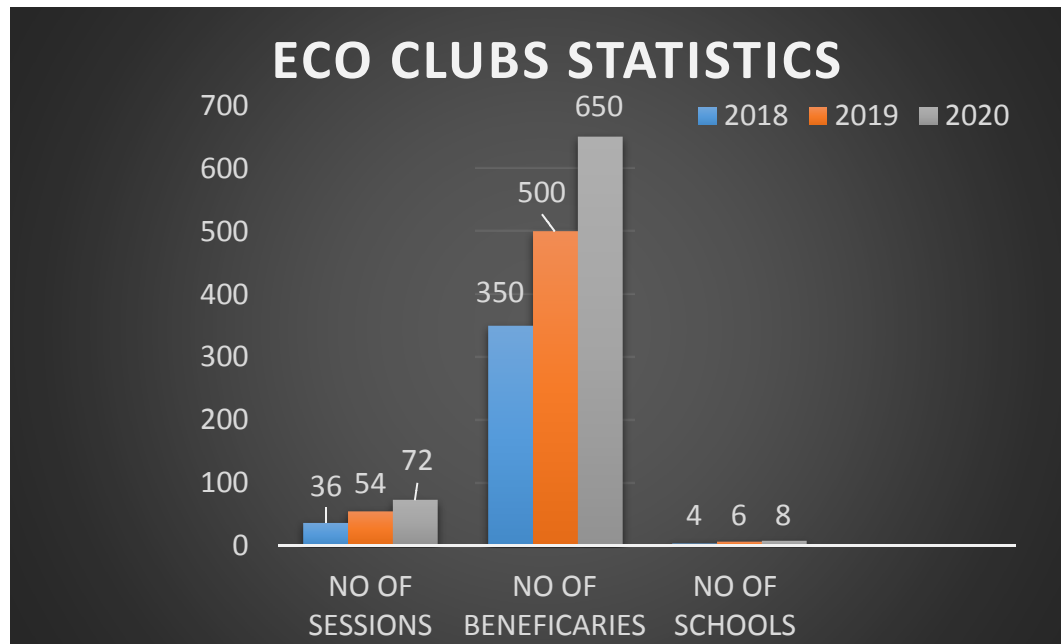
Making tulsi pot, Diya making, Clay making competition.

Drawing competition

How to make natural Holi colors?

Process:

- Currently pagdand has set up Eco Clubs in 8 schools under the authorization of Nagar Prathmik Shikshan Samiti (**NPSS**) in urban areas of Vadodara.
- The number of schools under the project will be slowly increased to as many government and private schools as possible in Vadodara and may be initiated outside of Vadodara as well.
- The Eco clubs runs on syllabus basis which gets updated after every one year.
- 10 Activities and practical sessions are covered in each school in an academic year.





Drawing competition on Environmental topics.

Diya making and Decoration Activity.





Plantation of medicinal plants Activity.





Seed ball making Activity.



Food chain explanation via model.



Model Explanation on Bio gas, Solar Energy and Hydro electricity.



Field visit at Akshay patra.





PLANTATION AND VRUKSH UTSAV- An initiative to conserve environment by recreating waste land and conducting plantation in and around Vadodara.

PLANTATION AND VRUKSH UTSAV

**Recreation of Waste land,
Plantation at public places,
societies, Industrial area and
saplings donation.**

Employees and contractors: **4**

Funded By: **INEOS STYROLUTION, SURE SAFETY.**

Key highlights:

- 2,00,000 Sq. Ft Green belt development at Industrial areas of Nandesari and Dodka in Vadodara district.
- 3,000 saplings donated to NGOS, Institutions and public.

Project Description: PAGDAND works on environment. The main purpose of the project 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. Green belt offers a number of benefits for both urban and rural population. By preventing the urban sprawl, it helps protect agricultural activities and the unique character of rural communities. Urban population, on the other hand, is provided an access to an open space which offers opportunities for outdoor activities and an access to clean air.

Aims and objectives:

- To capture the fugitive emissions emanating from Plant operations.
- Attenuate the noise generated and improve the aesthetics.
- To develop barren or unused land into small forest by covering the area with desi species .
- To maintain micro-climate of the region.
- To improve the air quality of the region.
- Free distribution of saplings to encourage tree plantation.



Recreation of Waste land and 10,000 Tree plantation at Industrial areas of Moxi, Vadodara. (1,00,000 Sq.Ft)



Area Before Development



Pit digging phase



Site visit



Entrance gate of site.



Fencing.



Area After Development

Recreation of Waste land and 8,000 Tree/Shrubs plantation at Industrial areas of Nandesari, Vadodara (80,000 Sq.Ft)

Location: Main gate Nandesari.



BEFORE



AFTER



Location: RO Plant Nandesari.

BEFORE



AFTER



Location: Opp HP Petroleum, Nandesari.

BEFORE



AFTER



BEFORE

Location: Opp HP Petroleum, Nandesari.

AFTER



Plantation and saplings donation In and Around Vadodara.



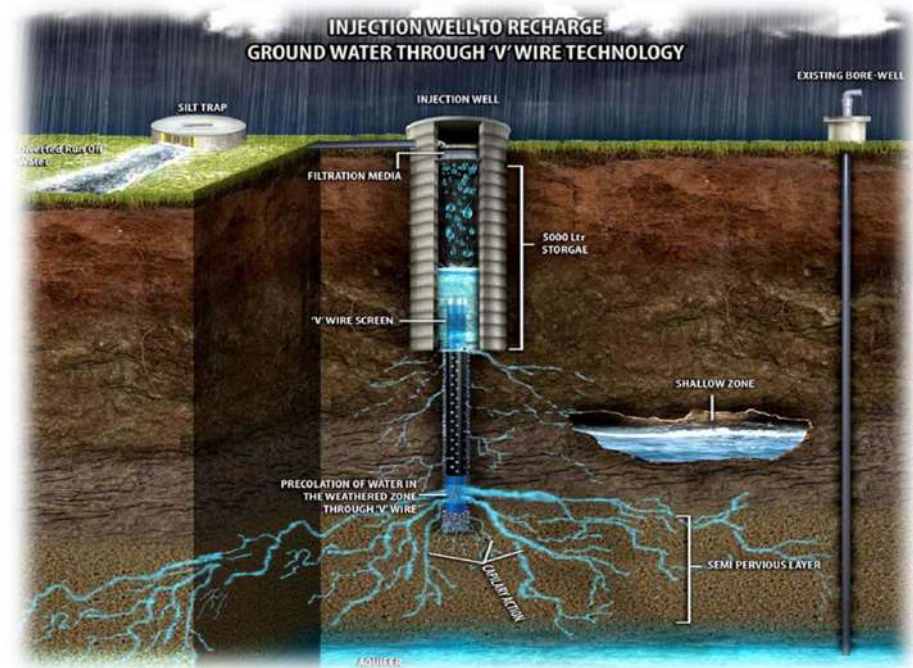
SUPPORTED BY:



ASSOCIATED WITH:



IMPLEMENTED BY:



WATER CONSERVATION-An initiative to Recharge ground water by harvesting Rain Water at Public systems.

WATER CONSERVATION

An initiative to recharge ground water.

➤ **About Project**

PAGDAND initiated Ground Water Recharge in public areas of Vadodara in collaboration with VMC. The areas are specially selected in public places. Rainwater harvesting systems can be employed as simple and effective methods to meet a municipality's storm water management program requirements of individual properties.

➤ **Objective of project**

- To conserve and preserve natural resources. (i.e. Water)
- Reducing loss of water by collecting and storing that water underground which can be used where there is little or no rain by bore well.
- To increase the ground water level of the area.
- To promote efficient methods of water use in the stressed areas.

➤ **Executed Projects:**

- 1. Rain Water Harvesting at Dodka Primary school, Vadodara.
- 2. Rain Harvesting system at Sure Safety India Ltd.

➤ **Current Projects:**

1. Ground Water Recharge at Sambhavnath Marg, Gotri, Vadodara.
2. Atithi gruh-vmss, Vadodara.
3. Sports complex: Manjalpur & Sama.

➤ **Advantages**

- Improvement in infiltration and reduction in run-off.
- Increases ground water level and yields by re-charging.
- Savings in annual requirement of water to the extent of 35%.
- Rejuvenation of dried bore wells.
- Provides Solution for the problem of water logging in Low Ground Area.
- Improvement in groundwater quality by reducing salinity and fluoride contents in the bore well.

➤ **Technique-About V wire Rain water Harvesting to recharge ground water**

In this technique at the bottom of recharge shaft a injection well of 100 - 150 mm diameter is constructed piercing through the layers of impermeable horizon to the potential aquifers to be reached about 3 to 5 meter below the water level.

Executed Projects.

Marking of area for storage tank.



Construction of UG tank.



Brick wall with inside plaster slab.



Drain pit



down take and delivery pipeline



Ready UCG 10,000 liters tank



•Phase 1: Drilling, pipe lowering and Bore- well.

Sports Complex Sama.



Marking of area.



PVC 8 inch pipes. 10 pipes of 20 feet.



Pit digging with JCB for water collection for construction.



Recharge well and silt trap.



Silt trap connected with drain and Storm water drain.



Installation of V wire technology.



Demonstration of system.



Rain water channel for collection.



Gravels and clay packing for filter.

Existing Projects



1. Atithi gruh-vmss, Vadodara.



2. Sports complex: sama



3. Sports complex:
Manjalpur

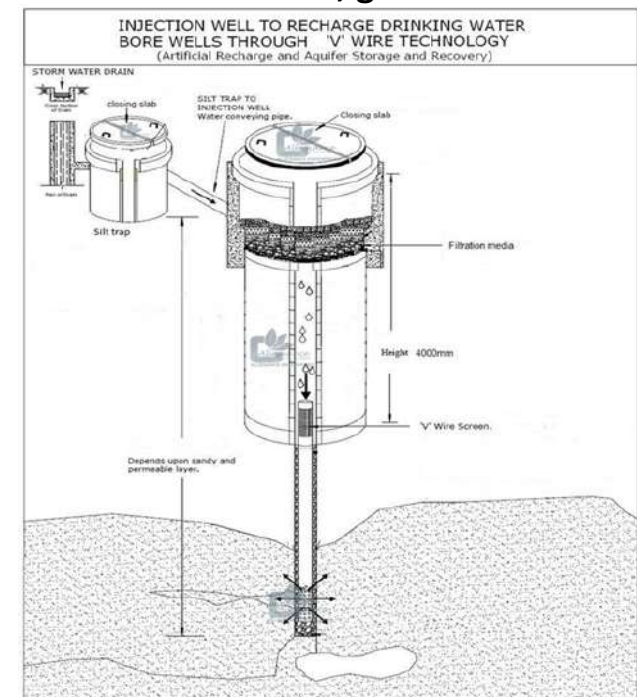


4. Sambhavnath marg,
Court road, gotri.

Methodology:

Injection Well Ground Water Recharge.

1. The Rain Water is lead through water channel and first reaches the silt trap, which allows for silt to accumulate in the chamber.
2. The overflow water is lead into the injection well, passing through multilayer's of Filtration media placed at the top of the injection well.
3. The water is accommodated in a specially designed storage well, which creates water column, injecting large quantities of water into the deeper layers of the semi impervious earth's strata through the Non Clogging V-Wire.





Pagdand

A CSR initiative by:



Tree bank donated by L&T-Sargent & Lundy Limited, 2017-2018



Tree Bank- An initiative to increase the survival rate of trees by developing and maintaining self sustainable saplings.

TREE BANK

With an aim to Sustain Environment.

PAGDAND” Tree Bank is an concept different from Nursery.

In Our Tree bank we grow the saplings from germination till they grow up to 5-6 feet in height.

➤ **Objective of Tree Bank:**

1. To increase the survival rate of trees.
2. To take care and nourish the plant till it becomes self sustainable.
3. To maintain flora in efficient way.
4. To conduct education session with Botany expert.

➤ **Advantages to the community/Beneficiaries:**

1. They get mature free saplings.
2. This project aims to plant our stock across Vadodara and to support VMC.
3. The saplings are ready to plant without any maintenance cost.

➤ **Total Saplings in stock:**

1. 5000 Saplings in stock.
2. Height of 7-8 feet.

➤ **Tree Banks in Vadodara:**

1. Dhanusya society, New Sama Road
2. Police Head Quarter, Pratapnagar.
3. Kotana village, Vadodara.

• **Total Saplings Donated:**

1. NGOs: 1,500 Saplings.
 2. General public: 5,000 Saplings.
 3. Industries: 3,500 Saplings.
- Total: 10,000 Saplings donated in 2019-2020.





1. Tree Bank at Police Head Quarter, Pratapnagar,



2. Tree Bank at Dhanusya Society, Vadodara.





Workshop at Tree bank.



Sr.No	Name of Plants
1.	SITAFAL
2.	PELTROFOAM
3.	BEHDA
4.	LIMDA
5.	ARJUN
6.	ASHOK
7.	BOHIMIYA
8.	AMDA
9.	ARITHA
10.	SAAG
11.	AUSTRALIAN BAVAD
12.	KUNJI
13.	GUNDA
14.	JAMBU
15.	TAMARIND
16.	KAILASH PATI
17.	CHIKOO



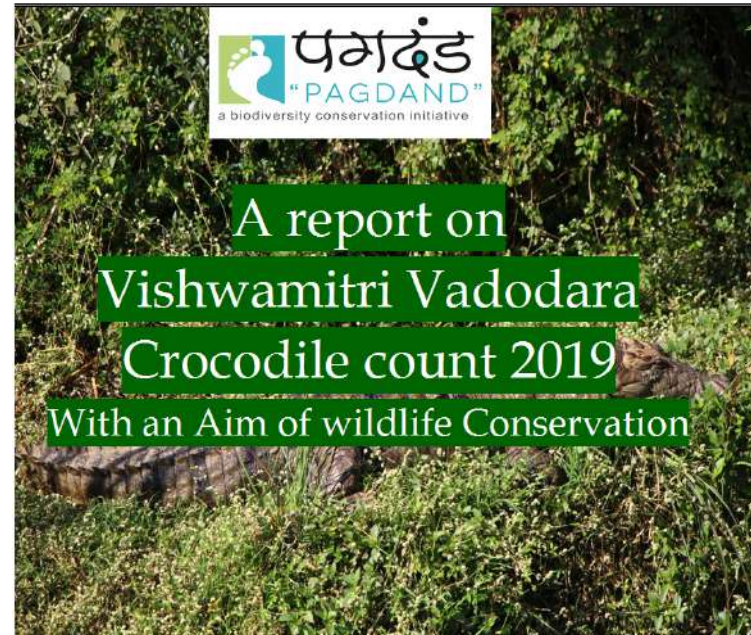
SAHYOG

Aapka Sahyog, Sab ki Suraksha

Initiative to provide cotton masks free of cost
to families living below the poverty line in Vadodara

We need your financial support
Please pledge your donation

**SAHYOG(COVID 19) - An initiative to provide
Cotton Masks and Sanitizer to BPL Residents of
Vadodara.**



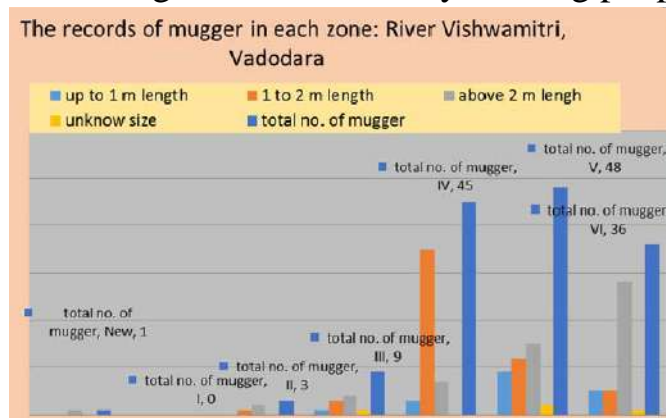
ORGANIZED BY:		IN ASSOCIATION WITH:	
 a biodiversity conservation initiative PAGDAND		 FOREST DEPARTMENT OF GUJARAT	
TECHNICAL PARTNERS:			
 www.vncindia.org VOLUNTARY NATURE CONSERVANCY	 BARODA MUSEUM	 VADODARA POLICE	 MS UNIVERSITY

VISHWAMITRI RIVER, VADOADRA CROCODILE COUNT-2019 WITH AN AIM OF WILDLIFE CONSERVATION.

- Day time ground survey method:** The urban stretch of river (22°19 N 73°13 E; Dena village to Talsat village) will be arbitrarily divided into 7 zones. Lalbaug and other water bodies with crocodile population will form the 8th zone. After familiarizing the participants with the habitat during the training session, the count will be initiated from at 0930 h to 1300 h and the daytime basking crocodiles will be manually counted as per Vyas et al (2013).
- Body size estimates:** Crocodile size classes based on total length (TL) classified as TL < 1 m as juveniles, between 1.1 and 2 m as sub-adults, and > 2 m as adults. Use of 8x40 binoculars will be done to execute this task.
- Citizens based count:** Public volunteers shall be used for counting crocodiles, a team of 10 volunteers and a team leader will be assigned a stretch of river and data will be collected through methodologies as well with information from the locals.
- Statistical analysis:** Descriptive statistics will be used to summarize crocodile population, encounter rates and abundance (number/km of river) will be calculated as per Vyas et al (2013).

How did you count?

We used an approach called “Citizen Science” to count crocodiles in Vishwamitri River. Citizen science is an exciting, multifaceted way to bring people from all walks of life together for research and conservation.



Partner with Us:

As Pagdand is well established NGO registered under Section 8 of companies' act 2013. We have also obtained 80G under which the funders and donors can redeem 100% tax redemption of the donated amount or as per rules applicable. We are well established NGO working in the field of Environment, Plantation and maintenance of trees and medical herbs. We also work on education sector in order to uplift the weaker section of the society. .

Our Achievements:

1. 8th VNM Environment excellence award.
2. 3 Tree bank with more than 6000 saplings in stock.
3. Expansion of sessions in 4 schools to 6 schools.
4. Launch of Green Ambulance for timely maintenance of our adopted plants and trees.
5. White Paper submitted to Government for water conservation.
6. Project on Vadodara Crocodile counting.

Our Services to Donors:

1. We ensure our partners to get proper and clear accountability of funds utilized.
2. We ensure to utilize fund in a best possible way minimizing expenses and increasing outcome.

CONTACT US

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Website: www.pagdand.org

YouTube: PAGDAND NGO

GREEN AMBULANCE



TREE BANK



ECO CLUB



NGO MEET

